



## PHYSICS DIVISION PROCEDURE

### TRAINING

#### 1. SCOPE

- 1.1 This procedure applies to all Physics Division Staff, Users, and Guests (wherever they may work) and to all persons working in Physics Division facilities.

#### 2. PURPOSE

- 2.1 This procedure provides requirements to (1) implement ORNL/UT/Battelle institutional and local training programs as required to meet Division needs, (2) ensure development and implementation of local training programs specific to Physics Division facilities, in full compliance with applicable procedures and regulations, (3) ensure adequate training of individuals who work in, or visit, Physics Division facilities, and (4) ensure adequate training for work done off-site.

#### 3. REFERENCES

- 3.1 SBMS Management System Training and Qualification
- 3.2 SBMS Subject Area Work Control
- 3.3 Physics Division Procedure Lab Space Management

#### 4. REQUIREMENTS

- 4.1 The Division Training Manager shall be responsible for ensuring that all required training is implemented in the Physics Division.
- 4.2 Physics Division training programs shall be performance based, with the exception of awareness-level training.
- 4.3 Written lesson plans shall be developed for Physics Division training, reviewed periodically by knowledgeable staff, and approved by appropriate Line Management.
- 4.4 When institutional training is developed by the Physics Division, the Division Training Manager shall ensure that the training has the written approval of the appropriate ORNL Subject Matter Expert or functional policy manager.

- 4.5 The Division Training Manager shall utilize SBMS standards and processes for granting exceptions to specific areas of training.
  - 4.6 The Division Training Manager shall be responsible for the maintenance and retention of Division training records. This responsibility may be delegated to other Physics Division positions.
  - 4.7 Training requirements for Division Staff, Users, and Guests shall be identified by the supervisor and documented on the Physics Division Training Requirements Review Form (Attachment 1 - available from the Physics Division Training Page on the web).
  - 4.8 Training Requirements Review Forms for Division Staff and long-term Guests shall be reviewed annually as part of the performance evaluation process and renewed as needed.
  - 4.9 Training Requirements Review Forms for Division Guests and Users shall be renewed whenever the PAS assignment is renewed.
  - 4.10 Site-specific training shall be developed and administered by the appropriate Physics Division Line Management to address unique hazards and corresponding controls in Physics Division facilities and Lab Spaces. Site-specific training shall be documented on the Physics Division HazCom Site-Specific Training Form (Attachment 2 – available from the Physics Division Training Page on the web).
- NOTE: Required reading of Research Safety Summaries is an example of site-specific training.
- 4.11 Verification of completion of training will be reviewed at least monthly by the Division Training Manager. Training deficiencies will be tracked and trended as a performance indicator.
  - 4.12 Training for intermittent Users will be reviewed and verified during the experiment review process.
  - 4.13 All Physics Division Staff, Guests, and Users who conduct hands-on experimental work must complete all required training for hands-on experimental work prior to beginning work.
  - 4.14 Physics Division Line Management, or their designees, shall be responsible for assuring that Physics Division Staff, Users, and Guests have completed all required training.

# PHYSICS DIVISION TRAINING REQUIREMENTS REVIEW FORM

4/18/2008

PLEASE COMPLETE AND RETURN TO MARY RUTH LAY, BLDG. 6000, RM. 240

Preparer's initials  Charge No. \_\_\_\_\_ Date \_\_\_\_\_  
 Name \_\_\_\_\_ (Last Name, First Name, M. I.) (Assignment Begin/End Dates) Badge No. \_\_\_\_\_  
 Building/Room \_\_\_\_\_ Phone \_\_\_\_\_  
 Email address \_\_\_\_\_ Supervisor \_\_\_\_\_  
 Status: Employee  User  Guest  RIB number  Intermittent  Full time

**If an individual does this:**

**This training is required:**

Users/Guests doing research/experiments	Read/ Sign ESH&Q Requirements for Guest Researchers Form
Unescorted ORNL site access	ORNL Site Access Training #93982
*Persons conducting Hands-On Work	ORNL Environmental Management Awareness #93505
Physics Division Employees only	ORNL Export Control Awareness Training #92222 Physics Division Waste Certification Awareness #6060
Unescorted access to 6000, 6000B, 6005	HRIBF Building 6000 Unescorted Access #B1
Access to 6000 Controlled Entry areas	HRIBF Rad Safety Module C1
Access to 6010	Bldg. 6010 Access Training #6010 (not yet available)
Access to ORELA Basement area	ORELA Basement Access Training #5237
Work at the SNS	ORNL Rad Worker Training may be required
*Be exposed to electrical hazards *Perform experimental work *Work w/chemicals/hazardous materials	Physics Electrical Safety #4012 Physics Experiment Safety #6446 Physics HazCom #1309 & HazCom Form #1310 <span style="float: right;"><b>Read RSS</b></span>
*Enter radiological areas and/or handle radioactive sources (1 course and PF)	Physics Rad Worker I #2107 Physics Rad Worker I Practical Factors #02107
Enter contamination areas (1 course and PF)	Physics Rad Worker II #2108 Physics Rad Worker II Practical Factors #02108
Work on or near energized electrical equipment >50V	ORNL Electrical Safety Training for R&D #94300 Staff Qualification for Electrical Work Form #4015
Operate or be exposed to Class 2 or 3a Lasers	ORNL Laser Safety Training #90125
Operate or be exposed to Class 3b or 4 Lasers	ORNL Laser Safety Training #90872
Enter confined spaces	ORNL Confined Space Training #90187
Use Self-Contained Breathing Apparatus	Contact Jim Maner @ 576-7083 to set up class (#39351)
Operate cranes and hoisting equipment	ORNL Crane Operator Training #7497 (orig) #90221 (requal)
Use lockout/tagout procedures	ORNL Lockout/Tagout Training #92179
Serve on 6000 Emergency Squad	6000 Local Emergency Squad #J1
Serve on 6010/6025 Emergency Squad	6010/6025 Local Emergency Squad #7070
Use a respirator	ORNL Respirator Training #10046
Access ORNL cyber resources	ORNL Cyber Security Awareness Training #90592
Open computer account	Contact Charles Thomas @576-7390

\*These modules comprise the standard block of training required for hands-on work.

Additional comments:

Guest Coordinator \_\_\_\_\_ Date \_\_\_\_\_ Group Leader \_\_\_\_\_ Date \_\_\_\_\_  
 User Liaison (Users) \_\_\_\_\_ Date \_\_\_\_\_ Supervisor in SAP \_\_\_\_\_ Date \_\_\_\_\_  
 HRIBF Director (Users) \_\_\_\_\_ Date \_\_\_\_\_ Reviewed \_\_\_\_\_ Date \_\_\_\_\_  
Training Manager \_\_\_\_\_ Date \_\_\_\_\_

# PHYSICS DIVISION HAZCOM SITE-SPECIFIC TRAINING FORM #1310

Revised April 18, 2008

NAME \_\_\_\_\_

BADGE \_\_\_\_\_

Building \_\_\_\_\_ Room(s) \_\_\_\_\_ Date \_\_\_\_\_

	<u>TOPICS</u>	<u>COVERED</u>
1.	<u>General Review of HAZCOM Requirements</u>	
	a. Location of ORNL HazCom Program	_____
	b. Restricted Access Requirements	_____
	c. Hazard Warning Labels	_____
	d. Chemical Inventory (location, content)	_____
	e. MSDSs (location, content, how to obtain)	_____
2.	<u>Physical and Health Hazards of Chemicals in Facility</u>	
	a. Type and location	_____
	b. Specific hazards of chemicals and permissible exposure limits	_____
	c. Methods to detect release and potential danger	_____
	d. Measures employees can take to protect themselves:	
	1. Proper Work Practices	_____
	2. Protective Clothing and Equipment	_____
	3. Emergency Procedures	_____
	4. Evacuation Procedures	_____
3.	<u>Known Legacy Hazards</u> (Radioactive contamination, PCBs)	_____
4.	<u>RSS Required Reading completed</u>	_____

Special Notes or Instructions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Name of Person Trained (Please Print)      Badge      Person Trained Signature / Date

\_\_\_\_\_  
Supervisor (Please Print)      Badge      Supervisor Signature / Date

Return completed form to Sandra Kennedy, Bldg. 6010, Room 203.

PHYSICS DIVISION HAZCOM SITE-SPECIFIC TRAINING FORM #1310  
INSTRUCTIONS

Identify the work area(s) or lab space(s) this training is for. Check off each item discussed.

- 1.a.) Location of ORNL HazCom Program =  
<http://sbms.ornl.gov/sbms/SBMSearch/ProgDesc/ORNL-SH-P12.cfm>
- 1.b.) Discuss access requirements, if any. Examples: rad work permit, building access training, etc.
- 1.c.) Discuss hazard warning labels. Examples: flammable, carcinogen, etc.
- 1.d.) Discuss location and content of chemical inventory. Important facts include:
  - the name of the hazardous material custodian,
  - report to custodian when materials used-up so they can be written off the inventory,
  - report to custodian when materials not on inventory are brought into area,
  - one must have a RECID number and a HM Control Area number to order chemicals,
- 1.e.) Discuss how to obtain MSDSs.
- 2.a.) Discuss physical and health hazards of chemicals in the workplace.  
Examples: carcinogens, compressed gases, shock sensitive, etc.
- 2.b.) Discuss specific hazards associated with chemicals and permissible exposure limits.  
Example: Beryllium can cause cancer or chronic beryllium disease.  
OSHA PEL is 0.002 mg/m<sup>3</sup> over 8 hours.
- 2.c.) Discuss methods and observations used to detect release and potential danger.  
Example: beryllium is not easily detectable; there are no real-time monitoring devices.  
Therefore, there is a danger of exceeding exposure limits.  
Engineering controls and PPE are required for beryllium work.
- 2.d.) Discuss measures employees can use to protect themselves.  
Examples include: pre-job briefings, work permits, engineering controls, PPE.  
Discuss applicable emergency procedures.
- 3.) Discuss known legacy hazards. Examples: radioactive contamination, PCBs.
- 4.) Confirm RSS Required Reading completed.

**Special Notes:** Document any special instructions that were discussed.  
Examples: Do not open chemical containers. Do not remove anything from this area without an HP survey.