Radiological Safety

Radiological Survey, RP Field Operations Group, Ext. 4299

This section to be completed by RP if the penetration will be within a radiologically controlled area, radioactive materials management area, or accelerator housing. Please allow two days.

☐ Pre-work survey required ☐ Radiological HEPA vacuum cleaner required

☐ Additional requirements for this penetration:

_____

_____

☐ Penetration does not need special requirements. .

Checked by: _____ Date: _____

Review, Approval, and Authorization

Any deviation from the scope of work identified on this permit requires re-validation of this permit. This penetration permit expires 30 days after issuance.

Class 1 & 2 Authorizations

I have discussed the hazards and controls with the workers and verified that they are trained/qualified to perform the work.

_____ DATE: 12-11-08

Responsible line manager/designee signature

Additional Authorization for Class 2

_____ DATE: 12-11/08

Area responsible person (e.g. area or building manager)

Hazards and Required Controls

May reference JHAM or AHA if hazards/controls are documented there

Hazards

Type and size of energy sources present (including results from NDT, if used):

N/A

Hazards specific to the tools that will be used: ~~Flying Debris,~~ Rotating Drill Bit

Work environment hazards (such as moisture, lead, asbestos, etc.):

~~N/A~~ Flying Debris

Other hazards:

N/A

Controls

Procedural requirements: Use depth gauge set to 2".

Types and classification of PPE: Eye Protection, Gloves

Other controls: N/A

Complete the "Radiological Safety" section if appropriate, and complete the Review, Approval, and Authorization section at the end of this form.

Class 2 Penetration Checklist

Greater than 2 inches into solid material

	Yes	N/A
Reviewed historical records, engineering plans, and drawings?	____	____
Area responsible person/designee, customer/requester, or other personnel consulted?	____	____
Visually inspected proposed location of penetration?	____	____
Checked other side of walls, under floors, or through false ceilings for hazards?	____	____
De-energized and locked/tagged-out energy sources as required?	____	____
NDT used to determine if additional hazards exist? *If yes, list results under "Hazards."*	____	____
NDT used to determine wall reinforcement?	____	____
Electrical tools equipped with GFCI or double-insulated?	____	____
GFCIs tested?	____	____
Appropriate PPE specified (see page 3) and obtained?	____	____
PPE inspection(s) up to date?	____	____
Short drill bits used or equipment marked to limit penetration depth?	____	____
Penetration is within a radiologically controlled area or a radioactive material management area. *If yes, complete the "Radiological Safety" section of the form.*	____	____
Penetration is part of accelerator shielding (for example: the Accelerator Housing Structure, End Station A Hall, Klystron Gallery Floor)? *If yes, complete the "Radiological Safety" section of the form.*	____	____
A Radiation Safety Work Control Form (RSWCF) is required for all penetrations that meet any of the following conditions (contact the area safety officer for more information):	____	____
• Into or through non-concrete radiation shielding		
• Into concrete radiation shielding, with penetration exceeding 2 inches in diameter		
• Into concrete radiation shielding, with penetration exceeding 6 inches deep		
• Into concrete radiation shielding where penetration is not re-filled with a dense material (e.g. concrete or steel)		
• All the way through concrete radiation shielding		

Checklist completed by: _____ Date: _____

Complete "Hazards and Required Controls" section.

Penetration Safety: Penetration Permit

Work Request # (if applicable): N/A Date Permit Submitted: 12-11-08

General Information

Area/location	Date(s) work will be performed	Job description (location of penetration, material to be penetrated, tools, etc)
NEH Laser Room	12-11-08 to 12-15-08	Drill holes in concrete walls to set ±" x 13 anchors
Responsible line manager or designee Name/Organization)	Phone #	Other information (e.g., depth of penetration, etc)
Hans Imfeld/AEG	x3472	≤ 2"

Class 1 Penetration Checklist

Hollow walls, ceilings or floors, or 2 inches or less into solid material

	Yes	N/A
Checked other side of walls, under floors, or through false ceilings for hazards?		✓
Verified stud locations?		✓
Non-conductive tools to be used?		✓
Masonry bits and hand tools to be used for initial penetration?	✓	✓
Drill bit stops or short drill bits (2 inches or less) to be used for solid material?	✓	
Electrical tools equipped with GFCIs or double insulated?	✓	
GFCIs tested?	✓	
Appropriate PPE specified (see page 3) and obtained?	✓	
PPE inspection(s) up to date?	✓	
Penetration is within a radiologically controlled area or a radioactive material management area? *If yes, complete the "Radiation Safety" portion of the form.*		✓
Penetration is part of accelerator shielding (for example: the Accelerator Housing Structure, End Station A Hall, Klystron Gallery Floor)? *If yes, complete the "Radiological Safety" section of the form.*		✓
A Radiation Safety Work Control Form (RSWCF) is required for all penetrations that meet any of the following conditions (contact the area safety officer for more information):		✓

- Into or through non-concrete radiation shielding
- Into concrete radiation shielding, with penetration exceeding 2 inches in diameter
- Into concrete radiation shielding, with penetration exceeding 6 inches deep
- Into concrete radiation shielding where penetration is not re-filled with a dense material (e.g. concrete or steel)
- All the way through concrete radiation shielding

Checklist completed by: [signature] Date: 12-11-08

Complete "Hazards and Required Controls" section.