




Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill

JOB SAFETY ANALYSIS TOPIC:


Drilling Concrete



| Title | Work Task | Hazards | Controls |
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| Preplan the work  | Gather proper tools (Silica dust collection vacuum, manufacturer matching dust collection kit, drill, concrete bits) Gather Proper PPE for the job and inspect it (safety glasses, gloves, safety shoes) | Improper tools Improper PPE inspection/selection | Only use EHS approved tools to ensure silica dust does not get airborne during work Proper inspection of all necessary PPE before starting the job |
| Before the job | Don necessary PPE Check vacuum to ensure bag is in place and filters are ready to be used | Improper Donning No filter/bag | Improperly donning or not donning PPE can lead to an unnecessary exposure. Ensure all PPE is on correctly and passed inspection Check the unit before work begins |

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| <p>Drilling Concrete</p> | <p>Mark area to keep pedestrians clear of potential hazards</p> <p>Locate where the drilling will take place</p> <p>Find a location to plug in the vacuum and ensure it runs</p> <p>Hook up the drilling dust extraction system and turn on the vacuum</p> <p>Place the drilling dust extraction system over the area to be drilled</p> <p>Drill the hole and allow the vacuum to remove dust</p> <p>Turn off vacuum after it is allowed to run and capture dust</p> | <p>Crystalline Silica Exposure Hazard</p> <p>Pedestrian Hazard</p> | <p>Ensure table 1 is being followed based on the location of the drilling (indoors/outdoors)</p> <p>Ensure area is marked and clear before work begins</p> <p>Always inspect vacuum before use to ensure it is proper working order with good filters and bags</p> <p>Keep vacuum running for a few seconds after work is complete to help make sure dust is collected</p> |
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| <p>Clean Up</p> | <p>Clean the site to ensure area stays clean (bring out PPE and tools)</p> <p>Clean and store PPE properly</p> <p>Keep tools stored in known and secure location</p> | <p>Improper PPE Storage</p> <p>Improper Tool Storage</p> | <p>Have a cool, dry, and known place to keep PPE and tools</p> |
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| <p>Training</p> | <p>Employees must have hands on training in the proper use of this piece of equipment.</p> | <p>Supervisor is to fill out the turn in the form to UNC-CH 'Supervisor Led Training Form' and Environment, Health and Safety for documentation of proper training</p> | |
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| Created By | Cory Kirkland, Facilities Safety Officer | |
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| Referenced Material | DeWalt Self Cleaning HEPA Dust Extractor Manual OSHA Table 1 (Silica Table in 1926) | |
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| Contact Info | <p>For more information about this JSA and other JSAs, contact: <i>UNC-CH Department of Environment, Health and Safety</i> 1120 Estes Drive Extension, Chapel Hill NC 27599 CB# 1650 (919) 962-5507 ☎ http://ehs.unc.edu</p> |  UNC ENVIRONMENT, HEALTH & SAFETY |