good to R Integrated Safety Management in the Department of Energy complex

ISM Workshop 2007

November 27-30, 2007

Hosted by Brookhaven National Laboratory

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Brookhaven National Laboratory Safety, Emergency and Traffic Information

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New York State Vehicle and Traffic Laws apply to all vehicles on the laboratory site.

The site wide speed limit is 30 mph unless otherwise posted.

Cell phone use while driving is prohibited.

All drivers of government and private vehicles and their front-seat passengers must wear seat belts.

Special Thanks

The Brookhaven National Laboratory and Brookhaven Site Office ISM Workshop Planning Team wishes to extend sincere thanks to the following sponsors and supporters:

Battelle

Brookhaven Science Associates

DOE Office of Science

DOE Office of Health, Safety and Security

DOE ISM Champions Council

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Special thanks to Jim Collins and his Good to Great organization for extending to us the privilege of using Good to Great as the theme for this Workshop.



In planning for this workshop, the lessons of Jim Collins' *Good to Great* work came to mind as a useful perspective on ISM thinking and practice that might help us find our way to Great. The DOE community has invested tremendously over the last decade and has seen real progress in developing, implementing, and integrating safety programs into daily work, yet we know that we can do more — we need to do more. We have, perhaps, achieved Good, but we seek Great. The Good to Great project analyzed companies that made a leap from good to great performance in terms of financial results, and sustained those results for *at least fifteen years*. The defining features for Good to Great results were more about leadership and a disciplined approach than any standard business metrics. "Good to Great" describes the underlying principles that can be used to achieve and sustain high performance in organizations of many types.

The attributes of the "Good to Great" companies include:

Disciplined People

- Level 5 Leadership, marked by personal humility and professional will.
- Getting the right people on the bus, and the right people in the key seats.

Disciplined Thought

- Confronting the brutal facts.
- The Hedgehog concept integrating your passion, expertise, and resource engine.

Disciplined Action

- Creating and sustaining a culture of discipline.
- Turning the Flywheel pushing in a consistent direction over a period of time until a point of breakthrough.

The Principles and Functions of ISM embody several of these concepts. The ISM principle of line management responsibility for safety is about leadership and accountability. Clear Roles and Responsibilities can only be achieved when the right people are on the bus and understand how they support the larger organizational goals. Our ISM systems define our central approach for accomplishing work safely. One of our challenges is implementing an effective and disciplined safety culture, where continued actions and decisions reinforce and strengthen that culture through continuous improvement.

Welcome



Brookhaven National Laboratory and the DOE Brookhaven Site Office are proud to host the 2007 Integrated Safety Management Workshop. The BNL Workshop Planning Team welcomes you to our site. In addition to providing opportunities for participants to share and learn about ISM, the agenda includes lunchtime tours of several facilities. We hope you take the time to experience some of the exciting science taking place at Brookhaven.

Samuel H. Aronson, Director Brookhaven National Laboratory

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Michael D. Holland, Manager U.S. Department of Energy Office of Science Brookhaven Site Office

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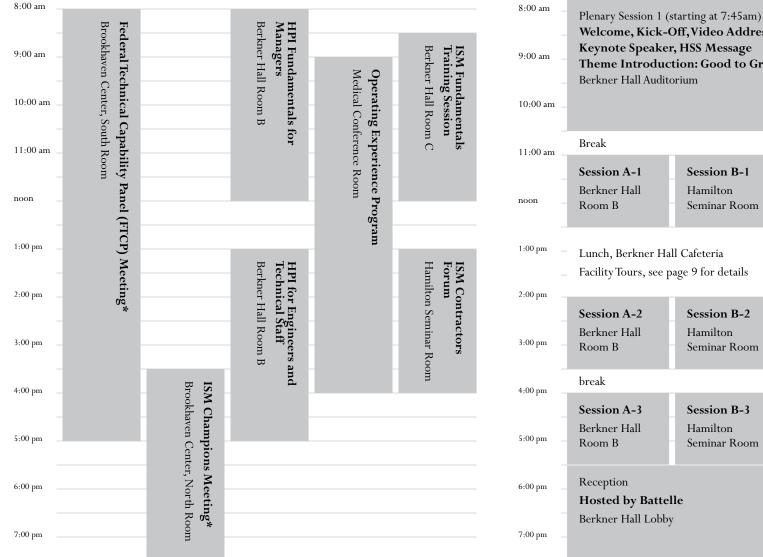


Workshop Check-in, Berkner Hall Lobby, 7:00 am - 5:00 pm



general workshop sessions

Workshop Check-in, Berkner Hall Lobby, 6:30 am - 5:00 pm



session details on page 6

* Bus transportation will be available to and from Brookhaven Center

Welcome, Kick-Off, Video Addresses Keynote Speaker, HSS Message Theme Introduction: Good to Great Berkner Hall Auditorium Session B-1 Session C-1* Session D-1 Hamilton Brookhaven Cntr Berkner Hall Seminar Room South Room Auditorium Lunch, Berkner Hall Cafeteria Facility Tours, see page 9 for details Session B-2 Session C-2* Session D-2 Brookhaven Cntr Hamilton Berkner Hall Seminar Room South Room Auditorium Session B-3 Session C-3* Session D-3 Hamilton Brookhaven Cntr Berkner Hall Seminar Room South Room Auditorium Hosted by Battelle Berkner Hall Lobby

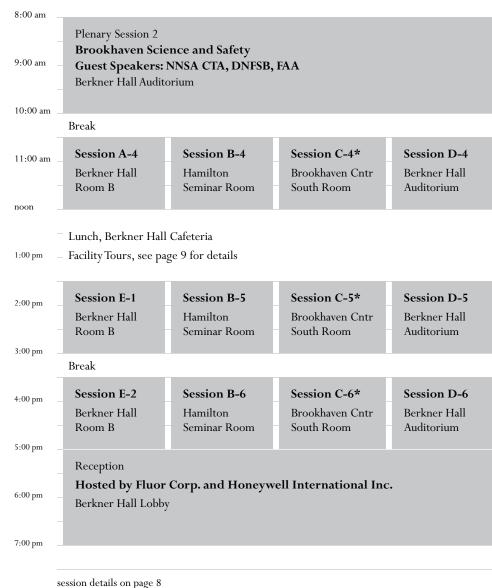
session details on page 7

* Bus transportation will be available to and from Brookhaven Center

schedule at a glance



Workshop Check-in, Berkner Hall Lobby, 7:00 am - 5:00 pm



* Bus transportation will be available to and from Brookhaven Center

V 11.30.07

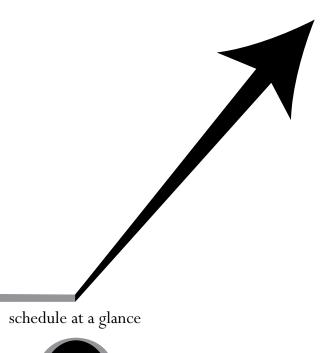
general workshop sessions

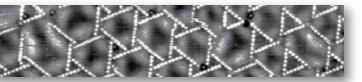
Workshop Check-in, Berkner Hall Lobby, 7:30 am - noon

8:00 am					
_	Session E-3	Session B-7	Session C-7*	Session D-7	
9:00 am 10:00 am	Berkner Hall Room B	Hamilton Seminar Room	Brookhaven Cntr South Room	Berkner Hall Auditorium	
Break (10:00 am - 10:15 am)					
plenary session 3 Wrap-up and track leader reports Farewell and safe travels					
noon _	Berkner Hall Audito		1.		
workshop ends at noon					

session details on page 9

* Bus transportation will be available to and from Brookhaven Center





Federal Technical Capability Panel (FTCP) Meeting Karen Boardman, NNS

8:00am – 5:00pm, Brookhaven Center, South Room

Tuesday 11.27.07 pre-workshop sessions

The objective of the FTCP meeting is to set goals and objectives to continue DOE's effort to recruit, deploy, develop, and retain Federal employees with the necessary technical capabilities to safely accomplish DOE's missions and responsibilities and to discuss current processes and programs supporting this objective.

ISM Champions Meeting

Pat Worthington, DOE HSS

3:30pm – 7:30pm, Brookhaven Center, North Room

This session is for DOE ISM Champions to share implementation status and best practices related to DOE aspects of ISM implementation. All DOE ISM Champions are asked to attend; DOE ISM Champions may also include one additional support person. This session will also include a working dinner.

HPI Fundamentals for Managers Chuck Lewis, DOE HSS

8:00am – noon, Berkner Hall Room B

This session will provide an overview of HPI principles, concepts and tools appropriate for managers interested in implementing Human Performance as part of their continuous improvement in ISM and safety culture.

HPI for Engineers and Technical Staff Bill Rigot, WSRC

1:00pm – 5:00pm, Berkner Hall Room B

This session will focus on the application of HPI principles, concepts and tools used to reduce engineering error contribution to adverse events.

Operating Experience Program Jeanne Boyle, DOE HSS

9:00am – 4:00pm, Medical Conference Room

This session is for all DOE and Contractor personnel who are coordinators or implementers of the DOE Operating Experience program (DOE Order 210.2). The focus is on sharing lessons learned and best practices related to operating experience, internal or external to the DOE.

ISM Contractors Forum

John McDonald, CH2M Hanford Joe Yanek, Fluor Corp.

ISM Fundamentals

Training Session Dr. Jim Szenazi, DOE HSS

$1{:}00\text{pm}-4{:}00\text{pm},$ Hamilton Seminar Room

This meeting will cover high level changes in ISMS contractor activities, and summarize the fall EFCOG ISM Program Manager Meeting. The group will also solicit input on strategic issues to be addressed by the Contractor ISM Working Group.

8:30am – noon, Berkner Hall Room C

This session is for all DOE and Contractor personnel who want to learn the basics of Integrated Safety Management. The training will be presented by the DOE National Training Center and will review the highlights of the DOE directives on Integrated Safety Management, including the ISM System Manual issued in November 2006.

session details





11.28.07 Wednesday general workshop sessions

7:45 am - 10:30 am	Plenary Session 1			
	Kick-Off Dr. Patricia W	Vorthington, HSS and Dr. Chuan Wu, EM	Keynote Speaker Dr. Jeffrey Wadswor HSS Message Glenn Podonsky, HSS Theme Introduction: Good to Grea	
		Break-Ou	t Sessions	
	Work Planning and Control Berkner Hall Room B	Feedback and Improvement Hamilton Seminar Room	Integrating Management Systems Brookhaven Center, South Room	Developing Effective Safety Culture Berkner Hall Auditorium
11:00 am - 12:30 pm	Session A-1 Leads K. Smith, NNSA / C. Murphy, Fluor Hanford	Session B-1 Leads M. Gibson, WSRC / P. Allen, WSRC	Session C-1 Leads G. Boyd, DOE SC / K. Downer, ORNL	Session D-1 Leads D. Shoop, DOE EM / J. McDonald, CH2M Hill
	Workplace Hazards Monitoring: Recent Oversight Results Thomas Staker, DOE HSS	A Project Management Approach to Continuous Improvement Steven Coleman, BNL	Integrated Management Systems - The HSS Integrated Work Management System Michael Kilpatrick, DOE HSS	S-102 Spill and ISMS Lessons Learned
	SAFER Dialogue as Pre-Job and Activity Review Tool Brian Harkins, DOE ORP	Merging the Annual ISMS Effectiveness Review with an Enhanced Performance Analysis Process Bill Luce, WSRC	Update on EM Quality Assurance Activities Analysis Process Bob Murray, DOE EM / Dae Chung, DOE EM	Shirley Olinger, DOE ORP Best Practices in Implementing Human Performance Initiative Bill Hartley, BWXT Pantex
12:30 pm - 2:00 pm lunch and tours	Hazard Analysis Process William Schleyer, DOE AL	Engaging Senior Management with the Management Review Process George Goode, BNL	LANL Integration of ISM with 10 CFR 851 and Other Safety Related Initiatives Barbara Hargis, LANL	
2:00 pm - 3:30 pm	Session A-2 Leads M. Holland, DOE BHSO / R. Enge, PNNL	Session B-2 Leads R. Knapp, LANL / T. Priestley, LANL	Session C-2 Leads D. Chung, DOE EM / J. Tarpinian, Battelle	Session D-2 Leads C. Wu, DOE EM / T. Conklin, LANL
	ISM Implementation at an R&D User Facility Allison Campbell, PNL	A Practical Approach to Using Causal Analysis Methods to Evaluate Events Robert Crowley, BNL	Improving Engineering Effectiveness at the Savannah River Site	Safety Observation Enhancement to Support HPI Implementation at HPI Todd Conklin, LANL / John Tseng, LANL
4:00 pm - 5:30 pm	Experimental Safety Review – SBMS Process Rob Doty, BNL	How to Read and "Right" a Causal Factors Report Richard Hartley, BWXT Pantex	Fred Beranek, SRNL Integrating MS: DOE's Savannah River Site's Salt Waste	Human Performance Training and Job Aid for Nuclear Materials Applications William Brown, BNL
	R&DWork Planning and Control at SRNL John Miller, SRNL	A New Causal Factor Program to Support a High Reliability Organization Richard Hartley, BWXT Pantex	Processing Facility - SWPF Thomas Helms / Dave Amerine James McCullough / Jack Kasper, Parsons	Developing Effective Safety Cultures Dr. Isabel Perry, The Safety Doctor.com
	Session A-3 Leads K. Smith, NNSA / C. Murphy, Fluor Hanford	Session B-3 Leads R. Kopenhaver, DOE LSO / F. Sharif, WIPP	Session C-3 Lead E. Sellers, DOE ID	Session D-3 Leads A. Ghovanlou, DOE HSS / W. Rigot, WSRC
	A Three Tiered Work Planning Process Steven Coleman, BNL	Hanford's Human Performance Improvement Pilot Lessons Learned John McDonald, CH2M Hill Dave Jackson, FH	New Requirements of EO 13423 and DOE O 450.1A: New Opportunities for EMS and ISMS	Commercial Nuclear Industry Progress on Safety Culture George Mortensen, INPO
	WSRC Work Planning & Control for All Activity-Level Work Tim Flake, WSRC	Dave Jackson, FH Brian Harkins, DOE ORP The Emerging Challenge of Human Performance Improvement: How to	Steven Woodbury, DOE HSS Fostering Continuous Improvement in EMS/ISMS Implementation through	Communication With the Dead is Only Slightly Harder Than Talking With an Engineer William Rigot, WSRC
	SWPF Construction Work Planning and Control Process Stephen Lindamood, Parsons	Manage Complex Interdependencies within a Performance System Cindy Wagner, LLNL	Best Practices and New Strategies Jeff Eagan, DOE HSS / John Irving, INL John Selva, BNL / Stephen Domotor, DOE EH	Safety Communications Jim Tarpinian, Battelle



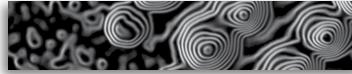
Thursday 11.29.07 general workshop sessions

8:00 am - 10:00 am	Plenary Session 2				
		nce and Safety Dr. Doon Gibbs, BNL t Speaker Bill Ostendorff, NNSA CTA	Guest SpeakerDr. Peter Winokur, DNGuest SpeakerChris Hart, FAA	FSB	
	Break-Out Sessions				
	Work Planning and Control Berkner Hall Room B	Feedback and Improvement Hamilton Seminar Room	Integrating Management Systems Brookhaven Center, South Room	Developing Effective Safety Culture Berkner Hall Auditorium	
10:30 am - noon	Session A-4 Leads M. Holland, DOE BHSO / R. Enge, PNNL	Session B-4 Leads R. Knapp, LANL / T. Priestley, LANL	Session C-4 Lead J. Tarpinian, Battelle	Session D-4 Leads P. Worthington, DOE HSS / D. Amerine, Parsons	
	The Nuclear Chemistry Summer School at BNL: Best Practices in Work Planning & Control for Students Richard Ferrieri, BNL	Differing Professional Opinions Michael Ford, BWXT Pantex	Enhancing ISM Infrastructure at a Single Purpose Laboratory Craig Ferguson, Jim Turi & Mike Dallas, JLAB	ISM and Safety Culture David Compton, DOE HSS	
	Successful use of Deployed Personnel at LANL Stephanie Archuleta, LANL	Sustaining Excellence Through Peer Surveillance Dennis Ryan, BNL	Integrating Environmental Requirements into a Project Life Cycle Kliss McNeel, CH2M Hill	Improving Safety Culture: Recognizing the Underlying Assumptions Douglas Minnema, DNFSB	
noon - 1:30 pm lunch and tours	Improving Work Planning Through Communications and Training Reed Kaldor, Fluor Hanford	Improving Worker and Management Involvement in the Self Assessment Program Patrick Sullivan, BNL	Strategies Utilized to Prepare for the INL Technology Demonstration Project Burdette Brunson, INL	Lessons Learned for Integrating an Effective Safety Culture into ISMS John McDonald, CH2M Hill	
1:30 pm - 3:00 pm	Implementing DOE ISM Requirements Berkner Hall Room B	Session B-5 Leads C. Lewis, DOE HSS / F. Sharif, WIPP	Session C-5 Leads K. Hall, NNSA SRSO / R. Hinds, WSRC	Session D-5 Leads D. Shoop, DOE EM / D. Jackson, Fluor Hanford	
	Session E-1 Leads G. Beausoliel, DOE NE / F. McCoy, WSMS	DOE Corporate Operating Experience Program Eugenia Boyle, DOE HSS	The Challenge – Moving from ISMS to a DOE Integrated Management System - IMS Gary Staffo, DOE EE	VPP Worker Involvement and Partnership Successes David Jackson, Fluor Hanford Ken Gray, HAMTC	
3:30 pm - 5:00 pm	Panel Discussion on Best Practices and Lessons Learned on ISMS Development, Modification, and	Panel Discussion on Contractor and Federal Operating Experience Programs Eugenia Boyle, DOE HSS	Improving Corporate Safety Performance through Sustainability Analyses Mari-Jo Campagnone, DOE HSS	Safety Leadership Class – Exploring Safety Excellence Dave Taylor, Stoller Navarro JV	
	Maintenance, and Implementatio after New Contract Awards Frank McCoy, WSMS		Performance Management – ISM in Contracting William Mullins, Energy Services Consulting	BBS and Human Performance in Action John Wellisch, INL	
	Session E-2 Leads G. Beausoliel, DOE NE / J.Yanek, Fluor	Session B-6 Leads C. Lewis, DOE HSS / B. Luce, WSRC	Session C-6 Leads H. Monroe, DOE / C. Scott, ORNL	Session D-6 Leads J. Lorence DOE BSO / D. Gibbs, BNL	
	ISMS Annual Review and Declaration – CH2M Hill Hanford Lessons Learned John McDonald, CH2M Hill	Operating Experience: Feedback from the Complex Ed Sierra, BNL	Integrating Safety and Security Bill McArthur, DOE-HSS	The Value of VPP in Improving Safety Culture in an R&D Environment Steven Goheen, PNNL	
	Annual Contractor ISM Processes and Document Submittals to DOE Melanie Gibson, WSRC		A Common Focus on Safe, Secure Operations Michael Stumbo, BWXT Pantex William Mairson, BWXT Pantex	Cultivating Safety Culture within a Creative Environment Frances Alston, SRNL	
	Risk & Work Configuration Management	Status of Operating Experience Team Developing DOE O 210.2 Metrics Eugenia Boyle, DOE HSS	Safety Integration for Safety Technology Deployment	The Role of the Line Technical Expert in an ES&H Program William Griffing Formi	

Management Lana Buehrer / Paul Cakanic, NST **Technology Deployment** Larry Wilcher, DOE HSS / Carl Pocratsky, DOE HSS

William Griffing, Fermi





	Break-Out Sessions			
	Implementing DOE ISM Requirements Berkner Hall Room B	Feedback and Improvement Hamilton Seminar Room	Integrating Management Systems Brookhaven Center, South Room	Developing Effective Safety Culture Berkner Hall Auditorium
8:00 am - 10:00 am	Session E-3 Leads G. Beausoliel, DOE NE / J.Yanek, Fluor	Session B-7 Leads S. Robinson, DOE SR / F. Alston, SRNL	Session C-7 Leads G. Boyd DOE SC / B. Luce, WSRC	Session D-7 Leads R. Desmarais, DOE BHSO / W. Mairson, BWXT Pantex
	Safety Self-Inspection of the Workplace – An Integral Element of ISM Rick Du Buse, DOE FE	Prioritizing Air Sampling Needs at BNL Robert Selvey, BNL	Integrating HPI into Operations to Achieve Zero Safety and Non-Compliance Events Jeff Mousseau & Leonard Sygitowicz, BBWI	WCH Initiatives to Strengthen Worker Involvement, Feedback, & Safety Culture Ray Skwarek, WCH
	Risk Based Oversight Dan Pellegrino, DOE AL	ISMS at the NSLS: Personnel Interview Survey Andrew Ackerman, BNL Advantages of Using External Assessors	Integrating a Safety Culture into a Radiation Dose ALARA Program Leonard Sygitowicz, BBWI	Evaluation of Safety Culture as a Measure of HRO Effectiveness Richard Hartley, BWXT Pantex Environmental Restoration Projects Methods for Safety Culture Realization
	Assessment and Causal Analysis – Enforcement Lessons Learned Tony Weadock, DOE HSS	Chuck Schaefer, BNL DOE Human Performance Center Resources Chuck Lewis & Thomas Gordon, DOE HSS	Integration Wrap-up Gerald Boyd, DOE OR David Olson, WSRC	Brian Heneveld, BNL Integration of ISM at a Disaster Site Howard Gordon, MACTEC, Inc.
10:30 am - noon		Plenary	Session 3	

Wrap-upTrack leaders reportsFarewell and Safe TravelsDr. Patricia Worthington, HSS

session details





Facility Tours

11.28.07 Wednesday

- 12:35 pm Participants go directly to buses outside Berkner Hall
- 12:45 pm Buses depart Berkner Hall for tours

12:50 pm Tour 1

Relativistic Heavy Ion Collider Ring and The Science Learning Center Ring road and related facilities

Tour 2

RADTEC: BNL Radiation Detector Testing and Evaluation Facility

Tour 3

National Synchrotron Light Source and The Center for Functional Nanomaterials

Buildings 725 and 735, lobbies and public corridors

- 12:50 1:05 Group A: National Synchrotron Light Source Group B: Center for Functional Nanomaterials
- 1:10 1:25 Group A: Center for Functional Nanomaterials Group B: National Synchrotron Light Source

1:25 to 1:30 pm Return to Berkner Hall for abbreviated lunch

11.29.07 Thursday

12:05 pm Participants go directly to buses outside Berkner Hall

12:15 pm Buses depart Berkner Hall for tours

12:20 pm Tour 1

Relativistic Heavy Ion Collider Ring and The Science Learning Center Ring road and related facilities

Tour 2

RADTEC: BNL Radiation Detector Testing and Evaluation Facility

Tour 3

National Synchrotron Light Source and The Center for Functional Nanomaterials Buildings 725 and 735, lobbies and public corridors

12:20 - 12:35 Group A: National Synchrotron Light Source

Group B: Center for Functional Nanomaterials

12:40 - 12:55 Group A: Center for Functional Nanomaterials Group B: National Synchrotron Light Source

Tour 4

Translational Neuroimaging and Addiction Research at PET (walk to OEP) Office of Educational Programs, Auditorium

12:55 to 1:00 pm Return to Berkner Hall for abbreviated lunch

facility tours



Workshop Planning Team



Planning Team	DOE ISM Champions Council	Brookhaven Site Office	Brookhaven National Laboratory	
	Dr. Patricia Worthington, HSS	Michael Holland	Roy Lebel	
	Dr. Chuan Wu, EM	Robert Desmarais	Jessica Wilke	
	Ali Ghovanlou, HSS		Erik Johnson	
	David Compton, HSS		Helen Todosow	
Tue als Loo da				
Track Leads	DOE Leads (from sites)	Contractor Leads	BNL Facilitators	
Work Planning and Control	Mike Holland, SC Brookhaven	Mike Schlender, PNNL	Steve Coleman	
	Kevin Smith, NNSA YSO	Con Murphy, Fluor Hanford		
Feedback and		Roland Knapp, LANL	X X 1	
Improvement	Jeff Allison, EM Savannah River	Farok Sharif, WIPP WTS	Joe Labas	
Integrating Management Systems	Gerald Boyd, SC Oak Ridge	Jim Tarpinian, Battelle	Joe Canestro	
	Elizabeth Sellers, NE Idaho	Robert Hinds, WSRC		
Developing Effective		Doon Gibbs, BNL	r · xx/11	
Ŝafety Culture	Doug Shoop, EM Richland	Bill Mairson, BWXT Pantex	Jessica Wilke	
Implementing DOE	Shirley Olinger, EM ORP	Joe Yanek, Fluor	Stave Colorean	
ISM Requirements	Geoff Beausoliel, NE Idaho		Steve Coleman	

workshop planning team

11

Building 555 Chemistry

Hamilton Seminar Room Tuesday ISM Contractors Forum Wednesday Thursday Break-Out Sessions B Friday **Building 488 Berkner Hall** Lobby Tuesday Registration Wednesday Registration Thursday Receptions Friday Registration Auditorium Wednesday Plenary Sessions Thursday Break-Out Sessions D Friday Room B HPI Courses Tuesday Wednesday Thursday Break-Out Sessions A & E Friday Room C Tuesday ISM Fundamentals **Building 490 Medical** Conference Room **Tuesday** Operating Experience Program Building 30 Brookhaven Center

North Room

Tuesday ISM Champions

South Room

 Tuesday
 FTCP Meeting

 Wednesday
 Break-Out Sessions C

 Friday
 Freak-Out Sessions C

