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PAGE: 1 of 19

SECTION: CAMPUS OPERATIONS

AREA: GENERAL

**SUBJECT: INTERIM LIFE SAFETY MEASURES (ILSM) AND INFECTION
CONTROL RISK ASSESSMENT (ICRA)**

PURPOSE

The purpose of this policy is to provide guidance on compliance with The Joint Commission Interim Life Safety Measures (ILSM) and Infection Control Risk Assessment (ICRA) standards as outlined in the American Institute of Architects (AIA) Guidelines for Design and Construction of Hospital and Health Care Facilities (Chapter 5).

SCOPE

All UAMS Faculty, Staff and Contractors.

DEFINITIONS

ICRA Committee: A multi-disciplinary group of professionals who meet and agree on what procedures will be implemented to protect the patient population from air borne infection during renovation and construction.

Patient Care Representative: The person is most directly responsible for patient care aspects on location where renovation and construction will occur.

POLICY

This policy applies to buildings that support outpatient and in-patient Clinical Programs. When planning demolition, construction, renovation, cable installation or maintenance work, the responsible UAMS department will conduct a proactive risk assessment to identify hazards that could potentially compromise patient care or worker safety in occupied areas. The risk criteria will address the impact that demolition, renovation, maintenance or new construction activities have on fire safety, air quality, infection control, utility requirements, noise, vibration and emergency procedures. Ongoing renovation and construction projects shall be monitored to ensure compliance with the latest Joint Commission ILSM and ICRA standards. The departments of Construction Management (CM), Physical Plant (PP), and Occupational Health and Safety (OH&S) are responsible for enforcement where applicable. ILSM/ICRA issues will be addressed in the planning stage of all projects, and the checklists attached to this policy will be used to document compliance.

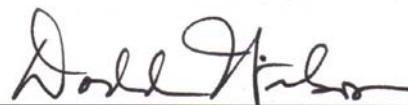
PROCEDURES

1. Early in the planning process, the responsible department (CM) will evaluate each project using the ILSM Risk Assessment (Attachment I) and the ICRA Permit/Matrix (Attachment II).
2. If any question on the ILSM Risk Assessment is **YES**, then ILSM may apply to the project. Contact Occupational Health and Safety (OH&S) for assistance before proceeding. If all answers are **No**, the signed negative assessment must be kept in the project file in the department for documentation.
3. If the ICRA Permit/Matrix indicates that Class I or II infection control procedures are required, the project must be signed off by the responsible departments and the signed permit matrix kept in the project file in the department for documentation.
EXCEPTION: All projects affecting patients in the **Highest Risk** group must be approved by an ICRA Committee (See number 4 below).
4. If it is determined that Class II in an area of Highest Risk patients, Class III or Class IV infection control procedures are required contact the CM Planner coordinator who will convene the appropriate ICRA committee members for a risk assessment meeting.
5. The ICRA committee must include at a minimum, Infection Control, OH&S, CM, PP and patient care representatives from the affected area/areas. Other involved departments or contractors may be included as necessary to fully understand the scope of the project.
6. An ICRA Permit/Matrix will be completed and signed by the committee members. Required Infection Control activities for each project will be determined based on the consensus of the committee.
7. The CM planner coordinator will document the ILSM and ICRA measures required based on the results of the risk assessments for the project using the Construction Management Project Planning Tool (Attachments I, II, III and IV).
8. A pre-bid conference will be scheduled by the project manager in which each applicable ILSM and or ICRA item will be reviewed for understanding & concurrence by contractors.
9. Upon plans completion a pre-construction conference will be scheduled by the project manager and each applicable ILSM and or ICRA item listed in project documentation will be briefed.
10. When a project requires Class III or Class IV Infection control precautions or ILSM applies, the Project Manager will do a daily sign-off to document that the applicable ILSM/ICRA measures are implemented using the ILSM/ICRA Daily Checklist.
11. Prior to project substantial completion the project manager will request that the Physical Plant foreman or designated representative conduct a fire/smoke wall inspection to verify that all specified fire/smoke separations are intact in accordance with Campus Policy 11.1.08, *Maintenance of Smoke/Fire Barriers*.
12. The ILSM and ICRA forms (Attachments I, II) and the CM project planning tool and daily checklist when applicable along with minutes of the ICRA Committee risk

assessment meeting, will be kept in the construction project folder and designated office files.

13. In addition to the ILSM and ICRA planning, all project planning will include consideration for all finishes to be used for renovation and new construction. Fire retardant or resistant materials will be selected to insure that all new product installations meet the latest NFPA Life Safety Code. Examples are products such as furnishings, draperies, interior decorations, waste containers and other materials, as indicated in Campus Operations Policy 11.4.17.
14. Free and unobstructed access for fire, police and other emergency services shall be maintained. The project manager shall brief all outside contractors on access to emergency services, and ensure escape routes for construction workers are maintained.
15. The project manager or shop foreman shall ensure that the fire alarm, detection, and suppression systems are not impaired unless absolutely necessary. A temporary but equivalent system, or compensatory ILSM/ICRA procedure, as agreed to jointly by OH&S and the project manager, must be available when the fire system is not working.
16. Temporary construction partitions in a required smoke or fire rated compartment shall be smoke-tight and built with noncombustible materials. Exception: Polyethylene (plastic sheeting) may be used as a temporary barrier provided the area is continuously staffed by the work crew. Polyethylene may be used as a means of dust control but is not intended to be a fire or smoke partition. Negative air shall be maintained in accordance with attachments I, II, III, and IV.
17. OH&S shall determine the need to provide additional fire-fighting equipment and user training for personnel. Work crews shall have at least one fire extinguisher available inside the construction area. OH&S shall train all UAMS supervisors in areas adjacent to construction to recognize when structural or compartmentation features of fire safety are compromised.
18. Smoking is prohibited in all construction and adjacent areas. The project manager or shop foreman shall enforce the no smoking policy. Refer to Campus Policy 3.1.01 , Smoking, for additional information and requirements.
19. OH&S the project manager, and the shop foreman shall provide hazard surveillance of buildings, grounds, and equipment with special attention to excavation areas, construction areas, storage areas, and field offices. Discrepancies shall be documented and tracked until corrected.

SIGNATURE:



Chancellor

DATE: September 18, 2008

Attachment I

Interim Life Safety Measures Risk Assessment

These criteria are used to evaluate areas in which construction renovation or repair activities are planned or in which a Life Safety Code deficiency has been identified. Consideration should be given to the scope of operations in the area, the level of staff activity, and the acuity of patient treatment in the area.

Area: _____ Project: _____ Project No.: _____

Date Assessed: _____ PFI Unique ID# _____ Healthcare Non-Healthcare

Criteria	NO	YES	Findings / Comments	ILSM
The issue alters or significantly compromises exit access, exiting, or exit discharge building elements	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Significant compromise of building compartmentation including fire or smoke walls, floor / ceiling assemblies, corridor walls, use area doors, or other defend in place elements	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
The issue impairs the building fire alarms or sprinkler systems for more than 4 hours in a 24-hour period.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
The activity includes significant ignition sources such as cutting, welding, or other operations using flame or producing sparks.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
The activity includes large quantities of combustible materials, flammable materials, or generation of large amounts of dust and debris.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Other Factors:	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Findings: ILSM are required ILSM are not necessary

Assessed by: _____ Signature: _____

Attachment II Pre-Assessment Final Healthcare Non-Healthcare

Infection Control Construction Permit

Project Number:

Permit Issued On:

Project Location:

Permit



Project Manager:

Number:

Permit Requested by:

Project Start

Date:

Contractor:

Date

Requested:

Contractor Supervisor:

Permit

Expiration:

Telephone:

Complete this section based on the results of the ICRA Matrix

CONSTRUCTION ACTIVITY

INFECTION CONTROL PATIENT RISK GROUP

TYPE A: Inspection and Non-Invasive Activities

GROUP I: Low Risk

TYPE B: Small scale, short duration activities which create minimal dust

GROUP II: Medium Risk

TYPE C: Activity generates moderate to high levels of dust, or requires demolition or removal of any fixed building components or assemblies.

GROUP III: Medium/High Risk

TYPE D: Major Demolition and construction activities.

GROUP IV: Highest Risk

CLASSIFICATION

CLASS I

Requires Planner, OHS, IC, CM Dir., PP Dir., Planning Supvr., Proj. Mgmt. Supvr: Approval and Signatures Below

CLASS II

Requires Planner, OHS, IC, CM Dir., PP Dir., Planning Supvr., Proj. Mgmt. Supvr: Approval and Signatures Below

CLASS III

Requires ICRA Committee Approval and Signatures Below

CLASS IV

Requires ICRA Committee Approval and Signatures Below

Additional Requirements

Signatures of Infection Control Risk Assessment Committee

Department Representative

Signature/Date

Department Representative

Signature/Date

User Contact:

Hosp. Admin.

Planner:

Proj. Manager:

Planning Supervisor: R. Perry

Project Management

Supervisor: R. West

Architect:

TeleCommunications:

CM Director: B. Cotten

Info. Technology:

PP Director: M. Ring

Engineer:

Infection Control: C. Cavanaugh

Contractor:

OH&S: L. Griffeth

Contr. Supvr:

Housekeeping:

Other:

UAMS Infection Control Risk Assessment (ICRA)

Matrix of Precautions for Construction & Renovation

Step 1:	Identify specific site of all activities, e.g. bldg, floor, patient rooms, medication room, etc.

Step 2:	Work hours: Can or will the work be done during non-patient care hours, or can patients be relocated for the duration of the project?

Step Three:

TYPE A	<p>Inspection and Non-Invasive Activities Includes but is not limited to:</p> <ul style="list-style-type: none"> • Removal of ceiling tiles for visual inspection or cable installation limited to 3 tiles at a time. • Painting (but not sanding) • Wall covering, electrical trim work, minor plumbing, installation of telephone and computer cabling and other activities which do not generate dust or require cutting of walls or access to ceilings other than as above.
TYPE B	<p>Small scale, short duration activities which create minimal dust Includes, but is not limited to:</p> <ul style="list-style-type: none"> • Access to chase spaces • Cutting of walls or ceiling where dust migration can be controlled. • Removal of sections of telephone or computer cabling. • NOTE: Any Type B activity in any location when patients will not be present, and for which the area can be isolated and vacated for the minimum time as per Appendix A and cleaned to required patient standards prior to resuming patient operations can be classified as Type A.
TYPE C	<p>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:</p> <ul style="list-style-type: none"> • Sanding of walls for painting or wall covering • Removal of floor coverings, exposure of large sections of ceiling spaces and casework • Demolition of walls or new wall construction • Minor duct work or electrical work above ceilings • Major cabling activities, or removal of a complete cabling system. • Working with sinks and plumbing that could result in aerosolization of water. • Demolition, repair or construction of elevator shafts. • Repairing water damage. • Any activity which cannot be completed within a single work shift.
TYPE D	<p>Major Demolition and construction projects Includes, but is not limited to:</p> <ul style="list-style-type: none"> • Activities which require consecutive work shifts • Requires heavy demolition • New construction

Step 3:	Considering the answers to Step 1 and 2 and using the table above <i>identify the Type of Construction Project Activity (Type A-D)</i>

Step Four:

Low Risk	Medium Risk	High Risk	Highest Risk
<ul style="list-style-type: none"> • Office Areas • Basement 	<ul style="list-style-type: none"> • Cardiology • Echo cardiology • Endoscopy • Nuclear Medicine • Physical Therapy • Radiology/MRI • Respiratory Therapy • General Clinics • General Patient Room Areas • Medical Unit • Negative pressure isolation rooms • TB Unit • Laboratories (specimen) 	<ul style="list-style-type: none"> • CCU • Emergency Room • Labor & Delivery • Newborn Nursery • Outpatient Surgery • Pharmacy • Post Anesthesia Care Unit • Surgical Units 	<ul style="list-style-type: none"> • Any unit or clinic caring for immunocompromised patients • Bone Marrow • Burn Unit • Cardiac Cath Lab • Central Sterile Supply • Intensive Care Units • NICU • Oncology • Operating Rooms including C-section rooms • Organ Transplant Unit

Step 4						
Using the table above, <i>identify the Patient Risk Groups</i> that will be affected for each area of concern. If more than one risk group will be affected, select the highest risk group that will be affected:						
Project Unit	Unit Below	Unit Above	Lateral	Lateral	Behind	Front
Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group	Risk Group

Step Five:

Match the highest 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 the level of infection control activities required.

IC Matrix-Class of Precautions: Construction Project by Patient Risk

Construction Project Type

PATIENT RISK GROUP	TYPE A	TYPE B	TYPE C	TYPE D
LOW Risk Group	I	I	II	III
MEDIUM Risk Group	I	II	III	III/IV
HIGH Risk Group	I	II	III/IV	III/IV
HIGHEST Risk Group	II	III	III/IV	IV

Step 5:	Match the Patient Risk Group and Construction Project Type, to <i>identify</i> the Class of infection control Precaution required.

Note: When the Construction Activity and Risk Level indicate that **Class III** or **Class IV** control procedures are necessary, an ILSM/ICRA Risk Assessment Committee must be convened for final approval.

Specific Class I-IV Color-Coded Precautions are delineated in the table on the following page.

Description of Required Infection Control Precautions by Class

	During Construction Project	Upon Completion of Project
Class I	<ol style="list-style-type: none"> 1. Execute work by methods to minimize raising dust from construction operations. 2. EPA disinfectant mist tiles and work surfaces to control dust before disturbing. 3. Immediately replace a ceiling tile displaced for visual inspection. HEPA-vac obvious dust collection. 	<ol style="list-style-type: none"> 1. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.
Class II	<ol style="list-style-type: none"> 1. Provide active means to prevent airborne dust from dispersing into atmosphere. 2. EPA disinfectant mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents. 5. Place dust mat at entrance and exit of work area. 6. Remove or isolate HVAC system in areas where work is being performed. 	<ol style="list-style-type: none"> 1. Wipe work surfaces with disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 4. Remove isolation of HVAC system in areas where work is being performed.
Class III	<ol style="list-style-type: none"> 1. Remove or isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers i.e. sheetrock, plywood, or plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Contain construction waste before transport in tightly covered containers. 5. Cover transport receptacles or carts. Tape covering unless solid lid. 	<ol style="list-style-type: none"> 1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department and thoroughly cleaned by the owner's Environmental Services Department. 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with disinfectant. 5. Remove isolation of HVAC system in areas where work is being performed.
Class IV	<ol style="list-style-type: none"> 1. Isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers i.e. sheetrock, plywood, or plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. 3. Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. 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. 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area. 7. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Control Department and thoroughly cleaned by the owner's Environmental Services Department. 	<ol style="list-style-type: none"> 1. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 2. Contain construction waste before transport in tightly covered containers 3. Cover transport receptacles or carts. Tape covering unless solid lid. 4. Vacuum work area with HEPA filtered vacuums. 5. Wet mop area with disinfectant. 6. Remove isolation of HVAC system in areas where work is being performed. 7. Clean or replace HVAC filters and verify appropriate ventilation parameters for the area have been re-established. 8. Flush the mains water system to clear dust contaminated lines if affected. 9. Commission the space as indicated.

Step 6: Identify issues related to: ventilation, plumbing, electrical in terms of the occurrence of probable outages.

IMPLEMENT ELEMENT	METHOD
<input type="checkbox"/> Water Isolation:	_____
<input type="checkbox"/> Noise Impact:	_____
<input type="checkbox"/> Vibration Impact:	_____
<input type="checkbox"/> Generator Failure:	_____
<input type="checkbox"/> Fuel Shortage/Restriction:	_____
<input type="checkbox"/> Transportation Failure:	_____
<input type="checkbox"/> Natural Gas Failure:	_____
<input type="checkbox"/> Water Failure:	_____
<input type="checkbox"/> Sewer Failure:	_____
<input type="checkbox"/> Steam Failure:	_____
<input type="checkbox"/> Nurse Call Failure:	_____
<input type="checkbox"/> Telephone Failure:	_____
<input type="checkbox"/> Telemetry Failure:	_____
<input type="checkbox"/> Public Address Failure:	_____
<input type="checkbox"/> O ₂ Failure:	_____
<input type="checkbox"/> Medical Air Failure:	_____
<input type="checkbox"/> Nitrogen Failure:	_____
<input type="checkbox"/> N ₂ O Failure:	_____
<input type="checkbox"/> CO ₂ Failure:	_____
<input type="checkbox"/> Medical Vacuum Failure:	_____
<input type="checkbox"/> HVAC Failure:	_____
<input type="checkbox"/> Control Air Failure:	_____
<input type="checkbox"/> Hazmat Exposure:	_____
<input type="checkbox"/> Asbestos Exposure:	_____
<input type="checkbox"/> Structural Damage:	_____
<input type="checkbox"/> Natural Gas Failure:	_____
Other: _____	

Step 7: Identify containment measures, using prior assessment. What type of barriers? (e.g. solid wall barriers); Will a HEPA filtration be required?

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(Note: Renovation/Construction Area shall be isolated from the occupied areas during construction and shall be negative with respect to surrounding areas)

Step 8:	Consider potential risk of water damage. Is there a risk due to compromising structural integrity? (e.g. wall, ceiling, roof)
Step 9:	Work hours: Can or will the work be done during non-patient care hours?
Step 10:	Do plans allow for adequate number of isolation/negative airflow rooms?
Step 11:	Do plans allow for the required number and type of hand washing sinks?
Step 12:	Does the infection control staff agree with the minimum number of sinks for this project? (Verify against AIA Guidelines for types and area)
Step 13:	Does the infection control staff agree with the plans relative to clean and soiled utility rooms?
Step 14:	Plan to discuss the following containment issues with the project team. (e.g., traffic flow, housekeeping, and debris removal (how and when)).

Appendix A – Required Time for Removal of Airborne Contaminants

Air Changes per Hour (ACH) and Time In Minutes Required for Removal Efficiencies of 90%, 99%, and 99.9% of Airborne Contaminants⁴

Air Changes/Hour (ACH)	Minutes Required for a Removal Efficiency Of:		
	90%	99%	99.90%
1	138	276	414
2	69	138	207
3	46	92	138
4	35	69	104
5	28	55	83
6	23	46	69
7	20	39	59
8	17	35	52
9	15	31	46
10	14	28	41
11	13	25	38
12	12	23	35
13	11	21	32
14	10	20	30
15	9	18	28
16	9	17	26
17	8	16	24
18	8	15	23
19	7	15	22
20	7	14	21
25	6	11	17
30	5	9	14
35	4	9	12
40	3	7	10
45	3	6	9
50	3	6	8

This table has been adapted from the formula for the rate of purging airborne contaminants.¹³¹²

Values have been derived from the formula $t_1 = [\ln (C_2 / C_1) / (Q / V)] \times 60$, with $T_1 = 0$ and C_2 / C_1 - (removal efficiency / 100), and where:

t_1 = initial time point

C_2 final concentration of contaminant

V room volume (cubic feet)

C_1 = initial concentration of contaminant

Q = air flow rate (cubic feet/hour CFH)

$Q/V=ACH$

The times given assume perfect mixing of the air within the space (i.e., mixing factor = 1). However, perfect mixing usually does not occur, and the mixing factor could be as high as 10 if air distribution is very poor.²⁰⁹ The required time is derived by multiplying the appropriate time from the table by the mixing factor that has been determined for the booth or room. The factor and required time should be included in the operating instruction is provided by the manufacturer of the booth or enclosure, and these instructions should be followed.

(PP-xxxx-x)

(xx)

ILSMs & ICRA's for JCAHO

Date: xx-xx-xx

To: xxxxxxxxxx, Project Manager

Construction & Contract Management - Slot 605

From: xxxxxxxxxx, Design Coordinator

Construction & Contract Management - Slot 605

The project manager shall initiate and monitor each of the eleven interim life safety measures (ILSM) and the four infection control risk assessments (ICRA) measures as listed below for the duration of the construction period. Following each ISLM and ICRA is a suggestion based on a written evaluation for this job from the design coordinator.

ILSMs

- 1. Ensure that exits provide free and unobstructed egress. All personnel should receive training if alternative or temporary exits are designated, especially during construction.

Evaluation for Number 1 - This project will require temporary exits to be designated for the construction crew. This project will require temporary exits to be designated for the public outside of the containment. This project will not effect the egress of the construction crew or the public.

Suggestion for Number 1 - Ensure that all temporary exits are created with no obstructions in the path of egress. Install battery powered exit lights with backup to clearly mark all temporary exits for the construction crew. Provide training for the paths of egress as necessary to the construction crew. Ensure that all temporary exits are created with no obstructions in the path of egress. Install battery powered exit lights with backup outside of the construction site as needed to clearly mark exit routes obstructed by containment walls for the public. Provide training for the paths of egress as necessary for the public. Does not apply (N/A).

- 2. Ensure free and unobstructed access to emergency departments or services and to allow emergency personnel access to the project site.

Evaluation for Number 2 - This project will create an emergency access obstruction due to the containments that will be erected in and around the construction site. This project will not create an emergency access obstruction as long as the main entrance is accessible. There will be no emergency access obstructions created by this project.

Suggestion for Number 2 - The project manager will ensure that each containment on the job site is fully accessible. Clearly mark the entrance of each containment. Install construction locks in the doors of each entrance of each containment that are compatible with the campus Best brand and allow access with a great grand master. Clearly mark the entrance of the job site. Install construction locks in the door of the job site entrance that are compatible with the campus best brand and allow access with a great grand master. Does not apply (N/A).

3. Ensure that fire alarm, detection, and suppression systems are not impaired. A temporary but equivalent system must be available when any fire system is not working. Temporary systems must be inspected and tested each month and be sure to document each inspection and test.

Evaluation for Number 3 - There is an existing fire alarm system in the area. There is not an existing fire alarm system at this job site. There is an existing fire suppression system. There is not an existing fire suppression system.

Suggestion for Number 3 - The project manager should ensure that there are provisions for protection of the existing system to be used throughout the duration of the project. Detection can be a problem during on-going construction activities, therefore the project manager should ensure that the smoke detectors are activated at night or at the end of each days work. Clean, protect and maintain the smoke detectors throughout the project period until final completion of the job is achieved. Prior to demolition, ensure that there are provisions for a temporary fire alarm system or alternative system to be in place before the project begins. Maintain throughout the project until the permanent system is in place and operational. Coordinate the temporary fire alarm system with the office of OH&S to determine if the system will be tied to central control or standalone with audible capability or other alternative type of system. Maintain the existing fire suppression systems, such as sprinklers, throughout the duration of the project. It will not be necessary for the suppression system to operate during work periods when personnel are present. Each day, the project manager will ensure that the fire suppression system will activate if required to suppress a fire, before and after normal work activities. Does not apply (N/A).

4. Make sure that temporary construction partitions are smoke-tight and are built with non-combustible materials.

Evaluation for Number 4 - This project will require temporary construction partitions. This project will not require temporary construction partitions.

Suggestion for Number 4 - It is imperative to evaluate the layout of the temporary containment walls before each set up to ensure integrity of the existing fire zones. Ensure that the temporary construction partitions to be used for a period of thirty days or longer are in a smoke-tight condition after the end of each day's work. If there are large openings that cannot be closed with wall construction until the end of the project, use a temporary seal to close such openings with the best possible type of material on a temporary basis. Does not apply (N/A).

5. Provide additional fire-fighting equipment and user training for personnel.

Evaluation for Number 5 - This project will require a temporary fire suppression system such as fire extinguishers to be present on the job site at all times.

Suggestion for Number 5 - Each worker should have access to and training for fire suppression equipment on the job site.

6. Develop and enforce smoking policies and procedures in excess of JACHO standards (N.A.1.3.15) Smoking must be prohibited in all construction and adjacent areas.

Evaluation for Number 6 - There is potential for members of the construction crew to use tobacco on this job site.

Suggestion for Number 6 - Ensure a schedule of smoking times and locations are established before the project begins.

7. Develop and enforce storage, housekeeping, and debris-removal policies and procedures that reduce flammable and combustible fire load to the lowest level necessary for daily operations.

Evaluation for Number 7 - This project has the potential to create debris and will require a cleanup each day. This project will require storage on the job site. This project will not generate any debris and will not require job site storage.

Suggestion for Number 7 - The project manager should use the specified policy or create a written policy for job site cleanup. Maintain a written daily record of the job site conditions by using a daily check off log. The project manager should use the specified policy or create a written policy for job site storage. Maintain a written daily record of the job site conditions by using a daily check off log. Also. provide and display MSDS (material safety data sheets) just inside the main entry to the job site. They should be placed in an envelope, labeled MSDS in

bold letters of a bright color, and hung approximately 4' to 6' above floor level and within (10') of the main entrance to the job site. Does not apply (N/A).

8. Conduct a minimum of two fire-drills per shift per quarter-unless state law says otherwise.

Evaluation for Number 8 - This project will require a fire drill for the construction crew. This project will require a fire drill for the public outside of the project containment. This project will not require fire drills to be conducted.

Suggestion for Number 8 - The project manager should conduct fire drills for the construction crew and produce a written record of the event. The project manager should enlist help from OH&S in conducting the fire drills. The project manager should conduct fire drills for the public outside of the project containment and produce a written record of the event. The project manager should enlist help from OH&S in conducting the fire drills. Does not apply (N/A).

9. Increase hazard surveillance of buildings, grounds, and equipment with special attention to excavation areas, construction areas, storage areas, and field offices.

Evaluation for Number 9 - This project has the potential to incur hazardous conditions during construction. This project is not likely to incur hazardous conditions during construction.

Suggestion for Number 9 - The project manager should use the specified policy or create a written policy for hazardous surveillance of the job site. Maintain a written daily record of job site conditions by using a daily check off log. Does not apply (N/A).

10. Train personnel to recognize when structural or compartmentation features of fire safety are compromised.

Evaluation for Number 10 - This project has the potential to compromise existing firewalls. This project has the potential to compromise existing fire zones or fire compartments. This project should not compromise any existing firewalls, zones or compartments.

Suggestion for Number 10 - The project manager should conduct a walk through on the job site with the construction crew and identify all of the firewalls. The project manager should conduct a walk through on the job site with construction crew and identify all of the fire zones and fire compartments for this job. Does not apply (N/A).

11. Conduct safety education programs to ensure awareness of any Life Safety Code deficiencies, construction hazards, and ILSM's mentioned above.

Evaluation for Number 11 - This project has the potential to create Life Safety Code deficiencies that will effect the occupants of the construction crew. This project has the potential to create Life Safety Code deficiencies that will effect the occupants of the surrounding areas of the job site.

Suggestion for Number 11 - Coordinate any needed safety training for the construction crew on this job with OH&S. Coordinate any needed safety training for the occupants of the surrounding areas of the job site with OH&S.

ICRAs

1. Ensure that the construction/renovation site is isolated from the surrounding areas with an appropriate containment in compliance with the classification assigned to this project on the infection control permit. Ensure that appropriate measures are in place to isolate noise, vibration and odors as required by the infection control risk assessment.

Evaluation for Number 1 - This project will require a containment as per classification on permit. This project is likely to create noise, vibrations and/or odors. This project is not likely to create noise, vibrations and/or odors. This project will not require a containment.

Suggestion for Number 1 - Ensure that containment the containment is in-place and in-tact each day. The project manger will take appropriate measures to reduce the effects of noise, vibrations and/or odors in compliance with the infection control risk assessment. The project manger will monitor the effects of noise, vibrations and/or odors during the course of the project. A containment does not apply (N/A).

2. Ensure that the air flow in the construction/renovation containment is negative to the surrounding area..

Evaluation for Number 2 - Ensure that the air flow in the containment is negative to the surrounding area. There will be no negative air requirements created by this project.

Suggestion for Number 2 - The project manager will ensure that the air flow is negative from the containment on the job site to the surrounding areas. There will be an air check conducted twice daily. Does not apply (N/A).

3. Ensure that there are temporary backup measures in place for utility failures and/or shutdowns in compliance with the infection control permit.

Evaluation for Number 3 - This project will require temporary utility measures for shutdowns. This project will require temporary utility measures for possible critical utility failures. This project will not need temporary utility measures.

Suggestion for Number 3 - The project manager should ensure that there are provisions for temporary utilities as needed due to planned shutdowns. The project manager should ensure that there are provisions for temporary utilities in the event of critical utility failure . Does not apply (N/A).

4. Ensure that the construction/renovation site is cleaned daily in compliance with the infection control permit..

Evaluation for Number 4 - This project will require daily cleanup for dust control outside of the project containment and/or the debris transport route. This project will not require daily cleanup for dust control outside of the project containment and/or the debris transport route. Upon project completion, the entire project job site will need to be wet mopped with disinfectant and vacuumed with HEPA filtered vacuum.

Suggestion for Number 4 - The area outside of the job site and/or the debris transport route will need to be vacuumed and cleaned each day. The area outside of the job site and/or the debris transport route will not need to be vacuumed and cleaned each day. Upon project completion, the entire project job site will be wet mopped with disinfectant and vacuumed with HEPA filtered vacuum.

Interim Life Safety Measures and Infection Control Risk Assessment

Project Number: _____ **Facility:** _____
Start Date: _____ **Location:** _____

Anticipated Completion Date: _____ **Patient Care:** Yes No

Month	Day	For the indicated ILSM, & ICRA, inspect Daily.									Fire drill will be conducted Quarterly						
		ILSM #1--Ensure egress for exits	ILSM #2--Ensure access for emergency service personnel	ILSM #3--To ensure that smoke alarm detector covers are removed after hours	ILSM #4 & 10--Ensure fire and smoke walls are properly sealed	ILSM #5--Additional firefighting equipment	ILSM #6--No smoking materials present on the job site	ILSM #7--Control combustible loading	ILSM #9--Increased Hazard surveillance	ILSM #11--Training of workers and public during each phase of project.	MSDS--(Material Safety Data Sheets)	ICRA #1--Isolation of the construction area	ICRA #2--Negative air in work area (2 signoffs in 24 hours)	ICRA #3--Temporary utility measures	ICRA #4--Daily cleaning of inside and outside of work area.	Comment Number (See Comment Number at Bottom of Page)	ILSM #8--Conduct fire drills regularly or for each new phase of work. (Minimum 2 per shift per quarter)
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F	2																
M	3																
A	4																
M	5																
J	6																
J	7																
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Comments:

