## Job Safety Analysis

### Portable Air Compressor

<table>
<thead>
<tr>
<th>Title</th>
<th>Work Task</th>
<th>Hazards</th>
<th>Controls</th>
</tr>
</thead>
</table>
| **Pre-Operation and Preparing for the Job** | 1. Pre-plan the work and assess the work area.  
2. Assess the equipment for damaged parts  
3. Select the appropriate PPE needed to perform the job task. | None                                  | • Administrative  
  o If equipment is damaged or broken, replace or have equipment repaired  
  • PPE  
  o Gloves  
  o Safety goggles |
| **Site Preparation**        | 4. Place tank in a well-ventilated area preferably 20 ft from work area  
5. Mark off area where work will be done  
6. If device uses multiple hoses use colored tags or multicolored hoses to keep hoses from tangling | • Chemical (toxic)  
• Slips, trips, falls | • Engineering  
  o Ensure area is well ventilated  
  • Administrative  
  o Keep alert of all hoses when walking throughout area |
| **Using the Compressor**    | 7. Turn the power switch to on  
8. Wait for compressor pump to fill air tank  
9. Connect any hoses or tools  
10. Prepare for tank to re-pressurize periodically throughout use | • Explosion (over pressurization)  
• Struck by  
• Noise | • Administrative  
  o If spraying compressed air, ensure regulator does not exceed 30 psi between uses  
  o If using for a pneumonic device only use recommend PSI for each device  
  o Do not touch moving parts  
  • PPE  
  o Same as above  
  o Hearing protection may be needed depending on devices used with compressor and proximity of compressor to work area |
| **Clean up**                | 11. Turn off power switch  
12. Disconnect any hoses or tools  
13. Bleed air tank  
14. Unscrew valve at bottom of tank and allow remaining pressure to force out | • Struck by  
• Noise | • Administrative  
  o Regularly have equipment serviced and hydrostatically tested  
  • PPE  
  o Same as above |
| **Training** | Employees must receive training on this JSA, Hand and Power tools, and PPE. Some trainings can be found on EHS website at [https://ehs.unc.edu/training/self-study/](https://ehs.unc.edu/training/self-study/). | Supervisor is responsible for ensuring the employee reviews the JSA and any EHS guidelines. |
| **Created** | Taylor Moore, Industrial Hygienist, February 21, 2020 |
| **Referenced Material** | EHS Website; UCLA job safety analysis - USING A PORTABLE AIR COMPRESSOR |
| **Contact Info** | For more information about this JSA and other JSAs, contact: Department of Environment, Health and Safety, UNC-CH, 1120 Estes Drive Extension, Chapel Hill NC 27599 CB# 1650 (919) 962-5507 [https://ehs.unc.edu/](https://ehs.unc.edu/) |