

# Chapter 49

## Service Subcontractor Safety

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# 1 Overview

The Stanford Linear Accelerator Center (SLAC) is dedicated to the principle that accidents are preventable and strives to provide a safe work environment for employees, subcontractors, and visitors. Management is committed to the belief that effective safety and operational objectives go hand-in-hand. At a minimum, SLAC expects subcontractors to comply with applicable health and safety regulations as described in this program. SLAC reserves the right to review subcontractors' written safety programs upon request.

To ensure that subcontracted services are completed in compliance with California Occupational Safety and Health (Cal/OSHA) standards and Department of Energy (DOE) health and safety requirements, such work at SLAC will be managed according to established and approved procedures.

Environment, safety, and health (ES&H) considerations must be integral to the planning and execution of subcontracted service work at SLAC. Subcontracted service personnel at all tiers must be fully aware of their legal and contractual responsibility to prevent occupational accidents and injuries.

## 1.1 Hazards/Impacts

Incidents could occur involving subcontracted service personnel and others if work is not well planned in advance and performed according to established procedures and under responsible supervision. Following these procedures will reduce the potential for injury and illness, harm to the environment, property damage, and business interruption.

# 2 Scope

This chapter addresses the controls for service work performed by subcontractors and any lower-tier subcontractors working for them.

Subcontracted service work may include, but is not limited to,

- CAD work/designers
- Cafeteria/catering

- Clerical temps
- Computer support
- Consultants
- Copier repair
- Delivery personnel (drinking water, uniform supply)
- Drain cleaning (including roof drains)
- Electrical services (non-construction subcontracts only)
- Elevator maintenance
- Equipment repair
- Fire alarm maintenance and fire protection
- Furniture installation
- Furniture movers
- Haas TCM and other chemical management services
- Hazardous waste transport and disposal (including radiological waste)
- HVAC maintenance and service (non-construction subcontracts only)
- Janitorial
- Laboratory equipment on-site calibration
- Landscaping
- Mechanical services (non-construction subcontracts only)
- Medical
- Security
- Sewer line service
- Tent erection
- Tree trimming
- Vending machine servicing and maintenance
- Warranty repair and maintenance
- Water sampling (environmental)
- Window washers

The requirements of this chapter do not apply to

- SLAC employees (except for those with responsibilities as discussed in this chapter)

- Subcontracted construction personnel or related construction activities (see Section 4, “Definitions” and Chapter 42, “Subcontractor Construction Safety”<sup>1</sup>)
- Collaborators (university)
- Students
- Scientists
- Faculty
- Casual visitors

## 2.1 Exemptions

There are no exemptions to the requirements of this chapter.

## 2.2 Emergencies

On occasion it may be necessary to engage a service subcontractor on short notice to provide emergency repair and maintenance services (examples include sewer line repair, critical air handling system repair, broken water valve replacement, fallen tree removal). Every effort must be made to use a subcontractor whose safety program has been previously reviewed and approved. All emergency work performed must meet the requirements in Section 5.1.8, “Emergency Service Work”.

# 3 Standards

- Title 10, *Code of Federal Regulations*, “Energy”<sup>2</sup>
  - Part 851, “Worker Safety and Health Program” (10 CFR 851)<sup>3</sup>
- Occupational Safety and Health Administration (OSHA) Directive CPL 2-0.124, “Multi-employer Citation Policy”<sup>4</sup>
- Department of Energy Order 231.1A, “Environment, Safety, and Health Reporting” (DOE O 231.1A)<sup>5</sup>
- Title 8, *California Code of Regulations*, Division 1, “Department of Industrial Relations”
  - Chapter 3.2, Subchapter 1, Article 4.5. “Multi-employer Worksites” (8 CCR 336.10–336.11)<sup>6</sup>

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1 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 42, “Subcontractor Construction Safety”, [http://www-group.slac.stanford.edu/esh/hazardous\\_activities/subcon\\_construction/policies.htm](http://www-group.slac.stanford.edu/esh/hazardous_activities/subcon_construction/policies.htm)

2 “Code of Federal Regulations: Main Page”, <http://www.gpoaccess.gov/cfr/>

3 Additional information on 10 CFR 851 and its implementation is available from the following site: “Worker Safety and Health Program Final Rule - 10 CFR 851”, <http://www.hss.energy.gov/healthsafety/WSHP/rule851/851final.html>

4 [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=DIRECTIVES&p\\_id=2024](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=2024)

5 <http://www.directives.doe.gov/pdfs/doetext/neword/231/o2311ac1.html>

- Chapter 4, Subchapter 5, “Electrical Safety Orders” (8 CCR 2299–2974)<sup>7</sup>
- Chapter 4, Subchapter 7, “General Industry Safety Orders” (8 CCR 3200–6184)<sup>8</sup>

## 4 Definitions

*Accelerator Area.* The area containing the main accelerator and SSRL housings and associated equipment (see *Site Access and Identification Badges Policy and Procedures*<sup>9</sup>). The Accelerator Area is surrounded by a control fence. This area is considered an industrial area (see *industrial area*).

*Buyer/contract administrator (B/CA).* Legal representative for SLAC in service contracts and other business matters

*Casual visitor.* Individual coming to the SLAC campus for a period of no more than 30 days per visit, whose visit does not involve unescorted entry to industrial/accelerator or other areas where unique SLAC hazards warrant limited access, and whose visit is for the following types of purposes: attending public lectures, public tours, or other activities open to the public; attending workshops, conferences, and collaboration meetings; use of the Linear Cafe (SLAC cafeteria); use of the Stanford Guesthouse; and meetings with SLAC personnel.

*Confined space.* A space that is large enough and so configured that a person can bodily enter, that has limited or restricted means for entry or exit (for example, tanks, vessels, vaults, pits), and is not designed for continuous occupancy

*Construction.* Any combination of engineering, purchasing, erection, installation, assembly, demolition, or fabrication used to create a new facility, or to alter, add to, rehabilitate, dismantle, or remove an existing facility. It also includes any construction and excavation activities conducted as part of environmental remediation efforts.

*Construction subcontractor.* An individual or firm hired by SLAC to execute a construction project; includes lower-tier subcontractors

*Facilities technical services representative.* SLAC employee qualified to oversee small purchase order, low and very low risk subcontracting activities as determined by the project manager, supervisor or UTR; usually assigned by the department sponsoring the work

*Imminent hazard.* Any activity or situation that is likely to result in serious injury, death, or significant environmental or property damage (see Chapter 2, “Work Authorization”<sup>10</sup>)

6 [http://www.dir.ca.gov/title8/ch3\\_2sb1a4\\_5.html](http://www.dir.ca.gov/title8/ch3_2sb1a4_5.html)

7 <http://www.dir.ca.gov/Title8/sub5.html>

8 <http://www.dir.ca.gov/Title8/sub7.html>

9 *Site Access and Identification Badges Policy and Procedures* (SLAC-I-720-0A0Z-002), [https://www-internal.slac.stanford.edu/esh/documents\\_internal/SiteAccess.pdf](https://www-internal.slac.stanford.edu/esh/documents_internal/SiteAccess.pdf)

10 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 2, “Work Authorization”, [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

*Incident.* An unintended and undesired event that resulted in (or had the potential to result in) any number of conditions, such as injury or illness, environmental impact, property damage

*Industrial area.* An area where some level of hazard may exist, such as moving machinery, noise, high voltage, hazardous materials/waste (see *Site Access and Identification Badges Policy and Procedures*<sup>11</sup>)

*Job safety analysis (JSA).* The process of planning and detailing the safety controls for specific activities in the work to be performed by the subcontractor

*Pre-work hazard analysis (PWA).* A process by which contracted parties plan work, identify task-specific hazards, assess associated risks, and establish control measures (mitigate risks)

*Project manager.* SLAC representative with overall responsibility for an ongoing service program (such as janitorial services) or project (such as tree trimming). Can act as a supervisor for low and very low risk subcontracting activities. Ensures subcontractor compliance with subcontract documents, including performance, schedule, budget, and safety. When appropriate, the role of a project manager may be delegated to a facilities technical services representative.

*Radiological control area (RCA).* An area where an annual occupational exposure may be greater than 100 mrem. RCAs may also contain radioactive material. RCAs are located throughout SLAC, both inside and outside accelerator areas (see Chapter 9, “Radiological Safety”<sup>12</sup>).

*Serious incident.* An unintended and undesired event that resulted in (or had the potential to result in) any number of conditions, such as a life-threatening injury or illness, broken or severed bone, severe bleeding, loss of consciousness, electric shock, overexposure to radiation, fall greater than four feet, explosion, hazardous material spill, property damage.

*Service subcontractor.* An individual or firm that provides skilled or unskilled labor, repair and maintenance services, deliveries, technical support, job shop personnel, and so on. Specifically excludes construction personnel and activities (see Section 2, “Scope”).

*Service subcontractor safety program manager.* The individual within the ES&H Chemical and General Safety Department with responsibility for the development and maintenance of Chapter 49, Service Subcontractor Safety. Is a resource to the SLAC point of contact community to assist with the review of documentation (pre-work hazard analysis, job safety analysis, site-specific safety plan), the assignment of risk categories, and the impartial interpretation of SLAC policies and regulatory requirements.

*Service work.* Any work involving maintenance, repair, cleaning, or other tasks that are not part of or related to a construction project or activities.

*Site-specific safety plan (SSSP).* A worksite-specific written plan that details how the work is to be performed safely

*SLAC point of contact (SLAC POC).* A general term for the person assigned by the sponsoring line organization to act as the primary SLAC representative to a service subcontractor. The SLAC POC ensures

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11 *Site Access and Identification Badges Policy and Procedures* (SLAC-I-720-0A0Z-002), [https://www-internal.slac.stanford.edu/esh/documents\\_internal/SiteAccess.pdf](https://www-internal.slac.stanford.edu/esh/documents_internal/SiteAccess.pdf)

12 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 9, “Radiological Safety”, [http://www-group.slac.stanford.edu/esh/general/radiological\\_safety/policies.htm](http://www-group.slac.stanford.edu/esh/general/radiological_safety/policies.htm)

the work is completed safely, according to SLAC requirements and contractual expectations, and may be a *university technical representative*, a *project manager*, a *facilities technical services representative*, a *buyer/contract administrator*, an individual assigned by a project manager to oversee low and very low risk subcontracting activities not requiring a UTR, a department manager, a supervisor, or other person assigned by the group sponsoring the work who has fulfilled the minimum POC training requirements (see Section 5.3, “Training”).

*Stop activity.* An instruction to workers to cease an activity anywhere on-site or for SLAC-sponsored activities off-site that present an imminent hazard to SLAC individuals, the public, the environment, or property. Individuals involved in or observing such an activity have the responsibility to alert workers to the hazard. Workers who are alerted must stop their activity to discuss any safety concerns and take steps as required to mitigate the hazard (see Chapter 2, “Work Authorization”<sup>13</sup>).

*Stop work order.* An order by the buyer/contract administrator to stop all work on a subcontract when a work crew has been identified violating safe work practices on a repeated basis, if the subcontractor’s supervision is unresponsive to direction to improve work practices, or if there has been a finding of imminent endangerment (see Chapter 2, “Work Authorization”<sup>14</sup>).

*University technical representative (UTR).* Designated representative responsible for overseeing the execution of the work, which includes safety and health management of service subcontractor activities

## 5 Requirements

### 5.1 General

#### 5.1.1 SLAC Point of Contact

For every service subcontract established, a SLAC point of contact will be assigned to act as its custodian and to ensure the subcontractor completes work safely, according to SLAC requirements and contractual expectations. The types of service subcontract work may vary from small-scope, low risk work (such as a one-week computer or clerical support contract) to extended-scope, high risk work (such as ongoing hazardous waste handling or tree trimming). Depending on the size, complexity, and risk level of the subcontracted service work, SLAC assigns a point of contact based on a tiered approach.

*Note* Only university technical representatives (UTRs) are eligible to oversee moderate or high risk subcontracted work as the SLAC point of contact.

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13 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 2, “Work Authorization”, [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

14 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 2, “Work Authorization”, [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

*Note* The SLAC University Technical Representative Requirements and Procedures for Construction.<sup>15</sup> applies mainly to construction work. Chapter 49 requires UTR involvement for moderate and high risk service work, and therefore this chapter should be referenced along with the UTR guide when UTRs are assigned to oversee service activities.

The role of SLAC point of contact, as used in this chapter, may be played by any of the following:

1. **Project manager (PM).** This person oversees the completion of complex service work (including high or moderate risk work) that requires SLAC coordination of scheduling, budget, and performance. The project manager is usually assigned by the organization sponsoring the work. For high- and moderate-risk work, a UTR must be assigned to work with the project manager.
2. **University technical representative (UTR).** This person is assigned by the project manager, supervisor, or the requestor for high or moderate risk service work, for all work scheduled off-hours, and for work inherently complex in nature or scope. The UTR may act as the point of contact working under the supervision of a project manager, or may be the primary point of contact for a service subcontract, depending on the scope, nature, and location of the work (see the *SLAC University Technical Representative Requirements and Procedures for Construction*).
3. **Facilities technical services representative (FTSR).** When assigned by a project manager or supervisor, a FTSR becomes the SLAC point of contact and administratively manages small purchase order service work not requiring project manager or UTR oversight due to its simplicity, restricted scope, and low or very low risk categorization.
4. **Buyer/contract administrator (B/CA).** This purchasing representative manages low and very low risk service subcontracts as the POC when there is no singularly-identified customer, the work is not a project, and the subcontract covers multiple locations and divisions, such as water delivery, catering/cafeteria services, and vending machines.
5. **Department manager or supervisor.** This person may be the requestor or approver of the purchase requisition and is usually from the group sponsoring the work. A department manager or supervisor is eligible for POC assignment on low and very low risk work only.

### 5.1.2 Risk Categorization

As the types of subcontracted service work are varied, SLAC has segregated the associated levels of risk of subcontracted services into four categories (see Service Subcontractor Safety: Risk Categorization Reference<sup>16</sup>):

1. High risk
2. Moderate risk
3. Low risk
4. Very low risk

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15 *SLAC University Technical Representative Requirements and Procedures for Construction* (SLAC-I-720-0A03Z-002), <https://www-internal.slac.stanford.edu/operations/manuals/UTRManual.pdf>

16 Service Subcontractor Safety: Risk Categorization Reference (SLAC-I-730-0A21T-007), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesRefRiskClass.pdf>

These categories provide the basis for the determination of subcontractor training requirements, the level of detail required in their safety documentation, and the amount and type of POC oversight required. All service subcontracts must be classified according to this scheme.

### 5.1.3 Planning and Document Review

Depending on the assigned risk categorization level, the service subcontractor will prepare and submit various types of safety documentation, such as the pre-work hazard analysis (PWHA), job safety analysis (JSA), and site-specific safety plan (SSSP). This documentation will be reviewed for completeness and quality by SLAC personnel (see Service Subcontractor Safety: Risk-based Safety Documentation Requirements<sup>17</sup>).

### 5.1.4 Notification and Hours Worked

The subcontractor must notify the SLAC point of contact prior to the day(s) their staff will be on site.

### 5.1.5 Safety Assurance

Service subcontractor work is subject to review by project managers, FTSRs, UTRs, safety inspectors, and other SLAC points of contact, who monitor field activities on a regular basis. Subcontractor supervisors will inspect their worksites to minimize the possibility of injury to personnel, damage to property, adverse effects to the environment, and disruptions or delays resulting from accidents, fires, or hazardous material incidents.

The frequency and scope of worksite inspections will depend on

- The number and type of hazards involved (such as work at elevations, confined spaces, chemical use)
- The level of risk to personnel, property, and the environment
- The presence of qualified safety and health personnel assigned to the work crew
- Previous experience with the subcontractor

#### 5.1.5.1 Recordkeeping

The subcontractor will keep inspection documentation for a minimum of six months after the date of inspection and will make it available to SLAC upon request. Documentation may include completed and signed logs, checklists, and so on.

### 5.1.6 Stopping Unsafe Activities

Detailed information about stopping unsafe activities and subsequent response and mitigation efforts is provided in Chapter 2, “Work Authorization”.<sup>18</sup>

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17 Service Subcontractor Safety: Risk-based Safety Documentation Requirements (SLAC-I-730-0A21S-021), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesReqDocument.pdf>

18 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 2, “Work Authorization”, [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

A *stop work order* (see Section 4, “Definitions”) may be issued by the B/CA in accord with Work Authorization: Subcontractor Stop Activity/Work Requirements.<sup>19</sup>

### 5.1.7 Incident Reporting

Subcontracted service personnel must report all incidents that occur at SLAC in the course of their work to their primary SLAC point of contact (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>20</sup>).

### 5.1.8 Emergency Service Work

During normal working hours, the requestor contacts SLAC Purchasing to acquire emergency subcontracted services. After hours the requestor may contact the service subcontractor directly and must verify the requirements in this section are met.

The subcontractor responding to an emergency call must have in place pre-work hazard analysis (PWHA) documentation (see Section 5.1.2, “Risk Categorization”). Prior to starting work the subcontractor must agree to comply with SLAC ES&H requirements for the duration of the performance of the work.

If subcontractor personnel have not yet completed required SLAC-specific ES&H orientation and training, but have otherwise proven their competency in their trade as needed to do the work, they must be accompanied by the UTR or project manager (for high and moderate risk work), or other assigned POC (for low and very low risk work).

#### 5.1.8.1 After Hours Emergency Service Work

A UTR or project manager should be present while work is being performed during off-hours. If neither is available due to the emergency nature of the work, or if the work is categorized as low or very low risk, the POC or person requesting the work must assign a SLAC representative to oversee the service subcontractor’s activities at the jobsite until one of the following occurs:

1. UTR or project manager arrives.
2. The job is completed and the subcontractor leaves SLAC property.

### 5.1.9 Personnel

#### 5.1.9.1 Training

The SLAC point of contact will complete the “SLAC Point of Contact” tutorial prior to assuming any POC responsibilities relating to on-site subcontractor work as required in Section 5.3, “Training”.

The SLAC point of contact will ensure the service subcontracting company employees have received SLAC- and trade-specific training as required in Section 5.3, “Training”.

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19 Work Authorization: Subcontractor Stop Activity/Work Requirement (SLAC-I-720-0A21S-004), <http://www-group.slac.stanford.edu/esh/eshmanual/references/workReqSubStopWork.pdf>

20 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

### 5.1.9.2 Badging

The SLAC point of contact will ensure that service subcontracting company employees are badged in accordance with the *Site Access and Identification Badges Policy and Procedures*.<sup>21</sup>

## 5.1.10 Roles and Responsibilities

Roles and responsibilities for project managers, UTRs, and subcontractors are listed in the *SLAC University Technical Representative Requirements and Procedures for Construction*.<sup>22</sup> Additional responsibilities specific to this chapter are provided below.

### 5.1.10.1 Service Subcontractor Safety Program Manager

When requested by the SLAC point of contact, the service subcontractor safety program manager acts as a resource by

- Reviewing work plan safety documents (such as the pre-work hazard analysis or site-specific safety plan)
- Researching and interpreting regulatory and SLAC safety requirements

### 5.1.10.2 Project Manager

Additional responsibilities of the project manager include

- Determining what level of UTR or FTSR qualifications and support are needed, based on disciplines and risk category involved in the project or service
- Requesting assistance from the service subcontractor safety program manager or other subject matter expert in ES&H when the project or service involves areas outside the project manager's area of expertise, or when an impartial interpretation of SLAC policy or regulatory requirement is needed
- Assigning a UTR or FTSR as needed
- Requesting a job safety analysis (JSA) from the service subcontractor if required by this chapter
- With the UTR (if applicable), reviewing the subcontractor's pre-work hazard analysis, site-specific safety plan (if required based on the assigned risk categorization), and job safety analysis for thoroughness and quality
- Working with the subcontractor to improve the plans if needed, and signing off on the paperwork if acceptable and complete
- Obtaining safety permits as needed (such as hot work, confined space)
- Obtaining authorization from relevant division, facility and building managers
- Obtaining, in writing, the subcontractor's appointment of competent persons where such an appointment is required

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21 *Site Access and Identification Badges Policy and Procedures* (SLAC-I-720-0A0Z-002), [https://www-internal.slac.stanford.edu/esh/documents\\_internal/SiteAccess.pdf](https://www-internal.slac.stanford.edu/esh/documents_internal/SiteAccess.pdf)

22 *SLAC University Technical Representative Requirements and Procedures for Construction* (SLAC-I-720-0A03Z-002), <https://www-internal.slac.stanford.edu/operations/manuals/UTRManual.pdf>

- Completing the Service Subcontractor Safety: ES&H Compliance Checklist<sup>23</sup> and obtaining the notice to proceed from the buyer/contract administrator before allowing work to begin
- Maintaining copies of completed PWHAs, JSAs, and SSSPs as applicable for a minimum of one year after completion of work
- Leading incident investigations (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>24</sup> and Chapter 28, “Incident Investigation”<sup>25</sup>)
- Initiating stop activity action in accordance with Section 5.1.6, “Stopping Unsafe Activities”

#### 5.1.10.3 University Technical Representative

Additional responsibilities of the UTR include (as applicable)

- With the project manager, requesting a job safety analysis (JSA) from the service subcontractor if required by this chapter
- With the project manager, reviewing the subcontractor’s pre-work hazard analysis, site-specific safety plan (if required based on the assigned risk categorization), and job safety analysis for thoroughness and quality
- Requesting assistance from the service subcontractor safety program manager or other subject matter expert in ES&H when the project or service involves areas outside the UTR’s area of expertise, or when an impartial interpretation of SLAC policy or regulatory requirement is needed
- When needed, assisting subcontractors in the development of JSAs
- Ensuring that subcontractor personnel have received SLAC safety training as required by Section 5.3, “Training”, and have been instructed on SLAC rules and regulations
- Ensuring subcontractors have completed site-specific training as defined in pre-work documents if required
- Determining that subcontractor-appointed competent persons are present during work requiring them
- Assisting the project manager in completing the Service Subcontractor Safety: ES&H Compliance Checklist<sup>26</sup>
- Obtaining the notice to proceed from the B/CA before allowing work to begin (if delegated this task by the project manager)
- Overseeing subcontractor compliance with the site-specific safety and health plan and job safety analyses
- Providing oversight of work off-hours

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23 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>

24 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

25 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 28, “Incident Investigation”, <http://www-group.slac.stanford.edu/esh/general/incident/policies.htm>

26 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>

- Conducting regular job site inspections
- Ensuring that work is regularly monitored for potentially hazardous conditions
- Ensuring that identified hazardous conditions have been corrected
- Initiating stop activity action in accordance with Section 5.1.6, “Stopping Unsafe Activities”
- Assisting with incident investigations (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>27</sup> and Chapter 28, “Incident Investigation”<sup>28</sup>)
- Maintaining records of
  - Hazards identified and abated
  - All safety-related permits

#### 5.1.10.4 Facilities Technical Services Representative

The responsibilities of a FTSR are similar to that of a UTR or project manager, but are scaled down relative to the scope, complexity, and risk level of the job, and include

- Identifying potential hazards associated with the project or service and ensures that appropriate hazard mitigation measures are implemented
- Obtaining authorization from relevant division, facility, and building manager
- Obtaining safety permits as needed (such as hot work, confined space)
- With the project manager, requesting a job safety analysis (JSA) from the service subcontractor if required
- Reviewing and approving subcontractor submittals, including pre-work hazard analyses, job safety analyses and site-specific safety plans with the project manager or UTR
- Requesting assistance from the service subcontractor safety program manager or other subject matter expert in ES&H when the work involves areas outside the FTSR’s area of expertise, or when an impartial interpretation of SLAC policy or regulatory requirement is needed
- Assisting the project manager in completing the Service Subcontractor Safety: ES&H Compliance Checklist<sup>29</sup>
- Obtaining the notice to proceed from the B/CA before allowing work to begin (if delegated this task by the project manager)
- Conducting regular and frequent job site inspections
- Initiating stop activity action in accordance with Section 5.1.6, “Stopping Unsafe Activities”
- When acting as the SLAC point of contact, leading incident investigations (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>30</sup> and Chapter 28, “Incident Investigation”<sup>31</sup>)

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27 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

28 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 28, “Incident Investigation”, <http://www-group.slac.stanford.edu/esh/general/incident/policies.htm>

29 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>

#### 5.1.10.5 Buyer/Contract Administrator

This person ensures compliance with administrative, business, and contractual requirements of the subcontract. The B/CA is the only individual who may negotiate, make change orders to, or provide addenda to the contract, and may act as the SLAC point of contact if appropriate.

Responsibilities of the B/CA include (as applicable)

- Obtaining written safety planning documentation from the subcontractor, such as pre-work hazard analyses, certificates of insurance, and site-specific safety plans as applicable (see Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure<sup>32</sup>)
- Reviewing such documentation for completeness
- Submitting such documentation to the project manager or other SLAC point of contact
- Requesting assistance from the service subcontractor safety program manager or other subject matter expert in ES&H when the work involves areas outside the B/CA's area of expertise, or when an impartial interpretation of SLAC policy or regulatory requirement is needed
- Withholding the award of the purchase order to the contractor until the project manager has satisfactorily completed the Service Subcontractor Safety: ES&H Compliance Checklist<sup>33</sup>
- In the case of the cafeteria contract, the B/CA will cooperate with the incident investigation program manager as needed during investigations (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>34</sup> and Chapter 28, "Incident Investigation"<sup>35</sup>)

#### 5.1.10.6 Service Subcontractors

Additional responsibilities of the subcontractor include

- Completing and submitting to the SLAC buyer/contract administrator (B/CA) required safety planning documentation such as pre-work hazard analyses and site-specific safety plans
- Submitting to the B/CA a certificate of insurance
- With the SLAC point of contact, jointly complete the job safety analysis (JSA) form and brief workers on the work to be performed and any associated hazard mitigation steps before the start of work

30 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

31 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 28, "Incident Investigation", <http://www-group.slac.stanford.edu/esh/general/incident/policies.htm>

32 Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure (SLAC-I-730-0A21C-016), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesProcedRiskPlanning.pdf>

33 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>

34 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

35 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 28, "Incident Investigation", <http://www-group.slac.stanford.edu/esh/general/incident/policies.htm>

- Submitting completed JSAs to the SLAC point of contact
- Providing clarification on safety planning documentation to SLAC as requested by the service subcontractor safety program manager, the project manager, UTR, or other SLAC point of contact
- Coordinate activities, training, and schedules with the SLAC point of contact
- Maintaining copies of completed PWHAs, JSAs, and SSSPs for a minimum of one year after completion of work
- Following the requirements of this document and related exhibits

## 5.2 Procedures and Specific Requirements

The following procedures are required. For the full procedures, see Section 6, “Exhibits”.

### 5.2.1 Risk Categorization

Categorizing service subcontractor work according to risk (see Service Subcontractor Safety: Pre-work Hazard Analysis Form<sup>36</sup> Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure,<sup>37</sup> and Service Subcontractor Safety: Risk Categorization Reference<sup>38</sup>).

### 5.2.2 Planning and Document Review

Developing and reviewing risk-based safety plans and documentation (see Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure,<sup>39</sup> and Service Subcontractor Safety: ES&H Compliance Checklist<sup>40</sup>)

### 5.2.3 Stopping Unsafe Activities

Detailed information about stopping unsafe activities and subsequent response and mitigation efforts is provided in Chapter 2, “Work Authorization”.<sup>41</sup>

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36 Service Subcontractor Safety: Pre-work Hazard Analysis Form (SLAC-I-730-0A21J-024), <http://www-group.slac.stanford.edu/esh/forms/>

37 Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure (SLAC-I-730-0A21C-016), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesProcedRiskPlanning.pdf>

38 Service Subcontractor Safety: Risk Categorization Reference (SLAC-I-730-0A21T-007), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesRefRiskClass.pdf>

39 Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure (SLAC-I-730-0A21C-016), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesProcedRiskPlanning.pdf>

40 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>

41 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 2, “Work Authorization”, [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

A *stop work order* (see Section 4, “Definitions”) may be issued by the B/CA in accord with Work Authorization: Subcontractor Stop Activity/Work Requirements.<sup>42</sup>

### 5.2.4 Incident Reporting

Incident reporting procedure for service subcontractors (see Incident Investigation: Subcontractor Incident Reporting Procedure<sup>43</sup>)

## 5.3 Training

### 5.3.1 SLAC Point of Contact

Personnel must read a one-time, short tutorial before being assigned as the SLAC point of contact (POC) for a service subcontractor or assuming any related responsibilities. This usually occurs during the purchase requisition phase. The tutorial requires the person to acknowledge and accept POC responsibilities upon completing the tutorial.

*Note* The requirement to complete the POC tutorial does not apply to UTRs.

### 5.3.2 Employee Orientation to Environmental Safety and Health

All service subcontractors who work at SLAC for more than 60 days during a given year, and/or who need to take general employee radiological training (GERT) in order to enter radiological control areas unescorted, must take this course:

- ES&H Course 219, Employee Orientation to Environment, Safety, and Health (EOESH)<sup>44</sup>

### 5.3.3 General Employee Radiological Training

Any service subcontractor who will need to enter a radiological control area (RCA) without an escort must take this course:

- ES&H Course 115, General Employee Radiological Training (GERT)<sup>45</sup>

### 5.3.4 Safety Orientation for Non-SLAC Employees

Any individual who meets the following conditions

- Performs work at SLAC for **less than 60 days** during a given year
- Enters industrial or accelerator areas

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42 Work Authorization: Subcontractor Stop Activity/Work Requirement (SLAC-I-720-0A21S-004), <http://www-group.slac.stanford.edu/esh/eshmanual/references/workReqSubStopWork.pdf>

43 Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017), <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>

44 [https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog\\_item.asp?course=219](https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog_item.asp?course=219)

45 [https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog\\_item.asp?course=115](https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog_item.asp?course=115)

- Does not require access to RCAs

Must take this course:

- ES&H Course 396, Safety Orientation for Non-SLAC employees (SO)<sup>46</sup>

### 5.3.5 Site-specific Safety Orientation

In addition to the above courses, individuals working at locations with specific hazards not covered in ES&H Course 396, Safety Orientation for Non-SLAC employees (SO), will complete a site-specific safety orientation. The SLAC point of contact will coordinate this training and will engage the services of the building or area managers as appropriate. In general, building managers will be asked to conduct site-specific orientation within buildings, and the area manager or the PM/FTSR will be asked to conduct the orientation for work conducted outside of buildings.

### 5.3.6 Other SLAC Courses

Based on the tasks and hazards identified during planning (see sections 5.1.2, “Risk Categorization”, and 5.1.3, “Planning and Document Review”), service subcontractors may be required to complete additional SLAC ES&H training courses as determined by the service subcontractor safety program manager in ES&H, the SLAC point of contact, or the UTR. (See Training: Training Needs Assessment Procedures.<sup>47</sup>)

### 5.3.7 Trade-related Safety Training

Service subcontractors, labor service providers, and job shop agencies are responsible for their employees’ trade-related safety training. When contracted personnel arrive at SLAC they must

- Be skilled in their specific trade
- Be knowledgeable of the applicable safety requirements for that trade
- Be equipped with the proper PPE and tools to safely perform their work
- Be physically ready to work
- Have completed all administrative requirements such as medical exams

The basic safety rules applicable to each trade or service industry should already been known and understood by those contracted parties. SLAC’s ES&H training is directly related to the unique SLAC-specific hazards that contracted personnel may encounter. SLAC-specific training will not absolve contracted parties from ensuring their employees have the general training, skill level, and safety knowledge needed to work safely and competently.

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46 [https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog\\_item.asp?course=396](https://www-internal.slac.stanford.edu/esh-db/training/slaonly/bin/catalog_item.asp?course=396)

47 Training: Training Needs Assessment Procedures (SLAC-I-720-0A04C-002), <http://www-group.slac.stanford.edu/esh/eshmanual/references/trainingProcedAssessment.pdf>

## 6 Exhibits

- Service Subcontractor Safety: Implementation Plan (SLAC-I-730-0A21M-002)<sup>48</sup>
- Service Subcontractor Safety: Risk Categorization Reference (SLAC-I-730-0A21T-007)<sup>49</sup>
- Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure (SLAC-I-730-0A21C-016)<sup>50</sup>
- Service Subcontractor Safety: Risk-based Safety Documentation Requirements (SLAC-I-730-0A21S-021)<sup>51</sup>
- Service Subcontractor Safety: Pre-work Hazard Analysis Form (SLAC-I-730-0A21J-024)<sup>52</sup>
- Service Subcontractor Safety: Site-specific Safety Plan Form (SLAC-I-730-0A21J-026)<sup>53</sup>
- Service Subcontractor Safety: Job Safety Analysis (JSA) Form (SLAC-I-730-0A21J-017)<sup>54</sup>
- Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016)<sup>55</sup>
- Work Authorization: Subcontractor Stop Activity/Work Requirements (SLAC-I-720-0A21S-004)<sup>56</sup>
- Incident Investigation: Subcontractor Incident Reporting Procedure (SLAC-I-730-0A21C-017)<sup>57</sup>
- Training: Training Needs Assessment Procedures (SLAC-I-720-0A04C-002)<sup>58</sup>
- *SLAC University Technical Representative Requirements and Procedures for Construction* (SLAC-I-720-0A03Z-002)<sup>59</sup>

## 7 References

### Management Systems

- *SLAC Integrated Safety and Environmental Management System Description* (SLAC-I-720-0A00B-001)<sup>60</sup>

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- 48 <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesPlanImplement.pdf>
  - 49 <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesRefRiskClass.pdf>
  - 50 <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesProcedRiskPlanning.pdf>
  - 51 <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesReqDocument.pdf>
  - 52 <http://www-group.slac.stanford.edu/esh/forms/>
  - 53 <http://www-group.slac.stanford.edu/esh/forms/>
  - 54 <http://www-group.slac.stanford.edu/esh/forms/>
  - 55 <http://www-group.slac.stanford.edu/esh/forms/>
  - 56 <http://www-group.slac.stanford.edu/esh/eshmanual/references/workReqSubStopWork.pdf>
  - 57 <http://www-group.slac.stanford.edu/esh/eshmanual/references/incidentProcedSubReporting.pdf>
  - 58 <http://www-group.slac.stanford.edu/esh/eshmanual/references/trainingProcedAssessment.pdf>
  - 59 <https://www-internal.slac.stanford.edu/operations/manuals/UTRManual.pdf>

- “Worker Safety and Health Program”<sup>61</sup>

*SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)*<sup>62</sup>

- Chapter 2, “Work Authorization”<sup>63</sup>
- Chapter 9, “Radiological Safety”<sup>64</sup>
- Chapter 16, “Spills”<sup>65</sup>
- Chapter 24, “Training”<sup>66</sup>
- Chapter 28, “Incident Investigation”<sup>67</sup>
- Chapter 42, “Subcontractor Construction Safety”<sup>68</sup>

Other SLAC documents

- “Purchasing Department – Terms and Conditions”<sup>69</sup>
- *Site Access and Identification Badges Policy and Procedures (SLAC-I-720-0A0Z-002)*<sup>70</sup>

## 8 Implementation

The requirements of this chapter will be implemented according to the Service Subcontractor Safety: Implementation Plan.<sup>71</sup>

## 9 Ownership

Department: Chemical and General Safety

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60 <http://www-group.slac.stanford.edu/esh/general/isems/sms.pdf>

61 <http://www-group.slac.stanford.edu/esh/general/wshp/>

62 <http://www-group.slac.stanford.edu/esh/eshmanual/>

63 [http://www-group.slac.stanford.edu/esh/general/work\\_authorization/policies.htm](http://www-group.slac.stanford.edu/esh/general/work_authorization/policies.htm)

64 [http://www-group.slac.stanford.edu/esh/general/radiological\\_safety/policies.htm](http://www-group.slac.stanford.edu/esh/general/radiological_safety/policies.htm)

65 <http://www-group.slac.stanford.edu/esh/environment/spills/policies.htm>

66 <http://www-group.slac.stanford.edu/esh/training/chapter/policies.htm>

67 <http://www-group.slac.stanford.edu/esh/general/incident/policies.htm>

68 [http://www-group.slac.stanford.edu/esh/hazardous\\_activities/subcon\\_construction/policies.htm](http://www-group.slac.stanford.edu/esh/hazardous_activities/subcon_construction/policies.htm)

69 <http://www-group.slac.stanford.edu/bsd/pur/termsAndConditions.htm>

70 [https://www-internal.slac.stanford.edu/esh/documents\\_internal/SiteAccess.pdf](https://www-internal.slac.stanford.edu/esh/documents_internal/SiteAccess.pdf)

71 Service Subcontractor Safety: Implementation Plan (SLAC-I-730-0A21M-002), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesPlanImplement.pdf>

Program: Service Subcontractor Safety

Owner: Program Manager

# Service Subcontractor Safety: Implementation Plan

Department: Chemical and General Safety

Program: Service Subcontractor Safety

Owner: Program Manager, Butch Byers

Authority: ES&H Manual, Chapter 49, Service Subcontractor Safety

The requirements of Chapter 49, "Service Subcontractor Safety", will be phased in according to the following schedule.

Section Number	Section Title	Effective (for both new and renewed subcontracts)
5.1.3	<p>Planning and Document Review</p> <p>B/CA no longer sends all service subcontractor PWHAs and SSSPs to CGS. POC will review and accept safety planning documents, and will request CGS support as needed. Service subcontractor safety program manager to work with director and deputy director of purchasing to train B/CA.</p>	Immediately
5.1.1	<p>SLAC Point of Contact (POC)</p> <p>Short term: B/CA asks requestor to assign POC and documents in text of purchase order. B/CA requires POC to read roles and responsibilities available online.</p> <p>Long term: Purchase requisition form requires POC assignment and acceptance of responsibilities before submittal (hard programmed). .</p>	<p>Short term: January 1, 2007</p> <p>Long term: BIS and PeopleSoft re-programming and subsequent user education: 6-12 months (complete by December 1, 2007)</p>
5.1.2	<p>Risk Categorization</p> <p>Short term: B/CA asks POC to assign risk category and documents category in text of purchase order.</p> <p>Long term: Purchase requisition form requires risk category field to be completed before submittal (hard programmed).</p>	<p>Short term: January 1, 2007</p> <p>Long term: BIS and PeopleSoft re-programming and subsequent user education: 6-12 months (complete by December 1, 2007)</p>
5.1.4	<p>Notification</p> <p>Service subcontractors must notify their SLAC POC prior to any day their staff will be on site.</p>	April 1, 2007 for new subcontracts or subcontracts renewed after this date
Various	<p>Various</p> <p>Revise terms and conditions for service subcontractors to include provisions for notification prior to arrival, submittal of safety planning documents, etc.</p>	July 1, 2007



# Service Subcontractor Safety: Risk Categorization Reference

Department: Chemical and General Safety

Program: Service Subcontractor Safety

Owner: Program Manager, Butch Byers

Authority: ES&H Manual, Chapter 49, Service Subcontractor Safety

## ***Examples of Subcontracted Service Work in Different Risk Categories***

Examples for the SLAC point of contact (POC) for a given service subcontract to use in determining an appropriate risk categorization (see Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure<sup>1</sup>).

### **Very Low Risk**

#### *Material Deliveries*

- Uniforms, vending machine deliveries into non-industrial and non-accelerator areas
- Pick-up and drop-off of palletized equipment

#### *Consulting/Meetings and Office Work*

- Guests, speakers, and trainers
- Engineers, consultants, advisors and students working in an office environment

### **Low Risk**

#### *Material Deliveries*

- Drinking water bottles delivered into non-industrial and non-accelerator areas
- Delivery of office supplies and/or chemicals in “consumer packaging” (for example, Corporate Express) into non-industrial and non-accelerator areas
- Office furniture delivered with minor assembly required in office areas
- Material that must be uncrated and moved into location

#### *Equipment Installation, Repair and Calibration*

- Copy machine repair done without live circuits
- Calibration of de-energized equipment
- Computer setup and repairs
- Installation of window blinds/shades that require neither power tools nor ladder use

#### *Other Activities*

- Ground-based landscaping (lawn maintenance, planting, bush and tree pruning)

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1 Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure (SLAC-I-730-0A21C-016), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesProcedRiskPlanning.pdf>

## Service Subcontractor Safety: Risk Categorization Reference

- Lawn sprinkler repairs or modifications
- Use of chemicals in “consumer packaging” (whiteboard cleaner, white-out, PVC pipe glue, wood glue, janitorial cleaning supplies, etc.)

### **Moderate Risk**

#### *Equipment Installation, Repair, and Calibration*

- Office partition installation, move, or repair (not containing electrical connections)
- Installation of shelves and window blinds/shades that require use of power tools and/or ladders
- Low voltage testing and calibrating of equipment (below 50 volts)
- Carpet and furniture installation
- HVAC duct cleaning without entry into the duct and without the use of chemicals
- Oven hood repairs that do not require lockout/tag-out or use of chemicals

#### *Mechanical Work*

- Concrete coring

#### *Other Activities*

- Kitchen appliance or other equipment repair that does not require lockout/tag-out (items that can be unplugged) – includes warranty work
- Site survey work
- Pesticide application
- Vector control
- Use of Class 2 and 3a lasers
- On-site assembly of purchased components by a vendor
- Elevator, crane, HVAC, and other equipment inspection or service that does not require lockout/tagout, fall protection, and/or use of chemicals
- Class 2 asbestos activities (involves the removal of asbestos materials which are not friable asbestos materials, such as undamaged floor tiles, wallboard, and transite)

### **High Risk**

#### *Contracted Deliveries*

- Delivery of compressed gases and cryogenics (bulk hydrogen, bulk propane, bulk helium, liquid nitrogen, liquid helium, oxygen and acetylene cylinders, etc.)
- Delivery of chemicals (sulfuric acid, sodium hypochlorite, other water treatment chemicals, plating and paint shop chemicals, laboratory chemicals, etc.)
- Bulk liquid fuel deliveries (gasoline, diesel)

#### *Work Activities*

- Working on energized equipment greater than 50 volts
- Installation of office partitions containing electrical connections
- Any activity where lockout/tag-out of an energy source is required
- Overhead door repair

## Service Subcontractor Safety: Risk Categorization Reference

- Pole work of any nature (electrical or phone)
- Elevator repair (assumes lockout/tagout/maintenance/inspection)
- Equipment alignment of energized equipment
- Fire water system repair or modifications
- Class 1 asbestos work activities (involves the removal of friable asbestos, thermal systems insulation, and surfacing asbestos-containing and potentially asbestos-containing materials)
- Use of chemicals requiring special handling precautions (HF, methylene chloride, etc.)

### *Mechanical Work*

- High-hazard tree work (aerial-based tree trimming, fallen tree removal and stump removal, use of mechanical wood chipping, and maintenance of 230kv electrical right-of-way)
- Laser repair and installation
- Chiller or refrigerant repair, recovery, or replacement
- Window cleaning above four feet
- Use of Class 3b and 4 lasers
- Any work using drill rigs (ie, geotechnical or hazardous waste investigations)

### *Work Environments*

- Any work where the work platform is more than four feet above the lower level
- Any work within six feet of the leading edge of a roof or other elevated work surface
- Confined space entry of any nature
- Work in radiological- or chemical-contaminated areas



# Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure

Department: Chemical and General Safety

Program: Service Subcontractor Safety

Owner: Program Manager

Authority: ES&H Manual, Chapter 49, Service Subcontractor Safety<sup>1</sup>

## Requirements by Risk Category

Risk Category	Pre-mobilization	Notice to Proceed	Safety Orientation	Work Execution		
	Site-specific safety plan	Pre-work hazard analysis (PWHA)	Purchasing Department	EOESH if more than 60 days SON if fewer than 60 days	Site-specific safety orientation	Job safety analysis (JSA)
High	X		X	X	A	X
Moderate		X	X	X	A	
Low		X	X	X	A	
Very low		X	X		A	

A: Site-specific orientation is required if SLAC-specific hazards exist in work area.

## Procedure

Step	Person	Action
1.	POC	Submits Purchase Requisition, scope of services, and Risk Categorization to the B/CA to initiate the service subcontracting process.
2.	B/CA	Conducts procurement process in accordance with purchasing guidelines. Provides award notice to selected service subcontractor.
3.	Subcontractor	Submits a SOW and a Certificate of Insurance to SLAC Purchasing B/CA. For service subcontracts categorized by POC as very low, low, or moderate risk, submits PWHA to B/CA. <sup>2</sup> For subcontracts categorized by POC as high risk, submits a SSSP to B/CA. <sup>3</sup>
4.	B/CA	Receives the documents from the subcontractor, reviews them for completeness

1 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 49, “Service Subcontractor Safety”, [http://www-group/esh/general/subcon\\_safety/policies.htm](http://www-group/esh/general/subcon_safety/policies.htm)

2 Service Subcontractor Safety: Pre-work Hazard Analysis Form (SLAC-I-730-0A21J-024), <http://www-group.slac.stanford.edu/esh/forms/>

3 Service Subcontractor Safety: Site-specific Safety Plan Form (SLAC-I-730-0A21J-026), <http://www-group.slac.stanford.edu/esh/forms/>

## Service Subcontractor Safety: Risk Categorization, Planning, and Documentation Review Procedure

Step	Person	Action
5.	B/CA	Copies the SOW and either the SSSP or the PWHA and forwards them to the POC for review
6.	POC	Reviews the documents for thoroughness and quality, and contacts the subcontractor as necessary to discuss the details of the work. Safety planning support should be obtained by the POC as needed, from either the POC's departmental safety personnel, or CGS staff. Provides review comments to B/CA. If the subcontractor has not visited the work area(s) as part of the procurement process, a site walk should be conducted to ensure all job- and site-specific hazards as having been identified.
7.	POC	When satisfied with the PWHA or SSSP, signs the safety plan as being complete and as having been reviewed.
8.	POC	Uses the Service Subcontractor Safety: ES&H Compliance Checklist <sup>4</sup> to verify that the subcontractor has satisfactorily addressed all applicable elements up to the NTP
9.	POC	If so, informs the B/CA to issue the NTP to the subcontractor
10.	Subcontractor	Coordinates with POC to ensure that workers undergo any applicable SLAC-specific training (SON if workers to be onsite for < 60 days, EOESH if workers to be onsite for > 60 days)
11.	Subcontractor	For subcontracts categorized as high hazard, completes the JSA <sup>5</sup> and submits to SLAC POC prior to beginning each phase of work. Reviews JSA hazards and mitigations with workers and POC prior to start of each phase.
12.	Subcontractor	Begins work
13.	B/CA	Maintains the PWHA and SSSPs (as applicable, see Service Subcontractor Safety: Risk-based Safety Documentation Requirements <sup>6</sup> ) on file with purchase order documentation for that subcontractor for a minimum of one year after the completion of work
14.	Subcontractor/SLAC POC	Maintains the PWHA, JSA, and SSSP (as applicable) on file for a minimum of one year after completion of work

### Legend

B/CA = buyer/contract administrator

ESH = service subcontractor safety program manager in ES&H

JSA = job safety analysis

NTP = notice to proceed

POC = point of contact

PWHA = pre-work hazard analysis

SOW = scope of work

SSSP = site-specific safety plan

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- 4 Service Subcontractor Safety: ES&H Compliance Checklist (SLAC-I-730-0A21J-016), <http://www-group.slac.stanford.edu/esh/forms/>
- 5 Service Subcontractor Safety: Job Safety Analysis (JSA) Form (SLAC-I-730-0A21J-017), <http://www-group.slac.stanford.edu/esh/forms/>
- 6 Service Subcontractor Safety: Risk-based Safety Documentation Requirements (SLAC-I-730-0A21S-021), <http://www-group.slac.stanford.edu/esh/eshmanual/references/servicesReqDocument.pdf>

# Service Subcontractor Safety: Risk-based Safety Documentation Requirements

Department: Chemical and General Safety

Program: Service Subcontractor Safety

Owner: Program Manager

Authority: ES&H Manual, Chapter 49, Service Subcontractor Safety<sup>1</sup>

## Very Low, Low, and Moderate Risk

### *Pre-work Hazard Analysis (PWA) Form*

For service subcontractor work categorized by the SLAC point of contact (POC) as *very low, low, or moderate* risk, the subcontractor will be asked to prepare a pre-work hazard analysis (PWA) form.<sup>2</sup>

The PWA will be specific to the work tasks the contractor expects to perform on site and the concomitant hazards.

The PWA form is required to be completed by the subcontractor's project manager and submitted to the SLAC buyer/contract administrator (B/CA) following subcontract award. The B/CA will forward it to the POC, who will review the PWA, work with the service subcontractor to make any necessary modifications, and sign it prior to the B/CA scheduling the kickoff meeting.

The B/CA and POC are both expected to attend the kickoff meeting with the subcontractor and the PWA, and the safety mitigations specified therein, will be reviewed at that time. The POC will be expected to inquire as to how all subcontractor employees who will cross the SLAC fence line and enter the site will be informed by their employer of the PWA requirements.

The B/CA and POC will maintain the PWA on file for a minimum of one year after the completion of work.

## High Risk

### *Site-specific Safety Plan (SSSP)*

For service subcontractor work categorized by the SLAC POC as *high* risk, the subcontractor will instead be asked to prepare a site-specific safety plan (SSSP). This plan should be more detailed in nature than a PWA, and address the high-hazard safety issues expected to be encountered during performance of the scope of work.<sup>3</sup>

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1 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 49, "Service Subcontractor Safety", [http://www-group/esh/general/subcon\\_safety/policies.htm](http://www-group/esh/general/subcon_safety/policies.htm)

2 Service Subcontractor Safety: Pre-work Hazard Analysis Form (SLAC-I-730-0A21J-024), <http://www-group.slac.stanford.edu/esh/forms/>

3 Service Subcontractor Safety: Site-specific Safety Plan Form (SLAC-I-730-0A21J-026), <http://www-group.slac.stanford.edu/esh/forms/>

## Service Subcontractor Safety: Risk-based Safety Documentation Requirements

The SSSP is required to be completed by the subcontractor's project manager and submitted to the SLAC B/CA following subcontract award. The B/CA will forward it to the POC, who will review the SSSP, work with the service subcontractor to make any necessary modifications, and sign it prior to the B/CA scheduling the kickoff meeting. The SSSP must, at minimum, satisfy both the requirements of Cal/OSHA and the information requested in SLAC's SSSP template.

The B/CA and the POC will maintain the SSSP on file with purchase order documentation for that subcontractor for a minimum of one year after the completion of work.

The subcontractor SSSP must

- Identify person(s) with authority and responsibility for implementing the SSSP
- Describe the work to be performed and outline the anticipated hazards
- Describe the system used to ensure personnel will comply with safe and healthy work practices. This system could include training and retraining programs, employee recognition programs, disciplinary actions, or any other such means that ensures employee compliance with safe and healthful work practices.
- Describe the system used to communicate with employees on safety topics in a form readily understandable to all employees. This system could include safety meetings, worker training in hazard recognition, postings, written communications, confidential reporting by employees about safety hazards, or any other such means that ensures communication with employees.
- Plan for control of high-risk activities:
  1. Confined space entries
  2. Elevated surface work (including use of fall protection equipment)
  3. Electrical hazards (including use of lock and tag procedures)
  4. Fire protection and prevention
  5. Hazardous material management
  6. Hazardous waste operations
  7. Environmental protection (such as stormwater, air emissions, chemical usage)
- Describe other procedures and plans:
  1. Accident reporting
  2. Emergency response, first aid, and medical services procedures
  3. Personal protective equipment requirements
  4. Project posting, access control, signs, and barricades
  5. Traffic control
  6. Housekeeping
  7. Material storage
  8. Tools and equipment
  9. Lighting provisions

### *Job Safety Analysis*

*Job safety analysis (JSA)* is the process of planning and detailing the safety controls for specific activities in the work to be performed by the subcontractor. Service subcontractors engaged in high-hazard work at SLAC are expected to prepare a JSA prior to beginning each phase of work.

Subcontractors may use the SLAC JSA form<sup>4</sup> or their own form, as long as it contains, at minimum, the same information.

The service subcontractor's project manager or job foreman will use the JSA to brief their employees on the work to be performed, the hazards specific to the task they are being assigned to perform, and the specific work assignments. On completion of the task-specific briefing, every subcontractor employee engaged in the task must sign the JSA acknowledging that they understood the briefing and their assignments.

If the work is to take place at one location, a copy of the signed JSA should be posted at the job board or some other central location; if it is to take place at various locations around the site (ie, chemical delivery and handling), a copy of the signed JSA should be kept with the subcontractor employee(s) performing the work.

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4 Service Subcontractor Safety: Job Safety Analysis (JSA) Form (SLAC-I-730-0A21J-017), <http://www-group.slac.stanford.edu/esh/forms/>



# Service Subcontractor Safety: Pre-work Hazard Analysis Form

## Instructions to Subcontractors/Sellers

PO#: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project/Job Description

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The purpose of this form is to gather detailed information regarding your scope of work.

The SLAC Point of Contact (POC) that has been designated for this job is:

POC: \_\_\_\_\_ Phone: \_\_\_\_\_ Pager: \_\_\_\_\_

Reviewed & Approved: \_\_\_\_\_ Date: \_\_\_\_\_

**If you have any questions in filling out this document, please contact the POC.**

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As a subcontractor to SLAC, you fall under the requirements of 10 CFR §851 (Worker Safety & Health Program) while your workers are physically located at SLAC.<sup>1</sup> As such, you must be aware of, and comply with the requirements of this regulation. You can find further details about these requirements at SLAC's Worker Safety and Health Plan (WSHP) web site, at <http://www-group.slac.stanford.edu/esh/general/wshp/subcontractors.htm>. This information is provided **only** as a guide – it is your responsibility to ensure you have read and understand the actual regulatory requirements.

Will you have any employees that will work on-site at SLAC for 30, 8-hour days in a twelve-month period, or are enrolled for any length of time in a medical or exposure monitoring program required by federal, state or local regulations (including, but not limited to: hearing conservation, respiratory protection, lead exposure, beryllium exposure, etc.)?

No

Yes; If Yes, you will need to comply with the Occupational Medicine requirements of 10 CFR 851 Appendix A §8 (see SLAC's Worker Safety and Health Plan (WSHP) web site, <http://www-group.slac.stanford.edu/esh/general/wshp/subcontractors.htm>).

Please provide your Occupational Medicine provider contact information:

Clinic/Physician: \_\_\_\_\_

Phone number: \_\_\_\_\_ email: \_\_\_\_\_

I certify that that I have read the requirements of 10 CFR 851 and attest that

\_\_\_\_\_ will comply with the requirements of 10 CFR 851 and SLAC's WSHP.

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*Note to SLAC UTR: If the answer above is "Yes," forward this form to SLAC Medical for recordkeeping.*

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<sup>1</sup> Note: SLAC is a DOE facility and therefore primarily subject to the health and safety requirements of the DOE, as opposed to Cal/OSHA. However, compliance with Cal/OSHA safety and health requirements will provide equivalent protection

# Service Subcontractor Safety: Pre-work Hazard Analysis Form

SLAC Contract Requestor: \_\_\_\_\_ Date Prepared \_\_\_\_\_

Supplier/Vendor: \_\_\_\_\_ Phone \_\_\_\_\_ Cell Phone \_\_\_\_\_

Prepared by : (Foreman/Supervisor for the job if possible) \_\_\_\_\_ Phone \_\_\_\_\_ Cell Phone \_\_\_\_\_

Supplier/Vendor Point of contact: \_\_\_\_\_ Phone \_\_\_\_\_ Pager \_\_\_\_\_

Job Description \_\_\_\_\_

PO Number \_\_\_\_\_ Job Location (Bldg. No./Site) \_\_\_\_\_

**Submission of this completed form is a prerequisite for issuance of the Notice to Proceed.**

**Instructions:** Complete this form for all onsite contracted work. Identify all hazards that could be present in your scope of work. If a box is checked "Yes", then additional documentation may be required. **Requestor must ensure that subcontractor or vendor is familiar with building area hazard analysis.**

YES NO

1.   **Fall Protection** – Will you be working at heights above 6 feet or on a roof? If so, be prepared to define the details of your personal fall arrest system, anchorage and submit your fall protection plan.

2.   **Ladders** – Will you be using any ladders in your scope of work? What is the height? Have your employees had training?

3.   **Lockout and Tagout Control of Hazardous Energy** – Please provide a copy of your lock and tag program. SLAC will require for electrical lockout/Tagout applications appropriate PPE per NFPA 70E to the category on the panel arc flash labels.

Describe: \_\_\_\_\_

4.   **Electrical Work Plan Required** – For example: Energized Electrical Permit, Rubber mat, sleeves. SLAC will require appropriate PPE per NFPA 70E to the category on the arc flash labels

Describe/List PPE: \_\_\_\_\_

5.   **Electrical** – For example: Wiring Design, low voltage installations, phone installations, Wiring Protection, Hazardous Location Installation. SLAC will require appropriate PPE per NFPA 70E to the category on the arc flash labels

Describe/List PPE: \_\_\_\_\_

6.   **Eye Protection** – For your scope of work, what eye protection is needed? Eye protection is required on all construction sites.

List PPE: \_\_\_\_\_

7.   **Ear Protection** – For your scope of work, what ear protection is needed?

List PPE: \_\_\_\_\_

8.   **Hand Protection** – For your scope of work, what hand protection is needed?

List PPE: \_\_\_\_\_

9.   **Foot Protection** – For your scope of work, what foot protection is needed? Work boots are required on all construction sites.

List PPE: \_\_\_\_\_

## Service Subcontractor Safety: Pre-work Hazard Analysis Form

10.   **Site Exits / Building Exits** – Know the locations of the building exits if working indoors. Identify your designated meeting place if working outdoors.

11.   **Fire Protection/Prevention** – Known Location of Extinguishers, Pull Box, Alarms, other

12.   **Material Handling** – Will your scope of work require lifting more than 40 lbs? If so, please provide a safe lifting plan.

13.   **Vehicle Safety** – While on SLAC, all employees must have a Valid Drivers License, Obey Posted Speed Limits, Pedestrian Safety **SLAC's strictly enforced speed limit is 25 MPH**

14.   **Temporary Power** – For your scope of work, will you be using any extension Cords, GFCI is required for all extension cords.

15.   **Power & Hand Tool Safety** – Please be prepared to discuss safe work practices for guards, cords, ground plug, GFCI.

16.   **Hazard Communication/Toxic Substances** – Will the scope of your work require the use of hazardous substances? Please be prepared to submit MSDS for chemicals used.

17.   **Medical Protection** – Call 9-911 from a SLAC phone for emergencies.

18.   **Other** – Please Identify any other hazard control associated with this job. Hard hats are required on all construction sites.



8 August 2008

Chapter 49, "Service Subcontractor Safety", is being revised by the Chemical and General Safety Department. In the meantime service subcontractors are directed to use the following form:

Subcontractor Construction Safety: Site-specific Safety Plan Form

SLAC-I-730-0A21J-025

<http://www-group.slac.stanford.edu/esh/eshmanual/references/subconstructFormSSSP.pdf>

or

<http://www-group.slac.stanford.edu/esh/eshmanual/references/subconstructFormSSSP.dot>

All other requirements of the published revision of Chapter 49 remain in effect. For questions on how to complete this form, contact Ernie Gomes (ext. 3470, [egomes@slac.stanford.edu](mailto:egomes@slac.stanford.edu))



8 August 2008

Chapter 49, "Service Subcontractor Safety", is being revised by the Chemical and General Safety Department. In the meantime service subcontractors are directed to use the following form:

Subcontractor Construction Safety: Job Safety Analysis Form

SLAC-I-730-0A23R-003

<http://www-group.slac.stanford.edu/esh/eshmanual/references/subconstructFormJSA.pdf>

or

<http://www-group.slac.stanford.edu/esh/eshmanual/references/subconstructFormJSA.doc>

All other requirements of the published revision of Chapter 49 remain in effect. For questions on how to complete this form, contact Ernie Gomes (ext. 3470, [egomes@slac.stanford.edu](mailto:egomes@slac.stanford.edu))



# Service Subcontractor Safety: ES&H Compliance Checklist

Department: Chemical and General Safety

Program: Service Subcontractor Safety

Owner: Program Manager, Butch Byers

Authority: ES&H Manual, Chapter 49, Service Subcontractor Safety

Service program or project title \_\_\_\_\_

Contract number \_\_\_\_\_

Project manager (PM) or delegate \_\_\_\_\_ UTR (if applicable) \_\_\_\_\_

*Note The project manager (PM) is responsible for ensuring that this compliance checklist is completed for each service contract or project. The PM may delegate the responsibilities of some or all of the tasks to a facilities technical services representative, supervisor, or other point of contact, but the PM retains the responsibility for the execution of the work.*

Mitigation Measure (as applicable)	Done	N/A	Reference
1. Work/project checklist			
2. ES&H baseline – site inspection			
3. Pre-work hazard analysis (PWHA)			
4. Assign risk level categorization(s) (work with ESH if needed)			
5. Statement of work & special conditions			
6. Subcontractor qualification for award defined			
7. Requisition complete			
8. Pre-proposal/pre-bid ES&H briefing			
9. Subcontractor ES&H evaluation			
10. JSA review and subcontractor (with ESH input if needed)			
11. Site-Specific Safety program reviewed (for high risk activities)			
12. Verification of competent person/ESH rep.			
13. Pre-work mtg. & issuance of notice to proceed (NTP)			
14. Subcontractor orientation & ID badging			
14.a SLAC SON orientation and/or EOESH			
14.b Facility/building site-specific orientation			
14.c Subcontractor JSA briefing			
15. Equipment & tool inspection			
16. Coordination & provision of permits			
17.a Confined space entry permits from CGS			
17.b Other permits (specify):			
17. Coordinate lockout/tagout services			
18. ES&H inspection of subcontractor activities			
19. Subcontractor evaluations			
20.			
21.			

Comments: