

<b>SKILL NAME:</b>	<b>RTAY Welding Pressure CTO</b>										
<b>Course ID:</b>	31260558										
Welding Pressure MMAW 31108226	<input type="checkbox"/>	<b>Imparts:</b> MMAW Q31108073 & MMAW Q31108075									
Welding Pressure GMAW 31260275	<input type="checkbox"/>	<b>Imparts:</b> GMAW Q31260552 & GMAW Q31260273									
Welding Pressure FCAW 31260276	<input type="checkbox"/>	<b>Imparts:</b> FCAW 31260553									
Welding Pressure GTAW 31279701	<input type="checkbox"/>	<b>Imparts:</b> GTAW 31409180 & GTAW 31260274									
<b>EMPLOYEE TO COMPLETE</b>											
<b>Name:</b>											
<b>SAP/Avetta ID:</b>											
<b>Department:</b>											
<b>Contractor:</b>	Yes	No	Company:								
<b>I have read and understood the current site standard Section 1.0</b>										<input type="checkbox"/> Yes	<input type="checkbox"/> No

**Employee Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

*\*Assessor must select either RCC or Full assessment*

<input type="checkbox"/> - <b>RCC Assessment</b>	
<b>Theory Questions Complete:</b> <i>(Section 2.0)</i>	<input type="checkbox"/> C <input type="checkbox"/> NYC
<b>Observation Checklist Critical Aspects Verified:</b> <i>(Observation Checklist, Section 3.0)</i>	<input type="checkbox"/> C <input type="checkbox"/> NYC
<b>Important:</b> <i>When RCC is completed the Assessor/Leader is required to complete the shaded critical aspects found in the Observation Checklist indicated by a *. Assessor to verify Candidates competency by signing on designated area.</i>	
<input type="checkbox"/> - <b>Full or First time CTO Assessment</b>	
<b>Theory Questions Complete:</b> <i>(Section 2.0)</i>	<input type="checkbox"/> C <input type="checkbox"/> NYC
<b>Observation Checklist Completed:</b> <i>(Observation Checklist, Section 3.0)</i>	<input type="checkbox"/> C <input type="checkbox"/> NYC
<b>What If Analysis Completed:</b> <i>(What If Analysis Questionnaire, Section 4.0)</i>	<input type="checkbox"/> C <input type="checkbox"/> NYC
<b>Important:</b> <i>For full assessment, all components in the relevant sections must be marked as either S or NYS and Assessor to sign in designated area to verify competency</i>	

<b>AUTHORISED ASSESSOR TO COMPLETE</b>			
<b>Assessor: (Holds TAE)</b>	Name:	Sign:	Date:
<b>Assessor Position:</b>	RTA Yarwun Employee: <input type="checkbox"/>	Contractor: <input type="checkbox"/>	
<b>Content Expert:</b>	Name:	Sign:	Date:
<b>Result:</b>	<input type="checkbox"/> Authorised to Operate	<input type="checkbox"/> Not Authorised to Operate	
<b>Assessment completed at:</b> <i>Specify RTO (if applicable):</i>	<input type="checkbox"/> Yarwun Refinery	<input type="checkbox"/> External RTO	

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	Printed Date:
Approved By:	Tracy Smith	Page:	Page 1 of 13

**RTAY Employees forward completed document to: [yarwuntrainingdataentry@riotinto.com](mailto:yarwuntrainingdataentry@riotinto.com)**  
**RTAY Contractors forward completed document to employer for entry into Avetta.**

LEARNING & DEVELOPMENT TO COMPLETE			
<b>Administrator Signature:</b>		<b>Date:</b>	

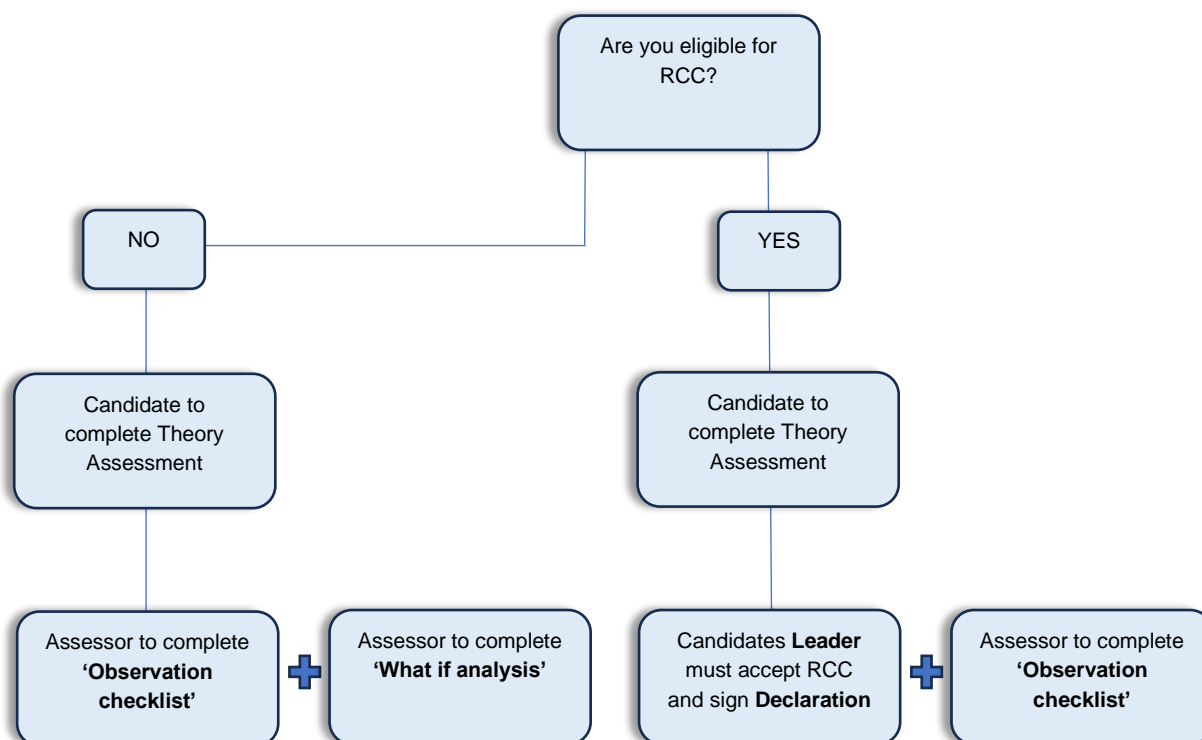
### Assessment Tool Overview:

This Assessment Tool is a collection of assessment instruments designed to help you demonstrate your competence against the Performance Standard (Located in the DMS)

### RTAY Welding Pressure CTO

This Assessment Tool provides the Authorised Assessor with a number of different instruments to assist in the evidence gathering process. Instruments used in this Assessment Tool include:

1. **Recognition of Current Competence (RCC) - applicable for recertification only**
2. **Observation Checklist**
3. **What If Analysis**



**Note: Authorised Welding Supervisor or Team Leader must complete Critical Aspects in the observation checklist for RCC**

### General Note:

1. This CTO does not replace the requirements for welder qualification under the applicable national and international welding or related standards.

### Assessment Appeal:

You may appeal against an unsatisfactory assessment result if you believe that reasonable grounds for reconsideration exist e.g.: inequitable assessment in comparison to other Learners, faulty administration, or Assessor misconduct. [HRT-GDL-0351.00-RT Yarwun TSOP 5.3.8 Assessment Appeal](#)

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation			Effective Date:	19/06/2024
Document Type:	Assessment			Printed Date:	
Status:	Approved	Version:		Page:	Page 2 of 13
Approved By:	Tracy Smith				

## Prerequisites:

Listed below are the minimum qualifications required prior to the assessment

Requirements	Description	Qual Code	Yes	No	N/A
RTY HSE Compliance	RTAY Respiratory Protection (WBT)	30656215	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RTAY C2 Electrical Hazard Awareness (WBT)	30679859	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RTAY Welding Operation and Safety	31415698	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RTY Site CTO	RTAY Compress Gas-Oxy cutting (CTO)	30413954	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RTAY Operate Angle grinder 5/7inch (CTO)	31129720	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation			Effective Date:	19/06/2024
Document Type:	Assessment		Version:	Printed Date:	
Status:	Approved			Page:	Page 3 of 13
Approved By:	Tracy Smith				

## Recognition of Current Competence (RCC)

### Definition of RCC:

RCC may apply if a Candidate has previously and successfully completed the requirements for this Site Authorisation and is now required to be reassessed to ensure that competence has been maintained.

### Steps required for RCC:

**Step 1:** Candidate to confirm their previous CTO is still currently valid. An RCC will **NOT** be accepted if their previous CTO has expired and will need to complete the full assessment process.

**Step 2:** Candidate completes questions based on relevant underpinning knowledge relevant to the Performance Standard to ensure you can recall essential information for safe and efficient performance.

**Step 3:** If RCC is accepted, the Assessor or Authorised Leader will sign the 'ASSESSMENT SUMMARY AND CERTIFICATION' record at the start of this document. If RCC is rejected, complete the full assessment process.

**Step 4: Candidate and Assessor must sign the RCC declaration.**

**Step 5: Assessor must sign to verify competency in the designated area in section 3.0 to confirm critical aspects \* as detailed within Observation Checklist (Practical demonstration)**

The Assessor is required to refer to the relevant Unit of Competency (located in the DMS) prior to conducting this CTO.

### Please Answer Prior to completing RCC.

Have you performed welding on the Rio Tinto Yarwun site within the last _____
<input type="checkbox"/> < 3 months <input type="checkbox"/> 3 - 6 months <input type="checkbox"/> 6 - 12+ months <input type="checkbox"/> No

Have you been involved in any incidents involving welding. If answered yes, please give more detail (May be referred to a supervisor for guidance)
<input type="checkbox"/> No <input type="checkbox"/> Yes

<b>RCC Declaration:</b>		
I confirm that as part of my role I am required to perform welding onsite.		
My leader has observed me performing this task in a competent and safe manner and confirm that I complete this task/s:		
<input type="checkbox"/>	Frequency of task _____	(Daily, Weekly, Monthly)
<input type="checkbox"/>	And have safely performed this task in the last <b>3 months</b>	
<b>Candidates Name:</b>	<b>Signature:</b>	<b>Date:</b>
<b>Leaders Name:</b>	<b>Signature:</b>	<b>Date:</b>

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:			
Approved By:	Tracy Smith	Page:	Page 4 of 13

## 1.0 SITE STANDARD REVIEW

The Assessor will provide the candidate with the relevant and current site standard and allow the candidate time to read and understand it. The Assessor will highlight relevant key information in the standard, and discuss any points raised by the candidate.

**Site Standard Review Declaration:**

I confirm that the Assessor has provided me with a copy of the current relevant Site Standard and acknowledge that I have read and understand the Site Standard received.

Yes

No

<b>Candidates Name:</b>	<b>Signature:</b>	<b>Date:</b>
<b>Assessor Name:</b>	<b>Signature:</b>	<b>Date:</b>

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:		Page:	Page 5 of 13
Approved By:	Tracy Smith		

**2.0 THEORY ASSESSMENT: Must be completed by ALL candidates.**

Please answer the questions below and provide comments where appropriate.

List 5 welding PPE that must be worn in order to protect yourself from getting burned from the radiated heat, sparks, slags and hot surfaces during welding.

When conducting weld repairs on a piece of equipment or structure that has coatings, list 4 controls that you may utilise to eliminate or reduce the risk of hazards from the fumes?

What are the 3 types of non-ionising radiation emitted by welding?

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:		Page:	Page 6 of 13
Approved By:	Tracy Smith		



### 3.0 Observation Checklist: RTAY Welding Pressure CTO

The Assessor/Leader will record their observations of your Practical Assessment in relation to the Performance Standard by marking (✓) either S or NYS. Assessor/Leader to verify competency by signing at the end of the observational checklist.

<b>1. Identify and prepare weld requirements:</b>		<b>S</b>	<b>NY S</b>
1.1.	Complete a Pre-Task Hazard Assessment and instigate all control measures.		
1.2.	*Identify, obtain and use appropriate welding PPE suitable for the task.		
1.3.	*Welding procedure and/or work instructions are used to determine job requirements including requirements for the test coupon		
1.4.	Read and interpret attached drawing and procedure / instructions ( <i>scope of work</i> )		
1.5.	Work health and safety (WHS), Site Safety Standards and environmental requirements associated welding and hot work are adhered to throughout the work.		
1.6.	Tasks are planned and sequenced in conjunction with others involved in or affected by the work.		
1.7.	*Tools and equipment, including personal protective equipment (PPE), are selected, and checked for serviceability.		
1.8.	*Perform inspection of all emergency equipment for serviceability.		
1.9.	Faults are identified and/or diagnosed and appropriate action is taken to remedy or report them as required by RTA Yarwun Site Standards.		

<b>2. Prepare materials for welding:</b>		<b>S</b>	<b>NY S</b>
2.1.	*Appropriate PPE worn and authorised for the welding task		
2.2.	*Materials, consumables and equipment are correctly selected in accordance with the procedure and/or instruction		
2.3.	Measure and mark the required dimensions of test coupon		
2.4.	Cut and prepare materials using grinder or oxy-acetylene cutting torch		
2.5.	Clean and prepare the weld faces using grinder		

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:			
Approved By:	Tracy Smith	Page:	Page 8 of 13



### 3. Prepare equipment for welding (MMAW or GRAW or GMAW):

		S	NY S
3.1.	*The equipment is assembled and set-up in accordance with the manufacturer and RTA Yarwun site standard guidelines		
3.2.	*Cables and connections are connected properly		
3.3.	For GTAW and GMAW processes the type of gas and gas flow rate are selected and set as per procedure and/or instruction		
3.4.	For GTAW and GMAW processes the type and size of wire are selected in accordance with the procedure and/or instruction		
3.5.	Leak testing checks are carried out on all hoses and equipment for security and leaks		
3.6.	Adjust and set welding parameters and variables to suit the application		
3.7.	Faults are identified and/or diagnosed and appropriate action is taken to remedy or report them as required by RTA Yarwun Site Standards		

### 4. Perform routine welding using; (MMAW or GTAW or GMAW):

		S	NY S
4.1.	*Wear all appropriate PPE for the welding task.		
4.2.	Tack the test coupon in place and re-check the final dimension as per drawing indicated in the procedure and/or instruction		
4.3.	*Welding is completed in accordance with the procedure and/or instruction.		
4.4.	Dress and clean finished welds in accordance with the procedure and/or instruction.		
4.5.	*Equipment is shutdown in accordance with manufacture recommendations		
4.6.	*Equipment is cleaned and inspected for serviceable conditions in accordance RTA Yarwun site standards		
4.7.	Unserviceable equipment is either repaired or tagged and faults identified in accordance with RTA Yarwun site standards		
4.8.	Material that can be re-used is collected and stored in accordance with RTA Yarwun site standards		
4.9.	Waste and scrap is removed in accordance with RTA Yarwun site standards		
4.10.	Work area is cleaned in accordance with RTA Yarwun site standards		

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:			
Approved By:	Tracy Smith	Page:	Page 9 of 13

I confirm that _____ is competent to perform all aspects (*Critical aspects for RCC) as outlined in the observational checklist.		
<b>Assessor/Leader:</b>	<b>Signature:</b>	<b>Date:</b>
I confirm that I am competent and confident to perform all aspects as outlined in the observational checklist.		
<b>Candidate:</b>	<b>Signature:</b>	<b>Date:</b>

**Feedback to Candidate:**

---



---



---



---



---



---



---



---



---



---

## Work Instruction for Practical Assessment:

### Materials and Consumables:

The following are required to complete this activity:

- 10mm grade 250 carbon steel plate
- DN 50 extra strong carbon steel pipe
- 3.2mm diameter general purpose welding electrodes (*e.g. ferrocraft 12XP E6013*)
- 5" Angle Grinder with Grinding disc (*use of cutting wheel requires permit*)
- Measuring tools (*e.g. tape measure, square and level*)
- Oxy-acetylene cutting set
- Welding PPE (*Welding / cutting helmet, welding gloves and grinding face shield*)

**Note: For welding process other than MMAW the assessor shall make reasonable adjustments and discuss with the candidate before any welding starts.**

### Welding Parameters:

Using a striking plate, adjust the welding variables and parameters in accordance with the consumable manufacturer's recommendations.

**Note: This information is typically indicated on the consumable packaging. If not available ask the assessor for assistance**

### Welding Requirements:

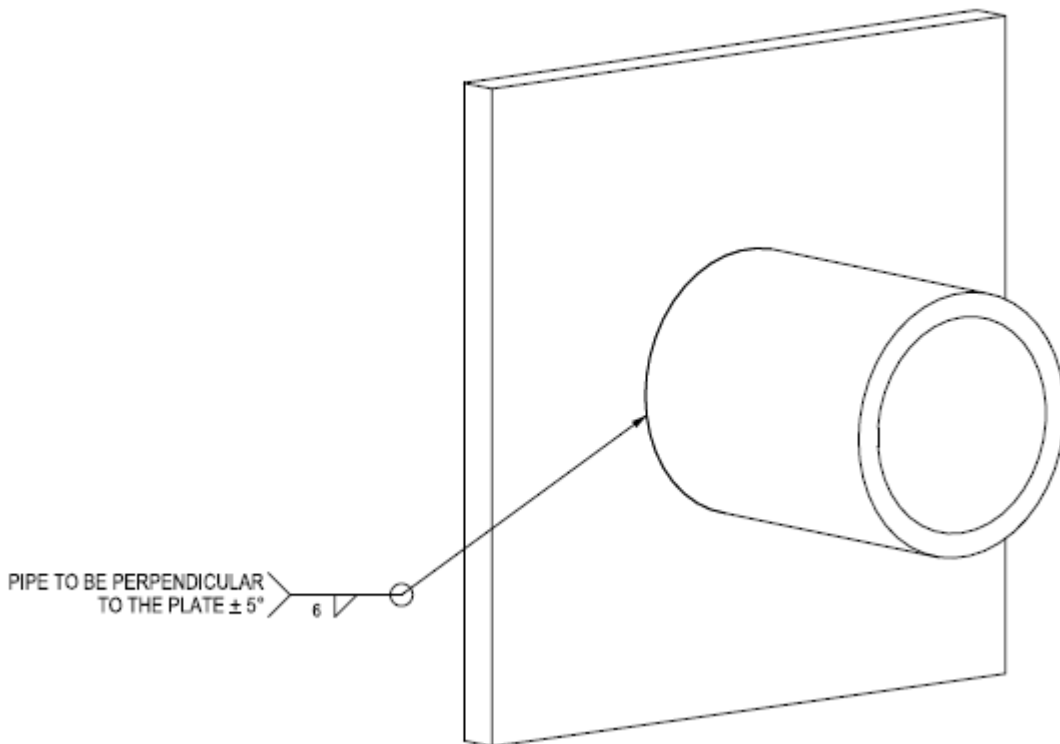
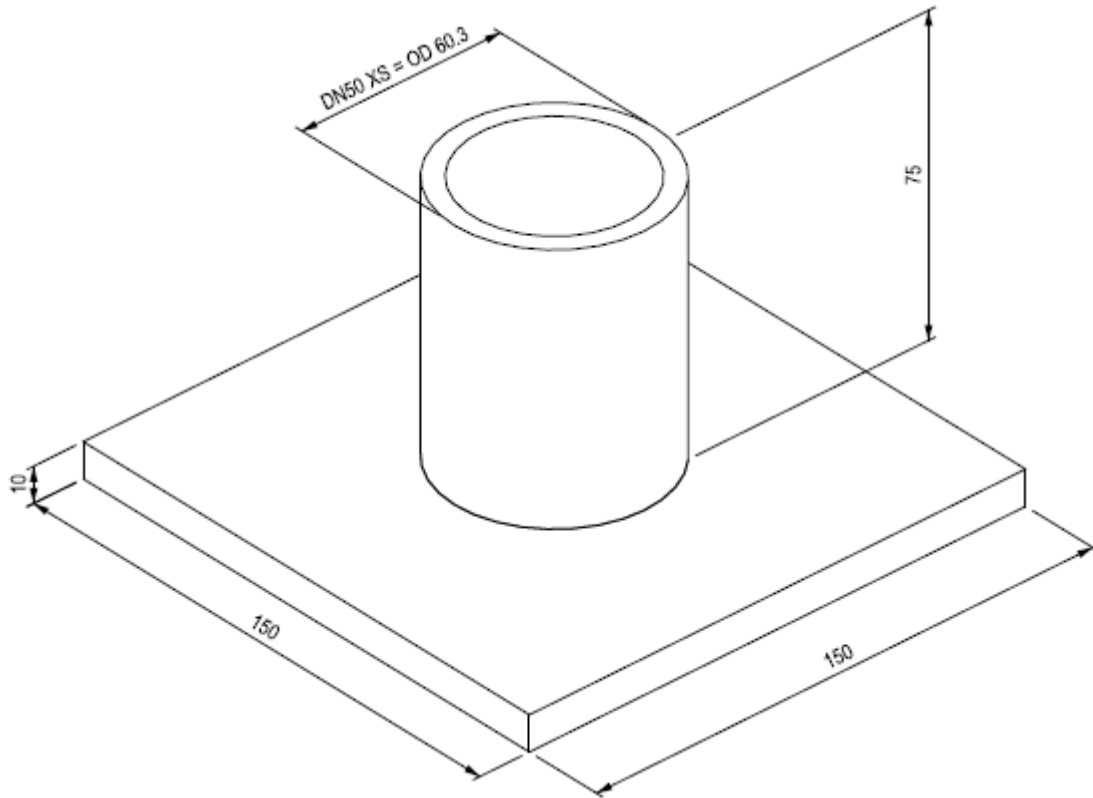
1. Safety; conduct risk assessment on the work area and pre-start on tools and equipment
2. Ensure materials and consumables are in good condition
3. Cut to the required dimension using oxy-acetylene cutting torch
4. Grind the cut edges back to sound material
5. Clean weld joints and surfaces to be welded
6. Assemble and tack the test piece (see attached sketch)
7. Check and measure test piece dimension before full welding (see attached sketch)
8. Complete welding in the 5F position with upward progression
9. Prepare and clean finished weld for inspection
10. Housekeeping; 5S after the activity

### Assessment Result:

Competent

Not Yet Competent

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Printed Date:			
Approved By:	Tracy Smith	Page:	Page 11 of 13



Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation			Effective Date:	19/06/2024
Document Type:	Assessment			Printed Date:	
Status:	Approved	Version:		Page:	Page 12 of 13
Approved By:	Tracy Smith				

## 4.0 WHAT IF ANALYSIS: GENERAL QUESTIONS

### Interview Guidelines:

Your Assessor will talk with you about your assessment. This is important to measure your:

1. task skills
2. task management skills
3. contingency management skills
4. job role/environment skills

The areas your Assessor will talk with you about include the discussion points listed below. The Assessor will also ask questions specifically related to the safety and risk management issues associated with each topic. Please feel free to add any discussion points that you would like to revisit in the available fields below.

### Issues for Discussion.

S NYS

<p>General safety considerations associated with in field operations</p> <ul style="list-style-type: none"> <li>• Take 5/JHA/ABP</li> <li>• Equipment leaks</li> <li>• Arch flash</li> <li>• Burns</li> <li>• Fumes</li> </ul>		
<p>Possible risks involved with welding operations:</p> <ul style="list-style-type: none"> <li>• Interaction with work groups or fixed plant</li> <li>• Environmental conditions</li> <li>• Night operations</li> <li>• Equipment damage</li> </ul>		
<p>The identification and management of risks</p> <ul style="list-style-type: none"> <li>• Hot works permit requirements</li> <li>• Fire watch requirements</li> <li>• Confined space restrictions</li> <li>• Hazardous area procedural knowledge</li> <li>• Electrocutation</li> <li>• Fire and explosion</li> </ul>		
<p>Site procedure for reporting safety incidents</p> <ul style="list-style-type: none"> <li>• Electrical shock procedure</li> </ul>		
<p>Alarms, emergency procedures, protocols and reporting</p>		
<p>Use of WPS (for coded welders only)</p>		
<p><i>Reserved – at Assessor discretion</i></p>		

**End of Assessment**

Document Name:	HRT-FRM-0472.00 – Welding- Pressure – Site Authorisation		
Document Type:	Assessment	Effective Date:	19/06/2024
Status:	Approved	Version:	
Approved By:	Tracy Smith	Page:	Page 13 of 13