

Penetration Safety: Penetration Permit

Work Request # (if applicable): N/A _____ Date Permit Submitted: 12/5/07 _____

General Information

| Area/location | Date(s) work will be performed | Job description (location of penetration, material to be penetrated, tools, etc) |
|--|--------------------------------|---|
| BTH | 12/10/07 to 12/21/07 | Drill floor and wall for survey monument installation. |
| 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 (N/A)

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): | _____ | _____ |
| <ul style="list-style-type: none">• 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.

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Class 2 Penetration Checklist

Greater than 2 inches into solid material

| | Yes | N/A |
|--|--------------------|--------|
| Reviewed historical records, engineering plans, and drawings? | _____ | _____X |
| Area responsible person/designee, customer/requester, or other personnel consulted? | _____X | _____ |
| Visually inspected proposed location of penetration? | _____X | _____ |
| Checked other side of walls, under floors, or through false ceilings for hazards? | _____ | _____X |
| De-energized and locked/tagged-out energy sources as required? | _____ | _____X |
| NDT used to determine if additional hazards exist? | _____ | _____X |
| <i>If yes, list results under "Hazards."</i> | _____ | _____X |
| NDT used to determine wall reinforcement? | _____ | _____X |
| Electrical tools equipped with GFCI or double-insulated? | _____X | _____ |
| GFCIs tested? | _____ | _____X |
| Appropriate PPE specified (see page 3) and obtained? | _____X | _____ |
| PPE inspection(s) up to date? | _____X | _____ |
| Short drill bits used or equipment marked to limit penetration depth? | _____X | _____ |
| Penetration is within a radiologically controlled area or a radioactive material management area. <i>If yes, complete the "Radiological Safety" section of the form.</i> | _____ | _____X |
| Penetration is part of accelerator shielding (for example: the Accelerator Housing Structure, End Station A Hall, Klystron Gallery Floor)? <i>If yes, complete the "Radiological Safety" section of the form.</i> | _____ | _____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 |
| <ul style="list-style-type: none"> • 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: 12/5/07_____ | |

Complete "Hazards and Required Controls" section.

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Hazards and Required Controls

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

Hazards; see AEG routine field JHAM: http://www-group.slac.stanford.edu/met/Align/Safety/JHAM_AEG_Field.pdf

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

Hazards specific to the tools that will be used:

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

Other hazards:

Controls; see AEG routine field JHAM: http://www-group.slac.stanford.edu/met/Align/Safety/JHAM_AEG_Field.pdf

Procedural requirements:

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.

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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: _____

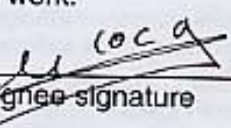
Date: _____

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.

Catherine LeCocq 

Responsible line manager/designee signature

DATE: 12/05/2007

Additional Authorization for Class 2

Bob Law 

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

DATE: 12/6/07

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

NOT NECESSARY
R. Russ
14 Dec 2007

☐ Additional requirements for this penetration:

☐ Penetration does not need special requirements.

Checked by:

Aaron Gorch

Date:

12/14/07

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.

Catherine LeCocq

Responsible line manager/designee signature

DATE: 12/05/2007

Additional Authorization for Class 2

Bob Law

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

DATE: 12/6/07