

PHYSICS DIVISION PROCEDURE

CONFIGURATION CONTROL

1. APPLICABILITY

- 1.1 This procedure defines the requirements for review and approval of Configuration Control changes involving components, structures, and systems that are required for safety and/or protection of the environment for work conducted by the Physics Division. This includes Physics Division work conducted outside of Physics Division facilities (such as at the Spallation Neutron Source) but does not include work conducted at other DOE sites.

2. DEFINITIONS

- 2.1 Configuration Control is an integrated process to ensure: that functional and physical characteristics are documented for components, structures, and systems required for safety and protection of the environment; that changes to such components, structures and systems are identified, controlled, and approved by authorized persons; that the identification process and the change process are documented; and that documentation reflects actual conditions.
- 2.2 Permanent Shielding for radiological protection includes mortared block walls, poured concrete walls, heavy shielding blocks, and other permanently engineered shielding that is inherent to the facility or structure.
- 2.3 Temporary Shielding for radiological protection includes lead, concrete, cadmium, poly, etc., pieces that may be easily removed (with or without tools) from facilities or structures. Temporary shielding is not inherent to the facility or structure.
- 2.4 Shielding for Detectors can be lead, concrete, cadmium, poly, etc., that is used to reduce the background radiation around detectors. Shielding for detectors is not used for radiological protection (it does not reduce the dose such that radiological postings or training would not be required).

3. REQUIREMENTS

- 3.1 Configuration Control changes for the Multicharged Ion Research Facility (MIRF), the Oak Ridge Electron Linear Accelerator (ORELA), and the Holifield Radioactive Ion Beam Facility (HRIBF) shall be reviewed and approved in accordance with the requirements of the operations documents of those facilities. Configuration Control changes that are not controlled by MIRF, ORELA, or HRIBF operations documents are controlled by the Physics Division Configuration Control review and approval process described in this procedure.
- 3.2 The Physics Division Configuration Control review and approval process shall be administered by the Division Research Support Group Leader.
- 3.3 Permanent shielding used for radiological protection shall be labeled "Permanent Shielding Under Configuration Control" or equivalent wording.
- 3.4 Temporary shielding used for radiological protection shall be labeled "Temporary Shielding Do Not Remove Without Rad Protection Ops Approval" or equivalent wording.
- 3.5 Shielding used to reduce background for detectors does not have to be labeled, provided that the shielding does not provide radiological protection (by reducing the dose rate such that posting or training is not required).
- 3.6 Physics Division Configuration Control changes (other than those noted in Section 3.1) shall be reviewed and approved by Line Management (the Division Director and Group Leaders are Line Managers). The following requirements shall apply to such reviews and approvals:
 - 3.6.1 Proposed Configuration Control changes shall be initiated by the responsible Lab Space Manager, reviewed by the Research Support Group Leader, and approved by the responsible Line Manager. If additional Subject Matter Experts are needed for the change review, the Research Support Group Leader will designate the appropriate reviewers.
 - 3.6.2 The Division Radiological Control Officer shall review all Physics Division Configuration Control change requests related to permanent shielding for radiological protection.
 - 3.6.3 A Radiological Control Technician (RCT) shall be consulted prior to making any changes to temporary shielding used for radiological protection. An RCT shall be consulted *before removing* temporary shielding and *after restoring* temporary shielding unless an

equipment-specific procedure exists (approved by the Research Support Group Leader and responsible Line Manager) that addresses removal and restoration of temporary shielding.

- 3.6.4 Physics Division Configuration Control changes shall be documented by means of the change memorandum that is part of this procedure. The change memorandum will address the proposed change in sufficient detail and shall provide an analysis of the effects in adequate depth to provide a basis for approving the change.
- 3.6.5 After all the required reviews and approvals are documented on the change memorandum, the described changes will be made. The person requesting the change will ensure that all work required by the change memorandum is performed by qualified personnel, that maintenance of systems, components, and structures addressed in the change memorandum is performed by qualified personnel, that documents and procedures are changed as required, and that required training is provided.
- 3.6.6 Additional data and signatures will be entered on the change memorandum to provide a record of the change, as appropriate. These data will include (1) the date that drawing revisions are completed and signature of the person verifying the completion; (2) the date that required procedure revisions are made and the signature of the person verifying the completion; and (3) the date the safety documentation revisions are made and approved and the signature of the person verifying the revision and approval.
- 3.6.7 The responsible Lab Space Manager shall maintain copies of approved Physics Division Configuration Control change memoranda.
- 3.6.8 The Research Support Group Leader shall maintain record copies of Physics Division Configuration Control change memoranda for the Division files.

PHYSICS DIVISION CONFIGURATION CHANGE MEMORANDUM

1. PREPARED BY		DATE	
2. BUILDING / LOCATION OF CHANGE			
3. TITLE			
4. REASON			
5. DESCRIPTION			
6. DRAWINGS REQUIRING CHANGE			
7. NEW DRAWINGS REQUIRED			
8. PROCEDURES REQUIRING CHANGE			
9. NEW PROCEDURES REQUIRED			
10. SAFETY DOCUMENTS REQUIRING CHANGE			
11. APPROVAL SIGNATURES		12. CHANGE COMPLETION SIGNATURES	
DIVISION ESH OFFICER	DATE	DRAWING CHANGES COMPLETED	DATE
DIVISION RADIOLOGICAL CONTROL OFFICER	DATE	PROCEDURE CHANGES COMPLETED	DATE
LINE MANAGER	DATE	SAFETY DOCUMENT CHANGES COMPLETED	DATE