

**Work Health And Safety: Safe Work Practice: Garden & Maintenance**

**Angle Grinder**

|  <b>Risks</b>                                                                                     | <b>Risk Level</b>                                | <b>Risk Controls</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Damage to eyes and other parts of body from particles from or item being worked on                                                                                                 | Likelihood: B<br>Consequence: 3<br>Rating = HIGH | <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Ensure guard is fitted to angle grinder</li> <li><input checked="" type="checkbox"/> Wear eye and ear protection</li> <li><input checked="" type="checkbox"/> Ensure no flammable materials are nearby</li> <li><input checked="" type="checkbox"/> Ensure skin covered from hot sparks</li> <li><input checked="" type="checkbox"/> Use gloves before touching hot workpiece</li> <li><input checked="" type="checkbox"/> File off burrs/sharp edges on workpiece</li> <li><input checked="" type="checkbox"/> First aid kit available for prompt treatment of injuries.</li> </ul>                                                                                                                                                                                                                  |
| Damage to eyes and other parts of body from disc explosion or contact with moving parts of equipment (the very high speed of disc creates the possibility of grievous bodily harm) | Likelihood: B<br>Consequence: 3<br>Rating = HIGH | <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Do not use disc that is cracked or damaged</li> <li><input checked="" type="checkbox"/> Do not force disc or apply pressure during cutting</li> <li><input checked="" type="checkbox"/> Ensure correct disc for the task</li> <li><input checked="" type="checkbox"/> Stop grinder if there is unusual noise or vibration</li> <li><input checked="" type="checkbox"/> Disconnect power before changing disc</li> <li><input checked="" type="checkbox"/> Ensure guard is fitted to angle grinder</li> <li><input checked="" type="checkbox"/> Ensure grinder comes to a complete halt before putting down</li> <li><input checked="" type="checkbox"/> Wear eye and ear protection</li> <li><input checked="" type="checkbox"/> First aid kit available for prompt treatment of injuries.</li> </ul> |
| Damage to ears from noise of angle grinder                                                                                                                                         | Likelihood: E<br>Consequence: 2<br>Rating = HIGH | <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Ear protection to be worn by workers.</li> <li><input checked="" type="checkbox"/> Restrict clients, animals and public from work area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Damage to the equipment                                                                                                                                                            | Likelihood: E<br>Consequence: 4<br>Rating = LOW  | <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Take care when moving tools</li> <li><input checked="" type="checkbox"/> Ensure regular maintenance of equipment</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Equipment required:**

| <i>Mercy Services equipment</i>                                                                                                                                  | <i>Others equipment</i> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| First aid kit<br><br><b>Personal Protective Equipment required:</b><br>Ear protection, eye protection<br>If necessary - yard work gloves, respiratory protection |                         |

| <b>Activity</b> | <b>Worker behaviour</b>                                          | <b>Client/other's behaviour</b> |
|-----------------|------------------------------------------------------------------|---------------------------------|
| Preparation     | 1. Ensure you are familiar with the instructions for use of tool |                                 |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                   | <ol style="list-style-type: none"> <li>2. Make sure the equipment is the right tool and disc is suitable for task (disc size must be correct, only cutting disc for cutting task and only grinding disc for grinding task, different discs are required depending on material (e.g. masonry, aluminium, steel/iron, and stainless steel))</li> <li>3. Ensure speed rating for the disc is greater than the speed of the grinder</li> <li>4. Visually inspect tool and disc to ensure it is in excellent condition (discard disc if it is cracked or damaged)</li> <li>5. Check bore size (only use if bore size of disc is same as machine)</li> <li>6. Check threads for damage</li> <li>7. Check the mounting faces of the retaining nut to ensure they are correctly oriented and clean.</li> <li>8. Mount wheel and tighten retaining nut with the pin spanner supplied.</li> <li>9. Ensure guard is positioned to protect user at all times (if necessary loosen the clamp and rotate the guard until it is between the disc and the user then tighten clamp)</li> <li>10. Rotate the disc by hand before starting machine (do not use if there is insufficient clearance between disc and guard)</li> <li>11. Ensure workpiece is held securely in a vice or as part of a larger item</li> </ol> |                                                                                                     |
| <p>Operation</p>  | <ol style="list-style-type: none"> <li>1. Use two hands to operate (one gripping the handle and other supporting weight of tool)</li> <li>2. Let machine gain maximum speed before starting to cut/grind</li> <li>3. Hold machine firmly and straight</li> <li>4. Hold grinder against workpiece with minimal pressure (to prevent kickback and grab)</li> <li>5. Keep grinder at 15 to 30 degree angle to object (do not twist in cut)</li> <li>6. Try not to get wheel in too deep (cut around hollow objects)</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>There should be no unauthorised/other people are not in the way or likely to be distracting.</p> |
| <p>Completion</p> | <ol style="list-style-type: none"> <li>1. Wait until wheel has stopped before putting machine down</li> <li>2. Switch off and unplug machine when work completed</li> <li>3. Clean tools</li> <li>4. Store tools securely</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                     |

**As at 04/11/2015 this Safe Work Practice is authorised for use in:**

| <i>Service</i>   | <i>Position</i>       |
|------------------|-----------------------|
| Home Maintenance | Maintenance Assistant |

**Date for review of safe work practice:** November 2015 (or if injury or changes require)

## COMPETENCY ASSESSMENT

### Angle Grinder

Employee \_\_\_\_\_

Assessor \_\_\_\_\_

Date \_\_\_\_\_

**Desired Outcome:**

To use angle grinder without injury

**Knowledge required:**

| Performance Criteria                                                                                                          | Competence demonstrated | Comment |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|
| <b>Preparation</b>                                                                                                            |                         |         |
| 1. Ensures is familiar with the instructions for use of tool                                                                  |                         |         |
| 2. Makes sure the equipment is the right tool and disc is suitable for task                                                   |                         |         |
| 3. Ensures speed rating for the disc is greater than the speed of the grinder                                                 |                         |         |
| 4. Visually inspects tool and disc to ensure it is in excellent condition (discards disc if it is cracked or damaged)         |                         |         |
| 5. Checks bore size (only uses if bore size of disc is same as machine)                                                       |                         |         |
| 6. Checks threads for damage                                                                                                  |                         |         |
| 7. Checks the mounting faces of the retaining nut to ensure they are correctly oriented and clean.                            |                         |         |
| 8. Mounts wheel and tightens retaining nut with the pin spanner supplied.                                                     |                         |         |
| 9. Ensures guard is positioned to protect user at all times                                                                   |                         |         |
| 10. Rotates the disc by hand before starting machine (does not use if there is insufficient clearance between disc and guard) |                         |         |
| 11. Ensures workpiece is held securely in a vice or as part of a larger item                                                  |                         |         |
| <b>Operation</b>                                                                                                              |                         |         |
| 1. Uses two hands to operate (one gripping the handle and other supporting weight of tool)                                    |                         |         |
| 2. Lets machine gain maximum speed before starting to cut/grind                                                               |                         |         |
| 3. Holds machine firmly and straight                                                                                          |                         |         |
| 4. Holds grinder against workpiece with minimal pressure                                                                      |                         |         |
| 5. Keeps grinder at 15 to 30 degree angle to object                                                                           |                         |         |

| Performance Criteria                                               | Competence demonstrated | Comment |
|--------------------------------------------------------------------|-------------------------|---------|
| (does not twist in cut)                                            |                         |         |
| 6. Tries not to get wheel in too deep (cuts around hollow objects) |                         |         |
| <b>Completion</b>                                                  |                         |         |
| 1. Waits until wheel has stopped before putting machine down       |                         |         |
| 2. Switches off and unplugs machine when work completed            |                         |         |
| 3. Cleans tools                                                    |                         |         |
| 4. Stores tools securely                                           |                         |         |

Is the worker assessed as being competent?  YES  NO

Any required follow up action/training: \_\_\_\_\_

\_\_\_\_\_

Signature of employee..... Date.....

Signature of assessor ..... Date.....