

GUIDELINE	PERFORMANCE	EXCEPTIONS & DEVIATIONS
<p>1. Status Change Authorization and Reporting</p> <ul style="list-style-type: none"> • Operations supervisor is responsible for proper configuration and any changes. • Operations Supervisor must be the focal point of shift operations. • Authority for some minor changes may be delegated, but Operations Supervisor should remain informed. • Good communication should be maintained between Operators and Operations Supervisor. • Status changes should have the proper authorization and should be communicated to the operators. 	<p>1. Status Change Authorization and Reporting</p> <ul style="list-style-type: none"> • Authorization is defined in OPM 1.A-1 "Authorization." The Chief Operator is responsible for proper configuration and any changes. • The Chief Operator is the focal point for shift operations, see OPM 6.A "Organization and Practices". • Shift organizations have authority for minor changes; however, the Chief Operator is kept informed. Operators are required to document changes to accelerator devices in the Operations Logbook. • Operators and Chief Operators are located together in the Central Control Room to ensure information flow. • Individuals who authorize the change, report changes in status to the facility to the Central Control Room. 	<p>1. Status Change Authorization and Reporting</p> <ul style="list-style-type: none"> • None.
<p>2. Equipment & Systems Alignment</p> <ul style="list-style-type: none"> • Check systems for proper alignment before placing them in operation. • Use alignment checklists to aid operators. • Include the proper nomenclature in the checklists, and have lists signed off at each step. • Check equipment in accordance with technical specifications and operational limits for start-up situations and after maintenance. • Maintain checklists for review and analysis. 	<p>2. Equipment & Systems Alignment</p> <ul style="list-style-type: none"> • Initial system alignment checklists are given in OPM 6.B-4A "ASD Operations Acceptance of New Equipment." Checklists in OPM 3.A-7.4 PPS Testing and Certification Procedure" are used to ensure outstanding radiation safety issues are closed out prior to operations. • Operators use alignment checklists such as those found in OPM Chapter 8, "Detailed Procedures" • Accelerators do not employ "technical specifications" like nuclear facilities; however, there are permissible operating ranges for specific certified equipment. The ASD operates within Operational Safety Limits prescribed in the "Accelerator Safety Envelope", OPM 2.B-1. Operational Safety Limits are reviewed prior to an annual running period. • Records of initial system alignments are maintained. • Checklists are maintained for review and analysis. 	<p>2. Equipment & Systems Alignment</p> <ul style="list-style-type: none"> • None.

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<p>3. Equipment Locking and Tagging</p> <ul style="list-style-type: none"> All personnel should have training on responsibilities for locking and tagging and on manipulation of locks and tags. 	<p>3. Equipment Locking and Tagging</p> <ul style="list-style-type: none"> Equipment locking and tagging are covered in OPM 2.F "Lockout/Tagout," 	<p>3. Equipment Locking and Tagging</p> <ul style="list-style-type: none"> None.
<p>4. Operational Limits Compliance</p> <ul style="list-style-type: none"> Compliance with operational limits should be documented. Documentation should include logs, status sheets, and checklists. Operations personnel should be appraised of requirements of operational limits. Compliance with limit should be reviewed. 	<p>4. Operational Limits Compliance</p> <ul style="list-style-type: none"> Operational safety limits (OSL) have been established and documented in procedures. Logs, status sheets, and checklists are used to help ensure compliance. Operators, Chief Operators, Liaison Physicists, Personnel Protection Groups and other relevant personnel are trained in OSLs. Compliance with specific limits is reviewed. 	<p>4. Operational Limits Compliance</p> <ul style="list-style-type: none"> None.
<p>5. Equipment Deficiency Identification & Documentation</p> <ul style="list-style-type: none"> Methods to identify, document, communicate, and control deficiencies should be established. 	<p>5. Equipment Deficiency Identification & Documentation</p> <ul style="list-style-type: none"> Equipment deficiencies are identified and communicated via OPM 2.D-1.5 "Occurrence Reporting and Processing of Operations Information." Controlling equipment deficiencies is via the use of Lock-out Tag-out, Radiation Safety Hold Tags and Do Not Operate Tags. These control mechanisms are covered by written procedures. 	<p>5. Equipment Deficiency Identification & Documentation</p> <ul style="list-style-type: none"> None.
<p>6. Work Authorization and Documentation</p> <ul style="list-style-type: none"> Operations Supervisor should document and authorize all activities which effect operations, safety, or change the control of alarms. Documentation of work in progress should be available for review. 	<p>6. Work Authorization and Documentation</p> <ul style="list-style-type: none"> Permit systems for activities affecting fire alarm, fire protection, radiation safety, radiation alarms, access control, digging, enhanced work control, welding and cutting and electrical safety are in use at SNS. The Maintenance Coordinator documents scheduled maintenance activities and operations personnel are notified. All work is documented in formal work control system. Work in progress is tracked and documented by Supervisors and the Maintenance Coordinators, and is available for review by looking at local work-control-system records. 	<p>6. Work Authorization and Documentation</p> <ul style="list-style-type: none"> None.

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<p>7. Equipment Post-Maintenance Testing & Return to Service</p> <ul style="list-style-type: none"> • Equipment should be tested after maintenance to demonstrate its proper operation. • Testing should be documented. 	<p>7. Equipment Post-Maintenance Testing & Return to Service</p> <ul style="list-style-type: none"> • Equipment is returned to service in accordance with procedures and work controls. Post-maintenance testing and return-to-work formalities are documented for safety significant structures, systems and components. Each running period, the alarm panel lights are tested for all consoles in the CCR. Deficiencies are repaired prior to operations. • Testing is documented in accordance with applicable procedures and work controls. 	<p>7. Equipment Post-Maintenance Testing & Return to Service</p> <ul style="list-style-type: none"> • None.
<p>8. Alarm Status</p> <ul style="list-style-type: none"> • Status and control and alarm panels should be available and include information on: <ul style="list-style-type: none"> • Alarms which have been disabled • Inputs which have been disabled • Alarms with set-point changes • Actions of alarms with multiple inputs • Appropriate actions should be taken to unmask simultaneous alarms from multiple sources. 	<p>8. Alarm Status</p> <ul style="list-style-type: none"> • The CCR is arranged such that there are a number of separate control consoles plus one additional console devoted to monitoring and recording the actions of the Personnel Protection System. The fire alarm system is a stand-alone system. The status of radiation monitor alarms is readily available to all operations personnel from any console. <ul style="list-style-type: none"> • Critical alarms cannot be disabled, or set points changed, by operations personnel. • Radiation monitor alarm inputs may not be disabled by operators, and if disconnected an alarm sounds. • Safety related audible alarms cannot be adjusted to different set points or different sound levels. • Actions by operators in response to multiple radiation monitor alarms are documented in OPM 2.H-18.10 "Responding to Chipmunk Alarms and Interlock Trips". • Simultaneous alarms are unmasked by the system and multiple radiation-monitor alarms are conspicuous. 	<p>8. Alarm Status</p>
<p>9. Temporary Modification Control</p> <ul style="list-style-type: none"> • Provide administrative controls for temporary changes in configuration and procedures. 	<p>9. Temporary Modification Control</p> <ul style="list-style-type: none"> • Formality for temporary modifications is the norm. The accelerator is constantly under development as are the experiments. A "Temporary Procedure" system and a Hand-Processed Procedure-Change system are used to control changes to existing procedures. See OPM 1.A-2.4. Procedure for Implementing or Canceling Temporary Procedures • Formal controls and procedures provide the following: <ul style="list-style-type: none"> • Technical oversight is provided via reviews conducted by the Chief Electrical, Cryogenic and/or Mechanical Engineers, the Radiation 	<p>9. Temporary Modification Control</p> <ul style="list-style-type: none"> • None.

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<ul style="list-style-type: none"> • Controls should provide the following: <ul style="list-style-type: none"> • Technical oversight • Formal approvals • Safety reviews • Installation approval • Independent verification of installation or removal • Documentation of modification • Updating of operating procedures • Training in modifications • Periodic audits of outstanding modifications 	<p>Safety Officer and the Radiation Safety Committee.</p> <ul style="list-style-type: none"> • Formal approval systems are used such as the <u>Operational Approval For Front End Systems (with checklist) OPM 6.E.</u> • The SNS Cryogenic Safety Committee reviews cryogenic systems. The SNS Electrical Safety Committee reviews electrical systems.. • Independent verification of installation or removal of the access control system or shielding is performed by the Radiation Safety Committee. Fire alarm/protection system installation and removal is controlled by ORNL support organizations. The Chief Electrical Engineer or his designate independently verifies electrical safety systems. • Documentation associated with modifications is retained in accord with OPM procedures. • Updating of temporary operating procedures is controlled in <u>OPM 1.A-2.4</u> "Procedure for Implementing or Canceling Temporary Procedures." • Training requirements are defined in the temporary procedure itself. • Temporary procedures are reviewed each running period by the Operations Coordinator, and are removed or converted to permanent procedures. The Radiation Safety Officer periodically reviews temporary modifications to safety significant equipment, such as interlock bypasses. 	
<p>10. Distribution & Control of Equipment & Systems Documents</p> <ul style="list-style-type: none"> • Provide system for distribution of controlled documents. 	<p>10. Distribution & Control of Equipment & Systems Documents</p> <ul style="list-style-type: none"> • <u>OPM 9.A-5</u> "Records Management" contains specific procedures for control of plans, procedures, engineering specifications and drawings. 	<p>10. Distribution & Control of Equipment & Systems Documents</p> <ul style="list-style-type: none"> • None.