Pre-construction Risk Assessment PCRA
Greater Orlando/Brevard County

Project Title: Replace Lakemont Cooling Towers	Project Number: 675-16-605
VAMC Competent Person (CP):	Date: 12/30/2015
In-House or contracted Out: Contracted Out	

CP Qualifications: 30 Hr. OSHA

Scope of Project: This project will Design and construct all the elements to complete the installation of two new cooling towers at the Orlando Lakemont Campus along with the removal of the existing cooling towers. Additional work shall include the demolition of existing concrete slabs and the installation of new concrete slabs for the cooling towers. New LED lighting shall be installed for the cooling tower area, the adjacent chillers (2) will be re-insulated, and air conditioning will be supplied to the mechanical room.

RISK ASSESSMENT MATRIX: IC GUIDELINES FOR CONSTRUCTION

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) ▪ wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
TYPE B	**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 ▪ 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 ▪ any activity that 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 ▪ new construction.

Patient Risk Group			
Low Risk	**Medium Risk**	**High Risk**	**Highest Risk**
▪ Office areas	▪ Cardiology ▪ Echocardiography ▪ Endoscopy ▪ Nuclear Medicine ▪ Physical Therapy ▪ Radiology/MRI ▪ Respiratory Therapy ▪ DOM	▪ CCU ▪ Emergency Room ▪ Labor & Delivery ▪ Laboratories (specimen) ▪ Newborn Nursery ▪ Outpatient Surgery ▪ Pediatrics ▪ Pharmacy ▪ Post Anesthesia Care Unit ▪ Surgical Units ▪ CLC	▪ Any area caring for immunocompromised patients ▪ Burn Unit ▪ Cardiac Cath Lab ▪ Central Sterile Supply ▪ Intensive Care Units ▪ Medical Unit ▪ Negative pressure isolation rooms ▪ Oncology ▪ Operating rooms including C-section rooms

CONSTRUCTION RISK REDUCTION PLAN			
Location of Construction:		Project Start Date:	
Contractor Performing Work:		Estimated Duration:	
√	**CONSTRUCTION ACTIVITY**	√	**IC RISK GROUP**
√	Type A: Inspection, non-invasive, minor	√	Low Risk
	Type B: Small scale, short duration, moderate levels.		Medium Risk
	Type C: Moderate to high level of dust.		High Risk
	Type D: Major demolition and construction projects.		Highest Risk
	****NOTE: If mold is discovered, stop work and notify COTR immediately.**		**See Appendix A for additional requirements.**

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

Description of Required Infection Control Precautions by Class

	During Construction Project	Upon Completion of Project
CLASS I	1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace a ceiling tile displaced for visual inspection	
CLASS II	1. Provide active means to prevent airborne dust from dispersing into atmosphere. 2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents. 5. Place dust mat at entrance and exit of work area 6. Remove or isolate HVAC system in areas where work is being performed.	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	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, 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.	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	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, 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.	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.

INTERIM LIFE SAFETY MEASURES			
√	LEVEL	ACTIVITY	ILSM PRECAUTIONS
√	LEVEL I	Minor: No breech of fire detection, alarm or fighting systems. No egress or access blockage.	Minimum 4, 6, 7, 9
	LEVEL II	Moderate: Short-term breech of fire detection, alarm or fighting systems < a single work shift. Blockage of egress or access but second means available.	Minimum 1, 2, 4, 6, 7, 9, 11
	LEVEL III	Major: Multiple or continuous breech of fire detection, alarm or fighting systems. Blockage of egress or access. Work > a single shift.	Minimum 1-11
	LEVEL IV	Are fire detection systems out of service for more than 4 hours in a 24 hour period	Minimum 12

___1. Ensuring free and unobstructed exit access and exits. Staff receives additional training when alternative exits are designated. Buildings or areas under construction must maintain escape routes for construction workers at all times. Means of exiting construction are inspected daily.

___2. Ensuring free and unobstructed access to emergency services and for fire, police and other emergency forces.

___3. Ensuring fire alarm, detection, and suppression systems are in good working order. A temporary, but equivalent system shall be provided when any fire system is impaired. Temporary systems must be inspected and tested monthly.

_**X**__4. Ensuring temporary construction partitions are smoke tight and built of noncombustible or limited combustible materials that will not contribute to the development or spread of fire in accordance with VA Master Specification, General Requirements.

___5. Providing additional fire-fighting equipment and train personnel in its use.

_**X**__6. Prohibiting smoking in or adjacent to construction areas.

_**X**__7. Developing and enforcing storage, housekeeping, and debris removal practices that reduce the buildings flammable and combustible fire load to the lowest feasible level.

___8. Conducting a minimum of two fire drills per shift per quarter (> 90 days duration).

_**X**__9. Increasing hazard surveillance of buildings, grounds and equipment, with special attention to excavations, construction areas, construction storage, and field offices.

___10. Training personnel to compensate for impaired structural or compartmentation features of fire safety.

___11. Conducting organization wide safety education programs to promote awareness of any LSC deficiencies, construction hazards and these ILSM. Conduct familiarization tours and site visits for local Fire Department, when necessary.

___12. Provide fire watch or evacuate buildings in the event that the fire alarm, detection or suppression systems are taken out of service for more than four hours in a 24-hour period.

Additional Construction Safety Questions

Will project place contracted workers at risk for transmission of Mycobacterium tuberculosis? If yes, refer to MCP 00Q-09 for guidance. **NO**
Has the Job Site been evaluated for ACM or other environmental hazards? **YES** If yes provide comments. **Facility wide inspection and report has been completed in 2007.**
Will Project create potential air quality issues other than identified in ICRA? **NO** Is any work or equipment near air intakes? **NO** Are Volatile Organic Compounds VOC being used? **NO** If yes, please explain and note plans to minimize: **PCRA to be followed at all times.**
Will project create potential noise issues? **NO** If yes, please explain and note plans to minimize:
Will project create potential vibration issues? **NO** If yes, please explain and note plans to minimize:
Is contractor required to provide 14 days notice for utility shutdowns? **YES** Will contractor/COTR follow Utility Shutdown SOP when utilities are shut down? **YES** Will contractor be given emergency notification telephone numbers for unplanned utility failures? **YES**
Will project create a potential for leaks? **NO** If yes, please include in contract for contractor to dike any floor penetration in construction area.
Any additional potential issues that effect EOC. **NO**
Will contractors be instructed to wear badges at all times while on site? **YES** Will badges identify name, employer name, project name and location and expiration date? **YES** Will police be notified if project takes place on off-hours? **YES**
Will contract require general and sub-contractor's construction workers all complete the OSHA 10-hour construction worker course or the 30-hour construction course with OSHA certified training? **YES**
Has/will the construction safety committee reviewed drawings and specs and signed off on each design submission? **NO**
Will Contracting Officer be requested to evaluate and consider past safety records of prospective contractors in the awarding of contracts? **NO**
Will contractor submittals include the names, qualifications and training dates for contractor CP designated to administer the site specific safety program, as well as the CP for other activities as required by OSHA regulation (such as scaffolds, cranes, excavation, etc.) **YES** Will COR provide copy of the site specific safety program to the Construction Safety Committee? **YES**
Is any portion of the project related to a special field that the CP does not have the required background for (for example, scaffolding, cranes, or excavation)? **NO** Will another VA Employee be CP for those special fields? **NO**
CONTRACTOR WILL NEED TO ENSURE DEMOLTION DUST IS NOT BLOWN INTO BUILDINGS OR DUCT SYSTEMS.

SIGNATURES:	Date:		Date:
Project COTR		Union Safety Officer	
Infection Control		Safety Manager	
Chief of Police & Law Enforcement		Chair – Construction Safety Committee	
GEMS Coordinator		Other as Applicable	
Chief Engineer			

APPENDIX A
MOLD REMEDIATION

MOLD REMEDIATION	AMOUNT IDENTIFIED	REQUIREMENTS
Source Containment	Total area of mold less than 3 sq ft	1. Contact COTR 2. Apply self-adhering plastic to entire moldy surface or SECURELY tape 6-mil poly over the ENTIRE moldy surface 3. Remove material and wrap or bag and securely. Enclose ALL moldy contents or materials in 6 mil poly or comparable packaging, 4. Avoid crushing materials or other actions that would generate dust and disperse funagal spores and fragments into the air. 5. Identify and remove any source of water intrusion 6. Remediators must wear appropriate PPE
Local Containment	Area of mold greater than 3 sq ft but less than 100sq ft	1. Contact COTR immeidately 2. Treat as ICRA Type C (or type D if work meets criteria for Type D) work and follow requirements based Patient Risk Group. (Refer to ICRA Matrix at the bottom of page 2) 3. Construction should stop until barriers have been erected and **negative air established**. 4.Identify and remove any source of water intrusion 5. Remediators must wear appropriate PPE
Full Containment	Area of mold greater than 100sq feet	Contact COTR, Safety and Infection Control for guidance.