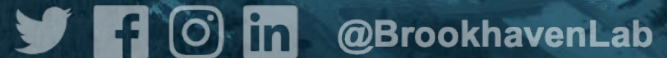




TAKE FIVE for Safety- Work Planning and Control

Frank Craner

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Work Planning and Control

Work Control Coordinator

- Screens the work per Work Planning and Control Subject Area Screening Tool:
 - Worker Planned
 - Permit Planned
 - Prescribed
- Plans work within one of the three categories above
- Screens the work for USI per OPM 1.10.1
- If the work involves Electrical Hazards:
 - Electrical Competent Person completes Electrical Planning and Briefing
 - Independent Electrical Reviewer completes review

Off-Hours Work- OPM 2.28.1

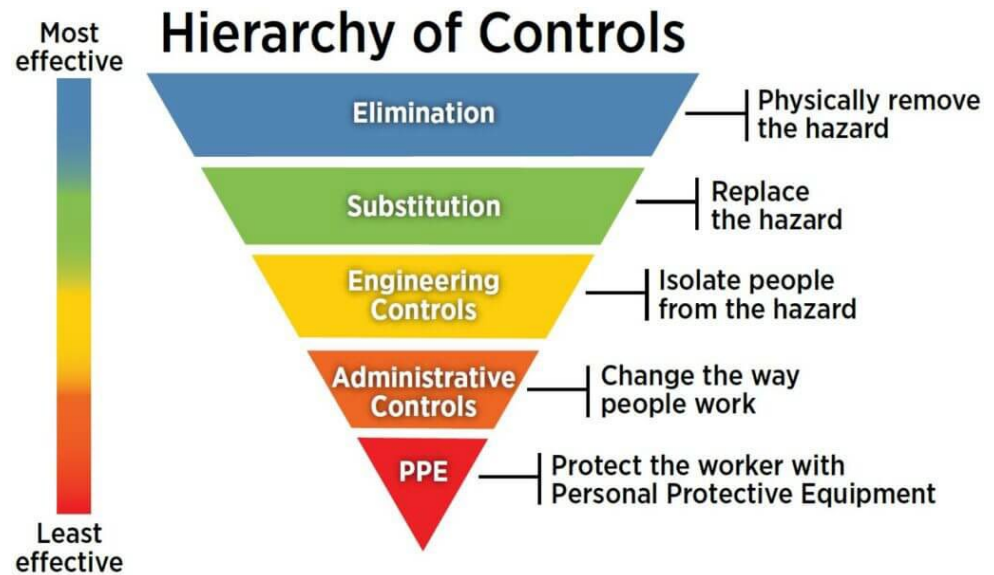
2.12	Communications Practices	9	Active
2.13	Use of "Do Not Operate" and "Caution" Tags for Equipment and Systems	12	Active
2.16	Procedure to Escort Personnel in C-A Primary Areas, Controlled Areas, Radiological Areas, Posted Magnetic Field Areas, and ODH Areas	21	Active
2.16.a	C-A Briefing Outline and Training Waiver for Persons Under Escort	16	Active
2.16.b	C-A Information Briefing Acknowledgement for Tours in Controlled Areas NOT Requiring a TLD	11	Active
2.19	Response to Water "Make-Up" Alarms	10	Active
2.20	Restarting the Booster Main Magnet Power Supply After an Alarm of the LIPA Pulse Power Monitor Relay (PPMR)	5	Active
2.21	Response to a Trip of the PSEG Pulse Power Monitor Relay (PPMR) Which Interlocks the Booster Main Magnet Power Supply	7	Active
2.22	Power Dip and Power Outage Response Procedure	8	Active
2.23	Lockout/Tagout (LOTO)	1	Active
2.23.a	Form for Removal of Lockout/Tagout (LOTO) by Others	0	Active
2.23.b	Testing of Complex Accountable Key Systems	0	Active
2.27	Release of New and Modified Equipment/Systems To Operations	10	Active
2.27.a	Operations Acceptance of New and Modified Equipment/Systems Checklist	8	Active
2.28	C-A Procedure for Work Planning and Control for Operations, Maintenance and Construction	23	Active
2.28.1	Personnel Call-In and Work Planning, Off Hours	6	Active
2.29	Work Planning and Control for Experiments	12	Active
2.29.d	NSRL Radiobiology Users Experimental Safety Approval Form	0	Active
2.29.e	C-A Experimental Safety Review form for RRPL and BLIP Users	0	Active
2.29.f	NSRL Electronics Users Experimental Safety Approval Form	0	Active
2.29.g	Tandem Users Experimental Safety Approval Form	0	Active
2.36	Operations Lockout	17	Active
2.36.b	Operations Lockout Primary Authorized Employees	20	Active
2.36.i	Typical Operations Lockout Locations For Radiation Safety	0	Active
2.36.j	Operations Lockout for Radiological Protection Log Sheets	0	Active
2.36.k	Form for Removal of C-AD Operations Lockout by Others	0	Active
2.39	Response to a Ground Fault Alarm at C-AD	5	Active
2.42	Liaison Engineer, Liaison Physicist; Project Engineer, Systems Engineer; Liaison Scientist: Roles and Responsibilities for Modifications	11	Active
2.43	Cyber Security -- Controlling the Shared User Account Password for the Linux Workstations	4	Active
2.46	Requirement to Close Vacuum Valves Prior to Access to a Primary Beam Enclosure	0	Active
2.51	Operator Aids	0	Active
2.52	Procedure for Conducting Readiness Reviews	0	Active

Safe Conduct of Research in Work Planning

- Everyone is personally responsible for ensuring safe operations.
- Staff raise safety concerns because trust permeates the organization.
- Cutting-edge science requires cutting-edge safety.
- A questioning attitude is cultivated.
- Hazards are identified and evaluated for every task, every time.
- A healthy respect is maintained for what can go wrong.

Identify, Evaluate, and Control Hazards

- Hazardous Energy
- Chemical Use
- Radiation
- Noise
- Lasers
- Heights/Fall Hazards/Ladders
- Working Surfaces
- Material Handling
- Moving Machine Parts
- Confined Spaces
- Atmospheric Hazards (ODH, Toxic Fumes, Gases, etc)
- Environmental Hazards
- Etc.



Source: NIOSH

Consider Human Performance Factors

- People are fallible, and even the best people make mistakes.
- Error-likely situations are predictable, manageable, and preventable.
- Individual behavior is influenced by organizational processes and values.
- People achieve high levels of performance because of the encouragement and reinforcement received from leaders, peers, and subordinates.
- Events can be avoided through an understanding of the reasons mistakes occur and application of the lessons learned from past events (or errors).

Key Messages

- The Planning must ensure conformance with several requirements in SBMS, including (but not limited to) Work Planning and Control, Accelerator Safety, Electrical Safety, Lockout-Tagout.
- The Work Planning process is the same, regardless of the time of day or sense of urgency.
- Planning can ensure that we identify and mitigate hazards.
- Time pressure and Stress are recognized Error Precursors; These can be managed through planning.