



KAISER PERMANENTE®

FOR PROJECTS (\$0-\$10 MILLION)

NATIONAL FACILITIES SERVICES (NFS)

**CONTRACTOR
PERFORMANCE SAFETY STANDARDS
MANUAL**

Original April 16, 2009

Revisions recorded on next page (Revision Tracking Sheet)

Revision Tracking Sheet

Revision #1 – 08/04/09

- 1) Modified Pre-qual section – Removed questionnaire requirement and replaced with pre-qual rating requirements table in section
- 2) Changed National Manager of Construction Safety and Loss Prevention to National Director of Construction Safety or designee (all refereneses in document)
- 3) Removed Appendix “A” – Pre-qualification Questionnaire for document
- 4) Modified Disciplinary Action subsection language
- 5) Modified Appendix letter designation to reflect removal of Appendix A
- 6) Revise Table of Contents to reflect removal of Appendix A and page numbering due to document modifications
- 7) Update revisions to PCRA Appendix “H”

Revision #2 – 03/30/10

- 1) Updated version of PCRA –
 - a) ICRA 2006 update,
 - b) ILSM Revision Item #6 – Provide Temp Equivalent Fire Alarm Systems, Item #7 – Provide additional fire fighting equipment, Item #8 – Conducts one additional fire drill
- 2) Modification to Safety Pre-Qualification of Subcontractors and Sub-Tiers – Last Paragraph – Revised language
- 3) Security standard – Match \$10-50M and >\$50M standards language

Revision #3 – 06/03/13

- 1) Revised Table to Contents – Modified 3rd bullet under section 7 to Lead Abatement and Installation – Master Specification
- 2) Modification to Section 7 “Hazardous & Potentially Hazardous Building Material Handling Programs”- Inserted Lead Abatement and Installation master specification requirements under subsection “Lead Abatement and Installation”

Revision #4 – 02/05/14

- 1) Update Preconstruction Risk Assessment Form and Appendices to match Facilities Maintenance Operations PCRA Standard – Appendices
- 2) Modified Section 16 “Excavation and Trenching” – Subsection “Special Precautions bullet 3 – Change 6 ft to 2 ft spoils

Revision #5 – 05/14/14

- 1) Modify Section 13 “Personal Protective Equipment”, Subsection “Respiratory Protection Requirements” - Expand requirements to include silica exposure and exposure assessment language
- 2) Modify Section 16 “Excavation and Trenching” – Paragraph 1 added trenching permit requirement
- 3) Modify Section 18 “Cranes Hoisting and Rigging – Included requirements for lifting over occupied operational buildings and facilities
- 4) Added Appendix J – Sample trenching permit
- 5) T of C page # revised

Revision #8 – 09/23/15

- 1) Modified Section 18 “Cranes Hoisting and Rigging, subsection “Hoisting and Rigging, sub bullet #5 – Removed the words “do not” - If structural engineer determines some floors of the building do not need to be unoccupied.....

KAISER PERMANENTE

CONTRACTOR PERFORMANCE SAFETY STANDARDS MANUAL

By contract and by law it is the responsibility of the General Contractor to maintain a safe work site. To help the General Contractor in this regard, the Owner has created minimum standards for safety on the project site. Furthermore, the performance safety standards described in this "Construction Performance Safety Standards" are supplementary to all Governmental rules, codes and regulation, and does not negate, abrogate, alter or otherwise diminish any requirements imposed by those Governmental rules, codes and/or regulations. Where the performance safety standards in the "Construction Safety Manual" are stricter, the stricter standard will apply.

The signature of the Owner and General Contractor represent an acknowledgement that the above information was reviewed by both parties and the General Contractor understands how the "Construction Performance Safety Standards" will be incorporated into their Site Specific Safety Program.

(Owner)

(General Contractor)

Date

Date

Project Name(s)

Project Number(s)

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1. GENERAL RESPONSIBILITIES

Kaiser Permanente

Kaiser Permanente's role in achieving construction safety is to utilize the services of contractors who demonstrate a solid commitment to safe work practices. Contractors may evidence such commitment by establishing and implementing sound safety and hazard-reduction programs that reflect a thorough understanding of best industry practices. Kaiser Permanente seeks to facilitate Contractor's familiarity with, and comprehension of, basic performance safety standards in the health care construction industry. Kaiser Permanente therefore furnishes this manual in furtherance of this objective. This responsibility does not supersede, override or take precedence over that of Contractors and individual workers, who are ultimately responsible for safety and health of their personnel, as well as the protection of the public and property.

All Contractors

It is imperative that site management and job foreman exercise positive leadership in orienting and motivating their employees toward performing their jobs effectively, efficiently, and with a high regard for safety. A clear understanding of roles will aid in achieving these objectives.

EACH GENERAL CONTRACTOR, PRIME CONTRACTOR, SUBCONTRACTOR OR SUB-SUBCONTRACTOR IS TOTALLY AND COMPLETELY RESPONSIBLE FOR ACCIDENT PREVENTION AND SITE SAFETY FOR ALL WORK AS DEFINED BY CONTRACT WHILE PERFORMING WORK ON THIS PROJECT.

Without limiting the generality of each foregoing, each Contractor acknowledges that the following performance and safety standards represent sound practices for construction in a health care setting: The Contractor will comply with all Federal, State and Local governmental requirements. (said requirements here in after collectively referenced to as "Government requirements") and to the General Performance Safety Standards as defined in this " Construction Performance Safety Standards".

General Contractors Site Safety Representative

- The General Contractor will be required to identify a Site Safety Representative to oversee Environmental, Safety and Health activities on the construction site (the site is defined as one building or multiple buildings being constructed on one piece of property).

The Site Safety Representative must be at a supervisory level (Superintendent, Project Manager, or Project Executive) to represent and make decisions for the General Contractor regarding all safety matters and must be assigned to this project only.

The Site Safety Representative shall have:

- Minimum of 5 years of construction experience and 30 hour OSHA certification.
- Demonstrate competency in pre-task (Job Hazard Analysis) planning, Accident Investigation root cause analysis, statistical analysis of injury trends.
- Broad understanding and recall of Federal, State and Local regulatory requirements as it pertains to OSHA (Federal and/or State) and Labor Codes.
- First Aid/CPR capabilities

The National Director of Construction Safety or designee retains the right to object to the appointment of the General Contractor's Site Safety Representative. In the event that the National Director of Construction Safety or designee reasonably objects to the Site Safety Representative, then the General Contractor shall replace the Site Safety Representative with a Site Safety Representative acceptable to the National Director of Construction Safety or designee.

Subcontractor Site Safety Representative

The Subcontractor will be required to identify a Site Safety Representative to oversee Environmental, Safety and Health activities on the construction site (the site is defined as one building or multiple buildings being constructed on one piece of property).

The Site Safety Representative shall have:

- Demonstrate competency in pre-task (Job Hazard Analysis) planning and Accident Investigation.
- Broad understanding and recall of Federal, State and Local regulatory requirements as it pertains to OSHA (Federal and/or State) and Labor Codes.

National Director of Construction Safety or designee and Loss Control Consultant(s)

Owner reserves the right to be represented by the National Director of Construction Safety or designee and/or Independent Loss Control Consultant to engage in the services including but not be limited to:

- Review Contractor Safety Plans
- Verify that the safety program is being implemented by each contractor/subcontractor/sub-tier.
- Identify non-compliance issues.

The independent Loss Control Consultant(s) can visit the work site and perform those duties as set forth in a separate agreement between Loss Control Consultant(s) and Owner.

If upon National Director of Construction Safety or designee or Independent Loss Control Consultant(s) observation of any unsafe act, unsafe behavior, or unsafe practice in a contractor's work area or by a contractor's employee, subcontractor, supplier, etc., the National Director of Construction Safety or designee or Independent Loss Control Consultant(s) will communicate the observations to the contractor of the condition(s). Should the contractor fail to correct identified unsafe condition(s), the National Director of Construction Safety or designee or Independent Loss Control Consultant(s) has the right to stop, but not the obligation, to take the appropriate action to mitigate the danger. Contractor shall not be entitled to any compensation for work lost to correct the unsafe condition(s).

Each contractor shall notify the National Director of Construction Safety or designee or Independent Loss Control Consultant(s) of any allegations of unsafe conditions, unsafe behavior or unsafe practices of other prime contractors, subcontractors, employees, etc. over which the contractor has no control.

No Third Party Beneficiaries – The rights conferred to the National Director of Construction Safety or designee and/or Independent Loss Control Consultant(s) hereunder may be exercised by National Director of Construction Safety or designee or Independent Loss Control Consultant(s) solely for Owner's benefit and not for the benefit of General Contractor, prime contractor, subcontractor, their employees, or any other person or entity.

National Director of Construction Safety or designee or Independent Loss Control Consultant(s) exercise or failure/refusal to exercise any such rights shall in no way relieve any contractor of its total and complete responsibility for accident prevention and site safety.

Site Specific Safety Plan (SSSP) (Required to be submitted by the General Contractor if the project awarded is in excess of One Million dollars and/or if requested by the Kaiser Project Manager)

The General Contractor shall, upon notification of the contract award, develop a Site Specific Safety Plan that is consistent with the "Construction Performance Safety Standards contained in this Manual. The Site Specific Safety Plan (SSSP) must meet or exceed the minimum performance safety standards contained herein for the service or work to be performed under its Contract with details commensurate with the services or work to be performed. Each subcontractor awarded work under the General Contractor will submit a SSSP to the General Contractor that must meet or exceed the performance safety standards contained herein.

The National Director of Construction Safety or designee and/or Loss Control Consultant(s) (where applicable) retains the right to review and approve the SSSP and require the contractor to edit, modify, add, delete or otherwise revise its SSSP for the project, as deemed necessary to improve safety performance or provide a safer work environment.

Any requests by General Contractors, subcontractor or sub-subcontractors to edit, modify, add, delete or otherwise revise the "Construction Performance Safety Standards" may be submitted in writing to the National Director of Construction Safety or designee and the Loss Control Consultant(s) (where applicable) for consideration. The request must include the precise identification of the relevant performance safety standard, a description of Contractor's proposed performance safety standard and supporting documentation regarding the applicable industry standard. Any modifications to Construction Performance Safety Standards will require a revision to the document and written approval by all parties (National Director of Construction Safety or designee and/or Loss Control Consultant(s) and General Contractor).

Delays by a contractor in submitting any of the information stated in this "Construction Performance Safety Standards" which result in the contractor being prohibited from starting work, will not constitute grounds for a contract schedule extension or delay claim.

The General Contractor shall ensure prime-contractors, subcontractors, and sub-subcontractors comply with the safety standards of the Contractor's Site Specific Safety Plan (SSSP) and "Construction Performance Safety Standards ", and shall include provisions to this effect in all written contracts with prime contractors, subcontractors, and sub-subcontractors.

The General Contractor shall ensure prime-contractors, subcontractors, and sub-subcontractors are provided with a copy of the Contractor's SSSP and "Construction Performance Safety Standards" (and any amendments or modifications thereto), and that they are familiar with the standards stated herein and are informed of their obligations with regard to safety.

Each contractor shall plan and execute all work to comply with the stated objectives and the safety performance standards stated herein including, but not limited to, the Contractor's SSSP and the "Construction Performance Safety Standards ", provisions of the Contract, government requirements, and industry standards. In the event of any conflict between requirements/standards, the most stringent requirements/standards shall govern.

At a minimum, the SSSP is to include the following elements:

- Name of Contractor On-Supervisor and Contact Information
- Name of Contractor Safety Representative and Contact Information
- List of Subcontractors that will be on-site
- Scope of Work Description
- Identification of Hazards, Risks and Exposures expected to be encountered during the Project
 - Lockout/Tagout of Equipment
 - Confined spaces
 - Digging/excavating
 - Potential chemical exposures
- Hazard Correction/Control Measures
 - PPE
 - First Aid Kits
 - Fall Protection
 - Fire Extinguishers
- Periodic Inspection Procedures
 - Schedule of Inspection (daily, weekly)
 - Personnel performing the Inspections
 - How are inspection findings addressed?

- Project Site Orientation Procedures
 - Informing subcontractors of the provisions of the SSSP and Construction Performance Safety Standards
 - Hazard Communications
- Record Keeping
- Safety Meetings
 - Schedule of meetings
 - Attendance expectation of meetings

Orientation Program

Each contractor shall maintain and/or participate in an orientation program for new employees that will include at a minimum: 1) an overview of these Construction Performance Safety Standards 2) a review of the General Contractor's SSSP (if required), 3) pre-tasking planning standards, and 4) encouraging contractors to provide feedback on safety conditions of the site and 5) review of the Pre-Construction Risk Assessment (PCRA) document. In addition, the General Contractor is responsible to review all Kaiser Permanente performance safety standards that may be specific to a particular site or facility in which the work is being completed (i.e., tenant improvement work that is being conducted in occupied facilities). Orientation training will be attended by all supervisors and workers prior to their starting work and their attendance documented by the General Contractor.

2. ADMINISTRATIVE PROCEDURES

Safety Pre-Qualification of Subcontractors and Sub-Tiers

It has been known throughout the construction safety community at large that a critical component of good contractor safety programs is the evaluation and selection of qualified contractors based on safety records. Therefore, it is the responsibility of the General Contractor to review safety records of all subcontractors and pre-qualify them prior to bidding the project work disciplines. **It is paramount, that these pre-qualifications occur prior to bidding out the disciplines in order to avoid inviting contractors to bid that have poor or suspect safety records.** After the initial pre-qualification, it is required that these pre-qualifications be performed by the General Contractor on an annual basis.

The following rating criteria is to be evaluated and contractors must be at or below the following ratings/numbers

Criteria	Ratings/Numbers
Experience Modifier Rate (EMR)	At or below 1.25
Total Recordable Case Rate – As defined in the OSHA Injury Recordkeeping Guidelines	Combined Average over past 3 years at or below 6.2
DART RATE (Days Away/Restricted or Transfer Rate) – As defined in the OSHA Recordkeeping Guidelines	Combined Average over past 3 years at or below 3.6
OSHA citations that are of greater severity than a "General" citation (i.e., serious, willful, etc.)	No more than two citations in the past 3 year period
Number of Fatalities	1 or more fatalities in the past 3 year period

Upon reviewing of the ratings/numbers, if a subcontractor is identified to have met the ratings/numbers requirements, the General Contractor is free to invite the subcontractor to the bidding process. For those subcontractors and subcontractor tiers who do not meet the ratings/numbers there is an exception process that could allow marginal contractors to be approved for bidding. The exception process requires the General Contractor to submit to Kaiser's Project Manager and

National Director of Construction Safety marginal subcontractors requiring an exception. The submission must include the subcontractor's ratings/numbers, justification for the need to include in subcontractor in the bidding process and safety mitigation strategies the General Contractor will use to manage the subcontractor, if subcontractor is awarded the work. Subcontractors who do not meet the ratings described above and have not been approved through the exception process will not be allowed to be included in the bidding process.

Incident Reporting

During the course of construction there is the likelihood that an injury or damage to property could occur. It is important that when an incident of this nature takes place that the General Contractor and Owner work closely together to resolve any issues. All incidents whether they be an injury (to a patient/member, medical center employee, construction worker or public at large) or damage to property (Kaiser Permanente Property or public) must be reported to the Kaiser Permanente Project Manager in order to assemble the appropriate resources to respond to the event.

(See [Appendix "A" for Incident Reporting Form](#))

Accident Reporting

FEDERAL OSHA and/or state government programs or governmental agencies mandate the reporting of certain types of employee accidents and the completion of certain reports for these accidents. Whether the reports are filled out for FEDERAL OSHA and/or state government programs recordkeeping requirements, or to satisfy the state's Workers' Compensation statutes, it is the Contractor/Subcontractor's responsibility that they be properly and completely filled out.

Safety Pre-Task Planning (Job Hazard Analysis)

Each subcontractor is required to present to the General Contractor a Pre-task Plan (Job Hazard Analysis) prior to commencement of work. The plan will at a minimum include: 1) the tasks/operations that will be performed, 2) the hazards associated with the tasks 3) the measures (engineering controls, administrative controls, personal protective equipment, employee training) that will be needed to mitigate those hazards, and 4) identify how the tasks performed affect other contractors working in the area. There may be instances where more than one pre-task plan would have to be submitted during the course of a subcontractor's work based on the various tasks/operations being conducted. In addition to the initial pre-task plan, a pre-task review will be conducted by the Supervisor and the crew on a daily basis prior to the commencement of work. This review will be documented and any tasks, hazards or conditions that have changed from the previous day will be noted and remediation measures identified.

Accident Investigation

Accident Investigation may help prevent the recurrence of similar accidents in the future and make the workplace safer for everyone.

- Each contractor shall complete an Accident Investigation Report on any injuries, accidents and "near miss incidents" (a near miss incident is any incident that does not result in injury or property damage, but had the potential to be very serious). The report should include as a minimum:
 - Date and Time of the injury, accident or incident
 - Task(s) or process(s) where the accident occurred
 - Hazards associated with the accident
 - Root Cause Analysis (required on more severe incidents or accidents)
 - What steps will be taken to mitigate the hazard (unsafe acts and/or unsafe conditions)
 - Training conducted for all affected workers
 - Document new mitigation steps have been observed once implemented
 - Photographs (where possible)
- The Contractor's Representative is to report the status of the Accident Investigation to the NFS Project manager and/or local EH&S Representatives.

- The accident investigation report will be completed and turned into the General Contractor's Representative within 24 hours of completion of the investigation. The General Contractor is to then immediately forward a copy of the Accident Investigation to the NFS Project Manager and the facilities local EH&S Representative.
- The General Contractor's Safety Representative will review the accident investigation report, observe that the mitigation steps are being followed and document these observations.
- The National Director of Construction Safety or designee or the Loss Control Consultant(s) may request a Root Cause Analysis depending on the severity the incident or accident.

Job Site Posting Standard

Each subcontractor shall ensure compliance with any and all Workers' Compensation Statutes and the regulations of the FEDERAL OSHA and/or state govern programs or governmental agency requirements that certain notices, signs, or posters be put up in a conspicuous place where they can readily be seen, or where notices to employees are customarily posted. Minimum posting standards include the following:

1. Job Safety, Permits, and Health Poster
2. Emergency Phone Number List
3. MSDS Notice to Employees — This notice advises employees where MSDS's for a particular job site are located along with the written HAZCOM program.
4. Annual Summary Injury recordkeeping log as required by FEDERAL OSHA and/or state govern programs or governmental agency requirements.
5. Copies of any Citations and/or Notice to Contest Citations required by postings FEDERAL OSHA and/or state govern programs or governmental agency requirement to be posted.

All required documents must be posted in languages identified by FEDERAL OSHA and/or state govern programs or governmental agencies.

Recordkeeping

Each contractor shall be responsible for completing and maintaining any of the applicable documentation listed below, and upon request, will submit copies of same to the General Contractor, Kaiser Permanente's Project Manager, Environmental, Health and Safety Manger National Director of Construction Safety or designee or Loss Control Consultant(s), upon request:

- Weekly Safety Meetings
- Daily Job Site Safety Inspections
- Employee Training Records - (Forklift, Fall Protection, etc.)
- Applicable permits (Excavation, Scaffold, Crane, etc)
- Pre-Task Planning (Job Hazard Analysis) Initial and Daily
- Accident Reports, Root Cause Analysis, and Investigations
- MSDS Inventory
- Orientation Sign-Off Sheets
- Site Specific Safety Plan (if applicable)

Safety Meetings

Contractor Pre-Task Planning and Safety Orientation Meeting

Each subcontractor will be required to attend a General Contractor's Pre-Task Planning and Safety Orientation Meeting prior to working on the Site. Topics discussed during this meeting will include general performance safety standard, project specific safety standards, hazard communication, site security procedures, emergency procedures, fire/rescue procedures, site evacuation procedures, traffic control , the pre-construction risk assessment (PCRA) document, and any other applicable site

or project rules and regulations provided by the specific site. In addition, Pre-Task planning will be discussed to ensure coordination with other construction activities.

Subcontractor Employee and Visitor Safety Orientation Meeting

All personnel of all subcontractors, sub-subcontractors and vendors who will be performing work on site shall be fully instructed/oriented in the standards of the "Construction Performance Safety Standards", site specific safety standards (if applicable) of the General Contractor and the safety practices required by their assignments prior to the start of any work/task on this project.

Visitors will be required to check in with the General Contractor and will receive orientation prior to entering the construction area where work is being performed or escorted by a general contractor's representative that has received the training.

The General Contractor's Site Safety Representative will administer a test to all new workers or visitors after the orientation and prior to letting them on the site to validate their understanding of the safety standards. Test results and sign-in documentation will be maintained on site throughout the duration of the project.

Safety Meetings

The General Contractor, subcontractors and sub-subcontractors shall conduct at a minimum bi-weekly toolbox safety meetings with all of its employees. These meetings are to be documented and signed by all attendees with a copy of the minutes submitted to the General Contractor's Site Safety Representative. The agenda for the meeting is to be prepared in advance and will include, at a minimum, the following:

- General Safety Items
- Site Specific Safety Items
- Process or Task Specific Safety Items
- Owner Safety Items
- Changes to Pre-task plans (Job Hazard Analysis)
- Injuries and root causes

It is each contractor's responsibility to determine the format of these meetings.

3. GENERAL PROJECT SAFETY

General Standards

- Access to this site is restricted to contractors' employees and those authorized by the Owner. All contractors will be authorized to work within a specified area of Owner's project. Any contractors or their employees who are found in an unauthorized area on the Owner's property (warehouses, buildings, offices, etc.), who are not performing work required by contract and who are not being escorted by an authorized Owner Representative may be subject to immediate removal from the site and, in the case of employees, other disciplinary measures.
- No portable radios, tape decks, CD's or earphones are allowed on site.
- Only authorized and trained persons are permitted to operate equipment.
- No riders on machinery or equipment. Riders in trucks are to be seated while the vehicle is moving and wearing their seatbelts. No employees may be transported in the back of a pick-up truck AT ANY TIME.
- All mobile machinery must have operable backup alarms at ALL times.
- No one shall enter a trench or excavation unless it is inspected by a trained, competent person and properly shored or sloped.

- Only trained, qualified operators will use power-actuated tools, and only when proof of training is readily maintained and available on site.
- All ladders will be adequately secured to prevent displacement. Always face ladder when ascending or descending.
- Each contractor will be responsible for maintaining a complete first aid kit in their field office or "gang-box".
- Report all accidents, unsafe conditions or practices immediately to your supervisor and the General Contractors Site Safety Representative.
- No private autos are allowed on site except in designated parking areas. All company vehicles will be identified by a contractor's name. No contractor vehicles (trucks) allowed on site without prior authorization from the Owner.
- Each contractor is responsible for providing and ensuring the use of required PPE. All employees shall use the PPE as prescribed by local, state, federal agencies and the requirements of this manual to control or eliminate any hazard or other exposure to illness or injury.

4. MEDICAL PROGRAM

First Aid Procedures

It will be the policy of each Contractor to provide for first aid, medical treatment and to notify "911" if treatment emergency transportation is needed for Contractor employees who sustain occupational injuries or illnesses.

Transportation of Injured or Ill Workers

1. Routine Transportation of Workers to the Doctor.
 - Each Contractor shall provide transportation from the job site to the specified doctor's office or clinic. Transportation will be available at all times when anyone is working on site and is to be provided by the Contractor.
2. Emergency Transportation
 - The Contractor is to call "911" for the proper handling of seriously injured or ill workers at the job site.

5. DISCIPLINARY PROGRAM

General Standards

The General Contractor and each subcontractor shall have a written disciplinary program which provides a series of progressive disciplinary actions for any employee that violates established safety or security policies and procedures. An example of progressive disciplinary actions can be as follows:

1. First Offense - Written Warning
2. Second Offense - 3-Day Suspension without Pay
3. Third Offense - Permanent Removal from Job Site

Note: At the discretion of the General Contractor, an employee can be permanently removed from the job site for committing a violation of the performance safety standards as outlined in this "Construction Performance Safety Standards " without written warning or a three day suspension period if the violation of the safety procedure is deemed to be severe.

6. HAZARD COMMUNICATION PROGRAM

Introduction

These safety standards have been developed as a guideline utilizing the requirements of the State or Federal OSHA, or other regulatory agency's requirements. These guidelines provide information for the safe use, handling and storage of hazardous chemicals is provide to and shall be made available to employees.

These safety standards include guidelines on identification of chemical hazards and the preparation and proper use of container labels, placards and other types of warning devices.

Chemical Inventory

- Each subcontractor will maintain an inventory of all known chemicals they use at the work site. A chemical inventory list is available from each contractor. The subcontractors will provide to the General Contractor's Site Safety Representative a copy of all MSDS's and inventory list including storage area and quantities.
- Hazardous chemicals brought onto the work site by any sub-tier of the subcontractor will be included on the hazardous chemical inventory list.
- The General Contractor will provide a comprehensive up-to-date inventory list that includes all hazardous chemicals being used on the project (including those of all subcontractors and sub-tier contractors). The up-dated lists will be transmitted to Kaiser Permanente Facilities Services/Engineering and Environmental Health and Safety Representatives on site (when working in an occupied facility). (See Appendix "B" – Chemical Materials Inventory Form)

Container Labeling

- All chemicals on site will be sorted in their original or approved containers with a proper label attached, including small quantities for immediate use. Any container not properly labeled will be given to your supervisor for proper identification, labeling or disposal.
- Chemical are not to be disposed until they have proper labeling.
- No unmarked containers of any size are to be left in the work area unattended.
- Each contractor will rely on manufacture applied labels whenever possible, and will ensure that these labels are maintained.
- Each contractor will ensure that each container is labeled with the identity of the hazardous chemical container and any appropriate hazard warnings.

Chemical Storage

- Location of Contractor's chemical storage area is to be approved by the local Kaiser Permanente representative (i.e. EH&S Manger or building Engineer) during the pre-construction planning process.
- Storage of Contractor's chemical near air-intake locations is prohibited.
- Chemicals are to be stored within a secondary container to avoid chemical spills.
- Appropriate PPE and spill clean-up kits are to be stored near the chemical storage area.
- Chemicals are to be stored within an area secured by the Contractor.

Material Safety Data Sheets (MSDS)

- Employees working with a Hazardous Chemical may request a copy of the material safety data sheet (MSDS). Requests for MSDS's should be made to their employer.
- MSDS's shall be readily accessible and standard chemical reference will also be accessible on the site to provide immediate reference to chemical safety information.
- The Contractor is to keep copies of MSDS for only the chemicals that are on-site

Employee Training

Employees will be trained to work safely with hazardous chemicals. Employee training will include:

- Methods that may be used to detect a release of hazardous chemical(s) in the workplace.
- Physical and health hazards associated with chemicals,
- Protective measures to be taken,
- Safe work practices, emergency responses and use of personnel protective equipment,
- Information on the Hazard Communication Standard including:
 - Labeling and warning systems
 - An explanation of Material Safety Data Sheets
 - All training will be documented and available on site.

Personal Protective Equipment (PPE)

Required clean and functioning PPE's will be made available by each subcontractor. Any employee found in violation of PPE requirements may be subject to disciplinary actions up to and including discharge.

Emergency Response

- The Contractor is to contact the local Facility Services Supervisor (FSS) (if a facility is not assigned an FSS, contact the local Department Manager) immediately and report the location of the spill.
- The foreman or the immediate supervisor will be responsible for insuring that proper emergency response actions are taken in leak/spill situations.

Hazards of Non-Routine Tasks

- Supervisors will inform employees of any special tasks that may arise which would involve possible exposure to hazardous chemicals.
- Review of safe work procedures and use of required PPE will be conducted prior to start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

Posting

Each contractor is required to post information for employees at this job site on the Hazard Communication Standard. This information can be found at the job site office.

7. HAZARDOUS AND POTENTIALLY HAZARDOUS BUILDING MATERIAL HANDLING PROGRAMS

Asbestos Management Programs

Introduction

Kaiser Permanente has been developed hazardous and potentially hazardous building material handling programs utilizing the requirements of the State or Federal OSHA, other regulatory agency's requirements and industry standards. These programs provide information for the safe handling, storage and disposal of hazardous and potentially hazardous materials including but not limited to Asbestos, Mold and Lead.

Contractor Notification for Asbestos

Kaiser Permanente is required by law to communicate information about the presence of asbestos in its facilities. The intent of this communication is to help minimize the potential impact on human health and the environment from operations and procedures that could impact and disturb asbestos-containing materials (ACM). In addition, the General Contractor is also required by law to inquire and verify the presence of asbestos prior to sending any of their workers, subcontractor or sub-tier contractor workers to conduct work on a project.

To facilitate this communication the General Contractor will contact the Kaiser National Facilities Services Project Manager and/or Engineering Department at the project site to verify the presence of asbestos in the building(s) they will be conducting work in. *The General Contractor may find a notification document similar to Appendix "C" (Asbestos Notification Form) describing which facilities contain either Asbestos Containing Materials (ACM) or Presumed Asbestos Containing Materials (PACM). Additionally, prior to construction activities and disturbance of any building materials, the Contractor must receive a signed copy of Appendix "C" (Asbestos Notification Form) from a Kaiser Permanente representative.*

If at any time, the Contractor has any doubts or questions regarding the presence of asbestos within building materials that will be disturbed as part of the construction activities, the Contractor is to cease work immediately and contact the NFS Project Manager for confirmation.

Asbestos Management Program

The Asbestos Management Program consists of two components:

Asbestos Abatement Management Program – Prior to performing any renovation or demolition activities, specific Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) requirements must be fulfilled. The Abatement Management Program provides the necessary tools, documents and procedures to satisfy these requirements prior to renovation or demolition activities in Kaiser Permanente buildings.

Operations & Maintenance ("O&M") Program – When performing operations and/or maintenance activities that may contact or disturb asbestos-containing materials (ACM), specific OSHA requirements must be fulfilled. The O&M Program provides the necessary tools, documents and procedures to satisfy these requirements when performing operations & maintenance activities in Kaiser Permanente buildings.

Asbestos Abatement Management Program (Electronic copies of the Program can be found in the NFS infoZone website under Environmental Programs. Web site: <http://kpnet.kp.org/ehs>)

The Asbestos Abatement Program consists of the following sections:

- 1) **The Asbestos Abatement Project Management Guide** - The Project Management Guide provides a step-by-step approach to managing the abatement process. It includes procedures to:
 - Determine if a survey is required
 - Contact a pre-qualified Asbestos Consultant
 - Develop an Abatement Document Package
 - Contract a pre-qualified abatement Contractor
 - Manage the Abatement Process
 - Documentation and Record Retention
- 2) **The Asbestos Management Reference Guide** - This guide is intended to provide guidance to pre-qualified Asbestos Consultants, Project Managers, Facility Managers, and others who participate in the asbestos abatement project management process. This handbook contains the standardized documents and forms that are used to accomplish asbestos-related projects in compliance with the Asbestos Management Program.
- 3) **The Asbestos Management Master Specifications** - The Master Specification provides Abatement Contractors with standardized requirements for asbestos abatement services provided to Kaiser Permanente. It is the intent of the Master Specification to describe the work necessary to complete a variety of asbestos

abatement projects. The scope of work for any given project and the relevant and applicable sections of this specification are described and stipulated in the project drawings and the Project Specific Amendment Form

The Asbestos Consultant and the Abatement Contractor are responsible for conducting abatement projects in compliance with all applicable laws, regulations, ordinances, official regulatory guidance, the Kaiser Permanente Asbestos Management Program documents and any additional project-specific documents. To the extent there is any **conflict(s)** between any such document and any law, regulation, ordinance or regulatory guidance, this **shall be brought to the attention of Owner in writing** along with a written proposal for amendment of the documents in a manner that will eliminate any such conflict.

Asbestos Operations and Maintenance Program (Electronic copies of the Program can be found in the NFS infoZone website under Environmental Programs. Web site: <http://kpnet.kp.org/ehs>)

All Kaiser Permanente facilities in which activities occur that may contact or disturb asbestos-containing material (ACM) must have an Asbestos Operations and Maintenance (O&M) Program which meets applicable Federal/State/Local Regulatory requirements. The Kaiser Permanente Asbestos O&M Program has been designed to minimize potential human exposures to asbestos during routine and emergency O&M activities, facilitate compliance with regulatory requirements, and manage the short term and long term risks associated with ACM in Kaiser Permanente buildings. The O&M Program allows for flexibility at the State / local level, while ensuring accomplishment in a cost effective and efficient manner.

The O&M Program is composed of three volumes:

1) **Volume I, Asbestos O&M Program Main Document**

This Volume is a comprehensive program management overview and reference document for the Asbestos Program Manager and other key personnel involved in O&M activities. It includes the key practices and procedures for managing asbestos in facilities and serves as the foundation to establish, implement and monitor a Facility's O&M program.

2) **Volume II, Asbestos O&M Program Work Procedures**

This Volume contains the specific work practices and procedures to be followed when routine facility activities may potentially contact or disturb ACM. Each procedure, entitled "*Work Procedure Instruction Sheet*", provides step-by-step direction on how to perform specific asbestos O&M activities in a safe, compliant, effective and efficient manner.

3) **Volume III, Asbestos O&M Program Forms and Documentation**

This Volume contains standard forms that are used to document certain O&M activities and program elements. It also provides a standardized repository for completed O&M Program records.

National Water Intrusion and Mold Management (WIMM) Program

Introduction

Kaiser Permanente is committed to providing a safe environment for our patients, visitors and employees. Periodically water intrusion incidents occur and/or mold growth may be identified in one of our facilities. In order to assure that patient care services are maintained, that a safe and healthy work environment is provided, and there is minimal damage to the work environment; the Water Intrusion and Mold Management Program (*WIMM*) has been established. The purpose of this program is to ensure that water intrusions and mold growth are thoroughly managed to ensure the safety of patients, visitors and employees.

Components of the WIMM Program (electronic copies of the program can be found in the NFS infoZone website under Environmental Programs. Web site: <http://kpnet.kp.org/ehs>)

The Water Intrusion and Mold Management (WIMM) Program is comprised of three sections:

- 1) **Section I** - describes the WIMM Program roles in detail and provides a backdrop for how the various roles work in concert with each other. Additional resources are provided in the Section I Appendices.
- 2) **Section II** - provides specific procedures and tools that are to be utilized when responding to water intrusion incidents. The step-by-step process provides guidelines for assessment of water intrusion, determination of patient risk groups, and the corresponding response procedures. In addition, several tools and documentation forms are provided in the Section II Appendices to assist in assessment, response, and record-keeping.
- 3) **Section III** - provides specific procedures and tools that are to be utilized when responding to mold management. The step-by-step process provides guidelines for assessment of mold growth, determination of patient risk groups, and corresponding response procedures. In addition, several tools, documentation forms and basic mold information are provided in the Section III Appendices to assist in assessment, response, and record-keeping.

Lead Abatement and Installation – Master Specification

In Occupied Kaiser Permanente Facilities

Although a nationally recognized lead abatement and installation program has not been fully developed for Kaiser Permanente, below is a master specification that **will be utilized by the General Contractor and included in the scope of work whenever lead abatement or installation activities are being performed in occupied Kaiser Permanente facilities. These activities include, but are not limited to, installation of lead lined drywall, lead on floors, paints containing lead and ceramic tile containing lead.**

The purpose of the specification is to generally outline regulatory requirements (specifics of the regulatory requirements are still the responsibility of the subcontractor executing the work) and highlight specific requirements that Kaiser Permanente determine are necessary in executing this work in an operational healthcare environment.

In Unoccupied Kaiser Permanente Facilities

Where lead abatement and installation activities are taking place **in unoccupied buildings where there are no patients or KP staff present**, the subcontractor will follow Federal, State and Local regulatory requirements.

Kaiser Master Specification

General Work Practices for the Removal or Installation of Lead containing materials

Storage and Handling of the lead containing materials

The subcontractor workers shall comply with regulatory storage requirements. This material should be stored in a safe and clean area. This material should not be sanded or ground, this may create a lead hazard. The common work practices of protecting your hands, such as wearing gloves, should be utilized when handling this material.

Regulations

The subcontractor workers shall comply with the requirements of the following regulations and guidelines governing lead storage and disposal, as well as all other applicable federal, state and local government regulations. The regulations and/or guidelines listed herein are incorporated by reference.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1926.29, CFR 1926.62 40, CFR Parts 50.12, 40 CFR Parts 261, 265, and 268, 40 CFR Parts 172, 173, 178 and 179

CALIFORNIA CODE OF REGULATIONS (CCR)
8 CCR Division 1, Chapter 4, Subchapter 4, 8 CCR 1532.1, 8 CCR 5144, 22 CCR Division 4 and 4.5

Equipment

The subcontractor workers shall have the following equipment available to minimize lead exposure during the removal of the lead containing materials:

Construction warning sign, High Efficiency Particulate Air (HEPA) vacuums, Respirators, Protective coveralls, Disposable Gloves, Typical construction personal protective equipment, Disposal containers (Poly bags), Sheet plastic and Tri Sodium Phosphate or other similar cleaning agent.

The subcontractor lead compliance program shall address the strategies for protecting workers from exposure to lead. This program includes all items required by 8 CCR 1532.1 (e) (2) and the following additional items:

Support & decontamination area(s), Air sampling plan (negative exposure documentation), Medical surveillance plan, Engineering controls, Personal protective equipment, Decontamination procedures, Methods of dust control, Employee training requirements, Monitoring/exposure records.

Documentation

The subcontractor Foreman shall have documentation related to lead activities such as medical examinations, respirator fit tests and training in accordance with Title 8 CCR 1532.1 (Cal-OSHA Lead in Construction Standard). The subcontractor Foreman shall also comply with section 3.1 of this standard.

Barriers

The work area shall be "contained" in such a way that lead dust and debris which is generated during the removal or installation of the lead containing materials will not contaminate the surrounding area. The Subcontractor Workers shall construct and maintain suitable poly barriers. Critical barriers shall be located at the entrance to the work area and at all points of egress from the work area to adjacent spaces or outside the building. Critical barriers shall be of sufficient size and strength to prevent the migration of dust from the work area and the inadvertent entry into the work area. The barriers shall be erected at all doorways or other open entrances to the work area and shall be constructed of one layer 6-mil poly taped on all four sides completely covering the entrance. Other openings that require isolation include, but are not limited to vents, HVAC units, windows, drains, and plumbing to the building or work area. The barriers shall only be removed by the Subcontractor Workers following completion of the project, including satisfactory final wipe samples.

Decontamination Unit

At a minimum, the Subcontractor Workers shall construct a functional decontamination unit. This unit shall be connected to the work area for the decontamination of workers contaminated with lead. The decontamination unit shall include a wash area. Subcontractor shall ensure that Workers enter and exit the work area through this unit.

Abatement Area

The Subcontractor Workers shall pre-clean all surfaces with a HEPA vacuum and remove any furniture, or other movable objects. All debris gathered during this clean up shall be disposed of properly. The Subcontractor Workers shall maintain critical barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the critical barriers shall be corrected by the Subcontractor Workers at the beginning of each workday and as necessary during the workday. Such openings or tears are required to be reported immediately to the Subcontractor Foreman. Work will not be allowed to commence until all barriers are in place and acceptable to the Subcontractor Foreman.

Removal

Prior to removal of the lead containing materials the Subcontractor Foreman shall post construction warning signs at all entrances to the work area and identify a hand washing facility to workers involved with the project. All workers occupationally exposed to lead, irrespective of airborne lead concentrations must use the washing facility prior to leaving the work area. Workers shall not eat, drink, smoke or chew gum or tobacco or apply cosmetics in the work area. Only authorized workers shall be allowed in the work area.

Work Practices

The use of a power tools and work practices are determined by the selected subcontractors exposure assessment data as directed by 8 CCR 1532.1.

Waste Storage and Characterization

All lead shielding and lead waste materials that is not reusable or is considered waste will be recycled, as required by Federal and State waste regulations. Waste Characterization shall be performed as stipulated in Title 22, including using one or more of the following testing procedures: **Total Threshold Limit Concentration (TTLC), Waste Extraction Test (WET) and Toxicity Characteristic Leaching Procedure (TCLP)**. All waste shall remain stored in secured waste storage areas until results of waste characterization are available. The Subcontractor Foremen shall arrange for all scrap lead shielding to be stored in a container marked for lead scrap metal recycling. It is the responsibility of the Subcontractor Foreman to coordinate with the designated Metal Recycler to have the lead scrap metal taken offsite, or delivered to the Recycler. There are no manifesting requirements for transporting scrap metal. The Subcontractor Foreman shall arrange for all hazardous waste, the contents of the HEPA vacuum, rags etc., to be transported from the site in accordance with the requirements of 40 CFR 263 and 264 and disposed of properly in accordance with 40 CFR 268, 49 CFR Parts 172, 173, 178 and 179 and California Code of regulations Title 22.

Project Surveillance

The Subcontractor Foreman will be on site during removal project. The Subcontractor Foreman shall make the following inspections: Work Area Preparation Completed, Post Removal Inspection and final clean up.

Final Clearance

After all visible debris has been secured for recycling and non-hazardous waste is properly removed and disposed of, the Subcontractor Foreman shall notify the Kaiser representative for the project that the project removal and clean-up procedures are complete. The Kaiser representative will schedule the qualified environmental consultant that the project is ready for clearance wipe sampling. Once final clearance criteria have been achieved the subcontractor removes containment areas.

Inspection/Clearance Standards:

When clean up has been completed, wipe samples by the qualified environmental consultant will be collected. The following standards shall be met for all clearance requirements:

One wipe sample from every work area.

Wipe Standards:

Floors: 40 ug/ft².

Closeout Documentation

The subcontractor shall provide the following documentation, *if applicable to the project*, to the designated Kaiser Project Manager within 15 working days after projection completion.

Training, Medical Evaluations, Respirator Fit Test Results, Daily Project Log, Entry/Exit Logs, Safety Meeting Records, MSDS Sheets, Personal Monitoring Results, Waste Hauler Documentation, Landfill Documentation and Copies of Waste Manifests or Recycling Tickets.

8. EMERGENCY RESPONSE PROCEDURES

The potential of a major crisis or emergency can arise at any time and from many causes, but the potential loss is the same – people and property. Advance planning for a crisis or emergency is one way to minimize this potential loss. For any project the General Contractor shall have a Phone Tree which identifies names and phone numbers of General Contractor and Owner Representatives to contact in case of a crisis or emergency.

Work Accidents Requiring Off-Site Transportation

If any employee suffers a work-related injury that is serious enough to require transportation to an off-site facility, the following procedures shall be followed:

- The General Contractor's Site Safety Representative will call "911" immediately to arrange for an emergency transportation vehicle.
- The employee's supervisor shall contact the General Contractor's Site Safety Representative to inform them of the accident and the need for "immediate medical attention".
- The employee's supervisor or designated First Aid provider shall coordinate with the General Contractor's Site Safety Representative until the transport vehicle arrives.
- The employee's supervisor will accompany the injured worker to the medical provider.
- The General Contractor's Site Safety Representative shall immediately inform the Kaiser Permanente Project Manager of all work accidents requiring off-site transportation.

Inclement Weather

If weather conditions around or near the construction area develop to the degree that work conditions become unsafe or hazardous, the following procedures will be followed:

- The General Contractor's Site Safety Representative will monitor the area by use of a weather alert information system.
- If weather conditions warrant the stoppage of work, the General Contractor's Site Safety Representative will notify all affected contractors, in writing.
- In the event of a tornado, all personnel will proceed to a designated shelter-in-place area. The contractors, project managers, superintendents, or foreman will be responsible for obtaining a "head count" of their employees and report said head count to the General Contractor's Site Safety Representative.
- If the project is shut down due to severe/inclement weather conditions, the General Contractor's Site Safety Representative will notify all affected contractors, in writing, when it is safe to return to the work area.

Emergency Evacuation

In the event of an emergency that requires the evacuation of the job site, the following procedures shall be followed:

- The General Contractor's Site Safety Representative shall notify all affected contractors of the need to evacuate the Project Site.
- If the evacuation signal is given, all contractors shall immediately stop work! All equipment shall be shut down and secured. All personnel shall then proceed to the designated evacuation area.
- Each contractor's project manager, superintendent, or foreman will be responsible for obtaining a "head count" of their employees. They will report any missing individuals immediately to the General Contractor's Site Safety Representative.

No contractor will re-enter the site until the General Contractor's Site Safety Representative gives the "All Clear" signal.

9. SECURITY

General Standards

Each subcontractor or subcontractor-tier and its employees, suppliers and visitors, will adhere to all security procedures/policies established by General Contractor while working on the site.

Each subcontractor will be advised of these standards by the General Contractor during the orientation meetings for working on the site or facility.

The General Contractor shall maintain a lock on the Construction access gate or door at all times. If the Owner determines that the gate or door has been left unlocked, the General Contractor shall, if required by Owner, provide a full time guard at no additional expense to Owner. Contractor shall maintain a lock on the Construction access gate at all times. If Owner determines that the gate has been left unlocked, Contractor shall, if requested by Owner, provide a full time guard at no additional expense to Owner.

The General Contractor, subcontractor and subcontractor-tiers shall take and be fully responsible for all reasonably required measures to protect and maintain the security of persons, existing facilities and property at the Site, including without limitation preventing theft, loss, vandalism and improper concealment of personal property of Owner and all persons lawfully present on the Site, and including times where workers are not present on the Site.

No claim shall be made against Owner by reason of any act of an employee or trespasser, and the General Contractor, Subcontractors and Subcontractor Tiers shall repair all damage to Owner property resulting from Contractor's failure to provide adequate security measures.

Contractor shall supply additional security fencing, barricades, lighting, and other security measures as required to protect and control the Site.

10. FACILITY AND FACILITY GROUNDS PROTECTION

Introduction

Each contractor and subcontractor has a responsibility to provide a job site that is free of recognizable hazards, which could cause possible exposures or loss to the facility, property and the general public. The Owner considers release of pollutants, dust, noise, vibration, disruption of facility operations and/or utilities, unsafe pedestrian and vehicle access as major exposures that the contractor and subcontractor must take extra precautions to protect the facility, property and those who use the facility from these exposures.

Release of Pollutants, Dust, Noise, Vibration, Disruption to Facility Operations and/or Utilities

The contractor and subcontractor will follow best practices to eliminate or reduce these exposures to the facility or property. The General Contractor's Site Safety Representative will monitor the work and make sure that all possible safety precautions are taken to reduce the impact on the medical center for the subject exposures. Should the exposure not be properly safeguarded the General Contractor's Site Safety Representative, the National Director of Construction Safety or designee, or Project Manager will **Stop Work (the tasks exposing the facility or property)** until proper safe guards and/or precautions are in place.

Control of Construction Site Access

The contractor and subcontracts will follow best practices to keep non-construction personnel and non-construction related vehicles from entering the construction site. Fences, gates, barricades along with construction warning signs will be used to eliminate or reduce this exposure. The General Contractor's Site Safety Representative will monitor the work site and make sure that all possible safety precautions are taken to control access to the construction site. Should the exposure not be properly safeguarded the General Contractor's Site Safety Representative, the National Director of Construction Safety or designee, or

Project Manager will **Stop Work (the tasks exposing the facility or property)** until proper safe guards and/or precautions are in place.

Construction Traffic

All traffic signs or devices used for protection of the public shall conform to American National Standards Institute, Manual of Uniform Traffic Control Devices for Streets and Highways, Manual of Traffic Controls for Construction and Maintenance Work Zones published by DOT, or other Governmental Requirements, whichever offers the greatest degree of safety.

Barricades, cones, and/or similar protective devices shall be used whenever employees or the public are exposed to traffic or similar hazards. When traffic patterns are closed or altered due to work activity, instructional or warning signs shall be posted.

Flagman with proper personal protection equipment and Stop/Slow Signs will escort construction vehicles when they are on medical center roads outside the construction area. Also see Traffic and Pedestrian Protection for additional safeguards.

11. TRAFFIC AND PEDESTRIAN PROTECTION

Introduction

Each contractor and subcontractor has a responsibility to provide a job site that is free of recognizable hazards, which could cause possible exposures or loss to the general public.

Public Liability Safe Work Rules

All traffic signs or devices used for protection of the public shall conform to American National Standards Institute, Manual of Uniform Traffic Control Devices for Streets and Highways or other Governmental Requirements, whichever offers the greatest degree of safety.

Barricades, cones, and/or similar channeling devices shall be used whenever employees or the public are exposed to traffic or similar hazards.

Traffic Control supervisors shall be trained in the fundamentals of traffic control and training records shall be provided to the General Contractor's Site Safety Representative.

The traffic controls plan shall be available for review and lighting shall be provided during the hours of darkness at the work locations and will be staged in such away to not hinder the driver's visibility.

When traffic patterns are closed or altered due to work activity, instructional or warning signs shall be posted.

Flagmen and signalmen shall be trained by each contractor in the required procedures for safely moving and processing traffic around construction activities; all training will be documented.

Employees working adjacent to traffic shall wear a reflector vest.

Low voltage (12 volt) protected lights shall be used to mark fences and barricades and other such encroachments onto public streets or sidewalks. These lights shall be kept operational.

Covered sidewalks shall be equipped with permanent lights to provide sufficient illumination for safe use by the public day or night. All bulbs will be cage-protected and kept operational.

Public walkways and roadways shall be kept clean and free of all recognized hazards and maintained for the safe and unobstructed movement of pedestrian and vehicular traffic.

When steel plates, wood planking or similar covers are used to cover excavations, they will be substantially secured to prevent movement from traffic and meet all American Disabilities Act and or local governing agency requirements.

When such covers are located where there is pedestrian traffic, they shall be constructed so as to eliminate tripping hazards. Covers will be non-slip in nature or have a non-slip surface and meet all American Disabilities Act and or local governing agency requirements.

Where sidewalks or other normal walkways for pedestrians are blocked, protected pedestrian pathways shall be provided around the blocked area to protect pedestrians from traffic and other hazards.

When work is to be performed over or near roadways, walkways or other areas used by the public, protection shall be provided to prevent material from falling on persons or vehicles. Employees will be instructed as to the proper methods to be used for discarding rubbish and debris.

When trash chutes and dumpsters are used for rubbish and debris disposal, such chutes and dumpsters shall not be located near roadways, walkways or other areas used by the public and adequate dust control method shall be implemented.

Construction materials that can be blown or swept off roofs or floors shall be properly secured and shall not be staged or stored near roof edge or floor perimeters.

Each contractor shall ensure that all of its employees are properly trained as to these regulations prior to beginning work. Training shall be documented and available for review.

12. UTILITIES IDENTIFICATION AND PROTECTION

Introduction

Each contractor shall be required to identify, locate, arrange for removal and/or protect any utilities which might interfere with work to be performed.

Public Utilities

Because public utilities are not controlled by the General Contractor these utilities can be installed, removed, relocated, activated or deactivated without General Contractor knowledge that these activities ever occurred. Therefore, it is essential that the location of these items be determined prior to the start of any work. The General Contractor shall locate public utilities by either consulting with the individual utility company or calling a recognized underground service locator.

Protecting Utilities

Once identified and located, each contractor shall take all steps necessary to protect utilities from damage. Each contractor shall:

- Use hand or controlled mechanical excavation procedures for underground utilities.
- Shore, support, brace and/or reinforce (as necessary) any utility.
- Clearly mark or identify any exposed utilities and provide appropriate warning or danger signs as needed to protect employees, the public and the utility itself.

Notification

At least three (3) working days (72 hours) prior to breaking ground or performing work which will impact Utilities, each contractor shall notify in writing the General Contractor's Site Safety Representative, all public utility companies and any persons having property, structures or improvement near the work area.

13. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Introduction

The Federal and State Occupational Safety and Health Administration and other regulatory requirements mandate that employers will ensure that all employees are using appropriate personal protective equipment (PPE) in all operations where employees are exposed to hazardous conditions.

Each contractor is responsible for providing and ensuring the use of required PPE. All employees shall use the PPE as prescribed by local, state, federal agencies and the requirements of this manual to control or eliminate any hazard or other exposure to illness or injury.

Minimum Personal Protective Equipment Standards

All contractor employees must utilize the following personal protective equipment (PPE) at a minimum, at all times while working on this site:

1. Each employee is required to wear an approved, well-constructed work boot. Steel-toed boots will be worn where required. Tennis shoes, dress shoes, sandals etc. are not permitted. Proper work attire is to be worn at all times. Shorts, cut-off t-shirts and tank tops are not permitted.
2. All contractors' employees are required to wear hardhats 100% of the time on the site. Refer to ANSI Z89.1 Safety Requirements for Industrial Head Protection.
3. All contractors' employees are required to wear safety glasses with side shields that meet (Federal or State) OSHA and ANSI Standards 100% of the time on the site.
4. If an employee wears prescription eyewear, then that eyewear must also meet Federal or State requirements for eye protection. All personal protective equipment shall be kept clean and in good repair. The use of defective equipment (with structural or optical defects) is prohibited.

Additional Personal Protective Equipment

Other personal protective equipment may be required depending on the work operations involved. All employees will be required to wear the appropriate Personal Protective Equipment in accordance with the task involved.

Eye Protection

All construction areas require 100% eye protection. Minimum eye protection includes approved safety glasses with side shields or monogoggles meeting the standards specified in American National Standards Institute Z 87.1-1989 (Rev. 1998), Practice for Occupational and Educational Eye and Face Protection.

Additional eye and face protection shall be worn by employees when performing the following tasks, including but not limited to:

1. Welding, burning, or cutting with torches.
2. Using abrasive wheels, grinders, or files.
3. Chipping concrete, stone or metal.
4. Working with any materials subject to scaling, flaking, or chipping.
5. Drilling or working under dusty conditions.
6. Sand or water blasting.
7. Waterproofing.
8. Using explosive actuated fastening or nailing tools.
9. Working with compressed air or other gases.
10. Working with chemicals or other hazardous materials.
11. Using chop saws, chain saws, masonry saws or other similar equipment.

12. Working near any of the operations listed above.
13. Any additional operations where additional eye protection is deemed necessary by the Site Safety Representative.

Hand Protection

Gloves, provided by each contractor, will be worn when handling objects or substances that could cut, tear, burn or otherwise injure the hand. Hand protection will be provided by each contractor and worn as specified by the task performed and directions included in the Material Safety Data Sheet.

Hearing Protection

All employees shall utilize appropriate hearing protection (earplugs or earmuffs) when required to protect from excessive noise levels generated from site operations or construction equipment. The threshold for hearing protection is 85dba. Hearing Conservation program shall be implemented along with substantiated monitoring for compliance.

Respiratory Protection (Respirators, Breathing Apparatus, etc.)

Respiratory Protection related to Welding, Burning, Cutting, Grinding metals, Silica and other construction activity is required whenever it is reasonable to suspect respiratory exposures of airborne contaminants are in excess of the permissible exposure limits.

OSHA has determined that exposures to certain gases, vapors, dusts and mists are potential health hazards to workers and has established permissible exposure limits (PELs) for the various categories of chemicals and materials (CFR 1926.55 App A). CFR 1926.55 (b) clearly identifies to achieve compliance with 1926.55 (a), the employer must have administrative and engineering controls in place whenever feasible. When such controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed in 1926.55(a). According to the regulation, any equipment and technical measures used for this purpose **must first be approved for each particular use by a competent industrial hygienist or other technically qualified person. Whenever respirators are used, their use shall comply with CFR 1910.134.**

In addition to limiting exposures to workers performing the construction activity associated with hazardous substances, Kaiser is equally concerned about other construction workers, hospital staff, patients or the public who are in close proximity to where the construction activities are taking place. Because of this potential secondary exposure, and the regulations clearly indicate that exposure assessments are required for any respiratory exposures to gases, vapors, fumes, dust or mists found in CFR 1926.55 App A, it is required that subcontractors and sub-subcontractors provide exposure assessment documentation to the GC as required by CFR 1910.134, prior to performing construction task(s) that could expose the subcontractor's employee, other construction workers, hospital staff, patients or the public to respiratory hazards.

Exposure Assessments - In order to determine if administrative and engineering controls are sufficient to limit worker exposures while performing construction tasks involving gases, vapors, fumes, dusts and mists—and to others within close proximity to where that activity is taking place—CFR 1910.134 requires the employer identify and evaluate the respiratory hazard(s) in the workplace prior to requiring workers to perform the work. This evaluation (exposure assessment) shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form.

Exposure assessment documentation will be based on the specific construction activity (i.e. welding/burning/cutting/grinding coated metals, grinding concrete, drilling in concrete overhead, saw cutting concrete, etc.). This assessment is required to determine if the worker conducting the work or workers close to where the work is being performed are exposed above the permissible limit or short term exposure limits. Documentation may be submitted from previous projects with similar physical/environmental conditions, engineering and administrative controls (1 year limit). Engineering controls are the initial step of prevention and respiratory protection should be used as a secondary precaution.

Only respirators that are applicable and suitable for the purpose intended will be used. They will be selected on the basis of the hazards to which the employee is exposed.

Employees required to use respiratory protective equipment approved for use in an atmosphere immediately dangerous to life shall be thoroughly trained in the use and limitations of such equipment.

Respiratory protective equipment will be inspected regularly and maintained in good condition. Filter cartridges will be replaced per manufacturer's recommended or calculated filter change-out schedule so as to provide complete protection and shall be documented.

Dust masks are to be replaced in accordance with manufacturer specifications. For Employees voluntarily using "dust masks" documentation will be maintained according to Federal or State regulations.

Respiratory protective equipment, which has been previously used, shall be cleaned and disinfected before it is issued to another employee.

Workers required to wear respiratory protection shall have been medically evaluated and approved to wear such devices. A copy of each of its worker's medical approval will be kept by each contractor on site.

All employees required to use personal protective equipment shall be given individual instruction by the employer regarding PPE prior to its use. This training shall be documented and a record kept on site.

Each contractor must perform fit testing on each employee to ensure the proper fit of the respirator. The results of the fit test shall be documented and a record kept on site.

Each contractor must have a written respirator protection program and this program is to be submitted to the General Contractor's Site Safety Coordinator prior to working at this site

14. REQUIRED PERMITS AND CERTIFICATIONS

General Standards

Each subcontractor is required to provide specific certifications and maintain required permits as listed below:

1. Scaffold Erection Permit: This permit is required when erecting any type of scaffolding, for any purpose, and for any duration of time.
2. Crane: Annual Certification Required.

ALL CRANES AND/OR CABLE (WIRE ROPE) RIGGED HOISTING EQUIPMENT SHALL HAVE A CURRENT ANNUAL INSPECTION BY AN ACCREDITED AGENCY, PRIOR TO WORKING AT THIS SITE AND SHALL MAINTAIN A CURRENT ANNUAL INSPECTION FOR THE DURATION OF WORK AT THIS SITE. AN ACCREDITED AGENCY IS A THIRD PARTY, WHICH IS RECOGNIZED BY THE DEPARTMENT OF LABOR/OCCUPATIONAL SAFETY AND HEALTH ORGANIZATION. A COPY OF THIS ANNUAL CERTIFICATION MUST BE SUBMITTED TO THE PROJECT SAFETY MANAGER PRIOR TO WORKING AT THIS SITE.
3. Powder-Actuated Tool Operator: Each powder-actuated tool operator will be certified in accordance with federal, state or local regulatory requirements. The certification shall be made available for review by the General Contractor's Site Safety Representative upon request.
4. Required Employer Respirator Procedures: Where applicable, subcontractor shall provide a written standard operating procedure governing the selection and use of respirators (Written Respirator Program.) Included in this program will be filter change out schedules based upon conditions to which the filters will be exposed. Medical Evaluation and fit testing/training documentation shall be provided to the General Contractor's Site Safety Representative.
5. Excavation Permits: An excavation permit is required for any excavation, digging, trenching, drilling or blasting operation. This permit is to be issued prior to any work, by the General Contractor's Site Safety Representative.
6. Flame/Spark (Hot Work) Permit: This permit is required for all burning, welding, soldering, etc. operations that are capable of being a flame or spark source. This permit will be issued daily by the General Contractor's Site Safety

Representative when required for each and every flame or spark source (i.e. each cutting outfit, every welder, etc.). The Flame/Spark permit will only be issued after each flame or spark source has been checked to ensure personal protective equipment is available; the proper type of fire extinguisher is dedicated and within easy reach of individual performing the work requiring the Flame/Spark permit and those proper procedures are planned.

7. Confined Space Entry Permit: This permit, signed off by Entry Supervisor is required prior to entry into a confined space. This permit will be issued daily by the Entry Supervisor after it has been demonstrated that all personnel have been trained and adequate personal protective equipment, lifelines, standby, fire extinguishers, ventilation, emergency rescue equipment, etc. are in place and ready for immediate use. Subcontractors requiring entry will provide calibrated fully functioning monitoring equipment.
8. Crane-Suspended Personnel Platform Permit: This permit is required prior to using a crane for lifting personnel in a suspended platform. This permit will be issued when it is determined by the General Contractor's Site Safety Representative that the use of the platform is the only feasible method of accomplishing the task. The safety checklist included with the permit will be utilized prior to hoisting personnel.
9. Other permits will be identified as work progresses. In addition, any permits required per applicable law or ordinance must be obtained by each subcontractor.

15. FALL PROTECTION

Introduction

Owner is committed to the philosophy of continuous Fall Hazard Control wherever the potential exists for personnel falling from heights of six-feet or more. Therefore, all contractors, subcontractors, and sub-subcontractors will be required to be tied off or utilize fall protection systems for heights greater than or equal to 6 feet, except where State or Federal OSHA, or other regulatory agency's fall protection requirements are more stringent.

General Standards

All subcontractors and sub-tier-subcontractors that will have activities with exposures to heights greater than or equal to 6 feet will be required to submit site specific fall protection approaches and systems that will be used by their workers to the General Contractor for review prior to commencement of any work on site to ensure compliance with these standards. The Site Specific fall protection plan will provide details to describe fall conditions that may exist related to tasks being performed, fall protection methods that will be used and the competent person responsible for executing the plan. All anchor points used for fall protection must be approved by a licensed engineer. These plans will be housed on site and will be available for review by the Owner and Insurance Carrier upon request.

Fall Protection Equipment

- Fall protection may consist of, but is not limited to, personal fall protection equipment (harness, shock absorber lanyards and life lines) or physical protection such as hand rails, catch platforms, parapet walls of appropriate height or a combination (100% tie off). Controlled Access Zones and Safety Monitoring Systems are not considered to be acceptable fall protection for fall exposures greater than 6 feet.

(NOTE: 100% tie off is defined as: a positive means of connection that will be maintained at all times for heights greater than or equal to 6 feet during the course of the work.)

- Lifelines, safety harness, and shock absorber lanyards shall be used only for employee safeguarding, not for positioning.
- Any lifeline, safety harness, or shock absorber lanyard actually subjected to in-service loading shall be immediately removed from service and discarded, and will not be used again for employee safeguarding.
- Lifelines shall be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,400 pounds.

- Safety harness shock absorber lanyards shall be of length to provide for a fall of no greater than six feet.
- All safety harness and shock absorber lanyard hardware shall meet or exceed the American National Standards Institute (ANSI).
- All fall protection equipment shall be inspected prior to each use. Reference the manufactures inspection requirements for guidance.
- Safety belts are not allowed as a form of fall protection.
- Position devices will not be considered a form of fall protection.

Ladders

The use, care and storage of ladders shall comply with the State or Federal OSHA, or other regulatory agency's and manufactures requirements.

Scaffolding

The construction, maintenance, use and disassembly of all scaffolding shall be under the direction of the subcontractor's Competent Person trained in the erection of that particular type or style of scaffold and shall comply with the requirements of the State or Federal OSHA, or other regulatory agency's.

Exterior scaffolding - Exterior scaffolding attached to buildings or structures will be required to have a scaffold stairwell for a means of access or an enclosed ladder system to minimized fall exposures. If these two methods are infeasible a fall protection plan may be developed and submitted to the General Contractor and will be forwarded to the National Director of Construction Safety or designee and Loss Control Consultant for consideration.

Rolling/mobile scaffold - Rolling/mobile scaffold will be erected and dismantled according the manufactures requirements. Each worker that operates these types of equipment shall be trained according to the manufactures operators' manual. Training and daily inspection documentation will be required to be available at the jobsite.

Aerial lifts, scissor lifts or similar equipment - Aerial lifts, scissor lifts or similar equipment will be operated according to the manufacture's operators manual and the ANSI standards. Each worker that operates these types of equipment shall be trained according to the manufactures operators' manual. Training and daily inspection documentation will be required to be available at the jobsite. Standing on the mid or top rails of this type of equipment is not allowed.

Suspended scaffolds - Suspended scaffold shall be installed per the manufactures requirements and under the supervision of a qualified person. Each worker that operates these types of equipment shall be trained according to the manufactures operators' manual. Training and daily inspection documentation will be required to be available at the jobsite.

16. EXCAVATION AND TRENCHING

Introduction

The general contractor shall establish a procedure or protocol for controlling excavations and trenching and utilize a permit (See **Sample Permit Appendix J**) process to document verification reviews and communication between all parties involved. This procedure or protocols should include the following but not be limited to:

General Standards

- A Trench is defined as a narrow excavation in which the depth is greater than the width, although the width is not greater than 15 feet. An excavation is any man made cavity or depression in the earth's surface.
- The determination and design of the supporting system shall be based on careful consideration of the following: depth of the cut; anticipated changes in the soil due to air, sun, freezing temperature and water; and ground movement caused by vehicle vibration and earth pressures (not only the angle or repose).

- The General Contractor will issue an excavation permit prior to all excavation, digging, trenching or drilling operations.
- All trenches and excavations over 5 feet deep must be sloped, shored, benched, braced, or otherwise supported.
- Contractors also may use a trench box - a prefabricated, movable trench shield composed of steel plates welded to a heavy steel frame. OSHA (Federal or State) standards permit the use of a trench box as long as the protection it provides is equal to or greater than the protection that would be provided by the appropriate shoring system. The engineering documentations must be available if manufactured the owners manual must be available on site for review.
- Manufacture shoring system (hydraulic, screw jack, etc.) shall be installed per the manufactures requirements and the owner's manual must be available on site for review.
- Timber shoring methods must be engineered and documentation available on site for review.
- Designing Adequate Protection
 - Some considerations each contractor will take into account in design of protection are:
 - Soil Structure
 - Depth of Cut
 - Water Content of Soil
 - Changes Due to Weather and Climate
 - Superimposed Loads
 - Vibrations
 - Other Operations in Vicinity
 - Overhead Power Lines
 - Underground Obstructions
 - Air Quality

Installing the Protection

- No worker, shall at any time, enter into an unprotected trench.
- Whatever support system is used, workers shall always install shoring, starting from the top of the trench or excavation and working down. When installing the shoring, care shall be taken to place the cross beams or trench jack in true horizontal position and to space them vertically at appropriate intervals. The braces also will be secured to prevent sliding, falling, or kick-outs.
- All materials used for shoring shall be in good condition, free of defects, and of the required size. Timbers with large or loose knots shall not be used.
- Installation of shoring shall closely follow the excavation work. It is dangerous to allow trenches to remain unshored even if no work is being performed, dirt walls will slough off, causing dangerous overhangs. The longer a trench is left unsupported, the greater the chance of a cave-in.
- One method of ensuring the safety of workers in a trench or excavation is to slope the sides of the cut to the "angle of repose", the angle closest to the perpendicular at which the soil will remain at rest. The degree of slope varies with different kinds of soil, and must be determined on each individual project and at each trench or excavation. When an excavation has water conditions, silty material, or loose boulders, or where erosion, deep frost, or slide planes are apparent, the angle of repose must be flattened.

- Other methods of support include shoring sheeting, tightly placed timber shores, bracing, trench jacks, piles, or other materials installed in a manner strong enough to resist the pressures surrounding the excavation.
- If employees are crossing an excavation a bridge shall be provided with adequate guardrail system and the bridge must be designed for the intended load and the capacity must be marked on the bridge.
- The excavation shall be protected by adequate physical barriers to keep unauthorized vehicular or foot traffic from excavation site or trench. Fall protection shall be utilized when an employee is exposed to a fall exposure greater than 6-feet. Controlled Access Zones and Safety Monitoring Systems are not considered to be acceptable fall protection for fall exposures greater than 6 feet.

Special Precautions

- Each contractor shall guard against an unstable excavation bottom, such as below the water line. Sheet piling may have to be driven below the bottom of such an excavation to add to the soil stability.
- Federal and State OSHA standards require that diversion dikes and ditches, or other suitable means, be used to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavation. Water causes erosion and softening and shall not be allowed to accumulate in a trench or excavation.
- In trenches or excavations which employees are required to enter, excavated or other material (this includes materials to be installed) shall be effectively stored and retained at least 2 feet or more from the edge of the trench or excavation.
- In case of emergency, workers will be able to leave the trench or excavation quickly. When employees are required to be in trenches over 4 feet deep, adequate means of exit, such as ladders or steps, shall be provided and located so as to require no more than 25 feet lateral travel. Ladders will be in good condition, extend from the floor of the trench to 3 feet above the top of the excavation, and be secured at the top.
- All underground utilities shall be located in advance of excavation and provisions made for their protection. All appropriate and/or required utility location services shall be contacted.

Inspections

- Excavations and shoring systems will be inspected daily by a competent person, employed by contractor, who is well trained in such matters and training records shall be made available at the site.
- Inspections are required after rain storms or any other change in conditions that can increase the possibility of a cave-in or slide. If dangerous ground movements are apparent, such as tension cracking, all work in the excavation shall be stopped until the problem has been corrected.

17. STEEL ERECTION AND ASSEMBLE

Introduction

These standards, which may exceed the OSHA (federal or state) regulatory standards, are applicable to this project regardless of exemptions contractors may obtain from OSHA (federal or state) on other projects.

Construction Commencement Approval and Site Layout

Prior to the commencement of steel erection, the controlling contractor shall ensure the steel erector is provided written information that the footings, piers, and walls have attained the proper compressive strength and repairs, replacements, or modifications to anchor bolts were conducted in accordance with OSHA (federal or state) Standards.

The controlling contractor shall provide the steel erection contractor with a drawing that indicates safe site layout including pre-planning routes for hoisting loads.

Site-Specific Erection Plan

- A Site-Specific Erection Plan shall be developed by the controlling contractor that will address all potential hazards and exposures, including occupied spaces and power lines.
- Key erection elements shall be pre-planned; including coordination with controlling contractor, other subcontractors, and tiered subcontractors before erection begins.

Site Specific Fall Protection Plan for Steel Erection and related activities

- A site specific fall protection plan shall be included in the erection plan that will clearly identify the methods of fall protection in the steel erection process (deckers, bolt up crew, welders, connectors, and safety cable installers etc.).
NOTE: FALL PROTECTION WILL BE REQUIRED WHERE WORKERS ARE EXPOSED TO A FALL EXPOSURE OF SIX-FEET OR MORE (SEE FALL PROTECTION STANDARDS SECTION).

Other Specific Issues to be covered in Site-Specific Erection Plan

- Hoisting and Rigging
- Working Under Loads
- Multiple Lift Rigging Procedures
- Structural Steel Assembly
- Roof and Floor Holes and Openings
- Beams and Columns
- Open Web Steel Joists
- Falling Object Protections
- Training (fall protection, rigging, multi rigging training, etc.)

18. CRANES, HOISTING AND RIGGING

Introduction

The safe operation and proper maintenance of cranes and rigging on the site shall be the overall responsibility of the contractor. Each contractor shall also be held accountable for compliance with State or Federal OSHA, or other regulatory agency's requirements in regard to all cranes or derricks on the site, whether contractor owned, leased or rented.

Special Provisions

1. Prior to its initial use on the site or after repairs have been made each crane or derrick shall be thoroughly inspected by a certified independent third party. Any deficiencies found shall be corrected before the equipment is placed into service.
2. A copy of the annual certification inspection performed by a certified independent third party shall be submitted to the General Contractor's Site Safety Representative prior to the crane being operated on site.
3. Each contractor shall designate a competent person who shall inspect all cranes and derricks daily as part of the contractor's job site inspection program. Such inspections shall be documented. Defective equipment shall be removed from service and repaired and service/repair shall be documented.
4. The contractor or vendor supplying the equipment shall inspect each crane at least monthly and provide a written report as to the results of the inspection. Defective equipment shall be removed from service.

5. Loads shall not be passed or suspended over persons.
6. Tag lines or guide ropes shall be used to control all loads.
7. Barricades for employee safety shall be maintained around the swing radius of the crane cab.

Crane Operator Qualifications

Each contractor shall select only those personnel meeting the following qualifications to operate cranes and other hoisting equipment:

1. Designated operators who have been licensed by an approved agency or union and meet the requirements of Chapter 5, ANSI B30.
2. Crane operators will meet the minimum requirements by the D.O.T. Physical Examination, as provided in D.O.T. 391, Physical Examination for truck drivers. No crane operator will be allowed to operate a crane until they have passed the Physical Exam conducted by a licensed Physician approved by the D.O.T.
3. No one other than the above personnel shall be in, or on, the crane during operations. Exceptions are oilers or supervisors whose duties may require their presence.

Operator's Responsibilities

1. Each crane operator will be specifically assigned the responsibility for safe operations and shall be given written instructions as applicable. These responsibilities shall include:

- Verification of a current "annual inspection" certification for the crane.
- Verification that manufacturer's rated load capacities, recommended operating speeds, and special warnings or instructions are posted on the crane and are visible from the operator's station.

Daily inspection of:

- Condition of brakes under no-load conditions
- Functioning of various safety devices and limiting devices fitted to the hoisting apparatus
- The electric power installation
- The overload controls
- Condition of structural members for cracks, bends, misalignment, etc.
- Fire extinguisher in cab
- Assuring that routine maintenance is performed, as well as necessary repairs.
- Responsibility for assuring that signaling and communications are adequate. This includes ensuring that personnel at materials loading and receiving areas use correct hand signals. Where conditions require, radio communications will be used with a clear channel for crane operations.
- Refusing to lift any loads that are not safely rigged. This refusal cannot be overridden by job supervisory personnel.
- Making sure that adequate clearances exist between operating areas and nearby structures, especially power lines.
- Safety latches on hoisting hooks.
- Chains, wire rope, slings, etc. are free from defects and conform to the standard load ratings for work being done.
- Eye splices conform to safety standards.

2. Each crane operator shall ensure that good housekeeping is maintained in his or her equipment.

Operating Procedures

Each contractor shall ensure that its crane operators:

1. Not engage in any practice, which may divert his attention while engaged in crane operations.
2. Not operate the crane if physically or mentally unfit, or if taking prescription drugs, which may affect judgment.
3. Not respond to any signal, which is unclear or is given by anyone other than appointed signalmen.
Exception: The operator shall respond to a stop signal given by anyone.
4. Have final responsibility and control over the crane operations. When there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle the loads until safety has been assured. Any manager, supervisor or person attempting to bypass the crane operator's authority on this issue will be immediately removed from the project.
5. Shall be intimately familiar and have thorough knowledge of the crane and its care, the operators' manual, and load charts. He shall be responsible for notifying its supervisor of any needed adjustments or repairs, and for logging his findings in the crane log.
6. Shall, upon request, demonstrate his ability to determine total load weight and its relationship to the crane load charts.
7. Immediately shut down the crane if any part of the crane, rigging or load strikes any object. The crane will be re-inspected by a qualified person, and if damage is detected, all repairs shall be completed under the guidelines of the manufacturer. The crane must then be re-inspected by a third party agency prior to beginning operations again.
8. Never leave the controls while there is a load on the hook.
9. Stop the crane operation if there are any problems and notify the General Contractor's Site Safety Representative.

Hoisting and Rigging

Due to the inherent risks of hoisting and rigging over occupied spaces, buildings areas, all options should be considered and explored to hoist/lift equipment or materials over unoccupied spaces, buildings or areas. Knowing some Kaiser buildings are occupied 24/7; it can be a challenge to determine the safest approach to eliminate human exposure and building structure failure if a lift is required to take place over occupied spaces, buildings or areas. If all options have been explored and it is determined a hoist/lift is required over occupied spaces, building or areas, the subsequent criteria shall be followed:

- An approved structural engineer stamped lift plan. The plan shall include but not be limited to the following:
 - Size and Weight of equipment or material to be lifted
 - Maximum distance equipment or material can be elevated above the structure or area during the entire path of travel of the lift
 - Specific path of travel the lift will take from edge of building to the equipment/materials final resting place
 - Number of floors that need to be unoccupied prior to and during the lift
 - If structural engineer determines some floors of the building need to be unoccupied, clearances of unoccupied space must be specified for the path of travel of the lift from edge of building to the equipment/materials final resting place. i.e. a twenty foot radius
 - All occupied building crane lift plans will be reviewed by the Regional Executive Director of Construction Acquisition and the National Director of Construction Safety and Loss Prevention prior to executing the lift.

- Documented inspections of hoisting and rigging equipment shall be conducted by a competent person before their use to ensure that it is in safe operating condition and that lifts will be conducted in a safe manner.
- Damaged or defective equipment shall be removed from service and removed from the project site.
- Accessible areas within the swing radius of the rotating superstructure shall be properly barricaded to prevent employees from being struck or crushed by the crane.
- The crane operator shall be responsible for determining the safe operation of their crane and the safety of each lift.
- Routes of suspended loads shall be preplanned to ensure no workers or the public are directly below suspended loads.
- Tag lines shall be used for controlling all loads.

Employee Training

Each contractor shall ensure that all of its employees involved in crane activities receive comprehensive training as to their responsibilities. This training shall include hand signals and those authorized to give signals. Said training shall be documented and available on site.

19. WELDING, CUTTING AND BURNING

Hot Work Precautionary Measures

Hot work performed in operational or occupied facilities present unique challenges that may not be found in new construction. The need for Facilities Services/Engineering to be aware of where hot work is taking place in the building they manage is of the utmost importance. *Prior to conducting any "hot work" activities ("Hot work" is defined as any cutting, welding, torching or flame-involved/inducing process) each contractor shall ensure that the following precautions or actions have been taken and documented in Appendix "D" (Hot Work Permit) and submitted to Facilities/Engineering prior to work being performed.* Precautionary measures that should be considered in planning hot work are:

- Defective equipment shall not be used
- Floors have been swept and combustibles removed.
- Wall and floor openings are covered.
- No combustible materials within 35 feet of work.
- A written Fire Prevention Plans will be followed including fire extinguishers, hot work permit, fire blankets and a fire watch will be posted during and up to 30 minutes after work has ceased.

Prior to the beginning of "hot work" each contractor shall insure that all employees are instructed as to:

- The work to be performed
- The precautions to be taken
- How to use fire extinguishers
- Emergency response techniques
- Work stoppage protocols for possible exposures.

Work will not commence if any employee does not fully understand what is expected of him or her during "hot work" activities. Hot work training shall be documented as to the information covered and workers in attendance, a copy of which shall be provided to the General Contractor's Site Safety Representative.

General Standards

- Each separate cutting and welding operation will be required to have, within easy reach, a proper fire extinguisher provided by the subcontractor performing the work of a size and type to extinguish any fire that may ignite on materials being cut or welded or materials immediately adjacent to cutting and welding operation.
- ***Prior to any welding, cutting or heating of coated metal or other materials, the subcontractor or sub-subcontractor will provide to the General Contractor an exposure assessment documentation (personal air monitoring results) based on activities being conducted in a similar environment with similar engineering and administrative controls where the work will be performed.*** This assessment is required to determine if the worker is exposed above the permissible limit or short term exposure limit and documentation shall be available at the site for review. Documentation may be submitted from previous projects with similar physical/environmental conditions, engineering and administrative controls. Engineering controls are the initial step of prevention and respiratory protection should be used as a secondary precaution.
- A suitable cylinder truck with chain shall be used to keep cylinders from being knocked over while in use. An acceptable wrench shall be installed on each cylinder truck.
- Cylinders of oxygen shall not be stored close to cylinder of acetylene or other fuel gas. They shall be separated by a minimum of 20 feet or by a noncombustible barrier with at least a 1 hour fire rating.
- Oxygen cylinders, cylinder valves, couplings, regulators, hose, and apparatus shall be kept free from oil and grease. "Oil and grease in the presence of oxygen under pressure may ignite violently". Employees shall be prohibited from handling oxygen cylinders or apparatus with oily hands or gloves.
- Cylinders in storage shall be kept away from sources of heat and shall be protected against the direct sunlight.
- Empty cylinders shall have their valves closed. Valve protection caps shall always be in place except where cylinders are in use or connected for use. Regulators and hoses will be removed at the end of each work shift.
- When moving cylinders by a crane or derrick, a cradle, boat, or suitable platform shall be used. Slings, hooks, or electric magnets shall not be used. Valve protection caps shall always be in place.
- Compressed gas cylinders--Empty or Full--shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried. Empty cylinders shall be marked EMPTY. If a cylinder is not equipped with a valve wheel, a key will be kept on the valve stem while in use.
- All hoses shall be frequently inspected for leaks, worn places, and loose connections. All hoses shall be elevated at least 8 feet above the work area where feasible so as not to prevent the safe passage of workers and equipment.
- Approved flash arresters shall be provided in both oxygen and acetylene hoses at the regulator connection.
- Compressed gas cylinders and accessories shall not be taken into or stored in closed or confined areas.
- Compressed gas cylinders will not be stored inside of any structure - this includes gang boxes, storage trailers and similar closed spaces.
- Compressed gas cylinders will be stored only in properly constructed storage racks. The racks will be constructed of rugged nonflammable materials.
- Welding current return circuits or grounds shall carry current without hot or sparking contacts and without passage of current through equipment or structures which might be damaged or made unsafe by the welding current or its voltage. Specifically, welding current must not be allowed to pass through any of the following materials:
 - Acetylene, fuel gas, oxygen or other compressed gas cylinders or accessories.
 - Tanks or containers used for gasoline, oil or other flammable or combustible material.
 - Pipes carrying compressed air, steam, gases or flammable or combustible liquids.
 - Conduits carrying electrical conductors.

- Chains, wire ropes, metal hand railings or ladders, machines, shafts, bearings, or weighing scales.
- All arc welding and cutting operations shall be shielded by noncombustible or flameproof screens.
- The ground for the welding circuit shall be mechanically strong and electrically adequate for the service required.
- Electrode and ground cables shall be elevated at least 8 feet above the work area where feasible and supported to prevent obstructions from interfering with the safe passage of workers and equipment.
- Where it is necessary to couple, or uncouple, several lengths of cable for use as a welding circuit, insulated cable connectors shall be used on both the ground line and the electrode holder line.
- An electrode holder (Stinger) of adequate rated current capacity insulated to protect the operator against possible shock, and to prevent a short or flash when laid on grounded material, shall be used.
- Cables with worn or damaged insulation may not be used.
- All connection lugs on welding machines will be insulated.
- All welding machines will be supplied with GFCI protection for temporary power.
- Fume capturing HEPA-filter equipment may be required where employees could be exposed above the PEL, TWA or STEL

Protective measures for welders and helpers:

- Combination hard-hats - Welding helmets shall be worn while welding. No soft caps allowed.
- For overhead work, fire-resistant Hard Hats and shoulder covers will be worn.
- Clothing will be free of oil, grease, and other flammable material. Collars and cuffs will be buttoned and pant cuffs shall be turned inside pants. Pockets should be covered with flaps and buttoned or eliminated from the front of vests, shirts, and aprons.
- Gloves will be worn to protect the welder/helper.
- Welder/helper will be protected with proper eye protection in addition to safety glasses.
- Workers engaged in oxy-acetylene welding and cutting shall wear a Combination hard-hat - Welding helmet or safety goggles equipped with suitable filter lenses.
 - Dark safety glasses are not acceptable.
 - Verify with Manufacture for appropriate eye protection
- Workers engaged in electric arc welding will use shields equipped with suitable filter lenses that will fit on hard hat.
- Eye protection in the form of approved safety glasses or goggles shall be worn under the hood.
- Face shields or goggles will be worn along with approved safety glasses during grinding operations.
- HEPA-filter equipment used to capture fumes/dust in areas where there is a possibility of workers being exposed above the permissible exposure level (PEL), time weighted average level (TWA) or short term exposure limit (STEL).

20. FIRE PROTECTION & PREVENTION

Each contractor shall implement and enforce fire protection and prevention measures in accordance with all federal, state and local governmental agencies and in accordance with the following standards.

Fire Protection Standards

- Temporary fire protection measures, such as the installation of fire extinguishers, hose lines and temporary standpipes near hazardous locations will be provided by each contractor as required.
- Fire Extinguishers:
 - Every 3,000 square feet of construction area
 - Inspected monthly and tagged
- Fire hydrants will be accessible at all times.
- Fire hose will be provided where directed or required.
- One portable fire extinguisher (rated not less than 10B) will be provided within twenty-five (25) feet of welding/cutting operations or flammable liquids.
- In situations where the welding/cutting operation are being performed off of aerial devices, elevated platforms, or scaffolding a fire extinguisher (rated not less than 10B) shall be available at the elevated work area.
- One fire extinguisher (not rated less than 10B) will be provided within five (5) feet of gasoline operated equipment.
- One portable fire extinguisher (rated not less than 20B) will be located not less than twenty five (25) feet, nor more than seventy five (75) feet, from any flammable liquid storage area.
- Employees shall be trained in the proper use of the fire extinguisher and training records shall be available for review.
- Access shall be maintained at all times to existing or newly activated fire hydrants and/or Fire Department connections.
- Emergency Fire Department phone numbers will be conspicuously posted.

Fire Prevention Standards

- All work areas will be cleaned on a daily basis. Good housekeeping will be maintained at all times.
- Combustible refuse from construction operations shall not be burned or dumped on the construction site. Such refuse shall be removed per local, state, or federal regulatory requirements.
- Flammable Liquids
 - Portable fuel tanks will be installed in accordance with federal, state and local requirements. Contractors are responsible for securing permits if required.
 - Flammable liquids shall be stored in approved containers or tanks outside, away from buildings, in a safe and secure location.
 - Outdoor flammable liquid storage and portable tanks shall be located or staged next to the job site structure or building in accordance with local, state, or federal regulatory requirements.
 - Portable fuel tanks will be located away from open flames.
 - Fuel tanks will be identified as to content and required signage will be posted in accordance with local, state, or federal regulatory requirements.
 - Storage areas to be kept free of weeds, debris and other combustibles.
 - Engines will be shut off during fueling operations. Funnels will be used when transferring fuel from portable containers.
 - No flammables will be stored inside tool trailers or other closed structures. Approved safety containers will be used for storage and handling of flammable liquids. Containers are to be kept in good condition and inspected regularly. Any defective containers are to be disposed of immediately.

- No smoking is permitted within 25 feet of any flammable liquid storage or dispensing areas. "No Smoking" signs will be posted.
- Storage of compressed gases shall be in accordance with all recognized safety practices, OSHA (Federal or State) and any other applicable regulations. Compressed gas cylinders shall be:
 - Stored on solid base with valve caps in place.
 - Secured to rigid support to prevent tipping.
 - Separated by 20 feet or 1/2 hour rated wall when stored.
 - Empty cylinders shall be stored apart from full cylinders, and conspicuously marked.
- Temporary Heating Devices
 - Temporary heating devices shall be utilized and maintained in accordance with all federal, local and state rules and regulations.
 - Solid fuel salamanders and open fires are prohibited.
 - Adequate insulation must be provided on combustible floors.
 - Mechanical ventilation shall be provided when fresh air supply is inadequate to maintain worker health and safety.
 - Temporary heaters will not be used in confined spaces.
 - Temporary heaters will be inspected each day prior to use. Heaters will not be modified or altered. Daily inspections must be document and available for review by the Safety Advisor and Loss control Consultant(s).

21. CONFINED SPACE ENTRY PROCEDURES

Scope of Confined Spaces

The following procedures apply to all open top vessels, confined spaces, pits, closed vessels, sewers, tanks, silos, vats, bins, tubs, pits, and pipes or other areas where confined spaces may occur. These procedures prescribed minimum standards for preventing employee exposure to dangerous air contaminations, oxygen deficiency, hazards from fixed or mobile mechanical/electrical equipment, the presence of combustibles, and establish minimum standards for safe entry, work processes and emergency rescue. Where State or Federal OSHA, or other regulatory agency's requirements supersede these procedures, they shall be followed.

Performing Confined Space Activities in Operational and/or Occupied Facilities

Federal and State OSHA requires that communication and coordination takes place between the property owner and contractor when permit required confined space activities take place in an operational or occupied facility. In addition, the regulations require that the coordination be documented. It is the responsibility of the General Contractor to ensure that communication and coordination between Facilities Service/Engineering and the contractor performing confined space activities takes place. ***Appendix "E" (Permit Required Confined Space Notification) of this document is a form that will utilized to document that the coordination has taken place.***

The General Contractor is to request a list of Permit Required Confined Spaces from Kaiser Permanente's Facilities/Engineering Department prior to construction activities. This is to be performed in the planning and design phase of the project.

Definitions

1. Confined Space - A space defined as having one or more of the following conditions:

- a. Existing ventilation is insufficient to remove dangerous air contamination and/or oxygen deficient conditions that exist or may develop.
 - b. Ready access or exit for the removal of a suddenly disabled employee is difficult due to the location and/or size of the opening(s).
 - c. A structure which is not designed for continuous occupancy.
2. Permitted Confined Space – For a confined space to qualify as a permit-required confined space it must first meet all three criteria for a confined space (see definition of Confined Space), then it must contain one or more of the hazards outlined below:
- a. Does the space contain or have the potential to contain a hazardous atmosphere (e.g. an oxygen deficiency or excess, a flammable/explosive atmosphere, or a toxic atmosphere)?
 - b. Does the space contain a material, such as fluid or particles that can engulf a person?
 - c. Does the space have an internal configuration that could trap or asphyxiate an entrant (e.g. inwardly converging walls or a floor that slopes downward and tapers to a smaller cross-section)?
 - d. Does the space contain any other serious safety or health hazard, such as an electrical or mechanical hazard?

If the answer to any of these questions is yes, then the Confined Space is a *permit-required confined space*.

Pre-entry

The subcontractor's entry supervisor will contact the General Contractor's Site Safety Representative and jointly develop a detailed program. The subcontractor's entry supervisor will also discuss, monitor, and enforce the project "Confined Space" program with the crew foreman assigned the work to include the following "Pre-Entry" activities:

- All lines, which may convey dangerous substances into the space, will be disconnected, blocked or effectively isolated to prevent dangerous air contamination and/or oxygen deficiency from developing. This will be done in such a manner that inadvertent reconnection is prevented.
- The space will be emptied, flushed, or otherwise purged of dangerous substances to the extent feasible.
- To the extent feasible, provisions will be made to ensure ready entry and exit by preventing obstruction of the opening or passageway during work procedures.
- The air will be tested with sufficient frequency shall be conducted by the subcontractor's competent person to ensure that safe conditions are maintained, with an appropriate device or method to determine whether dangerous air contamination and/or oxygen deficiencies exist. Written record of such testing results will be maintained at the work site for the duration of the work with copies to the General Contractor's Site Safety Representative.
- Where two or more confined spaces are interconnected, each will be continuously ventilated with either stationary or approved portable blowers provided for this purpose prior to entry and during occupation of the confined space.
- Where two or more confined spaces are interconnected, each space will be tested, the results recorded, and the most hazardous condition found will govern procedures to be followed.
- No source of ignition will be introduced until implementation of appropriate provisions of this section have ensured that dangerous air contamination due to flammable and/or explosive substances does not exist or will not occur.
- Whenever oxygen-consuming equipment such as propane heaters, plumbers' torches or furnaces and the like are to be used, measures will be taken to ensure an adequate source of combustion air and adequate exhaust gas venting. This is to prevent the depletion of available oxygen by the open flame equipment and accumulation of toxic gases such as carbon monoxide.

- The entry supervisor will instruct all crew personnel as to the standards contained in the project "Confined Space" program and explain that they are responsible for following all of the detailed steps as described. Said training and instruction will be documented.
- Where confined space permits are required, they must be signed by the entry supervisor and posted at the confined space entry location prior to starting any work.

Additional safety equipment may be required as follows:

- Portable instruments with audible alarms to detect oxygen deficiency, toxic gas, and flammable vapors
- Full body harness and lifelines appropriate for the size of the opening and hazards involved
- Self-contained or air-line breathing equipment and 5-min. pack
- Spark-proof tools
- Portable low-voltage isolating transformers
- Class (1) Group (D) explosion-proof lights
- Explosion-proof fans or air movers
- Appropriate chemical resistant clothing providing complete body protection
- Work site warning devices and communication equipment
- Mechanical lifting devices for rescue of persons working in a confined space that has a configuration making manual rescue difficult

Entry and Operations Procedures

The standards such as, but not limited to, safety glasses, hard hats, self-contained breathing apparatus, body harness and lanyard, hoists, atmospheric testing devices, ventilation blowers, and communication devices will be provided as required for each job.

Employees will be trained by the Entry Supervisor in the use of safety equipment, operating and rescue procedures, including instructions about the hazards, which are likely to be experienced. Said training will be documented and available at the jobsite.

22. HAZARDOUS ENERGY SOURCES

Performing Lockout/Tagout and Electrical Hot Work Activities in Operational and/or Occupied Facilities

Federal and State OSHA requires that communication and coordination takes place between the property owner and contractor when Lockout/Tagout activities take place in an operational or occupied facility. In addition, the regulations require that the coordination be documented. It is the responsibility of the General Contractor to ensure that communication and coordination between Facilities Service/Engineering and the contractor performing Lockout/Tagout activities takes place. ***Appendix "F" (Contractor Energy Control Agreement) will be utilized to document that the coordination has taken place and this documentation will be maintained by the General Contractor throughout the course of the project duration.***

Lockout/Tagout

All contractor's, subcontractor's and sub-tier's will abide with the State or Federal OSHA, National Fire Protection Agency and other regulatory agency's requirements. The following procedures are established as minimum guidelines with respect to hazardous energy sources on the project. They shall apply during the transition of temporary energy sources to permanent energy sources within the project. Any device such as electrical panels, transformers, valves, etc., which become "hot/energized" during the transition to permanent energy source will be subject to lock-out/tag-out procedures. Shut down and

restoration of permanent energy source equipment will be subject to lockout/tag-out procedures. Failure to follow procedures for lock-out/tag-out will result in immediate termination from this project.

Should the General Contractor or any of their subcontractors need to perform Lockout/Tagout procedures, it is the Contractor's responsibility to facilitate a meeting with the Kaiser Permanente Facilities/Engineering Department to review the Lockout/Tagout procedures for the equipment.

Electrical Hot Work

Only qualified electricians knowledgeable in code requirements shall be allowed to perform electrical work. *If any work is to be performed on energized circuits or equipment (known in the industry as "Electrical Hot Work") by anyone, regardless of experience, shall have a hot work program in place (according to NFPA-70E), that is approved by the General Contractor's Site Safety Representative.* No employee shall be permitted to work on or in close proximity to unprotected electrical power circuits unless the employee is protected against electrical shock by de-energizing the circuit (lock-out/tag-out) and grounding, or protecting the individual by effective isolation or blocking.

An electrical Hot Work Permit will be issued by the contractor conducting the work and will be signed by the General Contractor and local Facilities Services Manager and/or Kaiser Permanente Project Manager before commencement of any hot work (**See Appendix "G" - Electrical Hot Work Permit**)

Other Electrical Standards

Temporary lighting shall be caged and of the molded type consisting of manufacturers fixed lights. Contractor assembled, multiple conductor (single wire) or Romex stringers with pigtailed will not be acceptable.

All temporary power will be supplied with GFCI protection. Electrical cords and trailing cables shall be covered or elevated at least 8 feet above the work areas where feasible or otherwise protected from damage which could create a hazard to employees in the area. The means used for covering the cords or cables will not create a tripping hazard.

All temporary electrical tools and cords shall be protected by a GFCI throughout all phases of construction. Extension cords used with portable electric tools and appliances shall be heavy duty (not less than 12 gauge conductors) of the three wire ground type.

Damaged electrical cords will be repaired with heat shrink material only. Electrical tape repairs are not permitted.

23. INTERIM LIFE SAFETY REQUIREMENTS (Applies to projects in operational and/or occupied facilities)

Introduction

Interim Life Safety Measures (ILSM) shall be implemented to temporarily compensate for significant hazards posed by existing NFPA Life Safety Code deficiencies or construction activities. The Environmental Health & Safety (EH&S) Manager, Facilities/Engineer or NFS Project Manager department will coordinate the implementation of ILSM.

Appropriate Interim Life Safety Measures shall be implemented in or adjacent to all construction areas and throughout buildings with existing Life Safety Code (LSC) deficiencies. ILSM will apply to all personnel, including construction workers. Potential ILSM requirements will be evaluated during project and sub-project development, and when ILSM components are required they will be continuously enforced through the duration of the project or sub-project as long ILSM are required.

Identify Interim Life Safety Issues

It is the responsibility of the General Contractor to conduct an Interim Life Safety assessment in concert with Kaiser Permanente Facility representative (i.e. Facilities Services Director, EH&S Manager) prior to commencement of any work on the project.

Use of the Pre-Construction Risk Assessment/ILSM form Appendix "H" will be used by the General Contractor to document that interim life safety requirements have been reviewed and appropriate actions have been taken.

Copies of the signed assessment will be distributed to the Facilities Service Director and Project Manager and filed for 3 years.

This assessment assists in determining the appropriate measures that might be required prior, during and after construction. The areas of assessment include but are not limited to:

- Areas included in the assessment are as follows but not limited to:
- Blocked or obstructed exits
- Access to emergency services for fire, police and other emergency forces
- Ensuring fire detection and suppression systems are in place
- Identifying smoke and fire walls that will be breached
- Temporary construction partitions (types and materials)
- Debris accumulation and removal
- Surveillance of grounds where excavations and construction activities exist
- Cutting and Welding Operations
- Temporary Power utilized in the construction area
- Hand and safety rails in place on temporary walks
- Water purification testing
- Emergency power testing/disruption
- Medical gases certification

24. AIR QUALITY, INFECTION CONTROL AND OTHER CONSTRUCTION RELATED CONSIDERATIONS (Applies to projects in operational and/or occupied facilities)

Introduction

Kaiser Permanente is committed providing a safe environment for all employees and members at their facilities. Infection control, air quality, utility disruption, noise and Interim Life Safety Measures (ILSM) are important issues that affect patient care and require careful consideration.

Determining Air Quality, Infection Control, and Other Construction Related Considerations

Kaiser Permanente construction professionals involved in the design of construction and renovation activities can minimize the impact of these activities by performing a Pre-Construction Risk Assessment (PCRA) prior to the commencement of the project.

The NFS Project Manager shall conduct a Pre-Construction Risk Assessment (PCRA) in concert with the General Contractor, Kaiser Permanente Infection Control representative, Kaiser Permanente Facilities representative (i.e. Engineering

Department), Kaiser Permanente Environmental Health and Safety representative and other possible Kaiser Permanente representatives prior to commencement of any work on the project. It is the responsibility of Kaiser Permanente NFS Project Manager to ensure the completion of the PCRA documentation.

As part of the PCRA, the facility (Kaiser Permanente) is to conduct a risk assessment to identify potential construction hazards for the following elements:

- Air quality
- Infection control
- Utility requirements
- Noise
- Vibration
- Interim Life Safety Measures

While determining the risks associated to the hazards above, the following factors should be taken into consideration:

- The patient population near the construction activities
- The scope of the project activities
- The duration of the project
- The impact of the project on mechanical systems

In addition to identifying potential construction hazards for the elements above, completing the PCRA will guide the NFS Project Manager regarding other required documentation that is to be submitted from the General Contractor prior to the commencement of the project. These documents include:

- Chemical Inventory form
- Contractor Permit Required Confined Space Agreement form
- Contractor Energy Control (Lockout/Tagout) Agreement form
- Contractor Hot Work Agreement form
- Electrical Hot Work Agreement form

Use of the Pre-Construction Risk Assessment (PCRA) Appendix "H" will be used by the General Contractor to document that risk elements have been reviewed and appropriate actions have been taken. Copies of the signed assessment will be distributed to the Facilities Service Director, Infection Control Representative and Project Manager and filed for 3 years. **Application of the PCRA**

It is the responsibility of the General Contractor to ensure that the work practices and engineering controls identified in the PCRA are adopted and utilized during the course of construction activities by all construction personnel. Failure to employ these controls can result in adverse impact to both Kaiser Permanente members and staff and poses a greater risk to members with compromised immune systems. **The General Contractor is to post a copy of the completed PCRA documentation near the construction work area.**

To ensure that the engineering and administrative controls identified in the PCRA are effective, it is recommended that periodic inspection of construction activities be performed by Kaiser Permanente representatives. If it determined that these controls need to be amended, a revised PCRA should be completed and submitted to the General Contractor.

APPENDICIES SECTION

INCIDENT REPORT FORM

Project Name: _____ Date: _____

Contractor: _____ Consultant: _____

Location of Incident: _____

Please supply as much information as possible; use reverse side if you need more space. Send completed copies of this report to the Building Owner/operator and General Contractor, as appropriate.

- Type of Problem: _____
(actual/potential) _____

- Personnel On Hand: _____

- Cause: _____

- Area(s) Affected: _____

- Injuries: _____

- Who Responded: _____

- Corrective Action: _____

- Photos Taken?: _____ Photos Taken and Stored By: _____

Reported By: _____

Date: _____

CHEMICAL MATERIALS INVENTORY FORM

Project: _____ Contractor: _____

Date: _____ Contact Name: _____ Contact Number: _____

Storage Location: _____ Project Address: _____

MATERIAL/TRADE NAME	CAS NUMBER	MAX. QUANTITY OF PRODUCT ON SITE AT ANY TIME	STORAGE LOCATION (IF DIFFERENT THAN LISTED ABOVE)	MSDS AVAILABLE?	SPILL KIT AVAILABLE?

Update inventory as chemicals are added and/or deleted

CONTRACTOR ASBESTOS NOTIFICATION FORM

This Contractor Asbestos Notification Form constitutes notice to the contractor of the presence, location, and quantity of asbestos-containing materials (ACM) and/or presumed asbestos containing materials (PACM) in various Kaiser Permanente owned and/or operated facilities within the _____ Region. Kaiser Permanente and/or its leasing agent have conducted asbestos surveys at the following facilities:

Facility Summary

Facility	Address	Survey Date	Survey Conducted by

All surveys have been conducted in accordance with applicable federal and state regulations. The inspection findings and survey are available for review. Please contact Kaiser Permanente's National Facilities Services (NFS) team to make an appointment. All other facilities within the _____ Region owned and/or operated by Kaiser Permanente which are not included in the list above may have ACM/PACM, although such other facilities have not been surveyed. **In the event that asbestos survey information is not available for a facility, all suspect asbestos containing materials within that facility must be treated as PACM. In this, a survey must be performed prior to any renovation/construction activity.**

Contractor is responsible to review the inspection findings and survey reports and to share this information with its employees, subcontractors and any other individuals who work under its direction. Contractor is also responsible to comply with applicable EPA, HIOSH and OSHA regulations in the handling of ACM/PACM for the facilities listed above, as well as the facilities which have not been surveyed.

An executed copy of this Contractor Asbestos Notification Form acknowledging your responsibilities as set forth above will be requested at the pre-construction meeting.

If you have any questions about this Contractor Asbestos Notification Form or the survey reports and inspection findings, you may contact _____ the asbestos-designated person for the _____ Region at (_____) _____ - _____.

ASBESTOS VERIFICATION STATEMENT
(To be completed for any planned renovation/demolition activity)

The asbestos survey information for the upcoming _____ project has been reviewed by a Kaiser Permanente representative. It has been determined that the renovation/demolition activities that are to be performed by _____ between the dates of _____ and _____ will either (please check one):

Not Impact

OR

Impact the following asbestos containing materials: _____

OR

Insufficient asbestos survey information to determine (additional sampling needs to be performed and sampling results need to be forwarded to the contractor and KP Asbestos Program Manager)

CERTIFICATION STATEMENT

I certify as follows:

I have reviewed the inspection findings and survey reports applicable to the following facility and I have shared this information with my employees, subcontractors and all other individuals who work under my direction.

I will comply, and cause my employees, subcontractors and all other individuals who work under my direction to comply with all applicable EPA, NESHAP, and OSHA regulations in the handling of ACM/PACM at the following facility to the extent known or as determined subsequent to the date hereof.

Kaiser Permanente Representative (print)

Signature

Date

Contractor Name (print)

Signature

Date

HOTWORK PERMIT

Hot Work is not permitted unless this card is filled in and posted in work area

Issued

To: _____

Date: _____

Name of Company and/or KP Department: _____

Valid (no longer than 24 hours)

From (time): _____

AM

PM

Date: _____

To (time): _____

AM

PM

Date: _____

Work to be done: _____**Location (facility/department):** _____**Fire Watch required?**

Yes*

No

* **Fire Watch is required when** whenever an approved fire alarm or automatic sprinkler system is out of service for more than 4 hours in a 24-hour period in an occupied building. Notify municipal fire department provide a fire watch: in work area, and all adjacent areas where sparks might have spread, continuously inspect areas during the entire time cutting, welding, or other hot work is conducted, and 30 minutes after completion.

The location where work is to be done has been examined by me, the necessary precautions have been taken (see **checklist**), and permission is granted for this work.

Authorized by (Print/Sign/Title): _____

Checklist:

Fire protection system(s) in service (sprinklers etc.)

Cutting and welding equipment in good condition.

Floor/ground clean (and wet down when necessary).

All floor and wall openings within 35 feet covered.

Fire extinguishers or small standpipe fire hose provided.

Combustibles at least 35 feet from welding area.

All hazardous operations discontinued in area.

Flammable liquids and other hazards removed from area.

Location of nearest fire alarm box identified.

Non-combustible covers used to protect nearby combustibles and equipment

Containers, tanks, ducts, and other enclosures cleaned and purged of flammable vapors, liquids, dusts, and other hazardous materials.

HOT WORK PERMIT

Detach and post permit in area performing hot work for duration of the process. **Return this permit**, after work is completed, to Engineering/Facilities Department for filing.

Issued to: _____

Issued (date/time): _____

Expires: _____

Returned: _____

Authorized by (Print/Sign/Title): _____

Date: _____

PERMIT-REQUIRED CONFINED SPACE NOTIFICATION

For use when contractors will be working in or near Permit-Required Confined Spaces (permit-required spaces). Contractors are required to comply with the OSHA standard (29 CFR 1910.146). The Checklist is designed to fulfill the facility's responsibilities with regard to contractor work in a permit-required space.

Date:

Space Location:

Purpose of Entry:

Space Hazards:

Inform the contractor that the workplace contains Permit-Required Confined Spaces.

Inform the contractor that entry into the permit-required space must be in accordance with OSHA standard (29 CFR 1910.146).

Ensure the contractor has a written permit space program (Ensure the signed warranty is attached.)

Ensure the contractor's employees have been properly trained for confined space entry. . (Ensure the signed warranty is attached.)

Inform the contractor of all elements and/or hazards that qualify the space as a permit-required confined space.

Inform the contractor of any applicable experiences the facility has had with the permit-required confined space the contractor will be entering.

Inform the contractor of the facility's Permit-Required Confined Space Program; including what precautions or procedures that the facility has implemented for the protection of employees in or near the permit spaces the contractor will be working.

Coordinate entry operations with the contractor if both facility and contractor employees will be working in or near a permit-required confined space.

Contractor Signature:

Date/Time

Facility Signature:

Date/Time:

Conduct debrief with the contractor at the conclusion of entry operation concerning the permit space program followed and regarding any hazards confronted or created in the permit spaces during entry operation. List comments below:



CONTRACTOR WARRANTY REGARDING PERMIT REQUIRED CONFINED SPACE PROCEDURES

Contractor represents and warrants that it has a Permit Required Confined Space Program that complies with all applicable requirements of the OSHA Standard for Permit-required confined spaces, 29 CFR section 1910.146, and any applicable state and local safety regulations.

Contractor further represents and warrants that its assigned employees are all trained in accordance with applicable Permit Required Confined Space Procedures and all such training complies with the requirements of the OSHA Standard for Permit-required confined spaces, 29 CFR section 1910.146, and any applicable state and local safety regulations.

Dated: _____

Signature: _____

Name: _____

Title: _____

Company: _____

**CONTRACTOR ENERGY CONTROL AGREEMENT
CONTRACTOR & KP REPRESENTATIVE AGREEMENT FORM FOR JOINT LOCKOUT/TAGOUT ACTIVITIES**

Note: This page to be completed whenever a Contractor and a Kaiser Permanente representative are engaged in joint Lockout/Tagout activities. This page is to be completed per each joint lockout/tagout event.

Contractor confirms in writing it has a Lockout/Tagout Program that meets the requirements of OSHA's Lockout/Tagout program. (Ensure the signed warranty is attached.)

If Kaiser Permanente Employees will be involved in the procedure, verify the Contractor's program meets the requirements of Kaiser Permanente's Lockout/Tagout program.

Contractor confirms in writing that assigned employees are trained in LO/TO Procedures. (Ensure the signed warranty is attached.)

Document any noteworthy differences between the two programs below that might cause confusion for Kaiser Permanente Authorized or Affected Employees.

Receive briefing on the types of Locks and Tags the contractor will use.

Inform any Kaiser Permanente Affected or Authorized employees who will be involved in the maintenance of the differences in the contractor's program, and the types of locks and tags they may encounter.

Sign Agreement Below that both KP and the Contractor are satisfied with the Lockout/Tagout procedures to be employed for this work.

	Name	Title	Signature	Date
KP				
Contractor				

Maintain this document and attachment for 3 years.

CONTRACTOR WARRANTY REGARDING LOCKOUT/TAGOUT PROCEDURES

Note: This page to be submitted by the Contractor prior to engaging in Lockout/Tagout activities at Kaiser Permanente. It is recommended that this form be submitted on at least an annual basis by the Contractor.

Contractor represents and warrants that it has a Lockout/Tagout Program that complies with all applicable requirements of the OSHA Standard for Control of Hazardous Energy, 29 CFR section 1910.147, and any applicable state and local safety regulations.

Contractor further represents and warrants that its assigned employees are all trained in accordance with applicable Lockout/Tagout Procedures and all such training complies with the requirements of the OSHA Standard for Control of Hazardous Energy, 29 CFR section 1910.147, and any applicable state and local safety regulations.

Furthermore, the Contractor agrees that whenever the Contractor is engaged in Lockout/Tagout activities, the Contractor and Kaiser Permanente shall inform each other of their respective lockout or tagout procedures.

Dated: _____

Signature: _____

Name: _____

Title: _____

Company: _____

ENERGIZED ELECTRICAL WORK PERMIT (Page 1 of 3)

Facility:	KP Project Manager
Request Date:	

PART 1: TO BE COMPLETED BY REQUESTOR:	
1. Description of circuit/equipment/job location and fed from:	
2. Description of work to be done:	
3. Justification of why the circuit/equipment cannot be de-energized or work deferred until the next scheduled outage:	
<hr/>	<hr/>
Requestor Name, Company and Title	Date

PART 2: TO BE COMPLETED BY THE ELECTRICALLY QUALIFIED PERSON <i>DOING</i> THE WORK	
	Check when complete
1. Detailed step by step procedures to be used in performing the above detailed work (attach additional pages as needed):	<input type="checkbox"/>
2. Description of safe work practices to be employed:	<input type="checkbox"/>
3. Results of Shock Hazard Analysis:	<input type="checkbox"/>
4. Determination of Shock Hazard Boundaries:	<input type="checkbox"/>
5. Results of Arc Flash Hazard Analysis: (Attach analysis or provide reason for exception to requirement)	<input type="checkbox"/>

ENERGIZED ELECTRICAL WORK PERMIT (Page 2 of 3)

Facility:	KP Project Manager
Request Date:	

PART 2: CONTINUED		<input type="checkbox"/>
6. Determination of Arc Flash Boundary		<input type="checkbox"/>
7. Necessary personal protective equipment to safely perform the assigned task:		<input type="checkbox"/>
8. Means employed to restrict the access of unqualified persons from the work area:		<input type="checkbox"/>
9. Evidence of completion of a Job Briefing including discussion of any job related hazards:		<input type="checkbox"/>
10. Do you agree that the above described work can be done safely?		YES NO (If NO return to Requestor)

	1 st Line Printed Name, Title, Signature 2nd Line Company Name & Contact Number	Date
Electrically Qualified Person doing the work		
Electrically Qualified Person doing the work		

PART 3: APPROVALS TO PERFORM THE WORK WHILE ELECTRICALLY ENERGIZED		
	Signature	Date
Facility Chief Engineer (required)		
Electrical Supervisor (required)		

Recordkeeping	Received
Original completed Documentation goes to the Facility Chief Engineer.	
Copy of completed Documentation goes to Contractor	
Copy of completed Documentation goes to KP Project Manager	

ENERGIZED ELECTRICAL WORK PERMIT (Page 3 of 3)

Facility:	KP Project Manager
Request Date:	
ADDITIONAL INFORMATION (IF NEEDED FOR PARTS 1 OR 2)	



**Appendix H- Pre-construction Risk Assessment (PCRA) Form
PRE-CONSTRUCTION RISK ASSESSMENT (PCRA) CHECKLIST & ILSM FORM**

Project Name:	Project Number:
Facility & Department:	Project Start Date:
Department(s) below the work area that may be impacted: Department(s) above the work area that may be impacted: Department(s) adjacent to the work area that may be impacted:	Project Duration:
Contractor On-Site Supervisor:	Contractor 24/7 Contact Information
Kaiser Project Manager (or designee):	Kaiser 24/7 Contact Information
Work Area Inspections to be performed by:	Frequency of Inspections (e.g. Daily, Weekly, Monthly) Refer to Attach A for PCRA Project Inspection Checklist

SIGNATURES

Documenting that the PCRA has been reviewed by applicable Kaiser Permanente and Contractor representatives must be provided for each project using this signature page. Each PCRA must be signed by the Kaiser Permanente Project Manager and by any other Kaiser Permanente or Contractor representatives as appropriate for the project.

By signing below, I acknowledge that I have reviewed this PCRA and agree with the requirement set forth in this document. Further, I acknowledge that I (or the organization or department that I represent) will perform all necessary actions as indicated.

ROUTE FOR SIGNATURE (as necessary)	PRINT NAME	SIGNATURE	DATE	CONTACT INFORMATION
Project Manager				
Assistant Medical Center Administrator (or equivalent in ROCs)				
Facility Services Director				
Facilities Engineering				
Infection Prevention & Control				
EH&S				
Contractor Rep				

Description of Project Scope: _____

Based on the scope and complexity of the project, complete only the sections of the PCRA that may be applicable to the project. The Multidisciplinary Team completing the PCRA is to determine if the risk factors listed below are applicable to the project. In the section below, check the risk factor boxes that are identified by the Multidisciplinary Team.

As the Multidisciplinary Team identifies the PCRA Risk Factors and completes the PCRA form, some of the PCRA "Supporting Documents" may be necessary to complete.

PCRA RISK FACTORS:

- SIGNATURE PAGE
- INFECTION CONTROL PREVENTION ASSESSMENT (ICRA)
- CONTAINMENT CONSIDERATIONS
- NOISE AND VIBRATION ASSESSMENT
- AIR QUALITY ASSESSMENT
- UTILITY ASSESSMENT
- INTERIM LIFE SAFETY MEASURES
- STORAGE OF MATERIALS
- ELEVATOR ACCESS & RESTRICTIONS
- ROUTE FOR DELIVERY AND DEBRIS REMOVAL
- ASBESTOS
- LEAD
- HAZARDOUS WASTE
- CHEMICAL INVENTORY
- LOCKOUT/TAGOUT
- PERMIT REQUIRED CONFINED SPACE
- HOT WORK PERMIT
- ENERGIZED ELECTRICAL WORK PERMIT
- INCIDENT REPORTING
- CONSTRUCTION AND DEMOLITION WASTE
- SECURITY
- ADA COMPLIANCE (Outside of work area)
- SIGNAGE AND WAYFINDING COMPLIANCE
- STORMWATER RUNOFF
- ADDITIONAL PROJECT REQUIREMENT DETAILS

PCRA SUPPORTING DOCUMENTS:

- Attach A: PCRA PROJECT INSPECTION CHECKLIST
- Attach B: ABOVE CEILING ENTRY PERMIT
- Attach C: AIR DIFFUSER EXAMPLES (for indoor exhaust scenarios)
- Attach D: NEGATIVE AIR MACHINE AIR PRESSURE DIFFERENTIAL AND FILTER REPLACEMENT LOG
- Attach E: INTERIM LIFE SAFETY MEASURES (ILSM) WRITTEN CRITERIA
- Attach F: DAILY ILSM DAILY CHECKLIST
- Attach G: CONTRACTOR ASBESTOS NOTIFICATION FORM
- Attach H: ASBESTOS VERIFICATION STATEMENT
- Attach I: CHEMICAL INVENTORY FORM
- Attach J: PERMIT-REQUIRED CONFINED SPACE (PRCS) NOTIFICATION
- Attach K: CONTRACTOR WARRANTY - PRCS
- Attach L: CONTRACTOR ENERGY CONTROL AGREEMENT
- Attach M: CONTRACTOR WARRANTY - LOCKOUT-TAGOUT
- Attach N: HOTWORK PERMIT
- Attach O: ENERGIZED ELECTRICAL HOT WORK PERMIT
- Attach P: INCIDENT REPORT FORM
- Attach Q: PCRA STANDARD - PROGRAM ASSESSMENT CHECKLIST

Once complete, has a copy of the PCRA form been placed in the central PCRA repository as identified by the Support Services Assistant Administrators (NCAL) or Operational Support Services Group Lead (SCAL) or Facility Operations Executive NFS Directors (ROC)

Yes No

If no, explain: _____

INFECTION PREVENTION RISK ASSESSMENT

Step One: Using the following table, identify the Type of Construction Project Activity (Type A-D)

(i) TYPE A	Inspection and Non-Invasive Activities. Includes, but is not limited to: <ul style="list-style-type: none"> ▪ removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet ▪ painting (but not sanding) ▪ wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls
(ii) TYPE B	Small scale, short duration activities which create minimal dust. Includes, but is not limited to: <ul style="list-style-type: none"> ▪ installation of telephone and computer cabling ▪ access to chase spaces ▪ cutting of walls or ceiling where dust migration can be controlled.
(iii) TYPE C	Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies. Includes, but is not limited to: <ul style="list-style-type: none"> ▪ sanding of walls for painting or wall covering new wall construction ▪ removal of floor coverings, ceiling tiles and casework ▪ new wall construction ▪ minor duct work or electrical work above ceilings ▪ major cabling activities ▪ any activity which cannot be completed within a single work-shift.
(iv) TYPE D	Major demolition and construction projects. Includes, but is not limited to: <ul style="list-style-type: none"> ▪ activities which require consecutive work shifts ▪ requires heavy demolition or removal of a complete cabling system ▪ new construction.

Step Two: Using the following **guidance** table, identify the Patient Risk Groups that will be affected. **Note: This table may be modified based on recommendations from the local facilities Infection Prevention Department. If more than one risk group will be affected, select the higher risk group:**

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as: <ul style="list-style-type: none"> • Office Areas • Conference and Education Rooms • Unoccupied units or Clinics 	<ul style="list-style-type: none"> • Cardiology • Echocardiography • Endoscopy • Nuclear Medicine • Physical Therapy • Radiology / MRI • Minor Outpatient Procedure Rooms • Ob-Gyn • Outpatient Pharmacy • Primary Care • Medical and Surgical subspecialties 	<ul style="list-style-type: none"> • Dialysis • Emergency Room • Labor & Delivery • Laboratories (specimen) • Newborn Nursery • Outpatient Surgery • Pediatrics (In and Out) • Pharmacies that do compounding/mixing <ol style="list-style-type: none"> 1. Post Anesthesia Care Unit 2. Surgical Units (inpatient) 3. Respiratory Therapy 	<ol style="list-style-type: none"> 4. Areas providing care to immunocompromised patients (inpatient) 5. Burn Unit 6. Cardiac Cath Lab 7. Central Sterile Supply 8. Intensive Care Units (newborn, pediatric and adult) 9. Medical Unit (inpatient) 10. Negative Pressure Isolation Rooms (inpatient) 11. Oncology (in and out patient) 12. Operating Rooms, including C-Section Rooms <ul style="list-style-type: none"> • Infusion/dialysis clinics • Critical Care Unit <ol style="list-style-type: none"> 13.

Step Three: Match the project to the type and the risk to the group.

Patient Risk Group (Low, Medium, High, Highest) with the planned ...**Construction Project Type (A, B, C, D)** on the following matrix, to find the ...**Class of Precautions (I, II, III or IV)** or level of infection control activities required.

Patient Risk Group	Type A Construction	Type B Construction	Type C Construction	Type D Construction
LOW Risk Group	I	II	II	III/IV
MEDIUM Risk Group	I	II	III	IV
HIGH Risk Group	I	II	III/IV	IV
HIGHEST Risk Group	II	III/IV	III/IV	IV

Appendix H- Pre-construction Risk Assessment (PCRA) Form

INFECTION PREVENTION RISK ASSESSMENT FORM		ICRA Permit #: _____
Construction Type	Infection Prevention Risk Group	Work Classification (check all that apply)
<input type="checkbox"/> Type A: Inspection and Non-Invasive Activities	<input type="checkbox"/> Low Risk Group	<input type="checkbox"/> Class I
<input type="checkbox"/> Type B: Small scale, short duration activities which create minimal dust	<input type="checkbox"/> Medium Risk Group	<input type="checkbox"/> Class II
<input type="checkbox"/> Type C: Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components.	<input type="checkbox"/> High Risk Group	<input type="checkbox"/> Class III
<input type="checkbox"/> Type D: Major demolition and construction project.	<input type="checkbox"/> Highest Risk Group	<input type="checkbox"/> Class IV
<p>Note: If work area can be downgraded to a lower class as construction activities progress, then include dates of downgrade and approval signature of Infection Prevention representative in Class boxes below. Describe reason for downgrade in this box:</p>		
Class I Dates in Class I: Infection Prevention Signature:	<ol style="list-style-type: none"> 1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace any ceiling tile displaced for visual inspection. 	
Class II Dates in Class II: Infection Prevention Signature:	<ol style="list-style-type: none"> 1. Provide active means to prevent air-borne dust from dispersing into atmosphere 2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents. 5. Wipe surfaces with disinfectant. 6. Contain construction waste before transport in tightly covered containers. 7. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 8. Place dust mat at entrance and exit of work area. 9. Remove or isolate HVAC system in areas where work is being performed. 	
Class III Dates in Class III: Infection Prevention Signature:	<ol style="list-style-type: none"> 1. Obtain signed infection control permit before construction begins. 2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 3. Complete all critical barriers or implement control cube method before construction begins 4. Maintain A MINIMUM OF -0.02 negative air pressure within work site utilizing HEPA equipped air filtration units. 5. Maintain negative pressure logs or digital readouts for evidence of negative pressure within the work area. 6. Seal holes, pipes, conduits, and punctures appropriately. 7. Do not remove barriers from work area until complete project is thoroughly cleaned by Env. Services Dept. 8. Vacuum work areas with HEPA filtered vacuums. 9. Wet mop with disinfectant 10. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 11. Contain construction waste before transport in tightly covered containers 12. Cover transport receptacles or carts. Tape covering to cart. 	
Class IV Dates in Class IV: Infection Prevention Signature:	<ol style="list-style-type: none"> 1. Obtain signed infection control permit before construction begins. 2. Isolate HVAC system in area where work is being done to prevent contamination of duct system. 3. Complete all critical barriers or implement control cube method before construction begins. 4. Maintain a MINIMUM OF -0.02 negative air pressure within work site utilizing HEPA equipped air filtration units. 5. Maintain negative pressure logs or digital readouts for evidence of negative pressure within the work area. 6. Seal holes, pipes, conduits, and punctures appropriately. 7. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site. 8. All personnel entering work site are required to wear shoe covers 9. Do not remove barriers from work area until completed project is thoroughly cleaned by the Environmental Service Dept. 10. Vacuum work area with HEPA filtered vacuums. 11. Wet mop with disinfectant. 12. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 13. Contain construction waste before transport in tightly covered containers. 14. Cover transport receptacles or carts. Tape covering to cart. 	

Step Four: Review requirements with Contractor. At a minimum, all projects in high or highest Risk Group categories must be approved by Infection Prevention & Control Manager or designee. ICRA reviewed by:

Project Manager: _____ (Signature) _____ (Date)

Contractor: _____ (Signature) _____ (Date)

Infection Prevention and Control _____ (Signature) _____ (Date)

Appendix H- Pre-construction Risk Assessment (PCRA) Form
CONTAINMENT CONSIDERATIONS

ABOVE CEILING WORK

Work activities being performed above ceiling. ATTAIN "CEILING PERMIT" PRIOR TO COMMENCEMENT OF WORK (refer to **Attachment B** of the PCRA Supporting Documents for copy of a Ceiling Permit). Note: if mini-cube work area is in public corridor restricting egress, ensure that Interim Life Safety Measures (ILSM) checklist is completed.

CONTAINMENT BARRIER SYSTEM TO BE CONSTRUCTED OF:

- Fire Rated plastic sheeting (minimum of 6 mil.) recommended for projects lasting less than 24 hours
 - Hard Barriers (drywall, etc.) recommended for projects lasting greater than 24 hours and/or around areas where hot work is being performed or in high traffic areas and corridors
 - Work Area Containment is to be set up by: _____
 - Ceiling plenum within the work area is to be isolated and sealed by fire rated 6 mil. plastic sheeting
 - Prefabricated and portable containment "cube"
- Other: _____

ENTRANCE TO WORK AREA TO BE LOCATED AT: _____

AIR FROM CONTAINMENT EXHAUSTED INTO INDOOR ENVIRONMENT

When air from the containment area is exhausted indoor, then the following procedures are to be followed:

1. Obtain permission from Infection prevention and Control (IP&C) representative when exhausting into High and Highest Risk Areas

IP &C Representative Name: _____

IP &C Representative Signature: _____ (Date)

2. Air from containment is to be exhausted into a "diffuser system". Examples of a diffuser system can be found in **Attachment C** of the PCRA Supporting documents.

Is the negative air exhaust from the containment being exhausted into a "diffuser system"?

Yes No. If No, please explain: _____

3. The Contractor is responsible for maintaining air balance in surrounding high and high risk areas around the work and containment exhaust areas (e.g. positive pressure differential areas remain positive and negative pressure differential areas remain negative). To determine air balance requirements of surrounding areas, contact the Facilities Engineering department.

Surrounding High Risk Areas	Air Balance in surrounding High Risk Areas (positive or negative)

4. Ensure that the Contractor is using HEPA Filter exhaust equipment. Only HEPA filtered negative air machines (with a minimum 99.97% efficiency) with a rating of 200 to 2000 cubic feet per minute (CFM) are allowed to be used during construction activities.

Is the Contractor using HEPA Filtered exhaust equipment?

Yes No. If No, please explain: _____

5. If exhausting into existing HVAC systems, consult first with a licensed mechanical engineer to determine effects on air balance of the existing system

Exhaust into stairwells or vertical shafts is NOT PERMITTED (i.e., mechanical chases and elevators)

AIR FROM CONTAINMENT EXHAUSTED INTO OUTDOOR ENVIRONMENT

When exhausting into an outdoor environment:

1. Ensure that the Contractor is using HEPA Filter exhaust equipment
Is the Contractor using HEPA Filtered exhaust equipment? Only HEPA filtered negative air machines (with a minimum 99.97% efficiency) with a rating of 200 to 2000 cubic feet per minute (CFM) are allowed to be used during construction activities.
 Yes No. If No, please explain: _____
2. Consider exhaust locations and avoid exhausting near air intakes and operable windows/doors
Is the location of the containment exhaust located away from air intakes and operable windows?
 Yes No. If No, please explain: _____
3. Avoid member walkways whenever possible (may require diffusers)

OTHER CONTAINMENT EXHAUST REQUIREMENTS (for both INDOOR and OUTDOOR exhaust scenarios)

- Contractor informed that a **minimum negative air differential of -0.02 is required**
- Contractor informed that they are required to maintain documentation for evidence of negative pressure within the work area. Negative air pressure readings can be accomplished by: digital printouts from a manometer, circular chart recordings from a manometer or periodic logging of inspections of magnahelic gauge readings.

Note: A Negative Air Machine Air Pressure Differential and Filter Replacement Log can be found in **Attachment D** of the PCRA Supporting Documents.

HVAC ISOLATION REQUIREMENTS:

- HVAC system in the work area is able to be isolated (shut "off) during construction activities. Yes No
- If no, describe alternate plan to isolate and control HVAC in the work area: _____

DOES THE CONSTRUCTION AREA REQUIRE TERMINAL CLEANING UPON COMPLETION OF CONSTRUCTION?

- Yes No
- If yes, has EVS department been notified?

OTHER CONTAINMENT REQUIREMENTS: _____

NOISE AND VIBRATION ASSESSMENT (check all that apply)		
TYPE	IMPACT	CONTROL MEASURES
<input type="checkbox"/> Not Applicable <input type="checkbox"/> Drilling <input type="checkbox"/> Heavy Equipment <input type="checkbox"/> Motors <input type="checkbox"/> Pounding <input type="checkbox"/> Others:	<input type="checkbox"/> None <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	<input type="checkbox"/> Notify affected areas prior to noise or vibration producing activity <input type="checkbox"/> Use tools designed to minimize noise and vibrations <input type="checkbox"/> Required for high impact activities – Notify building Administration and EH&S <input type="checkbox"/> Relocate members/staff to another area of the facility for duration of activity <input type="checkbox"/> Provide staff and/or members with noise reducing protective equipment (e.g. ear plugs) <input type="checkbox"/> Schedule activity during hours that minimize impact to member/visitors and staff. Hours: _____ <input type="checkbox"/> Other:
AIR QUALITY (check all that apply)		
TYPE	IMPACT	CONTROL MEASURES
<input type="checkbox"/> Not Applicable <input type="checkbox"/> Dust <input type="checkbox"/> Chemical (VOC) <input type="checkbox"/> Fumes <input type="checkbox"/> Mold <input type="checkbox"/> Paint <input type="checkbox"/> Solvent/Cleaner <input type="checkbox"/> Roofing Tar <input type="checkbox"/> Other:	<input type="checkbox"/> None <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	<input type="checkbox"/> Restrict/shut down air handlers for duration of activity <input type="checkbox"/> Install charcoal filters in HVAC or portable units <input type="checkbox"/> Provide local exhaust ventilation <input type="checkbox"/> Substitute material with low VOC product <input type="checkbox"/> Notify affected areas and EH&S prior to construction activity that may impact air quality <input type="checkbox"/> Provide negative pressure/HEPA filtration <input type="checkbox"/> Relocate members/staff to another area of the facility for duration of activity <input type="checkbox"/> Schedule activity during hours that minimize impact to member/visitors and staff. Hours: _____ <input type="checkbox"/> Provide MSDS to local EH&S representative for review and recommended actions <p>Note: If Mold is encountered, follow work practices outlined in Kaiser Permanente's Water Intrusion and Mold Management (WIMM) Program. Copy of WIMM Program may be found at NFS infoZone (Note: obtain a user password to use the NFS infoZone website): http://www.kpnfs.com/infozone)</p> <input type="checkbox"/> Other:
UTILITY ASSESSMENT		

The following utilities will be "live" and within the designated work area(s):

In the event that a "live" utility is impacted, disturbed or damaged, the Contractor is to immediately notify the following:

Name:

Department:

Primary Contact Number:

Secondary Contact Number:

THE FOLLOWING UTILITIES WILL BE IMPACTED AND OUT OF SERVICE DURING THE PROJECT (check all that apply)

TYPE	IMPACT	CONTROL MEASURES
<input type="checkbox"/> Not Applicable <input type="checkbox"/> Computers <input type="checkbox"/> Health Connect <input type="checkbox"/> Code Blue System <input type="checkbox"/> Nurse Call or PA System <input type="checkbox"/> Wi-Fi system <input type="checkbox"/> Telemetry <input type="checkbox"/> HVAC* <input type="checkbox"/> Medical Gas* <input type="checkbox"/> Natural Gas* <input type="checkbox"/> Overhead Paging <input type="checkbox"/> Electrical * <input type="checkbox"/> Plumbing * <input type="checkbox"/> Fire Alarm* <input type="checkbox"/> Boiler/Steam * <input type="checkbox"/> Chiller * <input type="checkbox"/> Water Pump* <input type="checkbox"/> Sewage <input type="checkbox"/> Telephone <input type="checkbox"/> Vacuum System <input type="checkbox"/> Elevator or <input type="checkbox"/> Other:	<input type="checkbox"/> None <input type="checkbox"/> Modified Operation <input type="checkbox"/> Shut Down <input type="checkbox"/> Other:	<input type="checkbox"/> No special interventions required <input type="checkbox"/> Notify work areas during pre-construction planning <input type="checkbox"/> Relocate members / staff to another area of the facility for duration of activity <input type="checkbox"/> Schedule during hours that minimize impact to member/visitors and staff. Hours: _____ <input type="checkbox"/> Affected Departments are to be notified prior to Utility being turned back "ON" <input type="checkbox"/> Implement Disaster/Business Continuity Plans for utility outage <input type="checkbox"/> Other: <input type="checkbox"/> * If impact to these utilities requires Lockout/Tagout procedures, then ensure that these procedures are properly communicated and coordinated with the Contractor. Refer to "Lockout/Tagout Contractor Agreement and Warranty" attachment. ** Disruption to elevator and elevator components must be performed only by a qualified elevator vendor.

UTILITY ASSESSMENT (CONTINUED)

Utilities to be shut "OFF" during the following: Date(s):Times that utility will be "OFF":

Does the Contractor have the authority to shut "OFF" utilities during the project?

 Yes No. If "No", utilities are to be shut "OFF" by following KP representative:Name:Department:Primary Contact Number:Secondary Contact Number:

Does the Contractor have the authority to turn utilities back "ON" at the conclusion of their work?

 Yes No. If "No", utilities are to be turned back "ON" by following KP representative:Name:Department:Primary Contact Number:Secondary Contact Number:

INTERIM LIFE SAFETY CONSIDERATIONS

ILSM #: _____

Project Name:	Project Number:
Facility & Department:	Project Start Date:
Contractor On-Site Supervisor:	Contractor 24/7 Contact Information
Kaiser Project Manager (or designee):	Kaiser 24/7 Contact Information
Daily inspections of ILSM Conditions to be performed by:	

To determine which temporary measures are warranted, refer to the *ILSM Written Criteria* included in **Attachment E** of the "Supporting Documents" section of the PCRA Standard. To monitor the implementation of ILSM, use the Daily ILSM Checklist included in **Attachment F**.

For every life safety deficiency, an interim life safety measures (ILSM) risk assessment must be performed. For Joint Commission accredited facilities, if deficiency can be corrected in less than 45 days, add to AIMS system or corrective work order system. Ensure completion date is documented. For deficiencies taking longer than 45 days to correct, update the e-SOC with a PFI.

INTERIM LIFE SAFETY MEASURES RISK ASSESSMENT (To be completed for buildings that are occupied)		
ILSM ITEM DESCRIPTIONS	STATUS	RECOMMENDED CONTROL MEASURES
a) Construction activities will alter or compromise building egress by blocking exits or compromising exit routes.	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Staff to receive additional information/communication when alternative exits are designated. Buildings or areas under construction must maintain escape routes for construction workers at all times, and the means of exiting construction areas are inspected daily. <ul style="list-style-type: none"> <input type="checkbox"/> Install temporary exit evacuation routes <input type="checkbox"/> Install temporary exit signage <input type="checkbox"/> Train affected departmental staff and support staff <input type="checkbox"/> Send notice to facility regarding alternate exit route <input type="checkbox"/> Send notice to Code Blue, Rapid response teams <input type="checkbox"/> Increased hazard surveillance <input type="checkbox"/> Other:
b) Construction activities will alter or compromise emergency services and/or fire, police and other emergency forces.	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Alternative access ways for entry into the emergency department will be in close proximity to the original entry and will provide adequate space for members to enter. New access is to be clearly marked and illuminated. <input type="checkbox"/> Other:
c) Construction activities will result in the Fire Alarm or the Automatic Sprinkler System to be out of service for <u>less than 4 hours</u> in a 24-hour period in an occupied building?	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> A fire watch will be provided and/or a temporary but equivalent system is provided. Document fire watch activities with a daily log. <input type="checkbox"/> Other:
c) Construction activities will result in the Fire Alarm or the Automatic Sprinkler System to be out of service for <u>more than 4 hours</u> in a 24-hour period in an occupied building?	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Notify the local municipal fire department and provide a fire watch. Document fire watch activities with a daily log. <input type="checkbox"/> Other:
d) As part of the construction activities, temporary construction partitions are to be built to designate the construction work area(s).	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> When required by NFPA 101, partitions that separate construction areas from the existing building will be a 1-hour or 2-hour fire barrier as specified by relevant code. Temporary construction partitions will be smoke tight (if disturbing smoke wall) and built of noncombustible or limited combustible materials.

Appendix H- Pre-construction Risk Assessment (PCRA) Form

		<input type="checkbox"/> Other:
e) Additional fire-fighting equipment will be provided and affected staff will receive training in its use	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Facilities and/or Engineering will supply additional portable fire extinguishers, as part of a temporary but equivalent system, if the automatic suppression system is temporarily impaired. <input type="checkbox"/> Other:
(f) Contractor informed that smoking will be prohibited in and adjacent to construction areas, and throughout the organization's buildings and campus grounds, in accordance with the Smoking policy.	<input type="checkbox"/> Yes	This is to be applied with any project or construction activity, pursuant to organizational policy
(g) Contractor informed that storage, housekeeping, and debris removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level will be enforced at all times. Special procedures may be required depending on the project scope and materials used.	<input type="checkbox"/> Yes	This is to be applied with any project or construction activity
h) A minimum of two fire drills per shift per quarter are required (required if fire life safety conditions are anticipated to be compromised greater than 30 days)	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	Additional Fire Drills to be coordinated by:
i) Hazard surveillance of building, grounds, and equipment will be increased with special attention to excavations, construction areas, construction storage, and field offices.	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	Hazard surveillance to be performed by:
Construction activities will cause other deficiencies in the buildings Fire Life Safety System. Impacts to the system could include: <input type="checkbox"/> Exit signage will be removed, not illuminated or pointed in wrong direction due to construction activities <input type="checkbox"/> Fire alarm system being taken off-line <input type="checkbox"/> New fire system being installed and old system being taken off-line <input type="checkbox"/> Fire pump being compromised during construction <input type="checkbox"/> Emergency power being taken off-line, thus impacting all life safety devices <input type="checkbox"/> Construction items stored within 18" of sprinklers <input type="checkbox"/> Fire alarm device being disconnected <input type="checkbox"/> Fire Doors not latching <input type="checkbox"/> Smoke dampers temporarily not working/ not accessible <input type="checkbox"/> New dampers to be kept in closed position until tested and functioning properly <input type="checkbox"/> Other	<input type="checkbox"/> Yes (if checked, then follow control measures) <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Increased hazard surveillance <input type="checkbox"/> Perform Daily safety checks <input type="checkbox"/> Fire watch <input type="checkbox"/> Kaiser Permanente staff to receive additional training regarding impaired structural or compartmentalization features of fire safety. This training will include any new or special procedures they should follow in the event of a fire in their location or other locations in the building. Contact local EH&S to identify personnel that are to perform training. <input type="checkbox"/> Contractor(s) to be notified of storage, housekeeping, and debris removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level will be enforced at all times. <input type="checkbox"/> Staff to receive additional information/communication when alternative exits are designated. <ul style="list-style-type: none"> <input type="checkbox"/> Install temporary exit evacuation routes <input type="checkbox"/> Train affected departmental staff and support staff <input type="checkbox"/> Send notice to facility regarding alternate exit route <input type="checkbox"/> Send notice to Code Blue, Rapid response teams <input type="checkbox"/> Perform one additional fire drill in affected areas per shift per quarter <input type="checkbox"/> Other
ADDITIONAL ILSM REQUIREMENTS:		

ILSM SIGNATURES		
Project Manger	ILSM Implementation Date	ILSM Close-out Date
Facility Fire Life Safety Lead or designee	ILSM Implementation Date	ILSM Close-out Date

OTHER LIFE SAFETY CONSIDERATIONS:

Contractor(s) has been notified that smoking will be prohibited in and adjacent to construction areas, and throughout the organization's buildings?

Yes

Contractor(s) has been notified of storage, housekeeping, and debris removal practices that reduce the building's flammable and combustible fire load to the lowest feasible level will be enforced at all times?

Yes

STORAGE OF CONSTRUCTION MATERIALS:

Contractor has been informed that all construction materials are to be stored in a designated secured location with adequate fire suppression system area under the control of the Contractor.

Storage of Construction Materials to be located at:

ROUTE OF DELIVERY FOR MATERIALS AND DEBRIS REMOVAL:

The Contractor(s) has been notified of the preferred route for delivery of materials and debris removal. Preferred route is:

ELEVATOR ACCESS & RESTRICTIONS:

The Contractor(s) has been notified that use of the following elevators is prohibited:

The Contractor(s) is permitted to use the following elevators:

ASBESTOS:

Has an asbestos survey been performed to determine if there are any Asbestos Containing Materials (ACM) in the areas that will be impacted by the project?

Yes Not Applicable (project will not impact building materials that could contain asbestos)

Asbestos survey determined:

- No ACM present ACM was identified but will not be impacted by the project
- ACM was identified, will not be intentionally disturbed, but will require implementation of O&M procedures by O&M trained personnel
- ACM present and it will be removed by a pre-qualified contractor with oversight by a pre-qualified asbestos consultant hired by KP (list of pre-qualified asbestos contractors and consultants may be found at the KP contractor/vendor bid list that is maintained by KP Vendor Management Dept.)
- If ACM abatement will be required, or if any Asbestos O&M activities will take place, the local KP Asbestos Program Manager shall be notified by the PM and included in that part of the preconstruction planning process.

The results of the asbestos survey have been communicated to the contractor. Requirement to report any suspect material in work area that has not been tested has been communicated to the contractor. Requirement that ACM in the work area must not be disturbed has been communicated to the contractor. Yes Not Applicable- no survey required

To document communications to the Contractor(s) regarding the presence and location of ACM, the Project Manager may use Contractor Asbestos Notification Form (**Attachment G & H** of the PCRA Supporting Documents).

LEAD:

Will construction activities include abatement of lead lined walls or removal of pre-1978 paint (pre-1978 paint presumed to be lead-based unless sampled)?

Yes* No (project will not impact lead-lined walls or pre-1978 lead based paint)

*If "yes", then ensure that the removal of lead-lined walls and/or lead based paint is performed by a certified lead contractor. If Capital Projects Facility Construction (CPFC) is managing the project or lead abatement activities, then refer to the CPFC "Lead Control Program". This document can be located at the NFS infoZone web-site (<http://www.kpnfs.com/infozone>) under Project Tools/CPFC/Health and Safety/Volume One-Modules/Module L-Lead Control Program.

OTHER HAZARDOUS MATERIALS:

Will the project include demolition of the building materials that may include hazardous materials other than asbestos or lead? Such materials may include, but are not limited to: engine fuels (diesel or gas), PCB ballasts, HVAC compressor oils, elevator equipment hydraulic fluids, Freon.

No Yes. Following Hazardous Materials may be impacted: _____

Note: Demolition of the following materials may include hazardous materials:

- Laboratory Hoods and associated Ducting
- Waste and Sewer Lines

HAZARDOUS WASTE:

Any hazardous waste created as a result of construction activities (e.g. asbestos, lead, PCB)? Yes No

If yes, then coordinate with the local Environmental Health and Safety (EH&S) department to ensure that hazardous waste is properly profiled, the appropriate designated KP representative signs the manifest and that manifest recordkeeping responsibilities are agreed to with local EH&S.

Has the Contractor been informed by local EH&S as to whom at the facility has the authority to sign the hazardous waste manifest on behalf of the Generator?

Yes. See Below Not Applicable

Name: _____ Department: _____

Primary Contact Number: _____ Secondary Contact Number: _____

Will there be a waste dumpster located on the site during the project? Yes No

Location of waste dumpster: _____

CHEMICAL INVENTORY:

Has the Contractor submitted a "Chemical Inventory Form" that will be maintained on-site along with copies of the Material Safety Data Sheets (MSDS) for the chemicals identified on the Inventory Form?

Yes Not Applicable (No chemicals will be used)

If needed, the Contractor(s) may use the Chemical Inventory Form (**Attachment I**) of the PCRA Supporting Documents to submit an inventory chemicals that will be used or stored during the project.

PERMIT-REQUIRED CONFINED SPACES: For further Permit-Required Confined Space (PRCS) considerations, refer to PRCS Facility Maintenance Operations Standards (FMOS).

Contractor has received a list of Permit Required Confined Spaces (PRCS) within the work area?

Yes Not Applicable (no PRCS within the work area, skip next question)

Will the Contractor be performing a permit entry into a PRCS space (the PRCS cannot be reclassified to a non-Permit Required space)? **Note:** The use of Alternate Entry Procedures into a PRCS does not reclassify a PRCS to a Non-Permit Required space).

Yes No

If yes: Contractor has completed the "Permit Required Confined Space Agreement & Warranty" (**Attachment J & K** of the PCRA Supporting Documents). **Please note that this form is NOT a permit to complete the PRCS entry. The Contractor is to provide KP with the PRCS permit.**

LOCKOUT-TAGOUT: *For further Lockout/Tagout (PRCS) considerations, refer to Lockout/Tagout Facility Maintenance Operations Standards (FMOS).*

Will the Contractor be performing Lockout/Tagout activities?

Yes Not Applicable (the Contractor will not be performing Lockout/Tagout activities)

If Yes: Contractor has completed the "Contractor Energy Control Agreement & Warranty Form" (**Attachment L & M** of the PCRA Supporting Documents)

- Identify list of equipment that is to be LO/TO in the Lockout/Tagout Log
- If the Contractor is performing the LO/TO procedures, then the Contractor is to submit only the Contractor LO/TO Warranty

- If the Contractor and a Kaiser Permanente representative are jointly performing the LO/TO procedures, then page one of Contractor Energy Control Agreement needs to be completed and reviewed between the Contractor and a Kaiser Permanente Engineering representative AND page two of the Contractor Energy Control Agreement needs to be submitted by the Contractor.

HOT WORK:

Will the Contractor be performing Hot Work activities? Yes No

If yes, ensure that the "Hot Work Agreement Form" (**Attachment N** of the PCRA Supporting Documents) has been reviewed and authorized by a Kaiser Permanente Engineering representative.

ENERGIZED ELECTRICAL WORK:

Will the Contractor be performing Energized Electrical work activities? Yes Not Applicable

If yes, then ensure that the Contractor submits an "Electrical Energized Permit" for these work activities. The "Energized Electrical Work Agreement Form" (**Attachment O** of the PCRA Supporting Documents) is a sample of the elements that an "Electrical Energized Permit" is to include.

SECURITY:

Appropriate measures being taken to ensure site access and security during construction activities (refer to NFS Policy 2, Procedures 5 & 71)?

Yes Additional Measures Needed: _____

INCIDENT REPORTING

The Contractor has been instructed on Kaiser Permanente's Incident Reporting procedures and been given a copy of the "Incident Report Form" (Attachment P of the PCRA Supporting Documents)? Yes

In the event of an incident that: 1) results in interruption to Care Delivery; 2) results in death or serious injury to a Contractor that requires immediate medical care; 3) damages the building or other Kaiser Permanente property; 4) results in an event that receives media coverage; or 5) is a "near miss" event that has the potential to be a serious incident, the Contractor is to notify the following Kaiser Permanente representative immediately:

Name: _____ Department: _____

Primary Contact Number: _____ Secondary Contact Number: _____

CONSTRUCTION AND DEMOLITION WASTE:

Is a waste dumpster required for this project?

Not Applicable Yes. Location of Dumpster: _____

Does the Contractor have plans and policies to ensure that they are in compliance with any applicable local jurisdiction requirements for the management of Construction and Demolition (C&D) waste (e.g. percentage of waste recycled, container requirements, landfill requirements, etc.)?



Appendix H- Pre-construction Risk Assessment (PCRA) Form

Not Applicable Yes. Local C&D Waste Requirements: _____

ADA COMPLIANCE:

Will the construction project alter or compromise member, visitor and staff access in public areas and ADA Standards for Public Accommodations and Commercial Facilities,; Title III in areas OUTSIDE of the work areas?

No Yes. Plan to address ADA compliance standard: _____

SIGNAGE/WAYFINDING COMPLIANCE:

Will the construction project alter or compromise signage/wayfinding in either the exterior or interior of the building in areas outside of the work areas?

No Yes. Plan to address signage issues: _____

STORMWATER RUNOFF:

Will construction site operators be engaged in clearing, grading or excavating activities that disturb 1 acre or more?

No Yes

If "Yes", will the Contractor be covered under a National Pollutant Discharge Elimination System (NPDES) Storm water Permit?

Yes If No, Please explain: _____

If Yes then does the Contractor have a Stormwater Pollution Prevention Plan (SWPP) that meets all applicable local, state and federal regulations?

Yes No

ADDITIONAL PROJECT REQUIREMENT DETAILS

UTILIZE THIS PAGE AS NEEDED TO INDICATE ADDITIONAL DETAILS ON PROJECT REQUIREMENTS



Appendix H- Pre-construction Risk Assessment (PCRA) Form

Sample Excavation Permit

Project Name:			Project Number #	
Utility Location Service Contacted	Yes / No		Utility Location Service Phone #	
Private Location Service Contacted	Yes / No		Private Location Service Phone #	
Subcontractor representative Submitting Permit & Pre-task Plan			GC Representative Review Permit & Pre-task Plan	
Pre-task Plan reviewed with workers performing excavation/trenching	Yes / No		GC Representative overseeing excavation/trenching activity	
Permit Start Date			Permit Completion Date	

Subcontractor notified General Contractor, Utility Companies and persons having property, structures or improvements near the work area in writing 3 days in advanced before breaking ground which impacts utilities	Yes	No		Sub Initial ____ GC Initial ____
Utility company and/or Private Locator Services notified prior to starting work	Yes	No		Sub Initial ____ GC Initial ____
Locations of utilities marked and maintained through duration of excavation work	Yes	No		Sub Initial ____ GC Initial ____
Pot holing through non-mechanical means (i.e. hand digging) to locate utilities prior to utilizing any mechanical equipment	Yes	No		Sub Initial ____ GC Initial ____
Mapping of utility locations are continuously being updated on construction plans	Yes	No		Sub Initial ____ GC Initial ____
Shoring, support or bracing (as necessary) maintain utilities in place	Yes	No		Sub Initial ____ GC Initial ____
Written contingency plans in place for identified utilities in case of disruption	Yes	No		Sub Initial ____ GC Initial ____
Vehicle/Heavy Equipment structural bridges approved by registered licensed engineer	Yes	No		Sub Initial ____ GC Initial ____
Clearly mark or identify all exposed utilities and provide appropriate warning and danger signs as needed to protect workers, public and utilities	Yes	No		Sub Initial ____ GC Initial ____
Excavation/trench properly shored, benched, braced or sloped according regulatory requirements	Yes	No		Sub Initial ____ GC Initial ____
Engineering & manufacture documentation available on site for prefabricated shoring systems or trench boxes	Yes	No	N/A	Sub Initial ____ GC Initial ____
Engineered drawings and calculations available on site for timber shoring systems	Yes	No	N/A	Sub Initial ____ GC Initial ____
Excavation bridges in place with guard rail system and designed for intended loads	Yes	No		Sub Initial ____ GC Initial ____
Fall protection system in place for falls exposures equal to or greater than 6 feet	Yes	No	N/A	Sub Initial ____ GC Initial ____
Adequate barriers installed to protect workers from vehicular traffic entering the excavation/trench	Yes	No		Sub Initial ____ GC Initial ____
Atmospheric readings taken for potential oxygen and contaminate exposures	Yes	No		Sub Initial ____ GC Initial ____
Diversion plans written to prevent excavation/trench water accumulation and worker protection	Yes	No		Sub Initial ____ GC Initial ____
Excavations of depths greater than 20 feet designed by registered licensed engineer	Yes	No	N/A	Sub Initial ____ GC Initial ____
Soil spoils, materials and equipment setback at least 2 feet from lead edge	Yes	No		Sub Initial ____ GC Initial ____
Barriers provided around all excavations and trenches at all times	Yes	No		Sub Initial ____ GC Initial ____
Workers not allow to work under suspended or swinging loads	Yes	No		Sub Initial ____ GC Initial ____
Other Requirements:				Sub Initial ____ GC Initial ____

Appendix J- Sample Excavation Permit

Subcontractor Representative Name		Subcontractor Representative Signature	
General Contractor Representative Name		General Contractor Representative Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	
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Subcontractor Worker Name		Subcontractor Worker Signature	
Subcontractor Worker Name		Subcontractor Worker Signature	

SAMPLE