

Client: AltaGas Midstream	Project: EEP/JEEP	JHA Assessment Date:	Feb 26, 2026	Task Commencement Date:	
Type of work performed:	Welding, Cutting, Grinding	Supervisor (s):		JHA Author (s)	Curtis Gowler, HSE Manager

MANDATORY PPE REQUIRED FOR WORK TASK:	Welding/Grinding/Buffering: CSA approved eye protection, Welder Helmet c/w shade, Full Face Shield (Grinding & Buffering), FR Coveralls with reflective striping, CSA "Green Triangle" Safety Footwear, Welding Gloves, approved hearing protection, Continuous gas monitor. Other Workers: 4 head gas monitors (bumped and calibrated) to be worn on the upper portion of the body at all times, gloves appropriate for task and conditions, approved hearing protection when required (over 85dBA), CSA "Green Triangle" Safety Footwear, FR Coveralls with reflective striping, CSA Approved Hard Hat, CSA approved eye protection appropriate for task and conditions.
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No one may perform any work on this site without first reviewing, understanding, and signing off on this JHA.

TASK	Pre Control	JOB HAZARDS	CONTROLS	Post Control
Pre-Job Planning & Communication of Hazards	M	- Job scope not understood by all personnel - New employees to site/young workers - Improper planning and communication - Emergency procedure not known - Improper PPE/ tools/equipment for job - Insufficient lighting	- All new personnel must attend Tri Energy/Alta Gas orientation. - All workers must attend a pre-job meeting/toolbox before starting work, review muster points. - Short-service workers must be assigned a mentor and complete required Tri Energy SSW docs. - Applicable JHAs must be reviewed and signed. - Supervisors working in the same area must meet before the daily tailgate to share work plans and hazards, then relay that information to their teams. - Complete the required permit for the work scope - Update or complete a new FLHA when scope or conditions change. - FLHAs must be completed at the work-face to confirm all hazards and controls are understood. - Supervisors/Leaders must review and sign all FLHAs.	L
Obtain Appropriate Safe Work Permit	M	- Miscommunication, misunderstanding or lack of information. - Incomplete documentation. - Incomplete scope of work/operations.	- No work to be performed without a valid, applicable SWP. - Inspect the permit by reviewing elements of the work scope and the written instructions. - Review the permit with workers prior to commencing work to establish that no conditions have changed or were missed – all workers involved in the task must sign on to the permit. - Verify that the worker understands the entire scope of work prior to signing the permit by actively reviewing it with them.	L
Welding Duties, Operating cutting Torch.	H	- Flammable materials, pressurized gases, fire, explosion, hot work surfaces and live electrical equipment. - Falling slag to below surfaces - Hot surfaces - Burn Injury - Accumulation of fumes/gases - Welding fumes, gases and inadequate ventilation. - Unprotected work area, UV radiation, sparks & slag. - UV reactivity with solvents	- Fire Extinguishers must be within easy arm's reach, in good working condition by performing a complete thorough inspection. - Sweep area with Gas monitor before lighting torch and continuous monitoring by Safety Watch for duration of hot work. - Fire blankets positioned at the work area to shield all combustible materials, including scaffold planks and any exposed plywood beneath the work zone. - Pre-use inspection of hoses and cables, tools, equipment and materials. defective tools must be tagged and taken out of service. - When cordless grinders used, disconnect the battery before changing disk. - Confirm adequate ventilation is at site of work task. - Fire watch to remain at work location to confirm that there are no fires for a minimum of 30 minutes. - Remove all solvents from the area, ensure full evaporation and ventilation, and prevent UV exposure to any remaining vapours before welding begins.	L

JHA - Job Hazard

			- Corroborate with all non-essential workers that they are outside the hazardous area. - Secure all equipment prior to moving welding truck. - Spotters used when backing in or in congested areas. - Check that the work area is clear & sufficient space is maintained.	
Grinding/Buffering	M	- Blade fragmenting, friction/abrasion, cuts, gouges and abrasions - Extreme Physical Injury from grinder blade - Flying debris- Line of Fire hazards - Excessive noise over 85dBA - Injury from line of fire hazards - Spark contact with unprotected work areas – fires, smoldering etc.	- Pre-use inspection of tools and materials. Use the correct attachment for the task and that the grinder disk is rated for RPM of the grinder. - Both hands must remain firmly on the grinder with the manufacturer-approved side handle installed and used at all times to maintain control and prevent serious injury - Grinder guard is to be in place with minimum 120-degree coverage. - Full Face Shield and Safety Glasses to be used at all times while performing the task. - Stay clear of line of fire hazards, identifying pinch points, falling objects, stored energy, and never place your body between a load and a fixed object. - Hearing protection and welders' gloves to be used at all times. - Operate tool within the tool's safe operating speed. - Wear snug fitting clothing and confine long hair. - Direct sparks away from other workers and self - Use fire blankets or equivalent protective measures that ensure complete containment of all sparks.	L
Housekeeping	L	- Trip and slip hazards from uneven ground or poor housekeeping ie - materials, tools, garbage, debris not put in their proper place. - Manual lifting/handling or heavy items causing back injury or musculoskeletal issues.	- Be aware of footing and loose materials that pose a tripping risk. Clean as you go and put any garbage in bins. - Workers will organize materials, tools and equipment and put them away at the end of shift. - Proper Lifting techniques used - lift with legs not back and utilize the buddy system. - Tag out defective tools remove for repair or replacement. - Power off when not in use.	L

Leadership Sign Off

Operations Manager	Name:	Signature:	Date:
Supervisor	Name:	Signature:	Date:
HSE Manager	Name: Curtis Gowler	Signature:	Date:



JHA - Job Hazard

Please sign your name below to acknowledge that you understand and will follow the requirements and conditions outlined in this JHA.

NAME	SIGNATURE	DATE

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Risk Assessment Matrix

Potential Consequences					Increasing Likelihood				
					1	2	3	4	5
	People	Property	Environment	Reputation	Never heard of in the industry	Heard of in the industry	Occurred at Tri Energy or under 1/yr in industry	Has happened Under 1/yr at Tri Energy	Happened Under 1/yr at similar location doing similar work
0	No injury or illness	No damage	No effect	No impact	L	L	L	L	L
1	First Aid	Damage <\$2,000	< TDG limit	Slight impact	L	L	L	L	L
2	Dr visit req.	Damage <\$10,000	< TDG limit	Concern stays at location	L	L	L	M	M
3	Modified work < 5 days	Damage <\$25,000	> TDG limit on ground	Affect ability to work at location, regulators	L	L	M	M	H
4	Missing work (LTA)	Damage <\$100,000	Any into standing water body	Public response required	L	M	M	H	H
5	Permanent disability or fatality	Damage >\$100,000	Any into flowing water system	On-going public response with lasting impacts	M	M	H	H	H