



Chapter 11: [Excavation Safety](#)

## Excavation Permit Form

Product ID: [134](#) | Revision ID: 1372 | Date Published: 10 October 2011 | Date Effective: 10 October 2011

URL: <http://www-group.slac.stanford.edu/esh/eshmanual/references/excavationsFormPermit.pdf> | [.doc](#)

**ENVIRONMENT, SAFETY & HEALTH DIVISION**

**Instructions** This form must be completed, approved, and kept with work planning and control (WPC) documentation at the work site for the duration of the described excavation operations. For more information on completing this form, see [Excavation Safety: Excavation Procedures](#).

**Scheduling**

- 1) Allow 10 working days for required reviews.
- 2) If soil testing is required, allow an extra 2 weeks after the sampling date.
- 3) Permitted work must be initiated within 3 months of original submission. If it is not initiated the permit must be resubmitted to confirm in-field survey accuracy.

## A Description

Completed by the project manager (PM) or field construction manager (FCM) / university technical representative (UTR)

Initiated by: _____	Phone: _____	Date: _____
PM or FCM /UTR: _____	Phone: _____	Service request #: _____
PM or FCM / UTR: _____	Phone: _____	PO #: _____
Excavation competent person: _____	Phone: _____	Estimated start date: _____
Subcontractor: _____	Phone: _____	Estimated end date: _____
Project location (include grid coordinate): _____		Nearest building: _____
Describe excavation purpose: _____		
<b>Attach a detailed sketch or drawing</b> (include location, dimensions of work to be completed, and grading plans for cut-and-fill work)		
Maximum dimensions (feet) Length: _____ Width: _____ Depth: _____	Estimated volume of excavated material, cubic yards (yd <sup>3</sup> ) Request soil reuse as backfill? Yes <input type="checkbox"/> No <input type="checkbox"/>	As-builts, if needed, will be completed by <input type="checkbox"/> Subcontractor <input type="checkbox"/> <a href="#">MD-FDS</a> (see service request # above) <input type="checkbox"/> Requester
Will the excavation be five or more feet deep and will personnel be entering? If yes		Yes <input type="checkbox"/> No <input type="checkbox"/>
1 Does the subcontractor possess a valid Cal / OSHA annual excavation permit (required)?		Yes <input type="checkbox"/> No <input type="checkbox"/>
2 What protective system (eg, sloping, benching, shoring) is planned? _____		
Will the excavation be 20 or more feet deep? If yes		Yes <input type="checkbox"/> No <input type="checkbox"/>
1 The protective system must be designed by a registered professional engineer.		
2 A description of the system must be submitted prior to excavation.		
Will soil compaction testing be needed?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If yes, specify testing method: nuclear gauge (prior authorization required) <input type="checkbox"/> sand cone test <input type="checkbox"/>		
Is the excavation within any area that is posted as any type of controlled area, radiologically controlled area, contamination area, radiation, high radiation, or radioactive material area?		Yes / not sure <input type="checkbox"/> No <input type="checkbox"/>
Is the excavation within 25 lateral feet of an underground beam line housing? (indicated by yellow on the <a href="#">Beam Line Map</a> )		Yes / not sure <input type="checkbox"/> No <input type="checkbox"/>
Does the excavation involve a well or soil boring?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If yes, will the bore be near accelerator housing or is there any reason to suspect that radiological conditions may be encountered (such as tritium in groundwater)?		Yes / not sure <input type="checkbox"/> No <input type="checkbox"/>

## B Radiological Review

Completed by the Radiation Protection Field Operations (RPFO) Group

- No additional RPFO requirements
- Additional requirements apply as follows:
  - A radiation generating device authorization is required prior to bringing the device onto SLAC property.
  - A radiological work permit is required and must be attached to this form during excavation operations.
  - Radioactive waste management is required. Contact [Radioactive Waste Management](#).  
Allow 3-5 days for container delivery.
  - Other:
  - Call ext. \_\_\_\_\_ for further instructions

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Reviewed by (*print name*)

Date: \_\_\_\_\_

Signature

Completed by the Radiation Physics Group if excavation is or may be within 25 lateral feet of any underground beam housing.

- No special requirements apply.
- Additional requirements apply as follows:

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Reviewed by (*print name*)

Date: \_\_\_\_\_

Signature

## C Environmental Review

*Completed by the Environmental Protection (EP) Department*

Waste classification of excavated material:

Contact the Waste Management Group for any disposal coordination and containers by means of the [Hazardous Waste Pick Up and Disposal Form](#). Allow 3-5 days for container delivery.

Other requirements:

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Reviewed by (*print name*)

Date:

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Signature

## D Utility Drawing Review

Completed by the Mechanical Design-Facilities Design Services Group (MD-FDS) representative

The following utilities are present in the excavation area (*check all that apply*):

- |                              |                          |                |                          |                |                          |
|------------------------------|--------------------------|----------------|--------------------------|----------------|--------------------------|
| Electrical                   | <input type="checkbox"/> | Storm drain    | <input type="checkbox"/> | Sanitary sewer | <input type="checkbox"/> |
| Natural gas                  | <input type="checkbox"/> | Compressed air | <input type="checkbox"/> | Water          | <input type="checkbox"/> |
| Process piping               | <input type="checkbox"/> | Telephone      | <input type="checkbox"/> | Control cables | <input type="checkbox"/> |
| Groundwater monitoring wells | <input type="checkbox"/> | Other:         |                          |                |                          |

Refer to drawing number(s):

### Important:

An in-field utility line location is required for all excavations that require a permit: a completed [Excavation Safety: Utility Line Location Results Form](#) must be attached to this form.

Updated as-builts required upon completion? Yes  No

When surveying in an area of underground electrical circuits, energize the circuits when feasible so that the current is flowing during the survey.

\_\_\_\_\_  
Reviewed by (*print name*)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

## E ESH Approval

[Drilling rig initial inspection](#) required? Yes  No

I have reviewed this permit and work may proceed.

\_\_\_\_\_  
Excavation Safety Program Manager (or designee), Environment, Safety, and Health Division  
(*print name*)

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

## Scope Change

If the scope of work changes the excavation safety program manager or designee must be notified in order to determine if the permit must be revised and reapproved. (Examples of a scope change include encountering unexpected conditions or an increase in the size of the excavation.)

Scope revised on (*provide date*):

Comments / observations:

Signature:

## F Close Out

**Completion:** As-built drawings and utility line location results were verified in the field, the drawings were delivered to the excavation safety program manager, and the excavation has been completed according to the permit conditions.

PM or FCM / UTR: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

**Close out:** As-built drawings and utility line location results have been transmitted to MD-FDS, as required.

Permit closed by  
excavation safety  
program manager: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature