1. Purpose

This document specifies the hazards, risk, controls and residual risk associated with the Welder B Pressure role for the Alberta region. It is applicable to the Journeyman Welder, Welding Foreman, and Welding Apprentice positions.

**Table 1 – Hazard Assessment Dashboard**

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| **Scope** |
| It is applicable to the Journeyman Welder, Welding Foreman, and Welding Apprentice positions. |
| **Activities / Operations / Tasks** | **PPE (Field Site Visits)** |
| * Driving (Between Locations)  Overhead Doors  Iron Worker  Pipe Stands
* Working in Adverse Weather Conditions  General Electric Hazards  Ladder Use  Use of a Metal Sheer
* Natural Gas Leak (Exposure)  Use of the Band Saw  Material Storage  Tiger Torch
* Animal and Insect Encounters  Brake (Press)  Metal Scrap Bins  Trip Hazards
* Customer and Employee Contact (Field and Shop)  Compressed Air  Use of Overhead Cranes  Turn Tables (Positioners)
* Open Excavation  Compressed Gases (Exposure)  Oxy Acetylene Cutting Tools and Equipment  Welding Machines, Rods and Wires (When Welding)
* Working in Confined Spaces  Electrode Stabilization Oven  Grinders (Pedestal, Air, Electric) and Sanders (Air,  Hand Tools (Pipe Wrenches, Wrenches and Screwdrivers, etc.)
* Use of the Drill Press  Exposure to Engine Exhaust Electric)  General Material Handling
* Using Air Powered or Electrical Tools (Drills, Rivet, Guns,  Ergonomics  Pipe Threader  Other Tasks, as Required Grinders, Sanders)  Chemical and Flammable Products  Plasma Arc Cutter
	+ Use of a Hydraulic Press  Forklift and Telehandler Operations
 | * FR Coveralls
* Steel Toed Boots (6-8")
* Blackline Monitor
* Safety Glasses
* Respirators
* Gloves (various types)
* Leather Jacket/Sleeves
* Cotton Beanie
* Welding Helmet
* Hard Hat
* Hearing Protection
* Harness
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| **Major Equipment /Office Equipment** | **Highest Risk Task (Residual Risk)** |
| * Pneumatic Tools  Grinders  Trailers  Zoom Boom  Brake, Extractor
* Electrical Power Tools  Shoring  Sanders  Arc Cutter  Forklift
* Oxy Acetylene Cutters  Pipe Threader  Wrenches  Drill Press  Band Saw
* Ladder  Forklift  Plasma  Hydraulic Press  Ladders
* Cords
 | * Driving (Between Locations)
* Natural Gas Leak (Exposure)
* Working in Confined Spaces
 | **8 MEDIUM** |
| **Applicable Work Procedures and Documents** | **Hazard Impacts** |
| * GD 00152 Animal Encounters
* WP 00018 Forklift Operations
* WP 00107 Extreme Weather Conditions
* WP 00473 Vehicle and Equipment Operator Safety
* WP 00770 Barricading
 | * Personal Injury or Vehicle Damage  Electrical Contact  Tip Over, Driving too Fast
* MSD/RSI's  Equipment or Tool Damage  Falling Loads
* Objects Impacting Persons or Property  Hearing Impairment  Collisions and Pedestrians being Struck
* Driving Alone Inability to get Emergency  Sprains, Strains  Crush Hazards

Assistance  Hitting Head on Overhead Door  Improperly Parked Truck and being Struck* Loss of Production  Cage, Slips, Trips and Falls  Overturning Forklift, Falling Load
* Property Damage  Damaged Forklift
* Death
 |
| **Training Requirements** | **Critical Control** |
| * Working Alone  Equipment Training
* Ergonomics Training  Fit Testing
* Onboarding  SCBA/SABA
* WHMIS 2015  Proper Lifting Techniques
* In Seat Driver Evaluation, Resources, Exam  Forklift
* Confined and Restricted Space Entry  Rigging and Hoisting
* Bite Prevention Training  Welding Training
* Biohazard Training  Onboarding
* Violence and Harassment Training  Code of Conduct
* Inclusive and Respectful Workplace
 | * Vehicle Equipment, Seatbelts, Airbags, Horn, Back-  Bolt to Table  Fusible Discs, Safety Caps  Regulators, Flashback Arresters

Up Alarm, Vehicle Lights, Telematics, GPS,  Grounding Plug ESD  Insulation Thermostat  Fusible Rupture Discs, Plug Ruptures, Safety* Avoid Driving in Extreme Weather  Guards & Gauges  Shut off Engine when Possible Caps
* Clean Windows to Avoid Glare  Double Insulated Grounded Circuits  Anti-Fatigue Matting  Tool Resets and Face Plates
* Alternate Route Planning  Guards, Safety Switches  Proper Work Bench Height  Foot Pedal Clamp
* Use Rachet Straps with a Working Load Limit  Drive Chains, Electronic Sensor  Flammable Cabinets  Air Regulators
* Blackline Personal Monitor  Manual Opener  Proper Storage Bins  Concave Mirrors
* Postpone Work In Extreme Weather Conditions  Impact Sensor  Adequate Ventilation  Roll Overprotective Structure (ROPS)
* Trench Rescue Device (TDR)  Breakers  Scenes, Pressure, Relief Valves  Designed/Engineering Stands
* Customer and Cattle Gates  Emergency Stops  Guard for Pedal, limit Switches  Certified Tank and Valving
* Emergency Shut Off/ESD  Emergency UP Button Lockout  Use Racks and Shelves  Air Extractors
* Lockout/Tagout  Check Valve, Tie Hose to Regulator  Speed Controls  Safety Screen
* Securing Materials to Tabletop  Purge Petcock  Use of Forklift, Dolly, Cart, Pallet Jack
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**Table 2 – Formal Hazard Assessment**

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| **#** | **Activity/ Operation/ Task** | **Hazard Description** | **Hazard Category** | **Routine (normal)/ Non-Routine / Emergency** | **Hazard Impact** | **Initial Risk Probability** | **Initial Risk Severity** | **Risk Ranking** | **Risk Level** | **ACTION****Priority Level** | **Legal and Other Requirements** | **Controls****1-Elimination 2-Substitution 3-Engineering****4-Administrative 5- PPE** | **Residual Risk Probability** | **Residual Risk Severity** | **Residual Risk Ranking** | **Residual Risk Level** | **ACTION****Priority Level** | **Further Control Rec.** |
| 123456 |  | Distracted Driv | People | Routine | Personal Injury or Vehicle Damage | 4 | 4 | **16** | **HIGH** | **Requires Immediate Action** |  | 4 - Procedures on avoiding distracted driving, Pull off roadway to safe location to use electronic devices. | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |
|  | Static Position | Motion | Routine | MSD/RSI's | 3 | 2 | **6** | **MEDIUM** | **Acceptable with Current Controls** | 1. - Rest Breaks and Body Stretches, Seat Adjustments and Proper Driving Posture, Ergonomic Program.
2. - Portable Back Supports.
 | 3 | 1 | **3** | **LOW** | **Acceptable Risk** |  |
|  | Fatigue | Psychosocial | Routine | Personal Injury or Vehicle Damage | 4 | 4 | **16** | **HIGH** | **Requires Immediate Action** | 4 - Rest Breaks and Body Stretches, Carpooling, Journey Management (Preplan Trip). | 4 | 2 | **8** | **MEDIUM** | **Acceptable with Current Controls** |  |
|  | Weather | Temperature | Routine | Personal Injury or Vehicle Damage | 4 | 3 | **12** | **HIGH** | **Requires Immediate Action** | 1 - Avoid Driving in Extreme Weather.1. - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System.
2. - Driver's License (Class 5): Standard Vehicles, Driver Abstract Consent Form Release (every 3 years), Vehicle Familiarization (Review Vehicle Operator Manual), Driver Resources and Exam, In-Seat Driver Evaluation, Follow Rules of the Road, WP 00107 - Extreme

Weather Conditions. | 4 | 2 | **8** | **MEDIUM** | **Acceptable with Current Controls** |  |
|  | Other Drivers | Mechanical and Motion | Routine | Personal Injury or Vehicle Damage | 4 | 1 | **4** | **LOW** | **Acceptable Risk** | 1. - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System.
2. - Follow Rules of the Road, Avoid Driver Conflicts (Road Rage).
 | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |
|  | Vehicle Condition | Mechanical and Motion | Routine | Personal Injury or Vehicle Damage | 4 | 2 | **8** | **MEDIUM** | **Acceptable with Current Controls** | 4 - Fleet Shared Services Vehicle Preventative Maintenance (PM) Schedules, WP 00473- Vehicle and Equipment Operator Safety (Vehicle Inspections), VehicleOperator’s Manual. | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **#** | **Activity/ Operation/ Task** | **Hazard Description** | **Hazard Category** | **Routine (normal)/ Non-Routine / Emergency** | **Hazard Impact** | **Initial Risk Probability** | **Initial Risk Severity** | **Risk Ranking** | **Risk Level** | **ACTION****Priority Level** | **Legal and Other Requirements** | **Controls****1-Elimination 2-Substitution 3-Engineering****4-Administrative 5- PPE** | **Residual Risk Probability** | **Residual Risk Severity** | **Residual Risk Ranking** | **Residual Risk Level** | **ACTION****Priority Level** | **Further Control Rec.** |  |
| 78 |  | Road Conditions | Mechanical and Motion | Routine | Personal Injury or Vehicle Damage | 4 | 2 | **8** | **MEDIUM** | **Acceptable with Current Controls** |  | 1. - Alternate Route Planning.
2. - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System.
3. - Driver Resources and Exam, In-Seat Driver Evaluation.
 | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |
|  | Securing Vehicle Loads | Gravity and Motion | Routine | Objects Impacting Persons or Property | 4 | 4 | **16** | **HIGH** | **Requires Immediate Action** | 1. - Use Ratchet Straps with a Working Load Limit (WLL), Objects extending out of truck bed are flagged or to display red lights.
2. - Regular load inspections and criteria, Good Housekeeping inside

vehicle and secure contents. | 4 | 2 | **8** | **MEDIUM** | **Acceptable with Current Controls** |  |
| 9 |  | Driving Alone | Psychosocial | Routine | Driving Alone may lead to inability to get timely emergency assistance | 4 | 3 | **12** | **HIGH** | **Requires Immediate Action** | 1. - Telematics GPS Tracking, Blackline Loner Device.
2. - Working Alone Procedure, CMIS 1505500 Working Alone Safety, Cellphone, Control Centre and Dispatch Check-in Protocols, Emergency Response

Provisions. | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |
| 10 |  | Tip over | Motion and Gravity | Routine | Crushed or injury, forklift damage, load damage | 4 | 3 | **12** | **HIGH** | **Requires Immediate Action** | OHS Code: Powered Mobile Equipment | 3 - Roll-over Protective Structure (ROPS),4 - WP 00018 -Forklift Operations, Don't jump - stay in the forklift, hold tight to the steering wheel, brace feet, lean away from the impact, lean forward.5 - Steel Toed Boots(6-8"), Safety Glasses, Seat Belt. | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |