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| **Task/Description:** Hot Works  |
| **Assessed By:**   | Alasdair Ewen | **Approved By:**  |
| **Assessment Date:**  | 11th April 2023 | **Review Date: 11th April 2026**(Review not to exceed 3 years from assessment date) |

For specific risks we MUST have specific assessments – such as COSHH, DSE, Fire, Manual Handling, the business has specific forms for such RA’s, which should be referenced in the ‘Additional Information’ column.

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| **Hazard Identification – Indicate which of the following hazards are considered in this assessment**  |
| Access or egress |  | Harmful/Toxic substances |  | Power operated tools or machinery | x |
| Asbestos |  | Hazard to other activities | x | Pressure (implosion/explosion/high pressure system) |  |
| Biological agent/hazard |  | Hazards from other activities |  | Radiation (Ionising/non-ionising) |  |
| Confined space |  | Hot works/radiant heat | x | Remotely operated machinery |  |
| Corrosive/Irritant/Sensitising Substance |  | Impact/Contact hazards |  | Rotating Parts (Entanglement) |  |
| Crush hazards |  | Lasers |  | Slip trips and falls |   |
| Dust/particles | x | Lead |  | Stored energy |  |
| Electrical | x | Lighting |  | Temperature (hot/cold environment/surfaces) |  |
| Ergonomic factors (repetitive/posture/stretching) |  | Lone working |  | Traps/nips |  |
| Excavations |  | Manual handling |   | Underground services |  |
| Falling or flying objects |  | Mobile plant |  | Vapours/Mists |  |
| Falls from height |  | Needle stick or Sharps  |  | Vehicle/Plant Movements |  |
| Fire or explosion | x | Noise |  | Ventilation | x |
| Flames, sparks radiant heat | x | Overhead services |  | Vibration (whole body/hand-arm) |  |
| Flammable Substances |  | Pace of Work |  | Violence/abuse/assault |  |
| Fumes | x | Pedestrian access and egress |  | Weather conditions |  |
| Hand operated tools or machinery | x | Pedestrian movement |  | Working near water |  |
| Harmful or explosive gases |  | Pneumatic tools/compressed air |  | Other (please state) – Source of blinding light (arc eye) | x |

| **Hazard No.** | **Record Significant Hazards** | **Person(s) at Risk** | **Existing Control Measures** | **Initial****Risk Rating** | **Additional Control Measures**  | **Residual****Risk Rating** | **Additional****Information** |
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| **S** | **L** | **R** | **S** | **L** | **R** |  |
| Provide specific details. E.g. ‘work at height” say how high. E.g. “Electricity” state voltage and type of hazard, Striking underground services | Who might be harmed and how E.g. “Contractor or Employee Fall from Height” | Detail existing control measures.These are the controls that are currently in place | S – SeverityL – LikelihoodR - Risk | Detail additional control measures needed to eliminate hazard completely or minimise risk to acceptable level.(Include in Action Plan) | S – SeverityL – LikelihoodR - Risk | Cross Reference & AdditionalInformation e.g. SSW,  |
| **H1** | **Fire or Explosion*** Welding sparks igniting flammable materials or gases/liquids
 | **PHS Engineer****Client** **Employees*** Burns
* Percussive injuries
 | * Engineers trained, experienced and signed off as competent to perform hot works.
* Area to be welded closely inspected for cleanliness, and free from oils and grease.
* All flammable materials, gas bottles, drums etc to be cleared a minimum of 3m away from work area
* Welding PPE as stated in MS to be worn.
 | 5 | 2 | 10 |  |  |  |  |  |
| **H2** | **Flames/Sparks/ Radiant heat*** Material ignited by welding sparks/heat
* Sparks flying out from welding area
* Radiant heat from welded area
 | **PHS Engineer****Client** **Employees*** burns
 | * Area to be welded closely inspected for cleanliness, and free from oils and grease.
* All flammable materials, gas bottles, drums etc to be cleared a minimum of 3m away from work area
* Welding screen to be used to shield other areas from sparks/welding arc.
* Welded area allowed time to cool before barriers/screens removed

. | 4 | 2 | 8 |  |  |  |  |  |
| **H3** | **Fumes*** Fumes generated by welding rod
* Fumes generated from area being welded (e.g., burning paint)
 | **PHS Engineer****Client** **Employees*** Inhalation of welding fumes can cause respiratory issues.
 | * Air-fed welding mask to EN175, EN 379, EN166 to be worn
* Adequate ventilation available at the worksite. Portable LEV may be used where appropriate, or equipment must be moved to a suitable area.
* Paint, oils and grease to be removed from area to be welded before work carried out.
 | 3 | 2 | 6 |  |  |  |  |  |
| **H4** | **Hot works/ Radiant Heat*** Fumes from welding process
* Radiant heat from welded parts
* Eye injury from welding arc
 | **PHS Engineer****Client** **Employees** | * Covered in separate entries on this RA
* H3 Fumes, H6 Ventilation
* H2 Flames/Sparks/Radiant Heat
* H7 Injury from welding arc
 | 3 | 2 | 6 |  |  |  |  |  |
| **H5** | **Power operated tools*** Welding arc uses high voltages/current
 | **PHS Engineer****Client** **Employees*** Risk of electrocution or burns from equipment
 | * All equipment to be thoroughly inspected for damage before and after each use
* Damaged equipment must not be used under any circumstances.
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| **H6** | **Other: Lack of Ventilation*** Any fumes that would reduce oxygen in area
 | **PHS Engineer****Client** **Employees*** Respiratory issues
* Environmental
 | * Adequate ventilation should be available at the worksite. Portable LEV may be used where appropriate, or equipment must be moved to a suitable area.
* Open external doors/windows to disperse fumes
 | 4 | 2 | 8 |  |  |  |  |  |
| **H7** | **Other – Source of blinding light*** Risk of “arc-eye” from welding arc
 | **PHS Engineer****Client** **Employees*** All persons in vicinity not wearing EN379 eye protection
 | * Work area to be cleared of all non-essential personnel.
* Welding screen(s) to be erected around work area
 | 4 | 2 | 8 |  |  |  |  |  |
| **H8**  | **Emergency Procedures** | **PHS Engineer****Clients Employees** | * Please refer to RA for Emergency Procedures
 | 5 | 2 | 10 |  |  |  |  | * RA0024 Emergency Procedures
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**ACTION PLAN**

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| **Task** | **Risk** | **What further action do you need to take to control the risk?** | **By whom** | **Due Date** | **Date Complete** |
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Risk Assessment Sign Off Sheet

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| Site Name |  | Site Manager |  |
| RA Title / Reference No.  | RA0011 Hot works | RA Version Number | 1 |
| I have received training as to the hazards relating to the process/area, as outlined in the Risk Assessment and the control measures I should use to work safely. In the event of any queries I am aware I should stop work and speak to my supervisor or line manager.  |

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| Name | Signature | Date |
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