SECTION 5
contractor safety

TULANE UNIVERSITY
ENVIRONMENTAL HEALTH AND SAFETY POLICIES AND PROCEDURES MANUAL
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ADDITIONAL READING

- Asbestos Management Section 21
- Emergency Response Section 1
- Facilities Services Section 24
- Hazard Communication Section 12
- Hazardous Materials Safety Section 29

REFERENCED FORMS

- Confined Space Entry Permit 09F-OEHS
- Confined Space Hazard Addendum 08F-OEHS
- Hazard Communication Addendum 05F-OEHS
- Hot Work Permit 10F-OEHS
I. CONTRACTOR SAFETY

This section addresses health and safety requirements for contract work involving building, renovation, remodeling, or modification of Tulane facilities. Because work of this type, especially if conducted in or around occupied buildings, may present situations or conditions that could adversely impact the health and safety of Tulane personnel, and/or cause harm to the environment, it is of absolute importance that safety issues in construction be addressed.

The policies and procedures set forth in this section are meant to “supplement” applicable federal, state, and local governmental standards and codes, industry standards and codes, and the contractor’s own safety program by explaining how safety protocol involving construction is handled at Tulane facilities and what is expected of contractor’s who agree to work on Tulane construction projects. They are not intended to replace a contractor’s own safety program, nor do they purport to summarize all occupational and environmental regulations governing construction safety.

The contents of this section shall be used as a general health and safety reference for contractors working at Tulane facilities, and for Tulane employees involved in hiring contractors, preparing construction contracts, reviewing contract documentation, managing construction projects, and inspecting contract work sites. Only with regard to hiring policy and required approvals does this section address contract work for maintenance, goods, or services that are handled through standard service contracts.

A. Hiring Policy and Notification Requirements

1. To ensure compliance with federal, state, and local regulations regarding construction, remodeling, maintenance and service mandates, Facilities Services is the only department authorized to hire contractors on behalf of the University. All requests for contractor services must therefore be processed through Facilities Services.

2. To ensure compliance with federal, state, and local regulations regarding occupational and environmental health and safety, the Office of Environmental Health and Safety (OEHS) must be notified before contractors are hired for construction, remodeling, maintenance, and services. OEHS must also be notified and must grant approval before any contractual arrangement is made for the acquisition of hazardous materials and/or services involving the supply, transport, or disposal of hazardous materials.

3. OEHS must be notified of any asbestos removal by outside contractors at least 15 days prior to a request for bids, or, if bids are not requested, prior to the granting of the contract to allow adequate time for OEHS to assist with project coordination and/or monitoring. When asbestos
removal projects are to be performed by outside contractors, all parts of this policy shall be enforced through specifications prepared by a Tulane Asbestos Coordinator prior to bidding or granting of the contract. OEHS must review all bid proposals to ensure that contractor has followed all applicable health and safety guidelines. In the event of a contracted “emergency asbestos removal,” OEHS must be notified as soon as possible. (See, Section 21, Asbestos Management, of this manual.)

4. Some goods and services may be acquired by purchase order and handled through standard service contracts through the University’s Purchasing Department. There are, however, items that must be approved by OEHS before ordering (e.g., extension cords, chemical and biological hoods, biological safety cabinets, safety cans, etc.) A complete list may be obtained from OEHS and should be readily available for reference in the Purchasing Department.

As stated in IV.A.2 above, any order that entails the acquisition of hazardous materials or services involving the supply, transport, and/or delivery of hazardous materials, must also be approved by OEHS prior to purchase or the rendering of such services. For orders involving the acquisition of radioactive materials, Purchasing must verify that the department ordering the radioactive materials has a license to do so. Licenses are obtained by application from OEHS and the Radiation Safety Committee.

B. Responsibilities

The responsibilities outlined below for Tulane and contractor are not exclusive of those responsibilities set forth in the contract and in federal, state, and local codes and regulations.

1. Facilities Services

Facilities Services is responsible for:

a. Hiring contractors and vendors; requesting bids on all University projects; pre-certifying contractors and verifying insurance coverage; and, obtaining a signed standard contract prior to commencement of work.

b. Making certain that OEHS is included in the design and development stage of a construction project, and notifying OEHS before contractors are hired. Facilities Services should also make certain that OEHS is given the opportunity to review, at minimum, conditions specific to the project that would entail an assessment of occupational and environmental health and safety requirements.

c. Notifying OEHS if a vendor is to supply, transport, or dispose of hazardous materials (including radioactive materials).

d. Notifying OEHS of any asbestos removal by outside contractors prior to a request for bids or before granting a contract.

e. Designating a project manager who shall serve as a liaison between contractor and Tulane.

f. Providing a completed Confined Space Hazard Addendum (Form 08-OEHS in Appendix E of this manual) as part of the contract documentation, and notifying OEHS if the contract work involves entry into a permit-required confined space.
g. Providing a completed Hazard Communication Addendum (Form 05F-OEHS in Appendix E of this manual) as part of the contract documentation outlining Tulane’s and contractor’s responsibility for exchanging information on inherent hazards in the project site, equipment, or chemicals to be used.

h. Assisting contractor with injury/illness reporting procedures and submission of injury/illness documentation to Tulane’s Office of Risk Management.

2. Project Manager

The Project Manager, a representative of Facilities Services, is responsible for:

a. Providing a copy of the contractor’s health and safety plan to OEHS prior to the pre-construction conference.

b. Ensuring that OEHS is represented at any pre-construction meetings with contractor and any safety review meetings held during the course of the project.

c. Providing OEHS and Security with the contractor’s tentative on-site construction schedule and immediate written notification of changes.

d. Monitoring the contractor’s work performance to ensure that contract workers are complying with the contractor’s health and safety plan and with pertinent environmental, health, and safety regulations. Any questions regarding compliance with specific regulations should be referred to OEHS.

e. Ensuring that all required permits are completed by the contractor and signed by the appropriate authorizing unit. The project manager should also make certain that those permits that require posting are in fact being displayed at the work site.

f. Notifying OEHS immediately of construction accidents and providing OEHS with a copy of the contractor’s accident report.

g. Notifying OEHS immediately of any OSHA or other agency complaint and/or inspection of the jobsite. An OEHS representative must be present at any such inspections.

3. Office of Environmental Health & Safety

OEHS is responsible for:

a. Advising contractors of hazards, procedures and precautions related to entry into permit-required confined spaces.

b. Advising contractors of any hazards known to be present at the proposed work site, including any hazardous materials.

c. Investigating the work site if it is suspected that the contractor’s safety plan is not being properly implemented.

d. Investigating serious injuries/illnesses, major incidents or “near-miss” incidents.
4. **Contractor**

The following responsibilities apply to contractors (and their employees), subcontractors (and their employees), and where applicable, vendors (and their employees).

The contractor is fully responsible for its sub-contractors (and their employees) to the same extent that it is responsible for its own employees, and any references in this section to the contractors responsibilities toward its employees shall be understood to apply also to its sub-contractors and their employees as well.

Contractors are responsible for:

a. Meeting all applicable federal, state, and local regulations and ordinances and complying with same for the duration of the contract. Failure to do so may result in removal from a project.

b. Submitting, along with its bid, a comprehensive written health and safety plan for the subject project.

c. Gaining familiarity and ensuring compliance with the provisions outlined in this section of the policies and procedures manual regarding contractor safety.

d. Providing its employees with the necessary training, medical exams, and safety equipment. Specifically, contractor must ensure that its employees are trained to handle jobs specific to the project as, for example, hot work, confined space entry, lockout and tagout, hazard communication, emergency response, etc. All such training must be documented.

e. Ensuring that its employees have the appropriate medical clearance (if any are needed) prior to the start of work.

f. Providing its employees all safety and personal protective equipment (PPE) required to complete the work and ensuring that the safety equipment and PPE are properly used, worn, and maintained. (If work is to be done in an area requiring PPE, contractors must wear University required PPE.)

g. Providing a list of all hazardous chemicals that will be used at the jobsite and ensuring that copies of the material safety data sheet (MSDS) for each chemical is readily available to all construction workers and to OEHS upon request.

h. Obtaining the necessary disposal manifests and approvals prior to arranging for waste shipments. These activities may be arranged through OEHS.

i. Providing a competent, well-trained supervisor in charge at the site at all times during which its employees or those of its subcontractors are present.

j. Reporting all workplace chemical spills, occupational injuries and illnesses to the project manager and OEHS.

k. Making certain that employees wear the appropriate identification (contractor ID badges) and are conducting themselves in a professional manner.
C. Compliance

1. Tulane

Tulane personnel involved in the hiring of contractors for construction work must comply with the hiring and notification requirements outlined in IA above. Any failure to comply may result in substantial fines and costs to the unit in violation. Failure to notify and consult with OEHS before hiring contractors and vendors, especially those who supply, transport or dispose of hazardous materials, as outlined in IA above, may result in violations, the cost of which may be borne by the unit in violation.

2. Contractor

The contractor’s safety program, which should include provisions for health and safety inspection by trained contractor personnel, shall be generally relied upon by Tulane to provide health and safety inspections of the work site on a routine basis. However, Tulane, through OEHS, reserves the option to inspect the work site either randomly or by notice. If such inspection should reveal violations of the policies and procedures outlined herein, or any other violations of health and safety standards and codes not specifically covered in this general guideline but of which the contractor is expected to be aware, C.2.a-b below shall apply.

a. If OEHS should note any situation of non-compliance by the contractor, its employees, or subcontractors, of the policies and procedures set forth herein or any other health and safety standards and codes not specifically covered in this general guideline but of which the contractor is expected to be aware, OEHS shall verbally report such violations to the project manager with a follow up in writing. All violations brought to the attention of the project manager must be documented in a memo to file for the project. Failure to correct the violation or continued violations shall be grounds for termination of the contract.

b. If OEHS should find violations by the contractor, its employees or subcontractors, that pose an imminent danger, an “order to stop work” shall be issued immediately and reported to the project manager. Such violations may be grounds for termination of the contract.
II. SAFETY ISSUES IN PROJECT PREPARATION

A. Project Development & Design Review

To ensure that health and safety issues are addressed in the initial stages of a proposed project, representatives from OEHS shall join architects and engineers in the development and design stage of a project to highlight any potential hazards in or around the facility or facilities for which the project is being designed. OEHS shall also discuss in greater detail any federal, state, and local health and safety requirements to be taken into consideration in the development of certain types of projects such as: storage facilities for hazardous materials or equipment; renovations that would disturb hazardous materials such as asbestos; projects involving waste disposal issues.

B. Contractor Selection

Safety issues cannot be overlooked in contractor selection. Contractor selection should take into consideration the contractor’s health and safety plan and other factors related to occupational and environmental health and safety including, but not limited to, the contractor's: 1) experience modification rate; 2) OSHA injury/illness records for the previous five years; 3) back safety awareness program; and 4) substance-abuse program. These factors should be outlined in any request for bid packages.

C. Contractor’s Safety Plan

Contractors shall be required to submit a comprehensive health and safety plan along with their bid package. The plan should cover all aspects of onsite construction operations and activities associated with the type of project proposed including plans for fire protection and prevention. The plan must comply with all applicable health and safety regulations and any project-specific requirements as outlined in the bid proposal.

Acceptance of the contractor’s health and safety plan is strictly an acknowledgment that the plan generally conforms to the requirements of the contract. However, to ensure the protection of contractor’s employees and any Tulane employees in the area of the work site, the contract must emphasize that the contractor is responsible for enforcing the requirements of its health and safety plan.
D. **Contract Preparation**

Persons responsible for preparing contract documentation must ensure that the final contract language requires the contractor to: 1) meet all applicable federal, state and local occupational and environmental health and safety regulations, agency standards, and University policies; 2) provide its employees with the necessary training, medical exams, and safety equipment; 3) submit a written comprehensive health and safety plan for the specific contract work undertaken; 4) take responsibility for enforcing measures outlined in its health and safety plan; 5) comply with all applicable federal, state, and local regulations, agency standards, and University policies with violation constituting a default and grounds for termination of the contract.

E. **Contract Review**

A construction contract will generally contain both standard requirements and requirements unique to a given project. These unique requirements or “special conditions” shall include health and safety issues relevant to the nature and scope of work to be done. It is therefore important that OEHS be given the opportunity to review the contract before a final draft is presented to the contractor. A review may be accomplished either through a meeting of contract documentation personnel that would include representatives of OEHS, or by allowing OEHS representatives an “online” review using Facilities Auxiliary Services Technology (FAST) software. An online review using FAST would allow OEHS to both review and submit revisions or comments.

III. **PRE-CONSTRUCTION REQUIREMENTS**

Before any construction begins, representatives of the contractor and Tulane shall meet to review, among other things, the responsibilities of each party with regard to those health and safety issues that are specific to the nature and location of the construction project.

A. **Pre-Construction Conference**

Prior to the commencement of any work on a construction project, representatives of the contractor, Facilities Services, the project manager appointed by Facilities Services, and OEHS shall meet for the purpose of reviewing, among other things:

1. the responsibility of each party during the course of the project;
2. the projected work schedule;
3. permits that shall be required depending on the type of work involved;
4. the contractor’s health and safety plan which should include a fire protection/prevention plan;
5. the contractor’s list of hazardous chemicals and accompanying material safety data sheets;
6. OEHS’s guidelines for construction safety as outlined in IV below; and other relevant sections of this policies and procedures manual including, but not limited to: Section 1, Emergency Response; Section 12, Hazard Communication (see, especially VII); Section 21, Asbestos Management; Section 26, Fire Safety; and, particularly, Section 24, Facilities Services.
7. OEHS’s information (in keeping with the OSHA Hazard Communication Standard) on hazards present at the work site and written procedures and permit requirements for lockout/tagout, confined space entry, excavations/trench work, or hot work.

B. Contract Worker Orientation

If there is a need, the Project Manager shall conduct an orientation to acquaint contract workers and supervisors with the facility and the work site, and to address any residual questions that remain before the start of the project.

IV. Construction Safety Guidelines

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IV. CONSTRUCTION SAFETY GUIDELINES

The following are general guidelines to be reviewed at the Pre-Construction Conference. Some of this information may already be addressed in the contract under standard and/or special conditions or may be part of the contractor’s own health and safety plan. Nevertheless, all items should be reviewed and discussed to ensure that applicable guidelines for the specific project are in place before and/or during construction.

A. Preparations

   1. Site Security and Pedestrian Protection

      The contractor must be responsible for securing the work site from unauthorized access and for ensuring that all loose materials are secured at the end of the work shift. The contractor shall
further be responsible for providing protection for pedestrians by ensuring that the Standard Building Code requirements for the safety of pedestrian traffic (e.g., signage, walkways, fencing, handrails, posting of flagmen, and closure of walkways and sidewalks) are upheld. If overhead or elevated work presents a potential hazard to persons below, the contractor must erect barricades to restrict unauthorized access to these areas. In some instances, an attendant may be required to ensure that work areas near public walkways and high traffic areas are kept clear.

2. Parking and Storage

The contractor must make provisions for employee and/or subcontractor parking, as well as provisions for storage of construction materials, neither of which shall be provided by Tulane. Contractors are fully responsible for the safety and security of any contractor-owned equipment (vehicles, trailers, container bins, tool boxes, etc) brought onto a Tulane facility.

3. Use of Premises

a. Tulane must inform the contractor if the work area shall continue to be occupied during the course of the project. If this is the case, the contractor shall schedule work so as to cause as little inconvenience as reasonably possible; cause no obstructions except as is immediately necessary and for no longer than required; make certain that floors and walkways are kept free of debris, tools, etc.

b. Contractor shall make necessary arrangements for warehouse space for storage of materials until such time as the materials are scheduled for immediate installation.

c. Contractor shall maintain clear passage along corridors and walks. Tulane shall endeavor to keep personnel and visitors from the work area. Contractor, however, is responsible for enforcing all safety precautions.

d. Tulane and contractor shall have to coordinate the contractor’s use of elevators for delivery of materials, equipment or tools, as well as the time in which such deliveries may be made to the work site.

e. If the contractor’s employees or subcontractors are to use the facility’s restrooms, Tulane should designate which restrooms are to be used and stipulate that contractor is responsible for maintaining the restroom’s cleanliness. If the restroom is to be used exclusively by contract personnel, signage should be placed on the restroom door to prevent usage by Tulane personnel.

4. Utilities

Tulane shall provide only temporary utilities from existing panel boxes while contractor shall provide the temporary connections. Contractor must restore utilities to the original condition prior to completion of work. If the contractor needs to have electrical mechanical services cut or suspended, it must notify Facilities Services in writing. The actual cutting of utilities and auxiliary systems services shall be done by Facilities Services personnel only.
5. **Permits**

Contractor must obtain and conspicuously post at the work site any permits required for specific types of work such as hot works, confined space entry, excavation or trenching.

6. **Special Hazards**

Work involving the following hazards must be coordinated in advance with OEHS: hot work; excavation/trenching; asbestos; lead-based paint; permit-required confined space entry; shutdown of any fire alarm, detection, or suppression system; restricted access to fire exits.

7. **Work Site Documentation**

In addition to the permits that must be posted at the work site, contractor must ensure that the following documents are also available at the work site: a) a copy of the contractor’s health and safety plan, b) a copy of the “Contractor Safety” section of this manual and other relevant sections of this manual, and c) material safety data sheets for all hazardous chemicals being used at the work site.

8. **Fencing**

If the work site is to be fenced, contractor must ensure that entrances and exits to the facility are not locked or blocked, and that signs are posted on the fence identifying the area as restricted entry for authorized persons only. Contractor must take the responsibility for securing the area at the end of the work shift.

**B. Work Schedule**

1. Contractor shall provide OEHS and the project manager information regarding project construction time or anticipated construction time.

2. Work should be scheduled within normal work hours unless otherwise approved or specified. Normal work hours are Monday through Friday from 8 a.m. to 5 p.m.

3. The project manager must approve scheduled weekend or overtime work.

**C. Requirements of Contract Personnel**

1. **Identification**

   All contract personnel are required to wear contractor identification badges. ID badges must be visible at all times while performing work on campus.

2. **Conduct**

   Contractor personnel are expected to adhere to University policy prohibiting the carrying of weapons, fighting, intoxication, the possession or use of alcohol or controlled substances, stealing, and falsification of records. An individual’s prescription medication is acceptable only when ingestion will not affect job performance according to the employee’s attending physician.
3. **Housekeeping**

Contractor personnel shall keep work areas—especially walking and working surfaces and exit corridors—clean and free from debris that could cause slipping and tripping hazards. Tools and materials shall be kept and stored in an orderly fashion. Dismantled or surplus materials, dirt, lumber, concrete, metal, insulation, paper, etc., shall be promptly cleared and disposed of by the contractor. General clean up and disposal of debris is required each day. Tulane has the authority to require additional cleaning prior to contractor’s resumption of work.

4. **Smoking**

Smoking *is not* allowed inside any University building or restricted area. Smoking *is* permitted in designated smoking-permitted areas and outside. Non-combustible waste containers shall be used for disposal of waste smoking materials.

5. **Fall Protection**

All contractor personnel working above ground in areas not protected by standard guardrails and work platforms must wear a full body harness and shock absorbing lanyard that is secured to a structural support meeting the requirements of OSHA standards. Areas where standard guardrails and work platforms have been temporarily removed for access, revision, addition, etc., shall be barricaded and clearly marked of the impending danger.

6. **Personal Protective Equipment**

Contractor personnel are required to properly wear and maintain any personal protective equipment provided to them by contractor. If working in areas requiring PPE, contractors must wear the University required PPE (extra safety glasses or goggles in labs/areas using corrosive materials).

D. **Equipment, Tools, Industrial Vehicles**

Contractors must ensure that all equipment used at the work site is in safe operating condition, that equipment guards are in place, and that contractor is meeting or exceeding all applicable governmental regulations (OSHA, EPA, DOT, etc.). The contractor’s equipment is subject to inspection by OEHS or the project manager at any time. Such inspections or failure to inspect do not relieve the contractor from responsibility for the safe operation of its equipment.

Contractor should bear in mind that the guidelines provided herein are supplementary and do not purport to cover all governmental regulations on the subject.

1. **Portable Ladders and Scaffolds**

   Contractor is referred to Section 24, Facilities Services, IV Ladders and Scaffolds, of this manual.

2. **Electrical Tools and Equipment**

   a. All electrical hand tools used must be protected via a ground fault circuit interrupter (GFCI) or grounding assurance program. Equipment and piping cannot be used for grounding purposes.
b. Lighting used inside confined spaces must be explosion proof and must not exceed 12 volts unless a GFCI is provided and used.

c. Only campus electrical service outlets equipped with proper plug-ins shall be used; adapter “pigtails” are not to be used.

d. Extension cords supplied by contractor shall be checked monthly.

3. **Powered Industrial Trucks**

Contractor should review [Section 24, Facilities Services](#), of this manual covering safety guidelines for use of powered industrial trucks and shall ensure that employees designated to operate such vehicles are adequately trained, or retrained, to operate them safely and efficiently.

4. **Internal Combustion Engine**

Contractors planning extensive use of industrial trucks powered by internal combustion engines, shall make provisions for CO monitoring. Monitoring records shall be made available to the project manager and OEHS.

5. **Cranes and Other Lifting Devices**

a. Cranes shall be operated only by trained and experienced operators. The contractor is responsible for ensuring that the crane has been properly sized for the job and is properly maintained and inspected.

b. Tag lines are required to secure materials while being moved or handled with cranes or other mobile equipment.

c. All cranes working in the vicinity of overhead power lines shall be grounded and shall be equipped with proximity guards. Minimum clearance between the lines and any part of the aerial lift shall be at least 10 feet. Use of personnel baskets on cranes must comply with OSHA standards.

6. **Lockout/Tagout Procedures**

The contractor is required to comply with Tulane’s lockout/tagout procedures that require the contractor to provide individually keyed locks for each employee. The procedure requires that all energy sources be locked out/or tagged out by each worker or crew with potential exposure. The procedure also requires that each worker in a crew lock out the “lock box.” ([See, Section 24, Facilities Services, VIII., Equipment Lockout/Tagout](#), of this manual.)

E. **Emergencies**

1. **Work Stoppage and Evacuation**

Upon hearing a fire alarm or evacuation announcement over the public address system, the contractor must stop all work, including welding and burning activities, and must shut off all energized equipment.
If evacuation is necessary, contractor personnel shall evacuate the building using stairwell exits. When all personnel have reached a safe location, the foreman should take a head count. If any personnel are unaccounted for, the foreman should report the missing person(s) to emergency personnel.

Buildings should not be reentered, nor activities resumed until the fire department, Security, or other authorized emergency personnel have announced an “all clear” message to reenter and resume work activities.

2. Medical Treatment

The contractor shall provide first aid supplies and a sufficient number of employees on site that are trained in first aid. If additional first aid is required beyond the expertise of the trained first aid employee, call 911 or campus Security. The caller should identify the area where assistance is needed, type of injury or accident, his/her name, and the contractor’s name. The caller should not hang up until all the information has been verified.

Contractor should review Section 1, Emergency Response, II.B and III.A-C, of this manual, for guidelines in handling minor personal injury or work site emergencies or major emergency situations while awaiting the arrival of emergency response personnel.

3. Reporting Hazardous Situations

If contract personnel should observe a fire, chemical release, downed electrical wires, or other such incident, they shall report to campus Security immediately. For off campus facilities, contract personnel should call 911.

4. Injury/Illness Reporting

a. Contractor personnel are required to report all occupational injuries/illnesses or “near-miss” incidents to their supervisor. The supervisor must in turn notify the Tulane project manager. The project manager shall act as liaison between the contractor and Tulane’s Office of Risk Management.

b. Within 24 hours of an incident, the contractor shall furnish Risk Management with a copy of the First Report of Occupational Injury/Illness form. If a person is seriously injured, the contractor shall keep Risk Management informed of the person’s condition.

c. If the contractor has an unusual happening, such as a serious fire, explosion, fatality, or other serious incident, the contractor shall notify Risk Management immediately. The contractor shall coordinate any news releases with the Public Relations Department on the campus where the work is being performed.

d. In the event of a fatality or multiple hospitalizations, the contractor must report same to the federal Occupational Health and Safety Administration (OSHA) within a time and manner prescribed by that agency.

F. Fire Prevention and Protection

Contractor is encouraged to review Section 26, Fire Safety, and Section 1, Emergency Response, of this manual.
1. **Fire Protection/Prevention Plan**

Contractor shall prepare and carry out an effective fire protection and prevention plan that shall comply with current industry codes and standards and any provisions for fire protection and suppression set forth in this section. The fire protection/prevention plan shall be part of the comprehensive safety and health plan submitted by the contractor with its bid package.

2. **Exits**
   
a. Contractor shall provide free and unobstructed access to exits. Building areas under construction must maintain escape facilities for construction personnel at all times. Daily inspections of means of egress must be conducted by the contractor and documented.

b. Contractor shall provide free and unobstructed access within the project site to emergency services and personnel.

c. If the construction work requires the temporary blockage of a fire exit, contractor shall notify OEHS in advance and shall work with OEHS in devising an interim plan to compensate for the temporary blockage.

3. **Fire Extinguishers**

Distinctly marked fire extinguishers rated 2A40B:C or greater shall be suitably placed as follows:

a. One or more on each floor of buildings with at least one located adjacent to each stairway.

b. At least one located outside but not more than 10 feet from the door opening into any room used for storage of more than 50 gallons of flammable or combustible liquids.

c. At least one within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas is being used.

4. **Detection/Suppression Systems**

Contractor shall ensure that fire alarm detection and suppression systems are not impaired. OEHS must be notified in advance of any work that involves the shutdown of any fire detection, suppression, or alarm system. OEHS must also be notified if work will impair, obstruct or restrict access to building exits. OEHS shall work with contractor and project manager in developing interim fire safety measures if the type of work being done requires such.

5. **Flammable and Combustible Liquids**

a. All flammable liquids must be stored in FM/UL approved containers and in designated storage areas. Transfer of flammable liquids to containers and equipment must incorporate the use of grounding and bonding.

b. No flammable or combustible liquids, or highly combustible construction materials shall be stored in a project area after the day’s work is completed.
c. Equipment refueling must be accomplished by using approved containers and methods. All vehicle engines must be turned off during refueling activities. Portable fuel containers should never be filled while placed on a lined truck bed.

d. Smoking is not permitted in areas where flammable and combustible liquids are used or stored. The University follows a no-smoking policy in all facilities.

e. See fire extinguisher requirements in F.3 above.

f. Contractor shall develop and enforce storage, housekeeping, and debris removal practices that reduce the flammable and combustible fire load of a building to the lowest level necessary for daily operations.

6. Compressed Gas Cylinders

OSHA compliance requires that the handling, storage, and utilization of all compressed gases in cylinders at Tulane campuses shall be in accordance with provisions of all Compressed Gas Association Standards as set forth in Pamphlet P-1(1965), Safe Handling of Compressed Gases and P-2, Safe Handling of Medical Gases. (See also Section 30, Laboratory Safety, III.D, Standards for Handling Compressed Gases in Cylinders, of this manual for an outline of general safety and special precautions regarding CGCs.)

7. Hot Work

Contractor should review Section 24, Facilities Services, V.D., Hot Work, of this manual regarding procedures for conducting hot work at Tulane facilities.

a. Hot work includes welding, torch cutting, sweating pipes, and any other task that produces open flames, sparks, or significant heat. If the contract work includes any of these activities, contractor must obtain a Hot Work Permit (Form 10F-OEHS in Appendix E of this manual) from Facilities Services or OEHS and submit it at least 24 hours before the start of work. The permit must be posted at the work site for the duration of the hot work.

b. Prior to the start or resumption of hot work, contractor must conduct an inspection of the area and review the precautions listed on the reverse side of the hot work permit.

c. Flammable material must be removed from the work area before starting hot work. Combustible materials must be removed or protected with a flame-retardant cover before starting hot work.

d. At least one ten pound multi-purpose (ABC) fire extinguisher must be provided for each area where hot work is being performed. The contractor is responsible for training its employees on the proper use of the fire extinguisher.

e. Contractor must ensure that all employees in the hot work area are informed of the nature, scope, and duration of the hot work as well as precautions to be observed.

f. If there are smoke detectors in proximity to the hot work area that are likely to be activated by smoke and/or released fumes, contractor must notify Facilities Services prior to commencement of work. Only Facilities Services, the Control Engineer, or Tulane Security are authorized to disconnect and reactivate fire detection devices.
g. When hot work is performed, contractor must provide fire watch personnel to stay at the job site for a minimum of 30 minutes after the time that the hot work activity has been completed.

8. Penetration of Fire Resisting Assemblies

Any penetrations through fire resisting assemblies shall be in accordance with the Standard Building Code (Section 05.4) to ensure the rating of the assemblies maintained. Contractor is required to obtain fire, smoke or penetration permits prior to beginning any project that requires a penetration of fire related or smoke related walls. The permit shall be reviewed and signed off by the designated parties selected by Facilities Services. The Fire and Smoke Penetration Permit shall be issued at the Pre-Construction conference.

G. Hazardous Materials

1. Hazard Communication

a. Contractor must provide OEHS with a list of all hazardous chemicals that are to be used by its employees while working on Tulane property and, if requested, must provide OEHS with an MSDS for each chemical listed.

b. Contractor must bear the responsibility for training its employees on the potential hazards of the chemicals they will be using.

c. Before work begins, contractor must be given an opportunity to review the written Hazard Communication Plan and the Hazardous Chemicals Inventory for the contracted work area. Contractors shall also be given an opportunity to review any relevant MSDSs. MSDSs shall be provided by OEHS or the project manager.

d. Each written contract entered into between Tulane and a contractor or vendor must include a Hazard Communication Addendum to be completed and kept on file with the contract agreement.

2. Hazardous Material Spills

a. The contractor must provide adequate spill protection and shall not allow any oil, grease, fuels, lubricants, anti-freeze, paints, solvents, acids, alkalis, soil sediments, or contaminated liquids to migrate to any drain, ditch, or be spilled on the ground.

b. The contractor must report any spills immediately to OEHS. The contractor must take immediate action to contain the spill. OEHS shall coordinate clean up and disposal but all clean-up and disposal costs shall be charged to the contractor.

c. The contractor shall not discharge any materials, liquids, wastes, chemicals, etc., to any sump without the prior approval of OEHS. This includes the wash down of any parts or equipment in or on areas that eventually drain to ditches or sumps (e.g., parking lots, driveways around maintenance, etc.).
3. **Asbestos**

   a. **Planned Asbestos Project**

      1) Contractors hired for monitoring and for abatement (cannot be one and the same) shall be responsible to the Tulane Asbestos Coordinator for the scope of the project, and shall work with the Asbestos Coordinator, the OEHS Asbestos Abatement Liaison, and the University Project Coordinator to ensure that abatement activities are safely carried out.

      2) Contractors shall be responsible for all appropriate signage to ensure no one accidentally enters an abatement area.

      3) Both monitoring and abatement contractors must have attended and received a passing score from an LADEQ recognized course specifically designed for contractors.

      4) Contractor should review [Section 21, Asbestos Management](#) of this manual.

   b. **Emergency Asbestos Release**

      If in the course of construction work unrelated to a planned asbestos project, contractor discovers [asbestos-containing materials](#) (ACM), or suspects ACM, contractor shall notify OEHS and the Project Manager immediately. The suspect material shall not be disturbed further until it has been sampled and analyzed by trained, qualified personnel.

4. **Bloodborne Pathogens**

   a. If a construction project involves potential exposure of contract personnel to bloodborne pathogens or other potentially infectious materials (OPIM), the contractor must ensure that those employees who may be exposed follow the **Exposure Control Plan** for the Tulane facility where the contracted work is taking place and where the potential exposure exists. *(See, [Section 40, Bloodborne Pathogens](#), of this manual for the appropriate Exposure Control Plans)*

   b. If the contract work involves the closing out of a lab(s), contract personnel are advised to review [Section 30, Laboratory Safety, IV. Laboratory/Studio Close-Out](#) of this manual for lab close-out guidelines regarding the dismantling and removal of lab equipment.

   c. Read all cautionary signage.

   d. Wear appropriate protective equipment. If possible, a 1:10 dilution of household bleach shall be used to disinfect any tools or equipment that may become contaminated. After disinfection, equipment shall be rinsed with water and dried to prevent rusting.

5. **Waste (Generated Regulated Waste)**

   a. All solid waste generated by the contractor during a construction project shall be disposed in accordance with applicable laws.

   b. All hazardous waste material created by contractor at the work site must be handled in accordance with applicable regulations and Tulane University policies and procedures. The contractor shall ensure restoration of the work site to its original condition.
H. Confined Spaces

1. Contract work that involves entry into a permit-required confined space requires completion of a **Confined Space Hazard Addendum** form by Facilities Services personnel. This document is part of the contract documents.

2. Facilities Services is responsible for notifying OEHS before commencement of any permit required confined space work.

3. Before entry into a permit required confined space, OEHS shall apprise the contractor of inherent hazards and of any experience the University has had with the confined space in which the contractor would be working.

4. The contractor shall be notified of all hazards and precautions that affect the permit required confined space as documented in a completed **Confined Space Entry Permit (Form 09F-OEHS in Appendix E of this manual)**.

5. The Confined Space Entry Permit must be dated and signed by an OEHS representative and the entry supervisor before entry is authorized.

6. The University is not responsible for providing any equipment or personnel needed by the contractor when entry involves only contractor personnel. This includes, but is not limited to, personal protective equipment, ventilation equipment, sampling/monitoring equipment, communications equipment, rescue equipment and emergency services.

7. If both contractor and University employees shall be working together in the same permit required confined space, OEHS shall oversee the coordination of entry operations. Provisions of needed equipment and personnel shall be arranged through mutual agreement of Facilities Services, contractor, and OEHS.

I. Environmental Impact

1. **Excavation/Trenching**

   All excavations/trenching on Tulane property must be performed in accordance with applicable OSHA regulations (shored, sloped, shielded, barricaded, acceptable egress, etc.). The contractor is responsible for providing a “competent person” at every excavation site. This individual must be capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees. The assigned person must also have the authority to take prompt corrective measures to eliminate such conditions. He/she must be able, through experience or training, to determine the suitability of equipment and/or materials used for support systems, shield systems, and other protective systems.

   Excavation/trenching that will be done with mechanical equipment requires a permit from OEHS. Contractor must provide an excavation/trenching plan to OEHS two days prior to excavation/trenching work.
2. **Blasting Operations**

If the construction project is to include blasting operations, a written notification and description of blasting operations must be received by OEHS at least seven days prior to the actual operation. The request for blasting operations must be submitted to both the project manager and OEHS, and must include information as to the time, duration, purpose, type and amount of explosives, and the name and phone number of a contact person. Any exceptions to this notification shall be considered on a case by case basis.

3. **Dust Protection**

   a. Non-project areas must be protected from the effects of dust, smoke, vapors and fumes generated from construction activities.

   b. Dust partitions shall be constructed of non-combustible material. The use of polyethylene is restricted to areas that have automatic sprinklers.

   c. All construction sites shall have sticky walk-off pads placed immediately before entering as well as immediately before exiting the construction site to minimize the amount of dust being tracked throughout the building.

   d. Contractor must obtain approval from OEHS for any interim measures taken that may reduce level of life and fire safety in Tulane buildings.

4. **Noise Abatement**

   a. Contractor shall endeavor to keep the work area as quiet as possible, particularly when the project is in or near occupied buildings.

   b. Contractor is required to provide hearing protection devices for his/her employees during high noise operations or in any areas on campus where the noise level exceeds 85dBA or is deemed necessary by OEHS as required by the OSHA Occupational Noise Standard 1910.95.1

5. **Air Emissions**

   a. Contractors are prohibited from burning construction debris and other materials on Tulane property.

   b. Contractors are required to report any unplanned release of chemicals to the atmosphere to the Project Manager and OEHS immediately.

   c. Before any odorous chemical compounds (glues, solvents, paints, etc.) are used, the contractor or project manager must contact OEHS with information on the materials that will be used, where and for what duration. OEHS will therefore be able to respond to any inquiries or complaints about indoor air quality. If odorous compounds cause problems for building occupants, work may be suspended until further notice or rescheduled.
d. Appropriate precautions (found on container labels and MSDSs) regarding the use of chemical compounds must be observed. Where necessary, proper ventilation must be provided to ensure the safety of contract employees and building occupants.

6. Respirator Program

If respirators are required as part of the job, the contractor is required to have a written Respiratory Protection Program as described in OSHA Respiratory Protection Standard (29 CFR 1910.134). All affected contract employees must be fit tested, have medical approval to wear a respirator, and must be properly trained in respirator selection, use, maintenance, and storage. Contract personnel who are not included in the Respiratory Protection Program are prohibited from participating in respirator-required projects.

7. Waste Disposal

Any hazardous waste disposed of on behalf of Tulane University must be done in accordance with all applicable federal, state, and local regulations.

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