Site-specific Health and Safety Plan (SSHSP)

**Note: This is a template document that should be modified (deleting and adding information as appropriate) to create Site-specific Health and Safety Plans. When complete, all items highlighted in yellow should be modified and/or deleted based on the site hazards and conditions.**

|  |
| --- |
| **PROJECT INFORMATION** |
| **Project Manager:** |  |
| PM Name USC CCD: | **Project Manager Name USC CCD** |
| PM Cell Number USC CCD: | **PM Cell Number USC CCD** |
| **Project Data:** |  |
| Project Name or Work Order: | **Project Name or Work Order** |
| Project Number: | **Project Number** |
| Start Date of Anticipated Field Work: | **Start Date of Anticipated Field Work** |
| Issue Date of SSHSP: | **Issue Date SSHSP** |
| **Building Information:** |  |
| Street Address Project Site: | **Street Address Project Site** |
| Building Abbreviation Name: | **Building Abbreviation Name** |
| Campus Location: UPC, HSC, or Off Campus: | **UPC, HSC, or Off Campus** |
| **General Contractor Information:** |  |
| General Contractor Company Name: | **General Contractor Company Name** |
| General Contractor Company Telephone Number: | **General Contractor Company Telephone Number** |
| General Contractor Superintendent Name: | **General Contractor Superintendent Name** |
| General Contractor Superintendent Cell Number: | **General Contractor Superintendent Cell Number** |
| **Building Manager USC:** |  |
| Building Manager Name USC: | **Building Manager Name USC** |
| Building Manager Cell Number USC: | **Building Manager Cell Number USC** |
| **Hospital For Emergency Room (ER) Services:** |  |
| Nearest Hospital Name: | **Nearest Hospital Name** |
| Nearest Hospital Street (only) Address: | **Nearest Hospital Street (only) Address** |
| Nearest Hospital City, State, & Zip: | **Nearest Hospital City, State, & Zip** |
| Nearest Hospital Phone Number: | **Nearest Hospital Phone Number** |
| \*All plans must be submitted at least two weeks prior to the anticipated start date so they may be reviewed and approved by the FPM Health & Safety team before work begins. |

(To update All Bookmarks & Fields: [Control+A] (select all) then F9, then select “Entire Table”, OK.)

(Type Inside the highlighted areas to update the document Bookmarks and Fields.)

(See the last page for Instructions and Administrative Information.)

|  |
| --- |
| EMERGENCY TELEPHONE NUMBERS |
| USC Dept. Public Safety (DPS)Site Location:[**UPC, HSC, or Off Campus**] | **University Park Campus (UPC)****(213) 740-4321****Health Sciences Campus (HSC)****(323) 442-1000** | *\*In the event that DPS is unavailable,**contact 911 directly.* |
| The directions and information on the nearest hospital are found on Page [5]. |

ACKNOWLEDGEMENT PAGE

“I have read the attached Site-specific Health and Safety Plan for [**Project Name or Work Order**] dated [**Issue Date SSHSP**]. I have discussed any questions and/or concerns that I have regarding the contents of this document with the designated USC representative, and I understand its requirements.”

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| --- | --- | --- | --- |
| **Name** | **Signature** | **Company** | **Date** |
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*The final version of this document is part of the project record and must be available onsite, reviewed for acknowledgement and signed by all personnel throughout the course of the project.*

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# **Introduction**

At USC, the protection of human health and the environment is paramount. This Site-specific Health and Safety Plan (SSHSP) provides information to identify hazards that may be present and/or introduced by project’s activities onto USC job sites, and details needed precautions that employees should follow to protect themselves. Tasks performed on site or during projects should be analyzed to determine if physical or chemical hazards requiring safeguards or additional Personal Protective Equipment (PPE) exist. This plan will be modified as necessary if any new hazards are identified during the project that require additional safeguards to be put in place.

## Project Organization

|  |  |  |
| --- | --- | --- |
| **Role or Duty:** | **Name:** | **Cell Number:** |
| Project Manager: | Project Manager Name USC CCD | PM Cell Number USC CCD |
| General Contractor: | General Contractor Company Name | General Contractor Company Telephone Number |
| FPM Health and Safety Representative(s): | Gary Pons | 714-519-4812 |
| FPM Health and Safety Representative(s): | Bianca Carter | 213-740-6833 |
| FPM Health and Safety Representative(s): | Jose Manrique | 213-740-6833 |
| Building Manager: | Building Manager Name USC | Building Manager Cell Number USC |
| Contractor Superintendent: | General Contractor Superintendent Name | General Contractor Superintendent Cell Number |

## Scope of Work

[**Insert a detailed and thorough description of the project’s scope of work covered under this plan.**]

# **Emergency Response and Medical Treatment Procedures**

## Emergency Contact and Notification Information

|  |
| --- |
| [**Insert map and written directions.]** |
| **Figure 1 Map to the Hospital and Directions**Campus Location: **UPC, HSC, or Off Campus**Building Name:  |
| Nearest Hospital Address:Nearest Hospital NameNearest Hospital Street (only) AddressNearest Hospital City, State, & ZipNearest Hospital Phone Number |

## Incident Reporting System

In the event of an emergency at the site, project personnel shall immediately contact the Department of Public Safety (DPS) at **UPC (213) 740-4321, HSC (323) 442-1000** and inform them of the situation. After DPS has been contacted, project personnel shall contact the USC Project Manager and the FPM Safety Representative(s) so they may evaluate the nature of the emergency and provide further guidance.

In the event of a non-emergency incident, project personnel shall immediately contact their supervisor and provide any pertinent information so the need for additional notifications may be determined and completed as needed.

Stop work authority should be exercised when an injury or accident occurs.

## Site Emergency preparedness

**[Describe any specific procedures to be followed in the event of a site emergency, including how to communicate the emergency to fellow workers (e.g., five or more rapid blasts of a vehicle horn), whom to summon for help (fire/rescue, HAZMAT emergency response team), how to summon help (location of nearest telephone, emergency telephone numbers), and location of emergency response and emergency first aid equipment at the project site.]**

# **Site Description**

## Location Description

The facility is located at **Street Address Project Site** with the USC Building Abbreviation Name of **Building Abbreviation Name** at the USC **UPC, HSC, or Off Campus** Campus.

# **project Safety Procedures**

This section is designed to identify project specific hazards that involve employees and should be reviewed, understood, and signed before performing any task at the site. If additional steps or hazards are identified, this plan shall be revised and reviewed (i.e., at a project safety meeting) by all affected staff to indicate all items have been appropriately addressed and understood before proceeding with the task.

## project hazard analysis

All projects with a scope of work that impact existing building materials are required to be surveyed for asbestos, lead, PCBs, etc. prior to any work beginning.

[**Mark “X” and/or double-click on the checkbox to designate all that apply to this project site. When completed, delete this highlighted line.**]

| **Contractor Introduced Hazards and Site Hazards** |
| --- |
| **Item** | **Expectation** | **Applicability** |
| **Yes** | **No** |
| General Site Hazards | Safety Helmets (Hard hats) and safety glasses are expected to be used. All chemical handling shall be performed using safety goggles and/or face shields. No smoking in any process, construction areas, and campus. | [ ]  | [ ]  |
| Confined Space Entry | Any entry into these areas will be performed as a permit-required confined space. Any subcontractor will provide USC FPM with a copy of its Confined Space Entry Permit prior to entry for approval.Provide the following for review and approval:[ ]  Confined Space Entry Plan or Program[ ]  Confined Space Entry Permits* Contractors are responsible for providing their own permit that should be included in their program.

[ ]  Proof of Training and Certifications of Entry Team personnel.Location of Entry:Proposed date and time of Entry: *\*All The items listed and information requested are required for confined space entry approval.* | [ ]  | [ ]  |
| Uncontrolled Hazardous Energy | Work on equipment or in areas where energy sources are accessible will require proper isolation and verification by the subcontractor. Types of energy sources include hydraulic, electrical, pneumatic, mechanical, chemical, radiation, gravity and thermal. Provide the following for review and approval:[ ]  Provide Lockout Tagout Electrical Program[ ]  Provide Method of Procedures (MOP) that includes the following:1. Equipment (MEP) and energy source(s) to be isolated.
2. Steps of isolation: de-energizing, isolation verification and system re-energizing.
3. What energy isolation device(s) will be applied.
4. Confirm and include in the MOP that the isolation will be done concurrently with the applicable FMS shop(s).

*\*All items listed and information requested are required for approval.* | [ ]  | [ ]  |
| Working at Heights (unprotected above 48 inches) | Work involving removal of handrails or accessing elevated positions may create a potential fall hazard. Plan for and use appropriate fall protection.Provide the following for review and approval for all applicable items:[ ]  Scaffolding:1. Provide proof of certification for scaffolding competent person(s).

[ ]  Boom and Scissor Lifts:1. Proof of certification for operator(s).
2. Lift Operator’s Manual.
3. Specifications/load chart.
4. Annual and Quadrennial Inspection Certifications.

[ ]  Fall Protection:1. Proof of training.
2. Fall protection plan (including response to emergency situations, etc.).
3. Specifications for any temporary anchors (if applicable).
 | [ ]  | [ ]  |
| Slippery Surfaces | Wet surfaces may result in slippery walking conditions. | [ ]  | [ ]  |
| On-Site Bulk Chemical Storage | Storage areas within 100 feet of the project site will be identified on the project’s site-specific health and safety plan (SSHSP).Provide location of chemical storage in reference to the project site: | [ ]  | [ ]  |
| Traffic Control Required | Address traffic control issues created by project activities. Specify if traffic control measures involve vehicle and /or pedestrian traffic.***Removal of Bollards****Prior to work commencing all bollard removal for project site access must be coordinated with and approved, in writing, by the Department of Public Safety (DPS). The project’s general contractor is responsible for obtaining all approvals and distributing them to the project team.*Provide the following for review and approval:[ ]  Pedestrian and Traffic Control Plan: | [ ]  | [ ]  |
| Noise: Over 85 Decibels (dBA) | Noise levels above 85 dBA in the project site area will require use of hearing protection. | [ ]  | [ ]  |
| Radiation  | Determine if the scope of work includes any area where radioactive materials are in use. | [ ]  | [ ]  |
| Hazardous Classified Locations for Electrical Installations  | Determine if the scope of work requires being in a classified hazardous location(s). Intrinsically safe equipment (non-sparking) and/or a hot work permit is required when working in these locations. | [ ]  | [ ]  |
| Emergencies: General or MedicalSite Location: | In the event of an emergency, call **DPS UPC (213) 740-4321**, **HSC (323) 442-1000** then contact any additional designated emergency phone number(s) detailed in the project SSHSP.[ **UPC, HSC, or Off Campus** ] | [ ]  | [ ]  |
| Emergencies: Chemical Spills | If a chemical release is observed immediately notify the USC FPM Project Manager.  | [ ]  | [ ]  |
| Illumination Proper for the Task | Supplemental lighting may be required for certain work areas. Determine if the work area(s) requires intrinsically safe lighting. | [ ]  | [ ]  |
| General Housekeeping | Maintain an orderly worksite. | [ ]  | [ ]  |
| Biological Hazards | Determine if any plant and/or animal life related to the project site creates a potential hazard to site personnel.  | [ ]  | [ ]  |

| **Contractor Introduced Hazards** |
| --- |
| **Activity** | **Applicability** | **Requirement** |
| **Yes** | **No** |
| Hot Work | [ ]  | [ ]  | Hot Work Permit required for any spark or flame generating activities in area where combustible materials, flammable gases or vapors are/may be present. |
| Chemical Usage  | [ ]  | [ ]  | Applicable Safety Data Sheets (SDSs) shall be readily available at the project site. All subcontractors must provide a chemical product inventory, with SDSs, to USC prior to commencement of work.Submit the following for review and approval:[ ]  Provide Safety Data Sheets (SDS) for ALL chemical products. |
| Proposition 65 (CA Work Only) | [ ]  | [ ]  | Chemicals brought on site that are included in Proposition 65 warnings, will require sufficient postings near storage and work areas. |
| Respiratory Protection | [ ]  | [ ]  | Determine if any task that includes the use of respirators. Subcontractor use of respirators will require their respiratory protection program be submitted to USC. ***This section does not apply to Asbestos, lead, sub-surface contaminant(s), etc. remediation/abatement activities.***Provide the following for review and approval:[ ]  Respirator Make and Model(s).[ ]  Medical Clearance(s).[ ]  Fit Testing Record(s).[ ]  Proof of Trainings.Describe the scope of work that requires respiratory protection:*\*All items listed and information requested are required for approval.* |
| Excavation or Trenching  | [ ]  | [ ]  | Determine if an excavation competent person, consistent with Cal/OSHA regulatory requirements, is required for the project. Determine if a state-specific permit (e.g., CA) is required and ensure it is completed and kept with the project file. USC must receive the name(s) of the competent person(s) and the permits as required prior to initiation of any applicable excavation.Provide the following for review and approval:* Depths of 4ft or less:

[ ]  Proof of Certification for Competent Person(s).[ ]  Data from Testing of Subsurface Contaminants.* Depths of 4ft – 5ft:

[ ]  Proof of Certification for Competent Person(s).[ ]  Air Monitoring Plan.[ ]  Data from Testing of Subsurface Contaminants.* Depths of 5ft or more:

[ ]  Proof of Certification for Competent Person(s).[ ]  Air Monitoring Plan.[ ]  Data from Testing of Subsurface Contaminants.[ ]  Copy of Permit(s).If heavy equipment is to be used, provide the following:[ ]  Proof of Certification for Equipment Operator(s).[ ]  Operator’s Manual. |
| Crane Operations | [ ]  | [ ]  | Equipment, inspection records, and operator licensing records must be provided to the USC FPM Project Manager with adequate lead time for review prior to initiation of crane operations.Provide the following for review and approval:[ ]  Annual (Yearly) and Quadrennial (4-Year) Inspection Certifications.[ ]  Operator Certifications(s).[ ]  Rigging Certification(s), each rigger personnel.[ ]  Rigging and Lift Plan(s).[ ]  Load Chart(s), for each planned lift.[ ]  Barricad Radius of Crane Location(s).[ ]  Pedestrian and Traffic Control Plan(s).[ ]  Certificates of Insurance(COI).1. COI must include USC as additionally insured.

**Important: The Crane Operator Manual, Operator Certifications, and Rigging Certifications will be verified onsite before the start of the lift.**Reference [***Appendix A****: Crane Pre-lift Submittal and Permit Information*](#_Appendix_A:_Crane)for additional information regarding notifications and permit information.*\*All items listed and information requested are required for approval.* |
| Unmanned Aerial Vehicle (Drone) Operations  | [ ]  | [ ]  | Unmanned aerial vehicle (Drone) operations required for any USC project are to be performed strictly under the requirements of the Federal Aviation Administration (FAA). This operation poses both occupational and public safety hazards and must be performed by a Pilot in Charge (PIC) who holds a current FAA certificate. For more information, visit the following link: [Fire Safety & Emergency Planning (usc.edu)](https://fsep.usc.edu/) |
| Motor Vehicle Operations | [ ]  | [ ]  | Obey the posted speed limit(s) throughout the job site. If a speed limit is not posted, do not exceed 15 mph. |
| First Aid/Sanitary Facilities | [ ]  | [ ]  | Make provisions for First Aid and washing facilities for project employees. |
| Extension Cords/GFCI  | [ ]  | [ ]  | All extension cords are required to have GFCI and be free of any non-standard or non-compliant repairs to the outer sheath. |
| Ladders: Fixed or Portable Access\Egress Issues  | [ ]  | [ ]  | Use appropriate access equipment and securing techniques. |
| Hazardous Energy Control (HEC) | [ ]  | [ ]  | Determine if the project scope requires isolation of hazardous energy for in-place or new installations. If applicable, subcontractor written HEC program/procedures must be submitted to USC prior to commencement of work. |
| Hazardous Waste | [ ]  | [ ]  | All Hazardous Waste generated from project activities shall be handled and disposed of in compliance with all applicable regulations and project specifications. Subcontractors will review all hazardous wastes generated with the owner and USC with respect to characterization, storage, proposed treatment method, transportation, and documentation. |

|  |
| --- |
| **Safety Program Administration** |
| **Topic** | **Implementation** | **Reviewed** |
| **Yes** | **No** |
| Site Emergencies  | In the event of an emergency, project personnel are expected to adhere to the requirements detailed in the SSHSP. | [ ]  | [ ]  |
| Project Accident/Incident Reports  | Submit a report for all near misses, accidents, property damage, or unsafe conditions. Subcontractors shall use their own form for reporting accidents. If the subcontractor does not have one, USC will provide our form. It is available from the USC project superintendent.  | [ ]  | [ ]  |
| Regulatory Agency Inspection | Provide notice of all *scheduled* regulatory inspections at least 48 hours in advance. Unscheduled inspections must be communicated to the USC FPM Project Manager who will immediately contact the FPM Chief Safety Officer as soon as the regulatory agency representative arrives at the job site. | [ ]  | [ ]  |
| Imminent Hazards: Work Stoppage Around the Unsafe Activity | Work deemed to be unsafe will be stopped until the unsafe conditions are corrected. | [ ]  | [ ]  |
| Training Records (Subcontractors Only) | USC may request a review of certificates of training required by site requirement, statute, or regulation (e.g., Cal/OSHA, EPA, etc.) for subcontractors. Expired or unavailable records will result in individuals being prohibited from performing related tasks until certificates are received. | [ ]  | [ ]  |
| General Construction Rules | Reviewed with all USC, subcontractors, and site visitors prior to accessing the project site. | [ ]  | [ ]  |

**[Mark all that apply based on the hazard checklists completed in the previous sections]**

|  |  |
| --- | --- |
| **Control Measures** | **Information to Client/Owner** |
| Hot Work Permit Required*(Applicable hot work permits will be submitted through the USC Fire Safety and Emergency Planning Department webpage)* | [ ]  | Site-Specific Health & Safety Plan (SSHSP) | [ ]  |
| Chemical Storage Required | [ ]  | ***H&S Programs Required (list):*** |  |
| Traffic Control Plan Required | [ ]  | Confined Space Entry*(Applicable confined space entry permits will be submitted to FPM Health & Safety for review and approval)* | [ ]  |
| ***Other (list as required):*** | [ ]  | Lockout Tagout Procedure (LOTO) | [ ]  |
|  | [ ]  | Respiratory Protection Information | [ ]  |
|  | [ ]  | Chemical Inventory and SDSs  | [ ]  |
|  | [ ]  | Training/Permit Documentation Requested | [ ]  |
|  | [ ]  | Crane Lift Plan | [ ]  |
|  | [ ]  | Hazardous Materials Survey (e.g., asbestos, lead, PCBs, etc.)  | [ ]  |
|  | [ ]  | Sub-surface Contaminant(s) Data  | [ ]  |
|  | [ ]  | Abatement/Remediation Plan (Asbestos, lead, Sub-surface Contaminant(s), etc.) | [ ]  |
|  | [ ]  | ***Other (list as required):*** | [ ]  |
|  | [ ]  |  | [ ]  |
|  | [ ]  |  | [ ]  |
|  | [ ]  |  | [ ]  |

## ppe Assessment

Unless identified in this document, all project tasks are anticipated to only require Level D PPE, as defined by the California Occupational Safety and Health Administration (Cal/OSHA). Prior to working in a Level C or B environment, each employee is required to be medically qualified and properly fit-tested for the needed respiratory protection defined in this plan. The project’s designated person will verify that this is completed consistent with USC policy with assistance, as needed, from the FPM Health & Safety department.

Also, any employee working at a site as defined in 8 CCR 5192, or required by contract, shall be trained consistent with 8 CCR 5192(e) (e.g., 24-hour or 40-hour HAZWOPER, as appropriate). Each employee will only perform tasks that they have been properly trained to perform.

*A copy of each employee’s training record shall be available upon request.*

## Other Inspection Procedures

Periodic site inspections may be made by the FPM Health & Safety department and/or EH&S Fire Safety. There is also the potential for regulatory agencies to visit and inspect the site. USC personnel and contractors are to perform tasks in compliance with all contractual, regulatory, and company / university requirements at all times.

## PPE/Safety Equipment

[**For projects requiring use of personal protection equipment, a PPE element will be developed as part of the SSHSP. If not covered, this section may be deleted.**]

## Tailgate Health and Safety Meetings

[**Documentation of tailgate health and safety meetings is a requirement. Note here how the meetings will be documented.]**

## Site Control

[**Contractors will establish work zones to reflect the health and safety procedures to be followed for various work tasks; these will be referenced as part of the SSHSP. Site control requirements may include using a buddy system, establishing site security measures, setting up a communication network, and establishing zones of control.** **If not covered, this section may be deleted.**]

Our contractors are responsible for providing safe access to each project site and will limit access only to authorized personnel. If contractors encounter unauthorized individuals, they must notify the individual(s) to immediately exit the site. If unauthorized persons do not comply, the contractor will notify the Department of Public Safety immediately for assistance and should not take any corrective action of their own.

## Handling of Hazardous Materials, Samples, Containers, and Drums

[**For applicable projects, procedures for handling and storage of hazardous materials must be included as part of the SSHSP. If not covered, this section may be deleted.**]

## Housekeeping Requirements

[**Describe portable toilets or washing facilities required at the site, if any. Include information on precautions for providing portable drinking water containers, and any restrictions on eating or drinking in areas of the site. Also describe general housekeeping elements required to be implemented during all phases of a project.]**

## Air Monitoring

The requirement for air monitoring will be assessed for each project. Applicable project tasks (e.g., confined space entry, excavation, etc.) will be evaluated by the project team to determine if air monitoring is warranted and will be continually evaluated throughout the course of the project.

As applicable, this section describes the exposure assessment methodology (e.g., ambient and/or employee exposure monitoring) for the project scope of work. It shall include a site-specific air sampling plan with the applicable air monitoring methodology (e.g., NIOSH, etc.) and equipment.

# **Site Hazards**

[**Below is a comprehensive list of site hazards. Delete all hazards that do not apply to this site.**]

### Chemical and Physical Agent Hazards

The following chemical and physical hazards should be considered before performing any task or work at the site. The analysis will depend on a thorough understanding of the site’s physical characteristics and the task(s) being performed.

Methane (CH4): Methane gas is a colorless, odorless, flammable, and potentially explosive gas. The flammable range of methane is 5 to 15 percent by volume. Methane is a simple asphyxiate as it is capable of displacing oxygen. Personnel should wear an oxygen monitor when working in any area where gas may be present.

Toxic Compounds: Non-Methane Organic Compounds (NMOCs), as well as inorganic toxic contaminants such as mercury, and sometimes even radioactive contaminants such as tritium, may be present on a site. NMOCs include such toxic compounds as benzene, toluene, chloroform, vinyl chloride, carbon tetrachloride, and trichloroethane, which, although less than 1 percent by weight, are hazardous. These potential hazards should be evaluated on a case-by-case basis. Additional precautions will be established as needed in this plan.

Hydrogen Sulfide (H2S): Varies by site but is typically present between 10 and 200 parts per million (ppm). Hydrogen sulfide can accumulate in low areas such as sumps, holes, ditches, or depressions. Hydrogen sulfide is a primary hazard in confined space entry. Personnel should wear an H2S monitor to alarm when working in any area where gas may be present.

Poisons: Pesticides, cleaners, or other toxic materials of various types may be present at the site. Avoid contact with these items. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing and wash any skin that becomes contaminated with soapy water. Avoid contact at all times.

Flammables: Fuel (i.e., gasoline and diesel), paint thinners or other flammable materials may be present at the site. The primary risk associated with these materials is fire. Keep all ignition sources away from flammable materials. Do not smoke, unless in designated areas. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing and wash any skin that becomes contaminated with soapy water. Avoid contact at all times.

Oxidizers: Fertilizers, pool chemicals, chlorine, or other oxidizers may be present at the site. The primary risk from oxidizers is an increased fire potential. Keep fire and fuel or oil away from oxidizers. Do not smoke, unless in designated areas. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing and wash any skin that becomes contaminated with soapy water. Avoid contact at all times.

Corrosives: Acidic and caustic materials may be present at the site. The primary risk from corrosives is damage to the skin or eyes. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing and wash any skin that becomes contaminated with soapy water. Avoid contact at all times.

### Physical Hazards

The following physical hazards should be considered before performing any task or work at the site. Depending on the task(s) being performed, any or all of these hazards may be present.

Heavy Equipment: Compactors, bull dozers, loaders, track hoes, forklifts, large trucks, and other vehicles may be present. Loud noise and limited visibility can increase the threat of being run over or crushed by these vehicles. Wear high-visibility vests (recommend Class III) and coordinate with vehicle operators when working in the vicinity of these pieces of equipment. Heavy equipment hazards are especially present at or near the working face. When working in this area, equipment operators must be notified. These vehicles should not be operated within 50 feet of a person on foot. The use of a second person (as a spotter) should be done when working in this area. Only trained personnel shall operate heavy equipment.

High Pressure: Gas or liquids in pipes or cylinders can pose hazards related to the pressure that may exist in the vessel. Any vessel or conveyance that has the potential to contain pressurized liquid or gas must be carefully evaluated before performing work. Do not cut or open a vessel or pipe until it is verified that the pressure has been released or eliminated. Wear proper protective equipment (safety glasses, face shield, gloves, apron, or coveralls) as needed to provide a barrier from contact with materials. The presence of flammable gas or liquids presents additional hazards from fire or explosion. All sources of ignition should be eliminated when working with these materials.

Steep and Uneven Terrain: Treacherous footing on slopes (i.e., sandy soil/clay), heavy equipment, or snakes and other animals that could be present on slopes or in bushes, all present hazards at project sites. Walking, driving, or operating heavy equipment on steep hills or uneven terrain can be dangerous. These areas should be avoided whenever possible. When it is necessary to walk or drive in such locations, great care should be taken. Move slowly and be aware of loose materials or holes that could be present. Sharp items or spilled materials may also exist there and should be avoided. When traversing steep terrain, drive straight up or down slopes to reduce the possibility of roll over. Holes, pits, and ditches may be present. Falling or driving into these hazards can be avoided by becoming familiar with the site. Tall grass or vegetation can hide these features.

Do not drive on areas with which you are not familiar. Discuss access routes and hazards with site personnel. A good rule of thumb for driving is: “When in doubt—get out.”

Electrical: Electrical hazards fall into two categories. The first category includes underground or overhead electrical power lines that may be encountered. The location of all electrical power lines should be determined before any digging or excavation is performed. The presence of overhead electrical power lines should be determined so that contact with tall equipment (loaders, track hoes, etc.) can be prevented. Contracted locater services and/or physical protective measures (barriers or line covers) should be used as needed.

The second category of electrical hazard includes working on energized (powered) equipment or systems. Projects that may involve exposure to any form of hazardous energy, including electrical energy, must be performed in compliance with requirements described in the USC Health and Safety Program Manual. Special care should be taken while working in wet areas where electrical power is present. Activities occurring in proximity with electrical power require that extreme caution be exercised to avoid accidental contact with pipes, ladders, tools, or body parts.

Lightning: The danger of a lightning strike is increased when work occurs on elevated working surfaces. Lightning can strike miles ahead of a storm when no rain is present. All operations should be stopped immediately when lightning is visible, or thunder is audible. All project personnel shall seek shelter off the elevated working surface and remain inside a building (primary) or vehicle (secondary) until the danger passes. Do not take shelter near tall objects such as power lines, trees, antennas, or the flare stack. Work can resume when the lightning is no longer visible, and the thunder cannot be heard.

Heat-Related Injuries: Elevated body temperatures can cause serious injury or death. Working outdoors or in the sun increases the chance of heat-related injuries. This hazard is especially critical when PPE (such as coveralls or rain gear) is worn since heat from the body becomes trapped inside clothing. Personnel should drink plenty of liquids and take breaks as needed. The following describes the various Heat Disorders and Health Effects:

* Heat Stroke: This disorder occurs when the body’s system of temperature regulation (e.g., sweating and evaporation) fails and body temperature rises to critical levels. The condition is caused by a combination of highly variable factors, and its occurrence is difficult to predict. Heat stroke is a serious hazard, however. Primary signs and symptoms are confusion, irrational behavior, loss of consciousness, convulsions, a lack of sweating (usually), hot, dry skin, and an abnormally high body temperature. If a worker shows signs of possible heat stroke, call DPS to obtain **immediate** medical assistance. The worker should be placed in a shady area, and his or her outer clothing should be removed. The worker’s skin should also be wetted and air movement around the body increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible, by mouth only if the worker is conscious. Do not give coffee, alcohol, or salt. The medical outcome of an episode of heat stroke depends on the victim’s physical fitness and the timing and effectiveness of first aid treatment. Regardless of the worker’s protests, **no** employee suspected of being ill from heat stroke should be sent home or left unattended unless a physician has specifically approved such an order.
* Heat Exhaustion: The signs and symptoms of heat exhaustion include clammy skin, headache, nausea, vertigo, weakness, thirst, and giddiness. Fortunately, heat exhaustion responds readily to prompt treatment. This condition, however, should not be dismissed lightly, for several reasons. One is that fainting associated with heat exhaustion can be dangerous because the victim may be operating machinery or controlling an operation that should not be left unattended. The victim could also be injured when he or she faints. While the signs and symptoms associated with heat exhaustion are similar to those of heat stroke, the notable difference (with heat exhaustion) is clammy skin. Workers suffering from heat exhaustion should be removed from hot environments and given fluid replacement, by mouth only if the workers are conscious. Do not give coffee, alcohol, or salt. They should also be encouraged to get adequate rest.
* Heat Rashes: The most common problem occurring in hot work environments is heat rash. Prickly heat is manifested as red papules and usually appears in areas where the clothing is restrictive. As sweating increases, the papules give rise to a prickling sensation. Prickly heat occurs in skin that is persistently wetted by unevaporated sweat, and papules may become infected if they are not treated. In most cases, heat rash will disappear when the affected individual returns to a cool environment.
* Heat Fatigue: One factor that predisposes individuals to heat fatigue is the lack of acclimatization. Use of a program of acclimatization and training for work in hot environments are advisable. The signs and symptoms of heat fatigue include impaired performance of skilled sensorimotor, high-concentration, or high-vigilance activities. The sole treatment available for heat fatigue is to remove heat stress and increase fluid replacement before a more serious heat-related condition develops.

Cold-Related Injuries: In winter weather conditions, there is a potential for injury from cold, including dehydration, frostbite, heavy shivering, excessive fatigue, drowsiness, irritability, and euphoria. If workers show these symptoms, cease work immediately and move the affected personnel to a heated building or vehicle.

### Biological Hazards

Rodents, poisonous insects, snakes, other animals and/or plants are a natural part of any ecosystem. Contractor personnel should be aware of the potential for encountering these types of animals and plants. Where possible, nesting places should be removed or access to them should be limited. None of the animals should be fed, caught, or handled by contractor personnel. To manage any existing pest control issues, contact CRC at (**213) 740-3357**. To manage plant control issues, contact our landscaping department at (**213) 400-9708**.

The following could be encountered in performance of the operation, maintenance, and monitoring functions of a project:

Hantavirus: Infection typically occurs by the inhalation of tiny airborne droplets of fresh or dried rodent excretions. Transmission to humans may also occur through direct contact with rodents or rodent-contaminated materials, and ingestion of contaminated food or water is also a possible route of transmission. Sweeping or “shaking out” rodent-contaminated materials should be avoided unless performed using respiratory protection. The early symptoms of hantavirus disease are flu-like (fever, chills, muscle aches). For a very short period of time, the infected person starts to feel better. Then, within 1 to 2 days, he or she may develop shortness of breath. The disease gets worse quickly and leads to respiratory failure, a condition known as Hantavirus Pulmonary Syndrome (HPS). About half of all HPS patients experience these symptoms, which usually occur 1 to 5 weeks from contracting the illness.

Lyme Disease: A tick-borne bacteria that causes a range of debilitating symptoms (i.e., flu-like discomfort, joint pain, fatigue, headache, lack of concentration, facial paralysis). The most outstanding symptom of the disease is a bulls-eye rash from the tick bite. Personnel should avoid areas known to harbor ticks and use insect repellant containing DEET to limit the possibility of being bitten.

Africanized Honeybees: This species of bee is aggressive and unpredictable. It responds quickly and stings in large numbers; senses threats from people or animals 50 feet or more from the nest; senses vibrations from power equipment 100 feet or more from the nest; swarms frequently to establish new nests; pursues an enemy 3 miles or more; and nests in small cavities and sheltered areas. Avoid areas known to contain bees.

Snakes: Rattlesnakes, vipers, and coral snakes are poisonous. Not all rattlesnakes give audible warning before they strike. Extra caution should be taken if tools or other materials are dropped in highly vegetated areas, around rocks, into stockpiles of pipe or other objects, or when walking through highly vegetated areas where visibility of the ground is limited. The most active times for rattlesnakes are morning, late afternoon, and early evening; however, encounters could happen at any time of the day. Walking loudly, shuffling feet, or making noise while working is recommended. Boots that reach mid-calf or snake guards are recommended, and all personnel should have leather work gloves.

# **Appendix A:** Crane Pre-lift submittal and permit information

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| --- |
| Email the documents to the following for review and approval:` |
| [ ]  | **Fire Safety & Emergency Planning** - Rob Forsberg (forsberg@usc.edu)  |
| [ ]  | **Dept. of Public Safety (DPS)** - Mark Cervenak (mcervenak@dps.usc.edu)  |
| [ ]  | **USC Transportation Services:*** Pablo Sahagun (psahagun@usc.edu) – Parking Operations Manager
* Noel Ricardo Aguilar (noelagui@usc.edu) – Senior Manager, Transportation

***NOTE****: Once Transportation Services approves the location, Transportation Customer Service will be notified, and contractor can purchase permit over-the-counter. Permits are required for any vehicle or equipment on campus.* |
| [ ]  | **FPM Landscape** – Alejandro Benitez (abenitez@usc.edu)  |
| [ ]  | **Campus Filming** – Torie Daves (daves@usc.edu)  |
| *Crane Pre-Lift Plan must be emailed to the PM and FPM Health and Safety at least one week prior to the scheduled crane lift.* |

Permit Information

Oversized permits are required for all storage containers, food trucks, box trucks and any oversized units that do not fit in regular spaces and/or parked in restricted areas. As a reminder, these permits are not valid for any regular vehicles. The cost for these units is $60 daily rate.

If yellow zones are required to accommodate the oversized vehicles parking, then additional costs are incurred to barricade yellow zones at $60 plus material and daily labor fee (Total $72).

Please note that the act of barricading a certain area cannot be guaranteed as it is completed in advance of the event day and is not subject to constant supervision, thereby allowing for the possibility of relocation by others.

* The $60 rate oversized permit is for vehicles under 30ft.
* Vehicles over 30ft in length (Semi-trucks & Buses) will be $85 daily rate.

For access to any restricted area, approval from Fire Safety and DPS is required. If requesting for parking at a non-designated area, approval from the Department of Fire & Safety and Department of Public Safety is mandatory before the purchase of the special permit.

Payment must be made by credit card (MasterCard, American Express, Discover, VISA Except USC Procurement Card), in which case the ID of the person picking up the permit must match the credit card billing information. This special permit must be purchased several days before the event date.

If you wish to cover the cost under departmental requisition, please submit an Internal Service Delivery (ISD) (Formerly IRs) of the same to validate. Please confirm when you plan to visit the office to pick up the permits. Please email Pablo Sahagun (psahagun@usc.edu) once this process has been completed.

Please note that we do not offer any refunds once the pre-paid parking permits/passes have been issued. To avoid issues with access upon entry, please send Pablo Sahagun your confirmation permit number. Note that DPS provides the access clearance and directions to restricted areas.

Kindly note that any vehicle left unattended or any driver without a permit is liable for a citation.

Please notify the USC Transportation office when you plan to visit campus to process all permit information to ensure parking accommodations. The University Park Campus (UPC) Transportation office is located 620 W McCarthy way, Los Angeles, CA 90007. The Transportation office hours are Monday to Friday 8:30AM to 5:00 PM. Also please note that, we are closed on weekends and holidays.

## Medical Monitoring

**[Describe the medical surveillance requirements for contractors performing work tasks during a specific project. If not covered, this section may be deleted.]**

## Site-Specific Training

**[Outline the training requirements for contractors performing work tasks during a specified project. These training requirements shall correlate with the project scope of work. If not covered, this section may be deleted.]**

## Appendices (As Appropriate)

**[Include here any documents that are referenced.**]

(To add Bookmarks or Fields, Go to Menu, Insert, Text Group “Quick Parts”, then Links and References, Ref, then
the Bookmark Name, and check “Preserve Formatting.”)

(To add a new Bookmark or Field, Select Text in the Document, then the steps above.)

Instruction for Table Form Entry: {expand on left-side triangle}.

1. Updating the Document Bookmark and Field References:
	1. Enter [Control+A], then the F9 key, then select “Entire Table”, OK.
2. Data Entry:
	1. To not lose any existing [field definition], type the replacement text inside the existing text string, then delete the first or last text beside it. MS Word often deletes the brackets and deletes the field, just undo (control+z) if the bracket disappears.
	2. To update all fields, Control+A, then F9 key. Or:
		1. Go to Menu, Print, see the preview, then the back arrow; there is no need to actually print.
3. Optional Settings:
	1. One-time Only: To update all fields at printing, go to Menu, File, Options, Display, Printing Options, Check (on) “Update Fields before Printing” & “Update Linked Data before Printing.”

Only when needed:

1. To Add an Existing Bookmark Reference Value:
	1. Go to the Menu, Insert, Quick Parts in the Text Group, Select Field, Select Links and References in the top-left box, Ref in left column, then the Bookmark Field Name (#1 immediately above), always check the box on the right for “Preserve Formatting During Updates”.
2. To Add a New Bookmark Reference Value:
	1. Mouse Select the New Field Value Text Characters on the screen in the Document.
	2. Go to the Menu, Insert, Bookmark in Links Group, Enter the NEW Field Name (left side of the table below), then select Add; Be sure not to override an existing Field Name.

