

RISK ASSESSMENT TEAM		
NAME	COMPANY	ROLE
Andreu Dorca Duch	Celsa	Scrap purchasing Manager
Mike Kethro	Celsa	HSE Advisor
Ryan Connick	Celsa	Operations Manager

Area	Cardiff Circular Hub
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Risk Assessment Number:	CRUK-CCH-ARA-002-00
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Initial Assessor:	Mike Kethro	Signature:	
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Approved By:	Andreu Dorca Duch	Signature:	
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Initial Assessed / Signed Off Date:	29/03/2023	Current Revision No:	0
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						Unprotected Risk							Protected Risk				Additional Protection Risk		
SUB AREA	HAZARD	RISK	WHO MIGHT BE HARMED	No of fatalities	SAE	Severity	Likely-hood	Risk	Control Measures in place	Severity	Likely-hood	Risk	Additional Control Measures	Responsibility	Severity	Likely-hood	Risk		
	Burning Activities	Flammable and/or combustible materials nearby ignited by heat, sparks molten metal or direct contact with flame resulting in fire. Potential for: 1. Burns (1st, 2nd and 3rd degree) 2. Smoke exposure 3. Shock 4. Fatalities	Employees, Contractors, Visitors	1	SAE	5	D	Very High	1. Fire prevention plan in place 2. Fire risk assessments completed 3. Fire fighting equipment on all sites 4. Fire awareness training for all staff 5. Evacuation drills conducted annually 6. Emergency Plan in Place 7. Assembly points and escape routes Signage in place 8. Burning activities in segregated areas 9. All burning activities risk assessed and carried out under permit 10. 60 minutes FIRE WATCH to be in place for all hot work as a minimum. Higher risk tasks may require longer. 11. Trained and competent personnel 12. Good housekeeping to be maintained at all times	5	B	High							
	Fire and Explosion	Scrap metal or other combutable materials catching fire, Potential for: 1.Burns (1st, 2nd and 3rd degree) 2.Smoke exposure 3. Shock 4. Fatalities	Employees, Contractors, Visitors	1	SAE	5	D	Very High	1. Fire prevention plan in place 2. Fire risk assessments completed 3. Fire fighting equipment on all sites 4. Fire awareness training for all staff 5. Evacuation drills conducted annually 6. Emergency Plan in Place 7. Assembly points and escape routes Signage in place 10. 60 minutes FIRE WATCH to be in place for all hot work as a minimum. Higher risk tasks may require longer. 11. Trained and competent personnel 12. Good housekeeping to be maintained at all times 13. Fire breaks between scrap piles	5	B	High							
	Falls from Height	Potential for operators to lose footing and / or balance resulting in falls from height. Injuries could include: 1) Fractures 2) Concussion 3) Musculoskeletal Injury 4) Risk of being paralysed 5) Unconsciousness 6) Shock 7) Fatality	Employees, Contractors	1	S	5	D	Very High	1. All work at height tasks to be risk assessed and carried out under permit 2. Harness and double lanyard to be worn and attached to suitable anchor points where applicable (e.g. crane not at the stops) 3. Barriers to be in place to prevent falls from height 4. Good lighting conditions to be assured at all times 5. Trained, competent and authorised operators 6. Correct PPE to include non-slip footwear/ hard hat with chin strap, gloves and coveralls 7. Access platform/scaffolding to fall within a specified maintenance programme 8. Platforms to have fixed guard rails/railings attached 9. Three points of contact to be maintained at all times	5	B	High							
	Electricity - High Voltage	Direct contact with live high voltage equipment during maintenance activities, resulting in: 1) Serious burns 2) Electric shock 3) Unconsciousness 4) Cardiac arrest 5) Fatality	Employees, Contractor	1	S	5	D	Very High	1. Only HV trained, competent and authorised persons to undertake jobs on HV systems 2. Permit to work required 3. Adequate and thorough planning of the task to be undertaken. 4. All power in the HV system where work is to take place to be diverted. 5. System to be made dead. 6. All instruments being used to be tested prior to use. 7. System to be tested to ensure is dead. 8. Instruments to be re-tested after test. 9. Earthing to be put in place 10. Access restricted to authorised persons only. 11. Suitable space available for the worker. 12. Suitable PPE and clothing to be worn. 13. Suitable lighting and means of access. 14. Lone working prohibited. 15. Suitable qualified first aiders.	5	B	High							
	Electricity - Low Voltage	Direct contact with live equipment during maintenance activities, resulting in: 1) Serious burns 2) Electric shock 3) Unconsciousness 4) Cardiac arrest 5) Fatality	Employees, Contractor	1	S	5	D	Very High	1. Trained, competent and authorised personnel. 2. DECAP/, permit system applied (equipment isolated, lock off, proved to be dead and with warning notices posted). 3. Use of Electrical Safe Working Rules. 4. Live conductors protected in enclosures 5. Live conductors safe by distance 6. POWRA to be carried out before any job starts. 7. Defibrillators available. 8. Trained first aiders 9. PPE site minimum requirements to be worn 10. Warning signage on electrical cabinets	5	A	Medium							

Hazardous Materials in Scrap	Hazardous materials commonly found in Scrap include but not limited to Radioactive materials, hazardous liquids and gases, Lithium-ion Batteries, Medical waste, Asbestos, Sealed enclosed / pressurised containers – Gas bottles, oxygen tanks and fire extinguishers. Explosives, PCBs - transformers and capacitors, electrical equipment, fluorescent lights, thermal insulation, Lubricants & oil based paint etc, refrigerant liquids and gases. Leading to 1) Occupational Illness 2) Fires 3) Explosions 4) Injury (Minor to Major) 5) Fatality	Employees, Contractor	1	S	5	D	Very High	1. Trained and competent personnel. 2. All loads inspected prior to acceptance 3. All managers and operators empowered to reject loads, where hazardous materials are found 4. Radiation detectors at entry to weighbridge 5. Cylinders found stored in segregation cages according to status of cylinder 6. Hazardous items not actively purchased 7. Emergency plan in place 8. Quarantine areas for hazardous items or substances 9. Site minimum PPE requirements	5	A	Medium					
Gas Cylinders	Handling cylinders could lead to leaks or venting cylinders, rupture of cylinders under pressure, 1) Oxygen Enrichment of clothing - Clothing will burn if a source of ignition present or introduced - Burns 2) Hyperoxia (Oxygen Toxicity) 3) Oxygen reacts explosively with oil and grease. 4) Increased risk of fire/ or explosion resulting in burns, serious injury or fatality.	Employees, Contractors & Visitors	1 or more	SAE	5	C	Very High	1. Trained and competent personnel 2. Cylinder and Ancillary equipment changes to be carried out in well ventilated area 3. Cylinders to be shut and gear depressurised following use or changes of cylinders and ancillary equipment. 4. Cylinders in segregated storage areas (burning & quarantine cages) 6. Approved reputable supplier 7. Equipment only to be used for its intended use. E.g. never use oxygen to blow dust off clothing or to improve air quality in confined spaces. 8. Oil and grease to be kept away from contact with oxygen valves or cylinder fittings. 9. Leak check of all joints following change, with approved oxygen compatible leak check fluid.	5	A	Medium					
Mobile Plant - collision with personnel	Personnel struck by mobile plant such as FLT, MEWPs, etc resulting in: 1. Lacerations 2. Fractures 3. Concussion 4. Shock 5. Musculoskeletal injury 6. Bruising 7. Fatality	Operators, Other Employees, Contractors, visitors	1	SA	5	D	Very High	1. Designated walkways. 2. Site induction includes awareness of site vehicle movements. 3. All Mobile Plant drivers to be trained and competent for driving a Mobile Plant. 4. No unauthorised personnel in operational areas. 5. Operator always to stop before doorways, sound the horn and then proceed slowly if clear to do so. 6. Sound horn at blind corners or when entering buildings. 7. Banksman to be used where required. 8. Site speed limit 5MPH. 9. Speed restricters fitted to Mobile Plants 10. It is prohibited to be located within 5m of product and operating equipment. 11. Hi-Viz to be worn in the area	5	B	High					
Mobile Plant - collision other vehicles/buildings	Mobile plant crashing into other mobile plant and/or objects: 1. Lacerations 2. Fractures 3. Concussion 4. Shock 5. Musculoskeletal injury 6. Bruising	Operators, Other Employees, Contractors, visitors	0	SA	4	D	Very High	1. Site induction includes awareness of site vehicle movements. 2. All mobile plant operators are trained, competent and authorised. 3. No unauthorised vehicles in operational areas. 4. Sound horn at blind corners or when entering buildings. 5. Banksman to be used where required. 6. Site speed limit 5MPH. 7. Speed restricters fitted to FLTs 8. FLT's fitted with amber lights and LED running lights to be used at all times when equipment in use.	4	B	Medium					
HGVs - collision with vehicles	Potential for vehicles to collide due to road conditions - Risk of injury resulting in: 1. Lacerations 2. Bruising 3. Fractures 4. Concussion 5. Musculoskeletal injury 6. Shock	Operators, Other Employees, Contractors, visitors	0	S	3	D	High	1. Trained and competent staff (drivers license - certs) 2. Signage 3. Fixed mirrors 4. Site speed limit 5MPH. 5. Site induction includes awareness of site vehicle movements. 6. Seat belt enforcement 7. Use of mobile phone prohibited 9. Requirement to sound horns when entering/exiting buildings 10. Illumination of yards/buildings 11. Reversing kept to a minimum and banksman to be used	4	B	Medium					
HGVs - collision with Pedestrians	Potential for vehicles to come into contact with pedestrians resulting in serious injury to pedestrians: 1. Cuts and lacerations 2. Fractures 3. Concussion 4. Musculoskeletal injury 5. Internal injuries 6. Bruising 7. Shock 8. Fatality	Operators, Other Employees, Contractors, visitors	1	S	5	D	Very High	1. Trained and competent staff (drivers license - certs) 2. Pedestrian crossings 3. Signage 4. Static mirrors 5. Speed limit 5mph 6. Barriers along some access routes 8. PPE to include Hi-Viz clothing 9. Use of mobile phone prohibited 10. Site Safety induction/orientation 11. Requirement to sound horns when entering/exiting buildings 12. Illumination of streets/yards/buildings etc. 13. Pedestrian only access routes 14. Reversing kept to a minimum and use of banksman 15. Hi-Viz to be worn in the area	5	B	High					
Extreme Temperature (Cold)	Low seasonal ambient temperature resulting in: 1. Slippery conditions of the road resulting in loss of control over mobile plant, increased risk of collision with other vehicles/pedestrians/structures and overturning. Injury to personnel with potential for fatalities. 2. Hypothermia	Operators, contractors, other employees.	1	S	5	C	Very High	1. Gritting / salting of paths and operational areas 2. Trained and competent operators. 2. PPE (Waterproof equipment). 4. Manager authorisation to cease operations if conditions deteriorate to unsafe levels. 5. Hot water available in canteens. 6. Adequate rest periods for personnel exposed to inclement weather	5	A	Medium					

Circular Hubs	Loading / unloading operations	Potential for injury and loss of life due to personnel in vicinity of tipping operation being struck by falling scrap from trailer. 1. Crushing injury 2. Entrapment 3. Fatality	Operators / other employees / contractors	1	S	5	C	Very High	1. Trained, competent and authorised operators 2. Designated loading areas 3. Exclusion zones for all persons 4. Radio communications 5. Supervised area 6. Klaxons and warning lights 7. Safe distance to be maintained from tipping vehicles or other plant vehicles 8. PPE including proban coveralls, safety helmet, footwear, gloves and safety glasses 9. Safe distance to be maintained from rear doors of tipping trailers when opened, maintain position out of line of fire of falling scrap	5	B	High					
	Falling objects such as scrap from material handlers, scrap falling from open tipping trailers	Dropped loads during travelling / lowering / raising or static movements can cause serious injury or loss of life: 1. Lacerations 2. Entrapment 3. Crushing 4. Burns 5. Fatality	Operators / other employees / contractors / visitors	1	SE	5	D	Very High	1. Trained, competent and authorised operators 2. Correct PPE including hard hat and gloves 3. Exclusion zones / barriers 4. Banksman / signaler / communication 5. Maintenance and inspection of lifting equipment and lifting accessories 6. Drivers not to walk behind open trailer 8. Safety orientation and induction 9. Visitors escorted 10. Klaxons and warning lights 11. No work under suspended loads 12. Loads carried over safe areas 13. Safe distance defined as a control	5	B	High					
	Falling Objects - Incorrect storage of material	Stored scrap falling from piles leading to asset damage or injury to Personnel including, 1. Lacerations 2. Entrapment 3. Crushing 4. Burns from hot material 5. Amputation 6. Fatality	Operators, contractors, other employees, Visitors.	1	S	5	C	Very High	1. Trained and competent yard staff 2. Defined scrap pile heights max 4 metres 3. Car bales stacked in pyramid style 4. Tapered edges to scrap piles 5. Only authorised personnel to be present in the areas 6. Site minimum PPE requirements	5	A	Medium					
	Moving Machinery / Rotating Parts	There is a risk of the following due to drawing in/ entrapment/ crushing from moving parts (Shears) causing injury to personnel including: 1. Pinching to body part 2. Friction burns 3. Lacerations 4. Crushing 5. Fracture 6. Amputation	Operators, Other Employees, Contractors, visitors	1	S	5	D	Very High	1. Trained and competent operators. 2. Trained and competent maintenance personnel. 3. Maintenance process to be undertaken following manufacturer instructions. 4. Physical guards 5. 5m exclusion zone during operation 8. DECAP lock out tag out system in place for shears	5	B	High					
	Poor lighting	Too much or insufficient lighting causing vision impairment and disorientation to personnel, shadows cast by machinery leading to: 1. Impairment and disorientation 2. Misjudgment of movements 3. Slips, Trips and Falls all of which have the potential for serious injury including: 1. Crushing 2. Entrapment 3. Fractures	Employees, contractors	1	S	5	C	Very High	1. Regular maintenance and replacement of machinery lighting 2. Sufficient Lux rating type to be in place in all work areas 3. POWRA to be completed before commencement of task 4. Trained and experienced operators 5. Spot lights on machinery cages. 6. Hi-Viz to be worn 7. Mainly daylight hour working 8. Portable lighting towers in place for seasonal hours of darkness	5	A	Medium					
	Poor visibility	Poor visibility Blind spots/sunlight reflection. Reduced visibility leading to vehicle collision with personnel, assets and other vehicles. 1. Impairment and disorientation 2. Misjudgment of movements 3. Slips, Trips and Falls all of which have the potential for serious injury including: 1. Crushing 2. Entrapment 3. Fractures	Operators, contractors, other employees, Visitors.	1	SA	5	C	Very High	1. Hi-viz overalls required in the area. 2. Machinery equipped with reversing sirens. 3. It is prohibited to be located within 5m of live machinery. 4. Prior to approaching any vehicles the engines must be turned off. 5. Speed to be reduced and horns to be used when exiting and entering any door ways or blind corners. 6. Mirrors and windows to be kept clean. 7. Provision of tinted safety eyewear for sunny days. 8. 5m exclusion zone for all pedestrians 9. Banksman to be used where required	5	B	High					
	Uneven ground	Slips trips and falls. Potential for injury including: 1. lacerations, abrasions, bruising 2. fractures 3. other musculoskeletal injury	Operators, Other Employees, Contractors, visitors	0	S	3	D	High	1. Storage yard resurfaced at regular intervals 2. On going site environmental inspections includes ground conditions 3. Repairs carried out when required. 4. Use of STC boot with ankle support 5. Site minimum PPE requirements	3	C	Medium					
	Uneven ground	Excessive movement when using mobile plant. Musculoskeletal injury to personnel	Operator	0	S	3	C	Medium	1. Surface inspection and repair program ongoing. 2. Cushioned seats fitted to mobile plant. 3. Trained and Competent operators. 4. Seat belts to be worn at all times. 5. Speed limit 5MPH 6. On going site environmental inspections includes ground conditions 7. Routine maintenance, inspections and pre-user checks	3	B	Low					

Poor housekeeping	Scrap on floor and walkways, spillages other trip hazards resulting in Slips trips and falls, potential for injury including: 1. lacerations, abrasions, bruising 2. fractures 3. other musculoskeletal injury	Operators, Other Employees, Contractors, visitors	0	S	3	E	Very High	1. Access and egress points to be kept clear of obstacles. 2. Any obstacles that can not be removed to be adequately signalled to warn personnel of their presence 3. Materials arising from tasks to be removed from the area and located at a safe position to avoid slips, trips and falls. 4. All areas to be inspected and cleared after completion of work 5. Any spillages to be immediately clear. 6. Trained first aiders 7. PPE worn at all times 8. Regular sweeping of tipping points following delivery	3	D	High					
Noise	Excessive noise due to process/plant/machinery operations, leading to: 1. Long term health effects - noise induced hearing loss - tinnitus - other ear damage	Operators, Other Employees, Contractors, visitors	0	S	3	D	High	1. Trained, inducted and authorised personnel. 2. Noise survey carried out. Identify high noise areas 3. Noise conservation programme in force, requiring noise protection (ear defenders, disposable ear plugs, moulded ear plugs) to be worn at the required locations. 4. Regular health screening. 5. Included in the induction presentations. 6. signage	3	B	Low					
Extreme Temperature (Hot)	High seasonal ambient temperature, heat from product, leading to hyperthermia, sunburn, Injury to Personnel	Operators, contractors, other employees.	0	S	3	C	Medium	1. Air conditioning and fans in mobile plant 2. Rotation and regular breaks to be put in place. 3. Water coolers available in canteens 4. Provision to stock sun screen. 5. Salt replacement tablets available if required 6. Provision to stock sun screen	3	A	Low					
Flammable substances	Loss of containment of diesel/ Hydraulic oil from vehicles with the potential for ignition of vapours resulting in fire. 1. Burns 2. Environmental impact due to fire and spillages	Operators, contractors, other employees.	0	SAE	4	C	High	1. Trained and competent operators 2. Pre user checks 3. Maintenance and inspection regimes 4. Thorough examination 5. Any loss of containment to be reported immediately and machine to be quarantined until repairs are carried out. 6. Fire extinguishers available. 7. Spill kits available	4	B	Medium					
Dust	Repeat exposure to dust and/or hazardous substances due to disturbance of material through inhalation/ingestion/absorption leading to: 1. Chest infections 2. Lung disorders 3. Breathing difficulty 4. Eye infection 5. Complaints from neighbours 6. Eye injury 7. Environmental damage	Operators, contractors, other employees.	0	SAE	3	C	Medium	1. Dust suppression 2. Road sweeper operates on weekly basis. 3. Dust masks available if required. 4. Face fit testing. 5. Air sampling surveys for all sites. 6. Cab fitted with air conditioning for operators comfort, if operations are carried out with open windows safety glasses (clear/tinted) to be worn. 7. Cabs with positive pressure available when required	3	B	Low					
Hot metal	Hot metal can cause severe burns to anyone coming into contact resulting in: 1. Burns 2. Shock	Operators / contractors/ other employees/visitors	0	S	4	D	Very High	1. Trained, competent and authorised employees 2. PPE including coveralls and gloves 3. Visitors escorted 4. No-touch tools 5. Exclusion zones 6. Safe travelling routes 7. Signage	4	B	Medium					
Sharp edges	Injuries due to sharp edges of scrap resulting in 1. Lacerations.	Operators/ contractors	0	S	3	D	High	1. Trained, competent and authorised personnel 2. PPE including correct type of safety glove and coveralls 3. No-touch tools 4. Hand safety training and hand safety awareness 5. Minimum handling of scrap material	3	B	Low					
Suspended loads (Travelling)	Potential for people to walk under a load or for a load to pass over people resulting in possible collision and impact injuries: 1. Lacerations 2. Fractures 3. Unconsciousness 4. Shock 5. Fatality	Operators / other employees / contractors / visitors	1	SA	5	D	Very High	1. Trained, competent and authorised operators/slingers/banksman 2. Correct PPE including hard hat 3. Klaxons and warning lights during crane movements 4. Exclusion zones / barriers 5. Banksman / signaler 6. Lift plans 7. Designated routes free from hazard and obstruction wherever possible. 8. Access restrictions including permit controls for access to certain areas 9. Appointed persons 10. First aiders 11. Safe distance defined as a control 12. Safe Working Load (SWL) to be adhered to	5	B	High					

Reviews / Revisions To Area Risk Assessment			Next Review Required By:			28/03/2024
Revision No:	Date Reviewed	Reviewer Name	Reviewer Signature	Approver Name	Approver Signature	Brief Description of Change to Document
1						
2						
3						
4						
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Risk Index	
Frequency Of Review	1 Year
Action Required	Look to improve within specific timescale
Risk Scale	High
Risk	Tolerable if ALARP

