

# USSL Risk Assessment

| Risk Assessment No                                                              |                                             | 62                                                                                                                                                                                                            | Activity                                |   | Safe Use of a Compressor |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Locations                                                                |  | Site Works |  |
|---------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--|------------|--|
| Assessment Undertaken by                                                        |                                             | M. Watson                                                                                                                                                                                                     | Assessment Date                         |   | Jun-17                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Review Date                                                              |  | 1/6/18     |  |
| Risk Ratings                                                                    |                                             |                                                                                                                                                                                                               |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| Persons at risk (PAR)                                                           |                                             |                                                                                                                                                                                                               | Severity / Harm Rating (S)              |   |                          | Likelihood (L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                          |  |            |  |
| E                                                                               | Employees / Contractors                     | 1                                                                                                                                                                                                             | Negligible injury or no injury          |   |                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Extremely unlikely to occur at any time                                  |  |            |  |
| P                                                                               | Members of Public                           | 2                                                                                                                                                                                                             | Minor injury requiring First Aid        |   |                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A rare combination of factors would be required for an incident to occur |  |            |  |
| V                                                                               | Visitors                                    | 3                                                                                                                                                                                                             | Lost time injury                        |   |                          | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Could happen, but considered unlikely under normal circumstances         |  |            |  |
| C                                                                               | Clients                                     | 4                                                                                                                                                                                                             | Single serious injury or single death   |   |                          | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Not certain, but an additional factor may result in an incident          |  |            |  |
|                                                                                 |                                             | 5                                                                                                                                                                                                             | Multiple deaths and or serious injuries |   |                          | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Almost inevitable that an incident will result - Highly likely to occur  |  |            |  |
| Tolerance rating                                                                |                                             |                                                                                                                                                                                                               |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| 15 - 25                                                                         |                                             | DANGER - Task/activity should not proceed. Further control measures are to be put in place to reduce risk. When in place the level of risk should be re-assessed for adequacy before the work recommences.    |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| 7 - 14                                                                          |                                             | SIGNIFICANT RISK is attached to this task/activity. Look critically at ways of reducing the level of risk to a more tolerable level by improving existing control measures or introducing new controls.       |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| 1 - 6                                                                           |                                             | TOLERABLE RISK - Consider if risk is "as low as reasonably practicable", If not try to reduce risk further by improving control measures. Keep under review and continue with task/activity, but with caution |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| NB. Full PPE will be utilised as a matter of course during any works undertaken |                                             |                                                                                                                                                                                                               |                                         |   |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                          |  |            |  |
| Initial Assessment No controls                                                  |                                             |                                                                                                                                                                                                               |                                         |   |                          | Risk Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                          |  |            |  |
| Item No                                                                         | Hazard Identification                       | PAR                                                                                                                                                                                                           | S                                       | L | Score                    | Control Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                          |  |            |  |
| 1                                                                               | Untrained Personnel                         | E                                                                                                                                                                                                             | 4                                       | 4 | 16                       | The Compressor must only be used by suitably trained and authorised personnel.<br>A Site Based Risk Assessments and Method Statements should be provided for the operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                          |  |            |  |
| 2                                                                               | Contact with Vehicles/Members of the public | E,P                                                                                                                                                                                                           | 4                                       | 4 | 16                       | Ensure Compressor is parked on level ground, if the ground is not level place wheel chocks under wheels to prevent movement.<br>Ensure handbrake is applied.<br>Ensure jacks are positioned<br>Ensure the compressor is protected by barriers to prevent members of the public from coming into direct contact.<br>If the compressor is parked on a road, ensure it is parked in a safe position, with adequate lighting, with the beacon in use.<br>Hazard warning signs should be posted.<br>Any hoses or cables must be kept tidy, and should not cross a public footpath.                                                                                                                                                                                                                                                                                                                                                |                                                                          |  |            |  |
| 3                                                                               | Damaged Hoses and attachments               | E                                                                                                                                                                                                             | 3                                       | 4 | 12                       | Visually examine hoses and connections. Any defects or damage must be reported. IF IT IS NOT SAFE TO USE, DO NOT START WORK. Until replacement equipment has been obtained.<br>The use of unauthorised accessories and attachments is not permitted.<br>Always replace faulty hoses- never attempt to repair any hose if a leak is detected.<br>Connections must be checked for tightness before pressurising.<br>Locking collars and anti whip chains must be fitted to restrain hoses.<br>Ensure the correct source pressure is used and compressed air system is protected by adequate relief valves, maintained and inspected at regular intervals.<br>Appropriate PPE must be worn at all times.<br>Ensure rubber gaiter on air pack to be kept as close to work as possible to reduce scatter of debris.<br>Ensure that system pressure is relieved prior to disconnecting pressurised oil, gas, air, and water hoses. |                                                                          |  |            |  |
| 4                                                                               | Noise                                       | E                                                                                                                                                                                                             | 3                                       | 3 | 9                        | Where possible site the compressor away from public areas.<br>Wherever possible hoods/doors on plant and equipment should be kept closed.<br>When plant and equipment is not in operation it should be turned off.<br>If the equipment is defective contact the supervisor.<br>You must wear hearing protection while working with or in the vicinity of the compressor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                          |  |            |  |
| 5                                                                               | Entrapment.                                 | E                                                                                                                                                                                                             | 4                                       | 4 | 16                       | All moving parts and mechanisms should be properly and secured guarded.<br>Warning signs should be in place to warn about moving parts and mechanisms.<br>Segregate pedestrians from area of operation.<br>Supervision needs to be in place to prevent inquisitive people especially children getting to close or underneath the vehicle.<br>When hitching/unhitching the compressor to a vehicle the operative need to stand away from the rear of the vehicle while it is in motion.<br>Operatives need to be wearing the necessary PPE.<br>A method of communication need to be established between the driver and the person at the rear of the vehicle.                                                                                                                                                                                                                                                                 |                                                                          |  |            |  |
| 6                                                                               | Fire                                        | E,C                                                                                                                                                                                                           | 4                                       | 4 | 16                       | Ensure not combustible material or flammable liquids are stored in the vicinity of the Compressor.<br>Fire fighting equipment must be provided and staff trained in fire fighting and emergency procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                          |  |            |  |
| 7                                                                               | Fumes                                       | E,P,V,C                                                                                                                                                                                                       | 3                                       | 3 | 9                        | Do not site petrol or diesel-engine compressors in, or near the edge of an excavation unless fumes can be ducted away or the area can be ventilated.<br>Do not site compressors in doorways or near basement areas.<br>Carry out a on site risk assessment prior to using the compressor.<br>DO NOT use equipment indoors or in poorly ventilated areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                          |  |            |  |
| 8                                                                               | Contact with Hot Services                   | E                                                                                                                                                                                                             | 4                                       | 3 | 12                       | Operatives need to be aware that during operation, the motor, connections, cylinder and tubes may get hot, avoid contact with these surfaces.<br>Safety gloves should be worn at all times.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                          |  |            |  |
| 9                                                                               | Manual Handling                             | E                                                                                                                                                                                                             | 3                                       | 3 | 12                       | Avoid hazardous manual handling operations so far as reasonably practicable.<br>Carry out suitable and sufficient risk assessment.<br>All staff to receive manual handling training.<br>Heavy Equipment to be carried by a minimum of 2 people.<br>Use Mechanical means where possible to move materials and equipment.<br>And use trained manual handling techniques where mechanical means cannot be used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                          |  |            |  |
| 10                                                                              | Environmental Issues.                       | E                                                                                                                                                                                                             | 3                                       | 3 | 9                        | Any spills must be cleaned up immediately.<br>Any spillage must not enter the watercourse.<br>Drip trays should be placed under the compressor unit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                          |  |            |  |
| 11                                                                              | Maintenance.                                | E                                                                                                                                                                                                             | 3                                       | 4 | 12                       | The Operator should carry out the following daily checks before operating the machine.<br>Ensure controls are clear and can be understood.<br>Ensure stop procedures operate correctly.<br>Check Tyres, Brakes, Safety Guards, Locking Pins.<br>Ensure Hoses are in good condition.<br>Ensure all safety decals are in place and can be read clearly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                          |  |            |  |
| 12                                                                              | Refuelling                                  | E                                                                                                                                                                                                             | 4                                       | 4 | 16                       | Never re-fuel whilst the engine is running.<br>DO NOT smoke while re-fuelling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                          |  |            |  |
| 13                                                                              | Isolation                                   | E                                                                                                                                                                                                             | 4                                       | 4 | 16                       | Guards should be fitted to prevent the operation of, or tampering with, controls by unauthorised persons or children.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                          |  |            |  |
| 14                                                                              | Towing                                      | E,P,V,C                                                                                                                                                                                                       | 4                                       | 4 | 16                       | Ensure all personnel are clear of any reversing vehicles.<br>Ensure that the vehicles towing capacity is sufficient to tow the unit safely.<br>Check the towbar and coupling report any defects.<br>Connect lighting cable to towing vehicle if applicable, contact supervisor if this not possible, ensure number plate is also in position on compressor unit.<br>Check correct operation of lights.<br>Raise propstands/ Jockey wheel and lock in position.<br>Ensure brakeway cable is secured to towing vehicle.<br>Ensure handbrake is released.<br>Report all defects to supervisor or line manager.                                                                                                                                                                                                                                                                                                                  |                                                                          |  |            |  |
| 15                                                                              | Entrapment                                  | E                                                                                                                                                                                                             | 5                                       | 3 | 15                       | All moving parts and mechanisms should be properly and secured guarded.<br>Warning signs should be in place to warn about moving parts and mechanisms.<br>Segregate pedestrians from area of operation.<br>Supervision needs to be in place to prevent inquisitive people especially children getting to close or underneath the vehicle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                          |  |            |  |
| 16                                                                              | Dangers from Compressed air                 | E                                                                                                                                                                                                             | 4                                       | 4 | 16                       | When blowing through a hose or air line, ensure that the open end is held securely. A free end will whip and can cause injury.<br>Open the supply cock carefully and ensure that any ejected articles are restrained. A blocked hose can become a compressed gun.<br>DO NOT blow debris at yourself or others.<br>Never apply compressed air to you skin or directly at others.<br>Do not use compressed air to blow debris from your clothing.<br>DO NOT use air directly from a compressor for breathing purposes.                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                          |  |            |  |