



RULES OF THE STATION

DEPARTMENT OF VETERANS AFFAIRS PALO ALTO HEALTH CARE SYSTEM

The guidelines published in this issue are for the use and convenience of construction and maintenance contractors, vendors and others performing contract work at all Divisions of the VA Palo Alto Health Care System.

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- A. **CONTRACT WORK HOURS.** Normal available core work hours for the contract are from 7:00a.m. To 4:30 p.m. Monday through Friday, unless noted otherwise. Work may also being performed based upon project requirements (off normal working hour & weekend), excluding national holidays. The (10) holidays observed by the Federal Government are:

New Years Day	Presidents Day
Martin Luther King's Birthday	Memorial Day
Independence Day	Labor Day
Columbus Day	Veterans Day
Thanksgiving Day	Christmas Day

.Contractors may request, in writing, approval to work other hours or weekends. Except for emergencies, the contract person should receive such requests two weeks before the scheduled work. When possible, Contractors will submit emergency requests at least two days before the scheduled work.

- B. **UTILITIES.** No utility service such as water, gas, medical air and gas, steam, sewer, electric, fire protection or communication shall be interrupted without prior approval of the COTR. This includes those interruptions required by the contract. Construction contracts include provisions for maintaining utility systems or providing temporary facilities. Written requests for utility shutdowns shall be completed by the contractor and submitted to the COTR at least two weeks before the scheduled work. Lock-out / tag-out (LOTO) must be follow Health Care System Memorandum No. 138-09-28, on any disruption or shut-down of any energy source. Any EMERGENCY REQUIRING AN IMMEDIATE SHUTDOWN WILL BE REPORTED IMMEDIATELY to the COTR. The COTR will in turn immediately notify the Engineering Office and the appropriate Chief, Maintenance and Repair or site designee. The Contractor will prepare and forward to the Chief, Engineering Service, a written report of the situation, why it happened, a schedule of any further corrective work needed, and what, if any steps are being taken to prevent a recurrence. The request for utility shutdown is found in **Attachment A, A1, A2, and A3**

- C. **PROTECTIVE CLOTHING/EQUIPMENT.** All workers will wear and/or use protective clothing and gear when required. This includes hard hats, goggles, protective shoes, gloves, masks or breathing apparatus, etc. The Contractor shall provide any protective equipment that may be required.
- D. **SECURED WORKSITES** Contractor will be responsible to secure their worksite and provide construction safety and/or infection control barriers, including but not limited to temporary fencing, trench covers, etc. wherever work could cause injury to workers, visitors, VA personnel, or dependents. The Contractor shall conform to the rules and regulations as set forth by OSHA Safety and Health Standards, 29 CFR Part 1926 - Safety and Health Regulations for Construction and Title 8, California Administrative Code - Construction Standards. When the standards differ, the more restrictive standard shall apply. Construction site signage is required. Construction sites outside of existing structures shall be enclosed by 6 feet tall metal fencing. Examples of such fencing is found on **Attachment B**

- E. **TELEPHONES.** Contractors will provide their own telephones. Government telephones will not be used for private business or personal calls. Contractors or their workers may use the Government telephones to call/page the contact person, the Engineering Service office, or when authorized by the contact person - to call their office concerning contract matters. Telephone calls for contract workers will not be accepted by the Health Care System.
- F. **ELEVATORS/CORRIDORS.** Contractors and workers may use corridors and elevators for travel to and from the job sites when in proper attire (shirt and shoes required) provided they don't track mud, wet cement or any form of "dirt" into the buildings. The COTR will assign specific routes, times and elevators to use for transportation of materials and equipment. The Contractor will clean-up any mess caused by their workmen. Elevators will not be used during an emergency.
- G. **TOILETS.** The Contractor is to provide their own toilet facilities, however, the COTR will advise the Contractor which toilet facilities (if available) may be used by the Contractor's workmen. The Contractor will ensure that the facilities are kept clean and will be responsible for any damage done by the Contractor's workers.
- H. **PARKING/TRAFFIC.** Specific parking areas may be assigned for workers on larger construction projects. Workers on smaller construction or maintenance contracts may use any parking space that is not reserved if no parking area is designated. Contractors, including maintenance contractors and workers are specifically prohibited from parking in those spaces reserved for Engineering Vehicles or lawn areas. Further, the Contractor is not to "back in" the space.
- I. **DELIVERIES.** The contact person will assign routes for the delivery of materials and supplies to the job site. The Contractor or construction traffic will not block any Health Care System road or street, walk or building egress without requesting approval in a timely manner.
- J. **LOADING/UNLOADING.** Building loading docks and landings may be used to load or unload construction materials when approved by the contact person. However, any vehicle left unattended for more than a few minutes may be cited by the VA Police. Some areas may be reserved for Health Care System operations only during certain hours.
- K. **VA POLICE.** The VA Police are Federal Police Officers with full authority to make arrests, investigate crime, and to issue citations. Citations issued for driving, parking violations or other offenses may require an appearance in the Federal District Court and/or payment of a fine. FOR THE SAFETY OF PATIENTS, speed limits and other driving and parking codes are strictly enforced. The speed limit on VA roads is 15 MPH under ideal conditions. In parking lots, the speed limit is 5 MPH.
- L. **LOCKED AREAS.** The Contractor is to coordinate access to locked areas with the contact person, including obtaining keys required for access to work sites. All buildings at the Health Care System are locked during other than normal work hours. When the Contractor has approval to work other than normal work hours, he will need to make arrangements for his workers to have access to job sites.
- M. **OPERATIONS AND STORAGE AREAS** will be confined to areas designated by the contract or approved in writing by the contact person or the Contacting Officer. The Government will not be responsible for any tools, equipment or

materials left or stored on Government facilities, unless exceptions are provided in the contract.

- N. **CONSTRUCTION WASTE AND DEBRIS** is the property of the contractor and will not be disposed of on station or in Health Care System trash containers or dumpsters. The Contractor may provide his own bin or dumpster, however, the use and location of such must be approved in writing by the contract person. Construction waste and debris will not be accumulated in corridors or other building areas where it might cause a fire or safety hazard. Debris will be covered when taken from work sites to dump area. This is critical when carried through patient care areas.
- O. **RECREATIONAL FACILITIES** such as swimming pools, gym, tennis courts, etc. are not to be used by Contractors or Contractor's workers.
- P. **DISPOSAL OF HAZARDOUS MATERIALS.** Several buildings at the VAPAHCS contain asbestos containing materials (ACM). Some typical types of materials found to contain ACMs are pipe insulation, transit wall panels, floor tile, linoleum backing, floor/roof mastics and others. Contractors are required to communicate this information to all of their employees and subcontractors that will be working at any of the VAPAHCS sites, and failure to do so could result in OSHA citation(s). **Contractors are also required to alert the VAPAHCS immediately in the event any known or suspected ACM is accidentally disturbed or will need to be disturbed before proceeding with work.** If not indicated in the contract drawings, known locations of ACMs can be determined from the current VAPAHCS asbestos survey. Disposal of any hazardous or potentially hazardous materials in sanitary or storm sewer systems or on Health Care System grounds is strictly prohibited. Hazardous materials, such as asbestos materials, used cleaning solutions and other harmful chemicals shall be disposed of in accordance with State and/or local laws and regulations. In case of an accidental spill of hazardous materials, the contractor is expected to take immediate action to contain the spill and at the same time notify the C.O.T.R./Contracting Officer of the spill. Action should be taken to mitigate the situation until you receive direction from the VAPAHCS Quality Management personnel.
- Q. **WASH DOWN.** Washing leftover cement, plaster, paint, oil or grease, solvents, etc. into any drains and the washing down of cement trucks or other delivery vehicles is strictly prohibited. **REPORT ANY ACIDENTAL SPILLS THAT MAY RUN INTO STORM DRAINS IMMEDIATELY TO THE ENGINEERING SERVICE AT EXTENSION 62468.** Even accidental spills, particularly those not immediately controlled or contained, may result in legal action by local or state authorities against the responsible parties.
- R. **REMOVAL OF GOVERNMENT PROPERTY**, including empty boxes, crates, wood, etc. is prohibited, except approved by the Chief, Supply Service. Contractors or vendors taking Government equipment off station for repairs will notify the contact person of such action. In most cases, a receipt will be required.
- S. **SEXUAL HARASSMENT** is strictly prohibited. This includes deliberate or unsolicited verbal comments or gestures of a sexual nature, unwelcome sexual advances, requests for sexual favors and/or other unwelcome verbal or physical conduct of a sexual nature.

- T. **DRUGS AND ALCOHOL.** Possession or use of non-prescription drugs or alcohol, including beer and wine, on the Health Care System grounds is strictly prohibited. Used appropriately, over the counter medications such as Tylenol or Aspirin would be okay.
- U. **CONTRABAND.** Contraband is any item prohibited by Federal Law on VA grounds. These items also include any item or material that a person might use in a threatening manner. Examples include, but are not limited to:
- Firearms, BB guns, CO2 guns, pellet guns, slings, slingshots, blowguns, and starter pistols.
 - Knives with overall blade length in excess of 3.0 inches, including, but not limited to lock blades, pocket knives, cane swords, and machetes.
 - Explosive materials/Flammables: fireworks, gunpowder, ammunition, butane, propane, and lighter fluid.
 - Other weapons: mace, taser, martial arts equipment, tear agent, and Spears.
 - Illegal/Illicit substances: alcohol, drugs, and drug paraphernalia.
- V. **SMOKING POLICY.** Smoking is prohibited in all Health Care System Buildings particularly in corridors, elevators, offices and patient areas, except in designated areas. Smoking is generally not permitted within 35 feet of an entrance to a VA health care building or office building that is routinely used by patients, residents, employees or staff.
- W. **LOST AND FOUND.** Any article or money found on the premises should be delivered immediately to the contact person or Volunteer Services for safekeeping. Anyone losing an article or money should contact the Volunteer Service Lost and Found Department to determine if it has been turned in.
- X. **SMOKE/FIRE BARRIER PENETRATIONS.** Any penetrations to smoke or fire barrier walls, ceiling or floor slabs shall be properly sealed immediately. We recommend Hilti Fire Stop 601 or 635 for walls and ceilings and Hilti Fire Stop 657 for floor penetrations.
- Y. **WELDING AND/OR BURNING:** Any person planning welding or other such burning operations will in advance, obtain a 24 hour burning permit from the Safety Office, extension 65894. Welding and/or burning operations are allowed only during normal working hours. Sample of the burn permit is found on **Attachment C**
- Z. **LOW VOLTAGE CABLE INSTALLATION:** The contractor shall install low voltage cable in raceways trays whenever practical, only after scheduling the work with the contact person. Whenever feasible, low voltage cables to be in the ceiling will be installed before the ceiling tile is installed.
- AA. **OCCUPATIONAL HEALTH AND SAFETY:** Contractors and their employees are expected to comply with and are subject to applicable OSHA and CAL-OSHA regulations as at any construction site. Contractor's On-site Superintendent shall conduct daily construction site safety reviews using **Attachment D**
- BB. **INJURY ACCIDENTS:** The Health Care System does not have the equipment, facilities, or personnel trained to handle serious injuries. Call 911 for emergency medical assistance and notify the VA Police at extension 65500 at Palo Alto.
- CC. **DAMAGE TO GOVERNMENT PROPERTY** caused by the Contractor or his workmen, whether accidental or incidental to the work, shall be corrected

immediately at the Contractor's expense. This includes damage to lawns, shrubbery, irrigation systems, curbs, etc. Caused by construction vehicles/traffic and other operations.

- DD. **DUST AND FUME CONTROL** will be exercised on all construction operations. Workers will be careful not to operate any vehicles, gas or diesel engines, or to perform any fume or dust generating process near a building intake system. Appropriate dust barriers will be utilized to mitigate dust entering into patient areas and/or the HVAC System. Barriers will be approved by Infection Control prior to work commencing. If Safety requires a more stringent barrier, the more stringent barrier will apply with Infection Control requirements are also satisfied.
- EE. **NOISE** will be held to a minimum at all times. Jack-hammering, core drilling and other noisy or disturbing operations may have to be rescheduled to avoid interfering with surgery or other programs. OSHA standards related to decibels are a requirement in any event.
- FF. **ROADS & WALKS.** Any debris dropped along egress from the station will be cleaned up immediately. Mud and dirt on roads and walks will be cleaned up as soon as the construction operation is complete or at the end of each day.
- GG. **FIRE SAFETY PRECAUTIONS.** Contractors are expected to comply with all fire safety precautions. In the event of a fire or during regular fire drill, the contractor must vacate the construction site within the zone affected.

--- E N D ---

Attachment A

PAD UTILITY SHUTDOWN

To assure ample, dependable utility service to your area, we plan to make improvements to our facilities on:

Date(s):	MONDAY, August , 2009	Est. Shutdown Time:		hours
Utility		Contingency Time:		hours
System:		Total Shutdown Time:		hours
Building(s) Affected:		ISLM (if necessary):		
Impact:				
Description:				
For questions, contact:	Duke Falcon	At extension:		At cell:

I fully understand the impact of this shutdown and will take the necessary action(s) to **fully** coordinate and minimize impact to my service/section.

<input checked="" type="checkbox"/> _____ Associate Director (001)	<input type="checkbox"/> _____ none
<input checked="" type="checkbox"/> _____ Chief of Staff (11)	<input type="checkbox"/> _____ none
<input checked="" type="checkbox"/> _____ Safety, Emergency Management and Occupational Health	<input type="checkbox"/> _____
<input checked="" type="checkbox"/> _____ Police & Security Service (07)	<input type="checkbox"/> _____ none
<input type="checkbox"/> _____ none	<input type="checkbox"/> _____ none
<input type="checkbox"/> _____ none	<input type="checkbox"/> _____ none
<input type="checkbox"/> _____ none	<input checked="" type="checkbox"/> _____ Boiler Plant (138D4)
<input type="checkbox"/> _____ none	<input checked="" type="checkbox"/> _____ Technical Review (138C5)
<input type="checkbox"/> _____ none	<input checked="" type="checkbox"/> _____ Chief, Maintenance and Repair (138C)
<input type="checkbox"/> _____ none	<input checked="" type="checkbox"/> _____ Associate Chief, Engineering Service (138)
<input type="checkbox"/> _____ none	<input checked="" type="checkbox"/> _____ Chief, Engineering Service (138)

Note: ☒ Indicates that a signature is required.

Engineering\forms\m&r forms\utility shutdown-master

cc: Affected Services/138/138A/138B/138C
138C2/138D/138D1/138D4 – Boiler Plant

VETERANS AFFAIRS PALO ALTO HEALTH CARE SYSTEM
3801 Miranda Avenue
Palo Alto, CA 94304-1290

January 31, 2008

HEALTH CARE SYSTEM MEMORANDUM NO. 138-08-14

SUBJECT: UTILITY SHUTDOWN PROCEDURES

1. **SUMMARY:** Health Care System Memorandum No. 138-04-14, dated November 10, 2004, is rescinded. Minor changes have been made.
2. **PURPOSE:** To establish policy, procedures and responsibilities for planned utility system interruptions or temporary shutdown of any utility throughout this Health Care System. These shutdowns shall be accomplished to minimize disruption and impact on patient care, yet perform the necessary utility work.
3. **POLICY:** It is the policy of this Health Care System to protect the health and safety of our patients, employees, and visitors. It is also necessary to temporarily shutdown utility systems in order to perform necessary preventative maintenance, repairs, or project-initiated improvements on the utilities systems. This policy establishes procedures to notify all VA Palo Alto Health Care System staff, patients, and visitors affected by these scheduled temporary utility shutdown with sufficient notice so coordination efforts can be made to patient care activities.
4. **DEFINITIONS:**
 - a. Minor Interruption or Shutdown: Expected to last no more than four (4) hours and affect no more than one (1) utility service.
 - b. Major Interruption or Shutdown: Expected to last more than four (4) hours and/or affects more than one (1) utility service.
 - c. Emergency Interruptions or Shutdowns: Interruption or shutdowns necessary to minimize further utility loss or failure, utility system and/or equipment damage, or a safety hazard. Advance notification may not be possible during emergency shutdowns.
 - d. Utility System Loss: Loss of utility service from an outside source. This usually includes loss of service from utility companies that VAPAHCS has no control over.

e. Utilities Systems: Includes systems such as electrical power; steam distribution; potable/domestic water; sanitary sewer; natural gas; medical gases; heating, air conditioning and ventilation (HVAC); vertical transportations (elevators); and fire alarms/fire sprinklers.

5. PROCEDURES:

a. Utility Shutdown Forms: Requests for utility shutdowns will be submitted, in writing, at least two (2) weeks prior to the planned requested date. All affected Services will be notified in writing via the Utility Shutdown Form (Attachment A). It will be hand-carried by Engineering Service personnel to the offices of affected Services for concurrence signatures. All Utility Shutdown Forms will be concurred by affected Services at least five (5) working days prior to the planned interruption or shutdown.

b. Required Information: Utility Shutdown Forms will identify all pertinent information about the shutdown and indicate the necessary individuals for notification and concurrence. This includes, but is not limited to:

(1) Day of week (all caps), date, and time of temporary utility shutdown

(2) Utility affected

(3) Building(s) affected

(4) Description of the shutdown, including why the shutdown is necessary, what impact it will have on VAPAHCS patient-care and staff, and who to contact within Engineering Service.

c. Required Concurrence: All Utility Shutdown Forms must receive concurrence from the following Services:

(1) Engineering Service Foreman or Project Planning Contracting Officer's Technical Representative

(2) Chief, Engineering Service (138)

(3) Police & Security Service (07)

(4) Safety Officer (QM/S)

(5) Quality Manager (QM)

d. Communications: Once the Utility Shutdown Form has been concurred by all affected Services, Copies of the signed Utility Shutdown Forms will be distributed to all affected Services and posted within prominent areas of all building(s) affected.

e. Emergency Shutdowns: All personnel responding to emergency situations requiring utility system service interruption or shutdown will take appropriate action as necessary to minimize disruption to patient care. Before an emergency shutdown, occupants of affected areas and applicable Service Chiefs will be notified as soon as possible or practical under the circumstances. Documentation of any emergency shutdowns will be initiated utilizing the DHCP Incident Report as soon as the information becomes available. This will include any subsequent information and the final solution of the emergency situation. All emergency shutdown incidents will be reported to the Safety Committee.

f. Restoration of Utility Service: Upon completion of utility shutdown, Engineering Service will coordinate efforts to:

(1) Verify it is safe to restore the utility service, and that all systems and/or equipment in the affected area are working properly. This includes, but is not limited to, checking reset buttons, pilot lights, breakers, flushometers, etc.

(2) Notify affected areas and Service Chiefs that the service has been restored and the shutdown is complete.

6. RESPONSIBILITIES:

a. The Chief, Engineering Service, is responsible for ensuring if utilities systems must be interrupted, the temporary shutdown does not seriously impact patient care and all precautions have been made to accommodate alternate utility services. This includes coordinating, planning, scheduling, and providing the necessary tools, equipment, materials, and manpower necessary to accomplish the utility shutdown work. He/she is also responsible for ensuring the Utility Shutdown Form is completed and receives concurrence in a timely manner. He/she is also responsible for ensuring all utility shutdowns and interruptions are documented and reported in the quarterly Utility Management report to the VAPAHCS Environment of Care Committee.

b. Service Chiefs, or designees, are responsible for ensuring all affected staff in their Service are aware and fully understand the impact of the shutdown and will take necessary action(s) to *fully* coordinate and minimize impact to the Health Care System.

7. REFERENCES:

a. Health Care System Memorandum [138-04-22](#), "Utilities Management Program"

b. Health Care System Memorandum [138-40-20](#), "Engineering Work Requests"

c. "Environment of Care Guidebook," VHA Center for Engineering & Occupational Safety and Health (CEOSH), December 2006

8. **RESCISSION DATE:** January 31, 2011

9. **RESPONSIBLE OFFICIAL:** Chief, Engineering Service

Elizabeth Joyce Freeman
Director

I fully understand the impact of this shutdown and will take the necessary action(s) to **fully** coordinate and minimize impact to my service/section.

<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
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<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
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<input type="checkbox"/> _____	<input type="checkbox"/> _____

Note: ☒ Indicates that a signature is required.

VETERANS AFFAIRS PALO ALTO HEALTH CARE SYSTEM
3801 Miranda Avenue
Palo Alto, CA 94304-1207

Effective Date: March 31, 2008

Issue Date: April 24, 2009

HEALTH CARE SYSTEM MEMORANDUM No. 138-09-28

SUBJECT: LOCK-OUT / TAG-OUT

1. **SUMMARY:** Health Care System Memorandum No. 138-08-28, dated March 31, 2008, is rescinded. Changes have been made.
2. **PURPOSE:** This policy establishes the requirements for isolation of both kinetic and potential electrical, chemical, thermal, hydraulic, pneumatic and gravitational energy prior to equipment repair, adjustment or removal. The purpose of this policy is to ensure Veterans Affairs Palo Alto Health Care System (VAPAHC) is in compliance with The Occupational Safety and Health Administration (OSHA) Standard 29CFR 1910.147, The Control of Hazardous Energy and 29CFR1910.333, Selection and Use of Work Practices - Electrical.
3. **POLICY:** Compliance with the energy control procedures, will ensure that machines and/or equipment are isolated from potential hazardous energy, and locked out and/or tagged out before employees perform any servicing or maintenance activities where unexpected energization, start-up, or release of stored energy could cause injury. Lock-out devices shall be utilized over tag-out devices whenever practical. Tag-out devices will be utilized when energy isolating devices are not capable of being locked out.
4. **DEFINITION:**
 - a. **Affected Employee:** An employee whose job requires him/her to operate or use a machine or equipment on which servicing and/or maintenance is being performed under lock-out / tag-out or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.
 - b. **Authorized Employee:** A person who locks out or tags out equipment/machines in order to perform servicing and/or maintenance on the equipment/machines.
 - c. **Energy Isolating Device:** A mechanical device that physically prevents the transmission or release of energy. Such devices include, but are not limited to: electrical disconnects; double block-and-bleed valves; and line valves.

Note: Push buttons, selector switches, and other control circuit type devices are not energy isolating devices.

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d. **Energy Source:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

e. **Lock-out:** The placement of a lock-out device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lock-out device is removed.

f. **Lock-out Device:** A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in a safe position and prevent the energization of equipment/machine.

g. **Periodic Inspection:** Annual review of energy control procedures and employee knowledge of the responsibilities pertaining to energy control procedures being inspected. Inspection is conducted by an authorized employee other than the one(s) utilizing the energy control procedures being inspected.

h. **Tag-out:** The placement of a tag-out device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tag-out device is removed.

i. **Tag-out Device:** A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device to indicate that the energy isolating device and the equipment/machine being controlled may not be operated until the tag-out device is removed.

5. **PROCEDURES:** Only the standardized devices supplied by VAPAHCS are to be used for lock-out/tag-out. These devices shall not be used for securing any other device or for any other purpose. All devices used to lock-out/tag-out shall be stored in a secure manner to prevent unauthorized use. OSHA 29CFR 1910.147, The Control of Hazardous Energy, refers generally to hazards associated with the accidental starting of all energy-generating machines, devices or things. This policy shall be understood to include the possibility of injury from working near interconnecting machines or equipment. In situations where exposure to interconnecting machines or equipment is required, the Authorized person is required to shut down and lock out such equipment. This LOCK-OUT / TAG-OUT policy applies to all sources of energy including, but not limited to, electrical, mechanical, pneumatic, hydraulic, thermal, and gravitational energy. It also covers stored energy that remains in equipment even after it is isolated from its energy source. This can be, but not limited to, electrical capacitors, springs, flow lines, or pipes. Some machinery and equipment may be powered from multiple sources.

a. **Employee Involvement:**

(1) **Authorized employees:** Performance of the lock-out / tag-out of the equipment may only be performed by authorized employees and may only be

performed on authorized equipment. VAPAHCS designates authorized employees as the following engineering employee groups: Electricians; Plumbers; Maintenance Mechanics; Electronic and Biomedical Engineering Technicians.

(2) Affected employees: These employees operate equipment or work in an area where a lock-out is taking place. While they do not perform the lock-out, they must be notified of the lock-out before the lock out procedure begins.

(3) Other employees: These employees are not directly affected by the lock-out but need to recognize when a lock-out is in place. In some cases, the affected employee and the authorized employee may be the same person. An authorized employee, as listed by job title in this policy, is the only one permitted to perform energy shut downs and lock-out procedures.

b. Authorized employees shall follow the Basic Rule for Using Lock-out or Tag-out System Procedures:

(1) All identified equipment/machines capable of causing personal injury upon the unexpected energizing, start-up or release of stored energy shall be locked out or tagged out. Mechanically locking out equipment is required for all situations. If the equipment is not capable of being mechanically locked out, a full review of the equipment and tag-out procedure is required by the supervisor prior to equipment being tagged out. A written explanation as to why a mechanical lock-out device could not be used and the procedure to be used that will provide a level of safety equivalent to that of a mechanical lock-out device shall be filed in the Lock-out / tag-out log.

(2) DO NOT ATTEMPT TO OPERATE ANY SWITCH, VALVE OR OTHER ENERGY ISOLATION DEVICE WHERE IT IS LOCKED OUT OR TAGGED OUT.

(3) Preparation for Lock-out / tag-out: - Locate and identify all isolating devices to be certain which switches, valves or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical or others) may be involved. Follow the energy control procedures in attachment A as needed.

(4) Sequence of Lock-out / tag-out System Procedure:

(a) Notify all affected employees associated with the equipment or machinery that a lock-out or tag-out system is going to be utilized and the reason for its use. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

(b) If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

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(c) Operate the switch, valve, or other energy isolating device so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam or water pressure, etc.) must be dissipated or restrained by method such as repositioning, blocking, bleeding down, or other approved methods.

(d) Lock-out / tag-out the energy isolating devices with the designated individual lock(s) and/or tag(s). Multiple lock-out/tag-out devices shall be used when more than one shop is performing service/maintenance on the equipment/machine.

1. Lock-out devices shall be affixed in a manner to ensure the energy isolating device is in a "safe" or "off" position.

2. Tag-out devices shall be affixed in a manner to clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.

3. Tag-out devices shall be located as close as safely possible to the energy isolating device in a position that will be immediately obvious to anyone attempting to operate the device.

4. All tags shall be filled out completely and correctly (i.e., name, date, trade, and the reason for the lock-out).

(5) After ensuring that no employees are exposed, and to verify energy sources are disconnected, operate the push button or other normal operating controls to make certain the equipment will not operate.

(6) The equipment/machine is now locked out or tagged out.

CAUTION: Return operating control(s) to "neutral" or "off" position after test.

c. Procedure Involving More Than One Authorized Employee:

(1) Follow steps in paragraphs 5a through 5d, listed above.

(2) In the event an energy isolating device cannot accept multiple locks or tags:

(a) A multiple lock-out or tag-out device (hasp) may be used; or

(b) A single lock may be used to lock-out the equipment / machine with the key being placed in a lock-out box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet.

(c) If a shift change occurs during a lock-out procedure, the authorized employees who are leaving cannot remove their locks until the incoming

authorized employees attach theirs. Contractors or others who work on energized equipment must coordinate their work with the VAPAHCS authorized employees as designated in this policy.

(3) As each authorized employee no longer needs to maintain his/her lock-out protection, that employee will remove their lock from the box.

d. Restoring Equipment/Machines to Normal Production Operations:

(1) After the servicing and/or maintenance is complete and equipment/machine is ready for normal production operations, check the area around the equipment/machine to ensure that no one is exposed.

(2) After all tools have been removed from the equipment/machine, guards have been reinstalled and employees have been notified and in the clear, remove all lock-out / tag-out devices. Operate the energy isolating devices per manufacturer instructions to restore energy to the equipment/machine.

(3) In the event an authorized employee is not available (i.e., absent) to remove his/her lock/tag in a multiple lock-out/tag-out:

(a) Contact shall be made with absent employee's supervisor, who will become the authorized employee and will be capable of removing the lock/tag;

(b) Before removal of the lock/tag, the absent employee's supervisor shall attempt to locate the absent employee; and

(c) The supervisor shall notify the absent employee as soon as practical that their lock/tag has been removed.

(4) Notify affected employees associated with the equipment or machinery that the lock-out/tag-out has been removed and equipment/machine is returned to service.

e. Supervisor Actions:

(1) Train Authorized Employees. The training program will include:

(a) Review of facility lock-out/tag-out policy.

(b) Review of service procedures developed for equipment/machine and/or energy type-specific energy control procedures.

(c) Location and identification of designated equipment used in the lock-out/tag-out procedure.

(d) Documentation of training, to include attendance, date, training content, and signature of trainer.

(e) Conducting training of authorized employees as follows:

1. Upon initial assignment.
2. Whenever there is a change in the employee's job assignment.
3. Whenever a new hazard is introduced due to a change in equipment, machines, or process.
4. Whenever there is a change in the energy control procedure.

(2) Logbooks shall be kept for the recording of lock-out/tag-out use. Logbooks shall include start and stop dates, times, location, name of authorized employee performing lock-out/tag-out procedure and work performed (maintenance, repair, or modification).

(3) Creating equipment specific procedures for equipment that:

(a) There is potential for stored or residual energy, or re-accumulation of stored energy after shutdown and lockout.

(b) The equipment has multiple energy sources.

(c) The isolation and lockout will not completely de-energize or de-activate the equipment.

(d) The equipment is not isolated from that energy source and locked out.

(e) Multiple lockout devices are required.

(f) The lockout device is not under the exclusive control of the authorized employee performing the service.

(g) Servicing or maintenance creates a hazard for other employees.

(h) There have been previous accidents involving unexpected activation during servicing.

(4) Conducting periodic inspections in the energy control procedures:

(a) Select an auditor. The inspections are to be performed by an auditor who has been trained in lock-out/tag-out procedures and who is not involved with the process under audit.

(b) Perform inspections annually.

(c) Document inspection, to include identification of equipment/machine, date of inspection, employees included in the inspection, and signature of inspector.

(d) Initiate and follow up on corrective actions taken for deficiencies noted during periodic inspections.

6. **RESPONSIBILITIES:**

a. Chief, Engineering Service, is responsible for:

(1) Reviewing all lock-out/tag-out procedures.

(2) Reviewing annual inspection/audit and taking corrective action as appropriate.

(3) Retaining lock-out/tag-out procedures and audits. Audits to be retained for three years.

b. Project Engineer is responsible for:

(1) Obtaining copies of lock-out/tag-out procedures from contractors where implementation of such practice may affect Health Care System operations.

(2) Informing all affected Health Care System employees of contractor lock-out/tag-out operations.

(3) Informing outside contractors of this Health Care Systems's lock-out/tag-out policy where such practice may affect contractor or Health Care System operations.

c. Supervisors are responsible for:

(1) Identifying all equipment/machines requiring inclusion into the lock-out/tag-out program to protect his/her employees from injury during service and maintenance activities.

(2) Developing equipment/machine and/or energy type-specific energy control procedures.

(3) Training authorized employees.

d. Authorized Employees are responsible for following the procedures as outlined and described in this policy in sections 5a through 5d.

7. **REFERENCE:** OSHA standard 29CFR 1910.147, The Control of Hazardous Energy regulation.

8. **RESCISSION DATE:** April 30, 2012.

9. **RESPONSIBLE OFFICIAL:** Chief, Engineering Service (138).

Elizabeth Joyce Freeman
Director

Attachment B

Examples of Securing Exterior Construction Sites



Posted Construction Signage



Construction Fence with screen



Attachment C

VA PALO ALTO HEALTH CARE SYSTEM
3801 Miranda Avenue
Palo Alto, CA 94304-1290

February 21, 2007

HEALTH CARE SYSTEM MEMORANDUM No. SAFE-07-06

SUBJECT: HOT WORK PROGRAM

1. **SUMMARY:** This is a new Health Care System Memorandum.
2. **PURPOSE:** To establish policy and procedures for cutting and welding and other hot work operations in nondesignated areas.
3. **POLICY:** All supervisors, employees, and contractors will take proper precautions when any cutting, welding, or other hot work is to be accomplished and assure all work is done in a safe manner with limited risk to patients, staff and visitors.
4. **DEFINITIONS:**
 - a. Hot Work: Hot work activities include welding, flame cutting, open-flame brazing or soldering, grinding, thermal spraying and/or other similar activities that generate sparks/heat that can provide an ignition source. The use of a portable engine for temporary power is also considered a hot work operation.
 - b. Fire Watch: An individual responsible for keeping an eye on the work area during the hot work process. The Fire Watch shall not be the same person actively performing the hot work.
5. **PROCEDURES:** Procedures and controls are established to control all cutting and welding operations conducted in areas not specifically designated for this type of operation. Permits will be authorized and issued by the Safety and Emergency Management (SAFE) Service in written form. Permits are not necessary when hot work is performed in Engineering shops designated for routine use of cutting and welding equipment.
 - a. When a hot work operation is necessary, the SAFE Service will be contacted by the Contracting Officer's Technical Representative (COTR) or government employee. For major projects, the COTR should coordinate hot work requirements beforehand to preclude delay in contractor work.

b. When a permit is issued, Section A of the permit (Attachment A) will initially be completed by the SAFE Service.

c. Section B of the permit will be completed by the contractor or government employee requesting the permit and the permit will be maintained at the job site.

d. Section C on the permit will be completed by the supervisor or fire watch after the 30-minute inspection of the area has been completed.

e. When the operation is completed, and Section C of the permit is signed, it will then be forwarded to the SAFE Service where it will be maintained as a permanent record for a period of one year.

f. A Fire watch is required for all hot work unless specified differently on the permit. A fire watch is normally required in locations meeting the following conditions:

(1) Appreciable combustible material, in building construction or contents, closer than 35 feet (10.7 m) to the point of operation.

(2) Appreciable combustibles are more than 35 feet (10.7 m) away but are easily ignited by sparks.

(3) Wall or floor openings within a 35-foot (10.7 m) radius expose combustible material in adjacent areas including concealed spaces in walls or floors.

(4) Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.

g. The Fire watch shall have fire extinguishing equipment readily available and be trained in its use. They shall be familiar with facilities for sounding an alarm in the event of a fire. They shall watch for fires in all exposed areas, try to extinguish them or otherwise sound the alarm. A fire watch shall be maintained for at least 30 MINUTES after completion of welding.

6. **RESPONSIBILITIES:**

a. The Chief, Engineering Service is responsible for ensuring hot work permits are completed prior to hot work being conducted by contractors and staff under their purview.

b. The Facility Safety Officer, or authorized SAFE staff, will authorize and issue hot work permits when required and after assuring proper procedures have been put in place.

c. The COTR/Person requesting the Permit is responsible to insure that all required safety precautions as prescribed on the Hot Work Permit are complied with throughout the task.

7. **REFERENCES:**

a. NFPA 51B, Standard for Fire Prevention During Welding, Cutting and Other Hot Work, 1999 Edition.

b. OSHA 29 CFR 1910.119.

8. **RESCISSION DATE:** February 21, 2010.

9. **RESPONSIBLE OFFICIAL:** Chief, Safety, Emergency Management and Occupational Health Section

Elizabeth Joyce Freeman
Director

Attachment

ATTACHMENT

VA Palo Alto Health Care System
HOT WORK PERMIT

A. Safety & Emergency Management Service Completes

Date: _____

Requester (Section or Company Name): _____

Building/Department/Floor: _____

COTR/Permit Requestor: _____

Description of work: _____

Special Precautions (other than these listed): _____

Permit expires on: _____

Authorized by: _____

Date/Time Issued: _____

Date/Time Expires: _____

ATTENTION

Before any cutting and welding, ensure that the contractor/employee has inspected the work area and the COTR or permit requestor has confirmed that precautions have been taken to prevent fire. The location where this work is to be done has been examined and necessary precautions have been taken as identified on this permit. (See other side).

B. CONTRACTOR/PERMIT REQUESTOR COMPLETES:

PRIOR TO INITIAL START UP

This certifies the actions have been taken as indicated on this permit and the COTR/permit requestor has reviewed the work area.

Signature

Date

ATTACHMENT (cont.)

VA Palo Alto Health Care System
HOT WORK PERMIT (cont.)

PRECAUTIONS

- _____ Sprinklers in service (Required for hot work).
- _____ Cutting and welding equipment in good repair.

WITHIN 35 FT. OF WORK

- _____ Floors swept clean of combustibles.
- _____ Combustible floors wetted down, covered with damp sand, metal or other shields.
- _____ No combustible material or flammable liquids present.
- _____ Combustibles and flammable liquids protected with covers, guards or metal shields.
- _____ All wall and floor openings covered.
- _____ Covers suspended beneath work to collect sparks.

WORK ON WALL OR CEILINGS

- _____ Construction noncombustible and without combustible covering.
- _____ Combustibles moved away from opposite side.

WORK ON ENCLOSED EQUIPMENT (Tanks, containers, drums, ducts, etc.)

- _____ Equipment cleaned of all combustibles.
- _____ Containers purged of flammable vapors with an inert gas.

FIRE WATCH

- _____ Provided during and 30 minutes after hot work operation.
- _____ Appropriate class fire extinguisher readily available.
- _____ Trained in use of equipment and in sounding fire alarm.

C. SUPERVISOR/FIRE WATCH COMPLETES:

FOLLOWING COMPLETION OF HOT WORK

Work area and all adjacent areas to which sparks and heat might be affected (including floors above and below and on opposite sides of walls) were inspected **30 MINUTES** after the work was completed and were found fire safe.

Signature
(Supervisor or Fire Watch)

Date/Time

Return this completed form to the Safety and Emergency Management Service after the final check-up is completed and the permit has been signed above.

Attachment D

Veteran Affairs Palo Alto Health Care System (VAPAHCS)
Construction Site Safety Review Checklist (Revised 2/17/2011)

Project: _____ Date: _____
Contractor: _____ Certifier Signature: _____ Time: _____

All Contractor personnel and Subcontractor employees are responsible to conduct work activities in a safe and healthful manner for their health and well-being as well VAPAHCS personnel. The purpose of this Site Safety Review is to increase the Contractor/Subcontractors awareness of the need for safe work habits and a positive attitude toward loss prevention and control. Below columns marked with "NC" answers require the Contractor/Subcontractors implementation of corrective action plans. Additional comments/actions will be described on additional pages to supplement this report.

Safety & Health General	OK	NC	N/A- Done	Concrete Operations	OK	NC	N/A- Done
1. Safety Program / Injury Illness Protectn Plan				50. Cement/Silica dust exposures			
2. Orientation/Code of Safe Practices				51. Cutting Sawing/Grinding Controls			
3. Toolbox Meetings/Pre-Job Safety				52. PPE utilized by Crew			
4. Postings (OSHA) (Project Info/POC)				53. Wall or Structure Supported			
5. Emergency Numbers/First Aid				54. Pumps/equipment set-up/ cond.			
6. Toilets/ Hand Wash/Drinking Water				Ladders			
Environment				55. Ladder Conditions			
7. Ventilation, incl negative air/HEPA filtration				56. 3' Above Landing			
8. Illumination				57. Braced & Tied			
9. Integrity of Dust Control and containment				58. A-Frame Step Ladder Set Up			
10. Openings Guarded/Covered-Marked				59. Correct Height			
11. Stairs/Walkways Guarded & Accessible				60. Proper Use			
12. Rebars Capped				Scaffolds/Shoring (Interior/Exterior)			
13. Equipment/Material Storage				61. Current certified installation doc			
14. Traffic/Public Safety				62. Planks/toe boards			
15. 2 hr. fire separation from Patient Care Areas				63. Railed Properly			
16. Construction Warning Signs Posted				64. Tied to Structure			
17. Housekeeping				65. Ladder Access			
18. Emergency Exits – Clear / Unlocked				66. Daily Inspections			
19. ILSM in place – Exits Blocked/Locked				67. Users trained/Competent person			
Electrical Safety				68. Falling Object Protection			
20. Cords, Plugs Conditions, Surge Protectors				Excavations/Trench			
21. GFI Boxes & Grounding				69. Daily Inspections/Competent Person			
22. Overhead Lines protected/protected/spotter				70. Shored/sloped > 5' or soil cond.			
23. Lock out Tag Out				71. Spoil Piles at least 2' from edge			
24. Power/Generator/breaker panels secured				72. Underground Line located/potholed			
Personal Protection (PPE)				73. Barricades/protective measures			
25. Hard Hats				74. Ladder every 25' & after 4' deep			
26. Eye & Face Protection				Vehicle/Equipment Operations			
27. Ear Protection				75. Seat Belts by Operators			
28. Gloves/Clothing				76. Back Up Alarms – all Equipment			
29. Footwear				77. Reflective garments/PPE			
30. Respiratory (Dust/Canister Masks)				78. Personal cars in designated areas			
Site Security				79. Forklift operators trained			
31. Fencing				80. Flagmen/Traffic Control			
32. Security				Scissors/Zoom Booms/Lift Trucks			
33. Entrance/Exit				81. Controls Operative			
Hand/ Power/Powder Actuated Tools				82. Safety Chains in Place			
34. Guards attached/functional				83. Harness & Lanyards (JLG's)			
35. Grounded Properly				84. Operator Certification			
36. Working Properly				85. Visual Inspection			
37. Trained or Certified Operators/PPE				86. Fluid Levels (Oil, Water)			
Fire Protection				87. Brakes/Lights/Back up Alarm(s)			
38. Fire Extinguishers checked/accessible				88. Gauges – Operative			
39. Alarm/Detection System in Place				89. Scheduled Maintenance			
40. Smoking (No Smoking)				Welding & Cutting			
41. Hot Work Permits approved/current				90. Approved Hot Work Permit			
42. Flammable/Combustible Material				91. Cylinders – Use & Segregation			
Fall Protection				92. Torches, Hoses, Gauges, PPE, etc			
43. Use of Fall Protection above 6'				93. Weld Cables, Holders & Grounds			
44. Floor openings/holes securely covered				94. Fire Protection (Task Work)			
45. Perimeter/Interior Shaft Guardrails				Personnel Hoists & Cranes			
46. Falling material/objects				95. Inspections & Maintenance			
47. Trained on Use – Competent Person				96. Crane Set Up & Swing Protection			
48. Handrails for stairs 4 or more steps				97. Rigging & Loads Secured			
49. Fall Protection Equipmt in place/Inspected.				98. Certified Operator			

Legend: OK = Practice in Compliance; NC = Needs Correction -- Identify ID number & correction needed on back of sheet; N/A = Not Applicable



**HCSM SAFE-09-23 Attachment A
Existing Significant Life Safety Code
Deficiencies or Conditions as a Result of
Construction**

			A	B	C	D	E	F	G	H	I	J	K	L	M
			Ensuring Egress	Emergency forces access	Emergency forces notification	Ensuring operational life safety system	Temporary construction barriers	Additional fire fighting equipment	Conducting Additional training of incident response team	Temporary fire protections system or measures	Controlling combustible loading	Conducting 2 fire drills per shift in all areas	Increased hazard surveillance	Compartmentation training of personnel	Conducting organizational training on life safety
		Yes	No												
1	Patient room door latching problem							X			X		X	X	
2	Lacking a code complying smoke barrier							X	X				X	X	
3	Fire exit stairs discharge improperly				X				X	x		X		X	X
4	Excessive travel distance to an approved exit									X	X		X	X	
5	Lack of two remote exits								X		X		X	X	
6	Nonconforming building construction type							X			X	X	X		X
7	Improperly protected vertical openings										X	X	X		
8	Large penetrations in fire/smoke barriers								X		X		X		
9	Corridor walls do not extend to the structure										X		X	X	
10	Hazardous areas not properly protected										X		X		
11	Blocking off an approved exit			X		X			X		X		X	X	
12	Rerouting of traffic to emergency room				X	X									
13	Major renovation of an occupied floor			X			X	X	X		X		X	X	
14	Replacing fire alarm system (out-of-service)					X	X		X	X	X	X	X		
15	Installing sprinkler system (out-of-service)					X	X		X		X	X	X		X
16	Significantly modifying smoke or fire barrier walls							X			X		X	X	
17	Adding an addition to an existing structure			X	X	X	X		X						X
18	Fire alarm system out-of-service over 4hrs					X	X		X	X					
19	Sprinkler system out-of-service over 4 hrs					X	X		X	X					
20	Disconnecting alarm devices					X				X					
21	ILSM required?														

Notes

Infection Control Risk Assessment Matrix

Please complete this form and attach the Scope of Work document with this form.
Infection Control contact is Russell Ryono (x64849).

Project #: 040-11-150M

Project Title: B360 ELECTRICAL UPGRADE

COTR (print): WILSON BUNOAN Ext: 22488

Part I (Engineering to complete):

Using the following table, identify the type of construction project activity (Types A-D):

Type A	Inspection and Non-invasive Activities Includes, but is not limited to: Removal of ceiling tiles for visual inspection limited to 1 tile per 50 square feet; Painting but not sanding; and Wall covering, electrical trim work, minor plumbing and other activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
Type <u>B</u>	Small scale, short duration activities which create minimal dust Includes, but is not limited to: Installation of telephone and computer cabling; Access to chase spaces; and Cutting of walls or ceiling where dust migration can be controlled.
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: Sanding of walls for painting or wall covering; Removal of floor coverings, ceiling tiles and casework; New wall construction; Minor duct work or electrical work above ceilings; Major cabling activities; and Any activity which cannot be completed within a single work shift.
Type D	Major demolition and construction projects Includes, but is not limited to: Activities which require consecutive work shifts; Requires heavy demolition or removal of a complete cabling system; and New construction.

Type (circle one):

A

B

C

D

Part II (Engineering to complete):

Please answer the following questions (circle yes or no):

1. Is disruption of essential services (e.g., ventilation, water) to patients/employees anticipated?
 Yes ☐ No ☒ Comments: _____

2. Is relocation of patients to alternate units required or being considered?
 Yes ☒ No ☐ Comments: pending another project

3. Will the removal of debris pass through patient care areas?
 Yes ☒ No ☐ Comments: covered when going through patient areas

Part III (Infection Control to complete):

Using the following table, identify the patient risk groups that will be affected:

Low Risk	Medium Risk	High Risk	Highest Risk
Office areas	<ul style="list-style-type: none"> - Cardiology - Echocardiography - Endoscopy - Nuclear medicine - Physical therapy - Radiology/MRI - Respiratory therapy 	<ul style="list-style-type: none"> - CCU - Emergency room - Labor and delivery - Laboratories - Newborn nursery - Outpatient surgery - Pediatrics - Pharmacy - Post anesthesia 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Any area caring for immunocompromised patients— - Burn unit - Cardiac cath lab - Central sterile supply - Intensive care units - Medical unit - Negative pressure isolation rooms - Oncology - ORs

Risk Level (circle one): Low Medium High Highest

Part IV (Infection Control to complete):

Using the following table, identify the **Precaution Class** (I, II, III, or IV) or level of infection control activities required for the planned construction project. Match the construction type (A,B,C,D) with the risk level (low, medium, high, highest).

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

Source: Virginia Kennedy, St. Luke's Episcopal Hospital, Houston/ icanPREVENT.com

Precaution Class (circle one): I II ☒ III IV

Precaution Classes (Levels of Required Infection Control Activities)

All precautions in the determined class must be followed:

Class	Precautions/procedures that are required for each class
I	<p><u>During work:</u></p> <ol style="list-style-type: none"> 1. Execute work using methods to minimize raising dust from construction operations. 2. Immediately replace a ceiling tile displaced for visual inspection. 3. Minimize traffic (decrease exposure of patients to construction). 4. If disruption of water supply is necessary, schedule interruptions during low activity. <p><u>After work:</u> General clean up as needed</p>
II	<p><u>During work:</u></p> <ol style="list-style-type: none"> 1. All Class I activities listed above 2. Provide active means to prevent airborne dust from dispersing into the atmosphere. 3. Water mist work surfaces to control dust while cutting. 4. Seal unused doors with duct tape. 5. Block off and seal air vents. 6. Provide and use walk-off mats at work areas. Replace used mats with new mats in accordance with manufacturer's recommendations and when dirty. 7. Contain construction waste before transport in tightly covered containers. For removal of construction waste, follow pre-determined route. 8. Seal off isolate heating, ventilation and air conditioning (HVAC) system in areas where work is being performed. <p><u>After work:</u></p> <ol style="list-style-type: none"> 1. Clean and wipe work surfaces with hospital-approved disinfectant. 2. Wet mop and/or vacuum with HEPA-filtered vacuum before leaving the work area. 3. Remove isolation of HVAC system from work area.
III	<p><u>During work:</u></p> <ol style="list-style-type: none"> 1. All Class I and II activities listed above 2. Complete all critical barriers (i.e., sheetrock, plywood, plastic, or implement the control cube method [cart with plastic covering and sealed connection to work site with HEPA vacuum for cleaning prior to exit]) to seal the area before construction begins. 3. Maintain negative air pressure within the work site utilizing HEPA-equipped air filtration units. 4. Cover transport receptacles or carts. Tape covering unless the cart has a solid lid. <p><u>After work:</u></p> <ol style="list-style-type: none"> 1. Do NOT remove barriers from work area until completed project is inspected by the Safety Office and Infection Control and the area has been thoroughly cleaned by Environmental Management. 2. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA-filtered vacuums. 4. Wet mop area with hospital-approved disinfectant. 5. Remove isolation of HVAC system in area where work is being performed.

Class	Activity
IV	<p><u>During work:</u></p> <ol style="list-style-type: none"> 1. All Class I, II, and III activities listed above 2. Relocate patients away from construction areas. 3. Isolate HVAC system in area where work is being done to prevent contamination of the duct system. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. Construct anteroom and require all construction personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving the work site or they can wear cloth or paper coveralls that are removed each time they leave the work site. 6. All personnel entering work site are required to wear shoe covers, which must be changed each time the worker exits the work area. 7. Provide and use adhesive walk-off mats within the anteroom. Replace used mats with new mats in accordance with manufacturer's recommendations and when dirty. 8. Contain construction waste before transport in tightly covered clean (wiped clean with wet cloth) containers. For removal of construction waste, follow pre-determined route. 9. Construction/work area should be periodically inspected by Safety Office and Infection Control as appropriate <p><u>After work:</u></p> <ol style="list-style-type: none"> 1. Do NOT remove barriers from work area until completed project is inspected by the Safety Office and Infection Control and the area has been thoroughly cleaned by Environmental Management. 2. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 3. Contain construction waste before transport in tightly covered containers. 4. Vacuum work area with HEPA-filtered vacuums. 5. Wet mop area with hospital-approved disinfectant. 6. Remove isolation of HVAC system in area where work was performed.

Additional Precautions/Comments:

no TB

Part V: Persons completing the Infection Control Risk Assessment:

WILSON BUNOAN
Print name (Engineering)

W. P. Bunuan
Signature

10/22/12
Date

LAURA MACKMAN
Print name (Infection Control)

Laura Mackman
Signature

10/22/12
Date

Reference: Construction Safety Guidebook, April 2005



FIRE STOPPING POLICY