Penetration Safety: Penetration Permit

Work Request # (if applicable): _____ Date Permit Submitted: December 20, 2007_

General Information

Area/location	Date(s) work will be performed	Job description (location of penetration, material to be penetrated, tools, etc)
Research Yard	12/20/07	Drill survey monuments on the concrete apron in the north side of the BTH tunnel in the Research Yard
Responsible line manager or designee Name/Organization)	Phone #	Other information (e.g., depth of penetration, etc)
Catherine LeCocq SLAC/AEG	650-926-2335	See AEG website for procedure: http://www-group.slac.stanford.edu/met/Align/TechAnalysis/Monumentation_Drilling_Specifications.pdf

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?	____	X___
Verified stud locations?	____	X___
Non-conductive tools to be used?	____	X___
Masonry bits and hand tools to be used for initial penetration?	X___	____
Drill bit stops or short drill bits (2 inches or less) to be used for solid material?	____	X___
Electrical tools equipped with GFCIs or double insulated?	X___	____
GFCIs tested?	____	X___
Appropriate PPE specified (see page 3) and obtained?	X___	____
PPE inspection(s) up to date?	X___	____
Penetration is within a radiologically controlled area or a radioactive material management area? *If yes, complete the "Radiation Safety" portion of the form.*	____	X___
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.*	____	X___
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):	____	X___
• 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: Catherine LeCocq_____ Date: 12/20/07_____

Class 2 Penetration Checklist (N/A)

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.

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):
See AEG routine field JHAM
http://www-group.slac.stanford.edu/met/Align/Safety/JHAM_AEG_Field.pdf

Hazards specific to the tools that will be used:

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

Other hazards:

Controls

Procedural requirements:
See AEG routine field JHAM
http://www-group.slac.stanford.edu/met/Align/Safety/JHAM_AEG_Field.pdf

Types and classification of PPE:

Other controls:

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

Radiological Safety (N/A)

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.

C. LeCocq _____ DATE: 12-20-07

Responsible line manager/designee signature

Additional Authorization for Class 2

_____ DATE: 12/20/07

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