

# UNC New Haven

Abatement Industries Group

## Activity Hazard Analysis – 2.0

Activity/Work Task: Asbestos Abatement

Project Location: 71 Shelton Ave, New Haven CT 06511

Contract Number: 10-1007.00-AIG

Date Prepared: 10/4/2016

Prepared by (Name/Title): AIG (Ian Shea, Estimator)

Reviewed by: Sean Liddy, CSP

Competent Person (if applicable):

AIG Site Superintendent

Notes: (Field Notes, Review Comments, etc.)

The following outlines minimum requirements per accordance with the approved APP for the project site. Subcontractors are responsible for performing tasks in accordance with the minimum requirements established for the site and in accordance with their own HS&E policies and procedures. Subcontractors shall review and supplement the AHA with company specific HS&E guidance. Modifications or changes to the AHA should be forwarded to the PM/SSHO and reviewed by all project staff prior to performing the task.

Overall Risk Assessment Code (RAC) (Use highest code)

### Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	
Marginal	H	M	M		
Negligible	M				

Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

### RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk
L = Low Risk

### Personal Protective Equipment (PPE):

- |  |  |  |  |                                      |  |   |
|--|--|--|--|--------------------------------------|--|---|
| <input checked="" type="checkbox"/> Hard Hat | <input checked="" type="checkbox"/> Safety Glasses   | <input type="checkbox"/> Ear Muffs               | <input checked="" type="checkbox"/> Long Pants/Sleeves | <input type="checkbox"/> Inner Glove | <input type="checkbox"/> Fall Protection | <input type="checkbox"/> Wide Brim Hat                        |
| <input type="checkbox"/> Leather Glove       | <input type="checkbox"/> Safety Goggles              | <input checked="" type="checkbox"/> Ear Plugs    | <input type="checkbox"/> Coveralls (Tyvek)             | <input type="checkbox"/> Outer Glove | <input type="checkbox"/> Cooling Vest    | <input checked="" type="checkbox"/> Half/Full Face Respirator |
| <input type="checkbox"/> Kevlar Glove        | <input checked="" type="checkbox"/> Safety Toe Boots | <input checked="" type="checkbox"/> Traffic Vest | <input type="checkbox"/> Flame Resistant Clothing      | <input type="checkbox"/> Face Shield | <input type="checkbox"/> Welding PPE     | <input checked="" type="checkbox"/> Cartridge/Filter Type:    |
- Other PPE: Level C PPE, APR with P100 cartridges.

### Safety Equipment:

- |   |   |   |   |                                       |   |  |
|---|---|---|---|---------------------------------------|---|--|
| <input checked="" type="checkbox"/> First Aid Kit | <input checked="" type="checkbox"/> Eyewash Station | <input checked="" type="checkbox"/> Eyewash Bottles | <input checked="" type="checkbox"/> Fire Extinguisher (A-B-C) | <input type="checkbox"/> Pop-up Shade | <input type="checkbox"/> Sunscreen                  | <input checked="" type="checkbox"/> Drinking Water |
| <input type="checkbox"/> Air Horn                 | <input type="checkbox"/> Trekking Poles             | <input type="checkbox"/> Insect Repellent           | <input type="checkbox"/> Wheel Chocks                         | <input type="checkbox"/> Cargo Net    | <input type="checkbox"/> Stretch First Safety First |  |
- Other Safety Equipment:

### Monitoring Procedures and Action Levels (Refer to Section 7.0 of HASP):

- |                                       |                                       |   |  |   |   |   |
|---------------------------------------|---------------------------------------|---|--|---|---|---|
| <input type="checkbox"/> PPD (10.6eV) | <input type="checkbox"/> PID (11.7eV) | <input type="checkbox"/> Multi-Rae (PID+O2, H2S, CO, LEL) | <input type="checkbox"/> PDR (Respirable Dust) | <input type="checkbox"/> PDM (Total Dust) | <input type="checkbox"/> Radiological Meter | <input checked="" type="checkbox"/> Personal Air Pump |
|---------------------------------------|---------------------------------------|---|--|---|---|---|
- Chemicals of Concern (COC): Asbestos

### Job Steps

### Hazards

### Controls

### RAC

Identify and Secure Work Areas

-Slips, trips, and uneven surfaces

- Install work area boundaries, using caution tape.
- Inform other trades/workers in the area as to the conditions and hazards associated with the work to be performed.
- Identify possible slip, trip, and fall hazards such as holes, obstructions protruding from the ground, or debris that may be scattered on the ground. Contact site manager immediately and do not proceed if any conditions are observed that could make sampling location area unsafe.
- Watch where you step and do not back/step into any open holes. Ensure covers in place prior to starting work.

<b>Job Steps</b>	<b>Hazards</b>	<b>Controls</b>	<b>RAC</b>
Containment Setup	Potential for falls from ladders  Potential for cuts from hand tools Shock from electrical supply  Tripping hazards from power extension cords  Sprains/Strains from lifting	<ul style="list-style-type: none"> <li>-Prior to start of work, all ladders will be inspected and certified as safe for use.</li> <li>-Proper training for ladder and hand tools will be performed with all applicable employees.</li> <li>-Use leather gloves and avoid sharp metal and protruding objects.</li> <li>-Check integrity of all equipment power supply cords. Use GFCI on outlets.</li> <li>- Use proper tools and follow manufacturer's instructions.</li> <li>- Maintain housekeeping around work area.</li> <li>-Keep work area clear of surface encumbrances</li> <li>- Use proper ergonomic lifting technique. Get help in lifting heavy or awkward objects. Establish and maintain clear work area/path. Make sure equipment is in good condition.</li> </ul>	
Use of Portable Ladders and fixed ladders	Falls from ladders	<p>Ensure proper type of ladder selected for application. Before use, check the load rating of the ladder, to make sure the ladder can support the combined weight of the user, the weight of tools, and the weight of any material that will be placed on the ladder. This includes the weight of anything that may be supported by the user.</p> <p>Fully extend and lock spreaders on step ladders. Maintain 3 points of contact when ascending and descending. Keep hands free of additional material when climbing. Use a rope to lift material and tools. Do not overextend when working by reaching out to far on the side of a ladder. Keep your belt buckle between the two side rails.</p> <p>Avoid areas in which potential fall hazards (<math>\geq 6</math> ft to lower level) are present. Use fall protection if exposed to fall <math>\geq 6</math> ft to lower level.</p>	
Bagging up waste and loading out	Potential for exposure to asbestos fibers.  Potential for cuts from hand tools Shock from electrical supply  Tripping hazards from power extension cords  Sprains/Strains from lifting	<ul style="list-style-type: none"> <li>-Method of removal will be wet methods under full containment with negative pressure.</li> <li>-Personal performing abatement will be equipped with, protective suits, <math>\frac{1}{2}</math> face or PAPR respirators, hard hats, safety glasses and work boots.</li> <li>-Use leather gloves and avoid sharp metal and protruding objects.</li> <li>-Check integrity of all equipment power supply cords. Use GFCI on outlets.</li> <li>- Use proper tools and follow manufacturer's instructions.</li> <li>- Maintain housekeeping around work area.</li> <li>-Keep work area clear of surface encumbrances</li> <li>- Use proper ergonomic lifting technique. Get help in lifting heavy or awkward objects. Establish and maintain clear work area/path. Make sure equipment is in good condition.</li> </ul>	

Job Steps	Hazards	Controls	RAC
Asbestos Abatement & clearance sampling	<p>Potential for exposure to asbestos fibers.</p> <p>Potential for cuts from hand tools</p> <p>Shock from electrical supply</p> <p>Tripping hazards from power extension cords</p> <p>Sprains/Strains from lifting</p> <p>Chemical exposure from mastic remover</p>	<p>-Method of removal will be wet methods under full containment with negative pressure.</p> <p>-Personal performing abatement will be equipped with, protective suits, ½ face or PAPR respirators, hard hats, safety glasses and work boots.</p> <p>-Use leather gloves and avoid sharp metal and protruding objects.</p> <p>-Check integrity of all equipment power supply cords. Use GFCI on outlets.</p> <p>- Use proper tools and follow manufacturer's instructions.</p> <p>- Maintain housekeeping around work area.</p> <p>-Keep work area clear of surface encumbrances</p> <p>- Use proper ergonomic lifting technique. Get help in lifting heavy or awkward objects. Establish and maintain clear work area/path. Make sure equipment is in good condition.</p> <p>-Containment well ventilated to reduce exposure potential</p> <p>-Wear appropriate PPE and review Safety Data Sheet for product prior to use.</p> <p>-Prior to start of work, all ladders will be inspected and certified as safe for use.</p> <p>-Proper training for ladder and hand tools will be performed with all applicable employees.</p> <p>-Use leather gloves and avoid sharp metal and protruding objects.</p> <p>-Check integrity of all equipment power supply cords. Use GFCI on outlets.</p> <p>- Use proper tools and follow manufacturer's instructions.</p> <p>- Maintain housekeeping around work area.</p> <p>-Keep work area clear of surface encumbrances</p> <p>- Use proper ergonomic lifting technique. Get help in lifting heavy or awkward objects. Establish and maintain clear work area/path. Make sure equipment is in good condition.</p>	
Containment Breakdown	<p>Potential for falls from ladders</p> <p>Potential for cuts from hand tools</p> <p>Shock from electrical supply</p> <p>Tripping hazards from power extension cords</p> <p>Sprains/Strains from lifting</p>		

### Additional Safety Considerations

- All employees must receive site specific safety orientation prior to beginning work on the project site. Site specific orientation and review of client SSHP required prior to commencement of site work.
- Submit SDS to SSHO for all chemical brought on-site and review with work crew prior to use.
- Use caution around delivery trucks and stay clear if not involved in spotting operation. Use one person to communicate with driver via hand signals to avoid unnecessary confusion. Watch for overhead utilities. Wear high visibility vest or shirt at all times.
- Stow all materials in vehicle properly, use appropriate cases and bags. Secure equipment in bed of truck with netting or straps. Do not leave any equipment loose in the cab or bed or the truck. It can cause property damage or serious injuries to others or yourself by falling-off from vehicle.
- When securing equipment, watch for pinch points. Straps and netting can get caught on objects and snap back as well as trap a finger if hand placement is not correct. Use a buddy to help secure equipment when possible.
- Keep clear area around work area, maintain good housekeeping practices. When possible, use mechanical equipment to perform lifting of heavy objects. When lifting, follow safe lifting practices. Use the buddy system when lifting.
- Keep line of site with co-worker and ensure regular verbal contact. If out of the line of site, ensure radio or cell phone contact is established and maintained.

Contact Information			
Cabrera Contacts		AIG Project Contacts	
Contact Name	Title	Number	Contact Name
Greg Bright	Project Manager	C: 781-264-4445 O: 508-315-6246	Fran Mooney
Sean Liddy	OH&S Manager	C:443-553-1403 O:667-207-2942	Ian Shea
			Chris Powers
			Jayson Williston

Equipment to be Used	Inspection Requirements	Training Requirements
Utility Vehicles	Daily Preventative Maintenance Checks	Vehicle & Driver Safety Awareness Familiarity with the vehicle being operated.
Communications Equipment	Daily communications Checks	Familiarity with the equipment. Knowledge of Emergency Response Procedures.
Hand Tools, Sprayers, step ladders, utility knives scrapers	Inspect hand tools and ladders daily	Use hand tools for their intended purposes. Familiarity with the equipment.
Ladders	Daily inspection of ladders before use.	Use type of ladder (step/extension) for their intended purposes. Familiarity with the equipment.
		Other Training: -Evacuation, Emergency Response & Notification Procedures IAW APP. -Safe work practices and precautions IAW APP. -OSHA qualifications and training as required IAW APP.




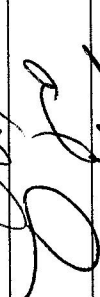

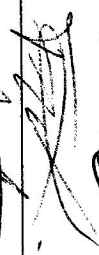

All employees, subcontractors, and visitors must sign the Acknowledgement form, in this section, before conducting field activities at this site.

By signing this form, AIG employees agree that:

- I have read this Activity Hazard Analysis and I understand the requirements of the AHA.
- I will conduct work at this site in accordance with the requirements of the AHA.

By signing this form, subcontractors and visitors agree that:

- I have read and understood the potential hazards associated with the site.
- I have read this Activity Hazard Analysis and I understand the requirements of the AHA.
- I will conduct work at this site in accordance with the requirements of the AHA.
- I will ensure compliance with my company's policies on health and safety.

Name (Print)	Date	Company	Signature
Ann Jacobs	2/21/17	Cabrera	
Tom Shea	2-21-17	AIG	
Chris Povers	2-21-17	AIG	
Rory Green	2-21-17	AIG	
Al Orang	2/21/17	Cabrera	
Nick Bertling	2/21/17	Cabrera	
Fred Jaisides	2/23/17	AIG	
Alexandro Colto	2/23/17	AIG	