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 |
| **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.** |
| 1  2  3  4  5  6 |  | 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), Vehicle  Operator’s Manual. | 4 | 1 | **4** | **LOW** | **Acceptable Risk** |  |

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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.** |  |
| 7  8 |  | 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** |  |