

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|                                                  |                      |                                      |         |
|--------------------------------------------------|----------------------|--------------------------------------|---------|
| <b>PCBU DETAILS:</b>                             |                      | <b>PRINCIPAL CONTRACTOR DETAILS:</b> |         |
| Name: Ezi-Lift Products (Australia) Pty Ltd      |                      | Name:                                |         |
| ABN:                                             |                      | ABN:                                 |         |
| Office address: PO Box 500 Campbelltown NSW 2560 |                      | Office address:                      |         |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |         |            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------|------------|
| <b>ASSESSMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>PROJECT</b>                                    |         |            |
| Plant Hazard and Risk Assessment Worksheet for Duct Lifter / Material Hoist / Centre Lift                                                                                                                                                                                                                                                                                                                                                                                                                                          | Work location:                                    | Various |            |
| <p>This risk assessment should be used in conjunction with the operator's manual for the equipment being used. The purpose of this risk assessment is to identify the risks associated with this item of plant and identify the risk control measures that are in place on the plant. No professional judgment has been made on the effectiveness of these control measures by EziLift Australia.</p> <p>Operator Daily safety checks as outlined in the Operators Manual are to be carried out prior to commencement of work.</p> | Works manager:                                    |         |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |         |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Contact phone no:                                 |         |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Date Assessment provided to Principal Contractor: |         |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Make:                                             | Model:  | Serial No: |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |         | Plant No:  |

|                               |                                                                                                                                                                                                                                                                                     |                                                         |                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WHS Legislation / ACT:</b> | Work Health and Safety Act 2011 (NSW)<br>Work Health and Safety Regulation 2017 (NSW)<br>SafeWork NSW Codes of Practice, including:<br>Managing the Work Environment and Facilities<br>Hazardous Manual Tasks<br>Managing Risks of Plant in the Workplace<br>(others as applicable) | <b>Codes or Standards Applicable to the Assessment:</b> | Work Health and Safety Act 2011 (NSW)<br>Work Health and Safety Regulation 2017 (NSW)<br>SafeWork NSW Codes of Practice (as amended), including:<br>Managing the Work Environment and Facilities<br>Managing Risks of Plant in the Workplace<br>Confined Spaces<br>AS 1418 series – Cranes, hoists and winches<br>AS 4024 series – Safety of Machinery |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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## PLANT ACTIVITY TEST

| Activity                                                              | Areas of plant Accessed | Activity performed by | Frequency of activity | Isolation required (Y or N) | SWMS or document reference | Comments                              |
|-----------------------------------------------------------------------|-------------------------|-----------------------|-----------------------|-----------------------------|----------------------------|---------------------------------------|
| <b>A. Delivery and set up of plant on site</b>                        |                         |                       |                       |                             |                            |                                       |
| Transport Driver                                                      | All                     | Driver                | AR                    | Y                           | YES                        | Isolation required if left unattended |
|                                                                       |                         |                       |                       |                             |                            |                                       |
| <b>B. Operation (including inspection, pre-start checks, storage)</b> |                         |                       |                       |                             |                            |                                       |
| Operator                                                              | All                     | Operator              | D                     | N                           | YES                        | Prior to start of each shift          |
|                                                                       |                         |                       |                       |                             |                            |                                       |
| <b>C. Service, maintenance and repairs (includes cleaning)*</b>       |                         |                       |                       |                             |                            |                                       |
| Qualified Service Personnel                                           | All                     | Technician            | 3 monthly             | Y                           | YES                        | 3 Monthly or as required / requested  |
|                                                                       |                         |                       |                       |                             |                            |                                       |
| <b>D. Decommissioning / removal from site</b>                         |                         |                       |                       |                             |                            |                                       |
| Transport Driver                                                      | All                     | Driver                | AR                    | Y                           | YES                        | Isolation required if left unattended |
| Operator                                                              | All                     | Operator              | AR                    | Y                           | YES                        | Isolation required if left unattended |
|                                                                       |                         |                       |                       |                             |                            |                                       |

\* Include any maintenance and servicing activities that will be carried out on site.

| Frequency of activity codes |         |    |             |    |                                         |
|-----------------------------|---------|----|-------------|----|-----------------------------------------|
| D                           | Daily   | W  | Weekly      | 2W | Fortnightly                             |
| M                           | Monthly | AR | As required | S  | Required at start up/commissioning only |

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## PLANT RISK ASSESSMENT

### ASSESSING THE RISK

**STEP 1:** Consider what might happen when a hazard is encountered (consequences), and how likely it is that an exposure to the risk(s) from the hazard will occur (likelihood).

**STEP 2:** Use the appropriate Risk Level Calculator to determine the Risk Level to persons who may be exposed to the hazards.

**STEP 3:** Determine the most effective control measures. (Consult the hierarchy of risk control measures when carrying out this step).

### RISK LEVEL CALCULATION

Use Risk Calculator 1.

### PLANT RISK ASSESSMENT CHECKLISTS – LEGEND

| Column    | Details                                                                                                                                                                                                                        |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Column 2  | Indicate whether the risk or safety concern listed in Column 1 does or does not apply to the plant.                                                                                                                            |
| Column 3  | Provide details of where the hazard exists on the plant.                                                                                                                                                                       |
| Column 4  | Indicate the “lifecycle” when exposure to risk will occur:<br>C = commissioning; D = delivery; O = operation; M = servicing and maintenance; R = removal from site.                                                            |
| Column 5  | Record preliminary consequence, likelihood and risk level with present risk controls (if any) in place.                                                                                                                        |
| Column 6  | Determine and record the relevant plant (engineering) controls                                                                                                                                                                 |
| Column 7  | Determine and record the relevant operator (administrative) controls                                                                                                                                                           |
| Column 8  | Record residual consequence, likelihood and risk rating after controls identified in Columns 6 and 7 have been applied.                                                                                                        |
| Column 9  | Determine if residual risk level is acceptable taking into account risk evaluation criteria and ALARP principles.                                                                                                              |
| Column 10 | Provide reference to corrective action number that corresponds with an appropriate corrective action to be applied to the plant (provide details in the “additional information/corrective actions” table at end of document). |

### HIERARCHY OF RISK CONTROLS

| Preference                          | Control                        | Description                                                                                                                                                                                  |
|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 (best – preferred control)</b> | <b>ELIMINATION</b>             | <b>Eliminate</b> the risk – remove the hazard that is causing the risk completely.<br>Only if it is not reasonably practicable to eliminate the risk, minimise it by (in descending order) – |
| <b>2</b>                            | <b>SUBSTITUTION</b>            | Substitute the hazard giving rise to the risk with something giving rise to a lesser risk                                                                                                    |
| <b>3</b>                            | <b>ISOLATION</b>               | Isolate the hazard from any person who may be exposed to it (e.g., barriers, etc)                                                                                                            |
| <b>4</b>                            | <b>ENGINEERING CONTROLS</b>    | Implement engineering controls (e.g., guards, speed controls, etc) to reduce risk                                                                                                            |
| <b>5</b>                            | <b>ADMINISTRATIVE CONTROLS</b> | Develop procedures to minimise exposure to a hazard (e.g., limit exposure times, post warning signs)                                                                                         |
| <b>6 (least effective control)</b>  | <b>PERSONAL PROTECTION</b>     | Use protective clothing and equipment (PPE) to limit harmful effects on workers from a hazard.                                                                                               |

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| 1             | Crushing, being drawn into, entanglement, shearing, friction or impact                                                                                      |                           |                                                                                 |                              |                                 |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                   |                                  |                                   |                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------|------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| Refer<br>ence | Column 1                                                                                                                                                    | Column 2                  | Column 3                                                                        | Column 4                     | Column 5                        | Column 6                                                                                           | Column 7                                                                                                                                                                                                                                                                                                                                          | Column 8                         | Column 9                          | Column 10                         |
|               | Risk or Safety concern                                                                                                                                      | Potential hazard<br>Y / N | Location & nature of hazard                                                     | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls                                                                 | Operator/<br>Procedural<br>controls                                                                                                                                                                                                                                                                                                               | Residual risk<br>(C,H,M,L,<br>I) | Risk level<br>acceptable<br>Y / N | Corrective<br>action<br>reference |
| 1.1           | Nip points / pinch points<br><br><small>Read the operator's manual</small> | Y                         | Machine mast sections.<br>Fold down stabilizers (if fitted).<br>Winch Assembly. | O,M                          | M                               | Winch covers<br>Mast guards.<br>Locking pins / clasps.                                             | Safety Decals.<br>Operators Manual.                                                                                                                                                                                                                                                                                                               | L                                | Y                                 | 4,5                               |
| 1.2           | In-running rollers / Gear sets                                                                                                                              | N                         | -                                                                               | -                            | -                               | -                                                                                                  | -                                                                                                                                                                                                                                                                                                                                                 | -                                | -                                 | -                                 |
| 1.3           | Crushing due to parts of plant closing or collapsing                                                                                                        | Y                         | Mast Sections.<br>Loads on forks.                                               | O,M                          | M                               | Inertia brakes<br>Inertia braked Reels                                                             | Safety Decals.<br>Operators Manual.<br>Keep hands and limbs free from mast and load area's at all times.<br>Inspection of Inertia controlled brake systems as per OEM guidelines.                                                                                                                                                                 | L                                | Y                                 | 4,5                               |
| 1.4           | Trapping between plant and materials or fixed structures                                                                                                    | Y                         | Between all parts of plant and structure / materials whilst in use              | C,D,M,O,<br>R                | E                               | Barricading.<br>Use of truck winch for loading / unloading.<br>Use of spotters.<br>Traffic Control | Loading & Unloading of plant to be done in designated area/s only.<br>SWMS / JSA and or Risk Assessment to be carried out including / identifying job task at hand prior to commencing work.<br>Clear demarcated exclusion zones to be set up around active working areas of the Material Hoist.<br>Safety Decals.<br>Avoid congested work areas. | L                                | Y                                 | 3,4,5                             |

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|     |                                                                   |   |                                                   |     |   |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |       |
|-----|-------------------------------------------------------------------|---|---------------------------------------------------|-----|---|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------|
|     |                                                                   |   |                                                   |     |   |                                                     | Do NOT lower the platform unless the area below is clear of personnel & obstructions.<br>Also consider the use of high impact/visibility fencing, signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |       |
| 1.5 | Being trapped beneath the plant or materials and fixed structures | Y | When lowering the platform.                       | O,M | E | Barricading.<br>Use of spotters.<br>Traffic Control | A SWMS/JSA and/or a Risk Assessment is to be carried out including / identifying job task at hand and note related dangers prior to commencing work by the operator.<br>Clearly demarcated exclusion zones to be set up around active working areas of the Material Hoist.<br>Safety Decals.<br>Avoid congested work areas.<br>Ensure load is centered and appropriately secured on the lifting platform prior to lifting or lowering.<br>Do NOT lower the platform unless the area below is clear of personnel & obstructions.<br>Also consider the use of high impact/visibility fencing, signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment. | L | Y | 3,4,5 |
| 1.6 | Body or body parts caught between moving components               | Y | Winch assembly.<br>Winch cable.<br>Mast assembly. | M   | H | Shrouds.<br>Covers.<br>Guards.                      | Only licensed & approved technicians are to carry out repairs as per OEM recommendations.<br>Safety decals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | L | Y | 3,4,5 |

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|      |                                                                                                                                |   |                                                   |   |   |                                |                                                                                                                                                                                                                 |   |   |       |
|------|--------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------|---|---|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------|
|      |                                                                                                                                |   |                                                   |   |   |                                | Ensure safe clearances are maintained as per AS4024:1801, 1802, 1803, AS4024:1601.<br>Never remove guards or shrouding at any time.                                                                             |   |   |       |
| 1.7  | Entanglement of body parts, hair, clothing, jewellery, tools, cleaning brushes, rags, etc, in moving parts                     | Y | Winch assembly.<br>Winch cable.<br>Mast assembly. | M | H | Shrouds.<br>Covers.<br>Guards. | Only licensed & approved technicians are to carry out repairs as per OEM recommendations.<br>Safety decals.<br>Avoid wearing loose fitting clothing.<br>Never remove guards or shrouding at any time.           | L | Y | 3,4,5 |
| 1.8  | Contact with moving parts during testing, operation, maintenance, etc.                                                         | Y | Winch assembly.<br>Winch cable.<br>Mast assembly. | M | H | Shrouds.<br>Covers.<br>Guards. | Only licensed & approved technicians are to carry out repairs as per OEM recommendations.<br>Safety decals.<br>Plant to be isolated and "tagged out of service" prior to commencement of repairs & maintenance. | L | Y | 3,4,5 |
| 1.9  | Friction due to contact with moving parts, surfaces or materials                                                               | N | -                                                 | - | - | -                              | -                                                                                                                                                                                                               | - | - | -     |
| 1.10 | Cutting due to sharp tools, components or work materials                                                                       | N | -                                                 | - | - | -                              | -                                                                                                                                                                                                               | - | - | -     |
| 1.11 | Accumulation of energy inside machinery (liquid /gas under pressure, vacuum, elastic energy) Note: energy listed in Section 5) | N | -                                                 | - | - | -                              | -                                                                                                                                                                                                               | - | - | -     |

|   |                   |          |          |          |          |          |          |          |          |           |
|---|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 2 | Movement of plant |          |          |          |          |          |          |          |          |           |
|   | Column 1          | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 |

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| Refer<br>ence | Risk or Safety concern               | Potential<br>hazard<br>Y / N | Location & nature of<br>hazard                                                                                                                                                                                                               | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary<br>risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls                  | Operator/<br>Procedural<br>controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Residual<br>risk<br>(C,H,M,L,<br>I) | Risk level<br>acceptable<br>Y / N | Corrective<br>action<br>reference |
|---------------|--------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| 2.1           | Plant stability – tipping, roll over | Y                            | Plant onsite.<br>Uneven work area.<br>Loading / Unloading<br>of plant all locations.<br>Traversing across<br>terrain that exceeds<br>allowable limits.<br>Misuse of<br>attachments.<br>Use of unapproved<br>and or certified<br>attachments. | D,O,M,R                      | E                                  | Plant<br>outriggers<br>(if fitted).<br>Load charts. | A separate SWMS / JSA or<br>Risk Assessment of the work<br>environment is to be<br>completed prior to use of<br>equipment by the operator –<br>This should include ground<br>condition and surrounding<br>areas where the Material<br>Hoist may traverse or be<br>used.<br>Plant may NOT be traversed<br>or operated on uneven<br>terrain, unstable surfaces or<br>angles that exceed OEM<br>recommendations.<br>All Loads are to be evenly<br>distributed across the<br>platform at ALL times.<br>Do NOT exceed the<br>maximum side force<br>allowable on the platform.<br>Do NOT exceed the<br>maximum lift capacity<br>allowable on the platform.<br>Do NOT exceed the<br>maximum allowable<br>attachment lift capacity.<br>Do NOT raise the platform<br>unless the machine is on a<br>firm, level surface.<br>Do NOT use the plant in<br>wind conditions greater than<br>that stated by the OEM.<br>Ensure the outriggers are<br>deployed on firm /<br>compacted ground and the<br>combined weight of the<br>plant, do not exceed the floor<br>point loading recommended<br>by the OEM. | L                                   | Y                                 | 3,4,5                             |
| 2.1<br>Cont.  |                                      |                              |                                                                                                                                                                                                                                              |                              |                                    |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     |                                   |                                   |

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|     |                                                                        |   |   |   |   |   |                                                                        |   |   |   |
|-----|------------------------------------------------------------------------|---|---|---|---|---|------------------------------------------------------------------------|---|---|---|
|     |                                                                        |   |   |   |   |   | Do NOT modify the plant in any way without authorization from the OEM. |   |   |   |
| 2.2 | Operator protection in event of roll over (ROPS) or plant tipping over | N | - | - | - | - | -                                                                      | - | - | - |
| 2.3 | Falling from or being thrown from plant                                | N | - | - | - | - | -                                                                      | - | - | - |

| 2             | Movement of plant (continued)                                                         |                                       |                                                                  |                                    |                                          |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                        |                                         |                                          |
|---------------|---------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------|------------------------------------|------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------|------------------------------------------|
| Refer<br>ence | Column 1<br>Risk or Safety concern                                                    | Column 2<br>Potential hazard<br>Y / N | Column 3<br>Location & nature of hazard                          | Column 4<br>Lifecycle (C,D,O, M,R) | Column 5<br>Preliminary risk (C,H,M,L,I) | Column 6<br>Plant (engineering) controls | Column 7<br>Operator/ Procedural controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Column 8<br>Residual risk (C,H,M,L, I) | Column 9<br>Risk level acceptable Y / N | Column 10<br>Corrective action reference |
| 2.4           | Inability to slow down, stop, or immobilise plant or restrict certain plant movements | N                                     | -                                                                | -                                  | -                                        | -                                        | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | -                                      | -                                       | -                                        |
| 2.5           | Collision with persons, traffic or objects                                            | Y                                     | Plant Surrounding structures.<br>Traffic.<br>Pedestrian Traffic. | D,O,M,R                            | E                                        | Barricading.                             | A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator with consideration taken into account from material such as the – Codes of Practice Traffic Management in the Workplace.<br>Be aware of limited sight distance and blind spots when operating.<br>Check work area for overhead obstructions and other possible hazards.<br>Also consider the use of high impact/visibility fencing, signage, spotters or traffic control management if deemed necessary via a JSA/SWMS or Risk Assessment.<br>Clearly demarcated exclusion zones to be set up | L                                      | Y                                       | 3,4,5                                    |



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|      |                                                                                                                      |   |                        |         |   |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |       |
|------|----------------------------------------------------------------------------------------------------------------------|---|------------------------|---------|---|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------|
|      |                                                                                                                      |   |                        |         |   |                                                                | around active working areas of the Material Hoist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |       |
| 2.6  | Uncontrolled or unexpected movement of plant, components or materials (e.g., slewing, luffing, lifting, driving etc) | Y | Plant.<br>Overloading. | D,O,M,R | E | Outriggers.<br>Stabilizers.<br>Lockable wheels and or casters. | When transporting the Material Lift always ensure Mast Brake is engaged and wheels locked.<br>Always assess the site ground conditions prior to using the Material Hoist.<br>Do NOT raise the platform unless the machine is on a firm, level surface.<br>Do NOT use the plant in wind conditions greater than that stated by the OEM.<br>Never “tie off” the plant to any structure.<br>Always engage wheel brakes when the Material Hoist is in use.<br>DO NOT transport loads at height – Always lower the platform fully before relocating a load on the platform or tynes. | L | Y | 3,4,5 |
| 2.7  | Parts of the plant collapsing                                                                                        | N | -                      | -       | - | -                                                              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -     |
| 2.8  | Inability to restrict plant or prevent plant moving into hazardous areas (as required for specific tasks)            | N | -                      | -       | - | -                                                              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -     |
| 2.9  | Unauthorised access to or operation of plant (or specific components)                                                | Y | Plant controls         | O,M     | E | -                                                              | Always ensure the plant is secured away from unauthorized use when not in use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | L | Y | 3,4,5 |
| 2.10 | Remote activation or automatic start up of plant or components                                                       | N | -                      | -       | - | -                                                              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -     |
| 2.11 | Damage to surfaces, etc, caused by plant movement or operations                                                      | N | -                      | -       | - | -                                                              | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -     |

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| 3             | Being struck by falling objects / ejected materials              |                           |                             |                              |                                 |                                    |                                                                                                                                                                                                                                                                                                                                               |                                  |                                   |                                   |
|---------------|------------------------------------------------------------------|---------------------------|-----------------------------|------------------------------|---------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| Refer<br>ence | Column 1                                                         | Column 2                  | Column 3                    | Column 4                     | Column 5                        | Column 6                           | Column 7                                                                                                                                                                                                                                                                                                                                      | Column 8                         | Column 9                          | Column 10                         |
|               | Risk or Safety concern                                           | Potential hazard<br>Y / N | Location & nature of hazard | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls | Operator/<br>Procedural<br>controls                                                                                                                                                                                                                                                                                                           | Residual risk<br>(C,H,M,L,<br>I) | Risk level<br>acceptable<br>Y / N | Corrective<br>action<br>reference |
| 3.1           | Falling objects                                                  | Y                         | Platform of Plant.          | O                            | E                               | Load Guard                         | All materials on the lifting platform are to be kept in an orderly and secure manner at all times.<br>No loose items to be allowed on platform stowed or raised.<br>Do NOT lift equipment or materials external to the working perimeters of the Material Hoist.<br>Exclusion area to be set up around active working area of Material Hoist. | L                                | Y                                 | 3,4,5                             |
| 3.2           | Failure of plant or components with loss of contents and/or load | N                         | -                           | -                            | -                               | -                                  | -                                                                                                                                                                                                                                                                                                                                             | -                                | -                                 | -                                 |
| 3.3           | Projectiles / ejected work pieces or items                       | Y                         | Platform of Plant           | O                            | E                               | Load Guard                         | All materials on the lifting platform are to be kept in an orderly and secure manner at all times.<br>No loose items to be allowed on platform stowed or raised.<br>Do NOT lift equipment or materials external to the working perimeters of the Material Hoist.<br>Exclusion area to be set up around active working area of Material Hoist. | L                                | Y                                 | 3,4,5                             |
| 3.4           | The plant, parts of plant or work pieces disintegrating          | N                         | -                           | -                            | -                               | -                                  | -                                                                                                                                                                                                                                                                                                                                             | -                                | -                                 | -                                 |

| 4 | Hazardous events (other) |          |          |          |          |          |          |          |          |           |
|---|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
|   | Column 1                 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 |

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| Reference | Risk or Safety concern                                                                                             | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls           | Operator/ Procedural controls                                                                                                                                                                                                                                                                                   | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
|-----------|--------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|------------------------|------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------|-----------------------------|
| 4.1       | Overloading of plant or components                                                                                 | Y                      | Plant platform              | O                      | H                            | Inertia Brakes<br>Inertia braked Reels | Equipment & materials must NOT exceed maximum platform capacity.<br>All Loads are to be evenly distributed across the platform at ALL times.<br>Do NOT exceed the maximum side force allowable on the platform.<br>Obey safety decals.<br>Inspection of Inertia controlled brake systems as per OEM guidelines. | L                          | Y                           | 3,4,5                       |
| 4.2       | Inadequate mechanical strength of parts                                                                            | N                      | -                           | -                      | -                            | -                                      | -                                                                                                                                                                                                                                                                                                               | -                          | -                           | -                           |
| 4.3       | Failure of loading controls                                                                                        | N                      | -                           | -                      | -                            | -                                      | -                                                                                                                                                                                                                                                                                                               | -                          | -                           | -                           |
| 4.4       | Inadequate design / selection of pulleys, drums, chains, ropes, etc.                                               | N                      | -                           | -                      | -                            | -                                      | -                                                                                                                                                                                                                                                                                                               | -                          | -                           | -                           |
| 4.5       | Abnormal conditions of assembly, testing, use, maintenance                                                         | N                      | -                           | -                      | -                            | -                                      | -                                                                                                                                                                                                                                                                                                               | -                          | -                           | -                           |
| 4.6       | Exposure to hazardous materials/chemicals, such as oils, grease, coolants, solvents, etc. and/or biological agents | N                      | -                           | -                      | -                            | -                                      | -                                                                                                                                                                                                                                                                                                               | -                          | -                           | -                           |

| 5         | Systems under pressure (hydro, hydraulic, pneumatic, compressed air)              |                                    |                                         |                                    |                                          |                                          |                                           |                                        |                                         |                                          |
|-----------|-----------------------------------------------------------------------------------|------------------------------------|-----------------------------------------|------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|----------------------------------------|-----------------------------------------|------------------------------------------|
| Reference | Column 1<br>Risk or Safety concern                                                | Column 2<br>Potential hazard Y / N | Column 3<br>Location & nature of hazard | Column 4<br>Lifecycle (C,D,O, M,R) | Column 5<br>Preliminary risk (C,H,M,L,I) | Column 6<br>Plant (engineering) controls | Column 7<br>Operator/ Procedural controls | Column 8<br>Residual risk (C,H,M,L, I) | Column 9<br>Risk level acceptable Y / N | Column 10<br>Corrective action reference |
| 5.1       | Fluids under pressure:<br>Low to moderate pressures (up to 4,000 psi or 27.6 mPa) | N                                  | -                                       | -                                  | -                                        | -                                        | -                                         | -                                      | -                                       | -                                        |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|     |                                                                                                          |   |              |         |   |                     |                                                                                                 |   |   |       |
|-----|----------------------------------------------------------------------------------------------------------|---|--------------|---------|---|---------------------|-------------------------------------------------------------------------------------------------|---|---|-------|
|     |                                                                                                          |   |              |         |   |                     |                                                                                                 |   |   |       |
| 5.2 | Fluids under pressure:<br>High to very high pressures<br>(over 4,000 psi or 27.6 mPa)                    | N | -            | -       | - | -                   | -                                                                                               | - | - | -     |
| 5.3 | Gas or air under hazardous<br>pressures (i.e., store in pressure<br>vessels or pressurized by<br>system) | N | -            | -       | - | -                   | -                                                                                               | - | - | -     |
| 5.4 | Striking due to damage or failure<br>of high pressure hoses /<br>couplings / tyres                       | N | -            | -       | - | -                   | -                                                                                               | - | - | -     |
| 5.5 | Energy stored in springs or<br>items under tension                                                       | Y | Winch cable. | D,O,M,R | M | Shrouds.<br>Covers. | Operator NOT to carry out<br>any repairs.<br>DO NOT operate without<br>safety shrouds in place. | L | Y | 3,4,5 |
| 5.6 | Residual energy / pressure in<br>system                                                                  | N | -            | -       | - | -                   | -                                                                                               | - | - | -     |

| 6             | Electrical                                                                                                                          |                              |                                      |                              |                                    |                                    |                                                                                                                                                                                                                                                                            |                                     |                                   |                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------|------------------------------|------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| Refer<br>ence | Column 1                                                                                                                            | Column 2                     | Column 3                             | Column 4                     | Column 5                           | Column 6                           | Column 7                                                                                                                                                                                                                                                                   | Column 8                            | Column 9                          | Column 10                         |
|               | Risk or Safety concern                                                                                                              | Potential<br>hazard<br>Y / N | Location & nature of<br>hazard       | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary<br>risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls | Operator/<br>Procedural<br>controls                                                                                                                                                                                                                                        | Residual<br>risk<br>(C,H,M,L,<br>I) | Risk level<br>acceptable<br>Y / N | Corrective<br>action<br>reference |
| 6.1           | Contact with or proximity to plant<br>electrical circuits or parts at<br>Extra Low Voltage (under 50V<br>AC or 120V DC)             | N                            | -                                    | -                            | -                                  | -                                  | -                                                                                                                                                                                                                                                                          | -                                   | -                                 | -                                 |
| 6.2           | Contact with or proximity to plant<br>electrical circuits or parts at<br>LOW or HIGH voltages (50-<br>1000V AC or 120-1500V DC)     | N                            | -                                    | -                            | -                                  | -                                  | -                                                                                                                                                                                                                                                                          | -                                   | -                                 | -                                 |
| 6.3           | Contact with or working in close<br>proximity to “live” electrical<br>conductors (i.e., LV, or HV<br>power transmission lines, etc) | Y                            | Plant.<br>Surrounding<br>Structures. | D,O,M,R                      | E                                  | Barricades<br>Insulators           | A separate SWMS/JSA or<br>Risk Assessment of the work<br>environment is to be<br>completed prior to use of<br>equipment by the operator<br>specifically detailing work<br>near power lines.<br>Reference the Codes of<br>Practice (Work Near<br>Overhead Power lines 2006) | L                                   | Y                                 | 3,4                               |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|     |                                                                                            |   |                               |         |   |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |     |
|-----|--------------------------------------------------------------------------------------------|---|-------------------------------|---------|---|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-----|
|     |                                                                                            |   |                               |         |   |                       | Section 4.4.2 for alternate ways of reducing or eliminating the risk. Refer section 5.8 of AS 2550.10-005 to establish safe working distances, no go zones and use of spotters. Consult local authorities before commencement of work near power lines. Look up and live throughout. Dial before you dig. Be aware of your surroundings.                                                                                                                                                                                                                        |   |   |     |
| 6.4 | Overloading of circuits (i.e., electrical / electronic systems including control circuits) | N | -                             | -       | - | -                     | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -   |
| 6.5 | Energy sources – identification and isolation of systems                                   | N | -                             | -       | - | -                     | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - | - | -   |
| 6.6 | Contact with or working in proximity to "live" electrical conductors or control devices    | Y | Plant Surrounding Structures. | D,O,M,R | E | Barricades Insulators | A separate SWMS/JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator specifically detailing work near power lines. Reference the Codes of Practice (Work Near Overhead Power lines 2006) Section 4.4.2 for alternate ways of reducing or eliminating the risk.<br><br>Refer section 5.8 of AS 2550.10-005 to establish safe working distances, no go zones and use of spotters. Consult local authorities before commencement of work near power lines. Look up and live throughout Dial before you dig. | L | Y | 3,4 |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|     |                                                                                                      |   |   |   |   |   |                                |   |   |   |
|-----|------------------------------------------------------------------------------------------------------|---|---|---|---|---|--------------------------------|---|---|---|
|     |                                                                                                      |   |   |   |   |   | Be aware of your surroundings. |   |   |   |
| 6.7 | Residual / stored energy in electrical systems (i.e., batteries, capacitors, UPS, emergency systems) | N | - | - | - | - | -                              | - | - | - |
| 6.8 | Electrical systems intrinsically safe where plant applications involve hazardous atmospheres         | N | - | - | - | - | -                              | - | - | - |

|               |                                                                                    |                        |                             |                        |                              |                              |                               |                            |                             |                             |
|---------------|------------------------------------------------------------------------------------|------------------------|-----------------------------|------------------------|------------------------------|------------------------------|-------------------------------|----------------------------|-----------------------------|-----------------------------|
| 7             | <b>Fire / explosion</b>                                                            |                        |                             |                        |                              |                              |                               |                            |                             |                             |
| Refer<br>ence | Column 1                                                                           | Column 2               | Column 3                    | Column 4               | Column 5                     | Column 6                     | Column 7                      | Column 8                   | Column 9                    | Column 10                   |
|               | Risk or Safety concern                                                             | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls | Operator/ Procedural controls | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
| 7.1           | Components susceptible to high temperatures, overheating or unsafe thermal loading | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 7             | <b>Fire / explosion (continued)</b>                                                |                        |                             |                        |                              |                              |                               |                            |                             |                             |
| Refer<br>ence | Column 1                                                                           | Column 2               | Column 3                    | Column 4               | Column 5                     | Column 6                     | Column 7                      | Column 8                   | Column 9                    | Column 10                   |
|               | Risk or Safety concern                                                             | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls | Operator/ Procedural controls | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
| 7.2           | Ignition sources – plant design (i.e., flame, sparks, heating elements)            | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 7.3           | Ignition sources – process and/or plant operation (e.g.,                           | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|     |                                                                     |   |   |   |   |   |   |   |   |   |
|-----|---------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|
|     | ejected work pieces, electrical discharge, sparks)                  |   |   |   |   |   |   |   |   |   |
| 7.4 | Flammable or explosive atmosphere                                   | N | - | - | - | - | - | - | - | - |
| 7.5 | Over-pressurisation, catastrophic failure within pressurized system | N | - | - | - | - | - | - | - | - |
| 7.6 | Interference with remote detonation equipment                       | N | - | - | - | - | - | - | - | - |

| 8         | Slips, trips, falls                                                                                                                                          |                        |                             |                        |                              |                              |                               |                            |                             |                             |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|------------------------|------------------------------|------------------------------|-------------------------------|----------------------------|-----------------------------|-----------------------------|
| Reference | Column 1                                                                                                                                                     | Column 2               | Column 3                    | Column 4               | Column 5                     | Column 6                     | Column 7                      | Column 8                   | Column 9                    | Column 10                   |
|           | Risk or Safety concern                                                                                                                                       | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls | Operator/ Procedural controls | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
| 8.1       | Working / access surfaces on plant uneven, slippery or obstructed                                                                                            | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 8.2       | Falls from designated access (ladders, stairs, walkways) on the plant                                                                                        | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 8.3       | Falls from elevated areas on plant (fall height under 2m) due to size, location, lack of fall protection, unprotected holes, openings, penetrations or gaps) | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 8.4       | Falls from elevated areas on plant (fall height over 2m) due to                                                                                              | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|     |                                                                                                   |   |   |   |   |   |   |   |   |   |
|-----|---------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|
|     | size, location, lack of fall protection, unprotected holes, openings, penetrations or gaps)       |   |   |   |   |   |   |   |   |   |
| 8.5 | Falls due to collapse of supporting structure (e.g., mobile crane boom, batch plant, tower crane) | N | - | - | - | - | - | - | - | - |

| 9         | Atmospheric conditions/ contaminants                                                                    |                        |                             |                        |                              |                              |                               |                            |                             |                             |
|-----------|---------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|------------------------|------------------------------|------------------------------|-------------------------------|----------------------------|-----------------------------|-----------------------------|
| Reference | Column 1                                                                                                | Column 2               | Column 3                    | Column 4               | Column 5                     | Column 6                     | Column 7                      | Column 8                   | Column 9                    | Column 10                   |
|           | Risk or Safety concern                                                                                  | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls | Operator/ Procedural controls | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
| 9.1       | Atmospheric contaminants associated with plant operation (exhaust emissions, gases, thermal fumes, etc) | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 9.2       | Atmospheric contaminants created through work/material (dusts, fibres)                                  | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 9.3       | Contaminants / toxic materials produced                                                                 | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 9.4       | Confined spaces associated with the plant                                                               | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |
| 9.5       | Unsafe oxygen levels                                                                                    | N                      | -                           | -                      | -                            | -                            | -                             | -                          | -                           | -                           |

| 10        | Working environment/ ergonomics (e.g., visibility, noise, vibration, manual handling) |                        |                                                 |                        |                              |                                  |                                                                                                                                                                |                            |                             |                             |
|-----------|---------------------------------------------------------------------------------------|------------------------|-------------------------------------------------|------------------------|------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------|-----------------------------|
| Reference | Column 1                                                                              | Column 2               | Column 3                                        | Column 4               | Column 5                     | Column 6                         | Column 7                                                                                                                                                       | Column 8                   | Column 9                    | Column 10                   |
|           | Risk or Safety concern                                                                | Potential hazard Y / N | Location & nature of hazard                     | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls     | Operator/ Procedural controls                                                                                                                                  | Residual risk (C,H,M,L, I) | Risk level acceptable Y / N | Corrective action reference |
| 10.1      | Lighting conditions (e.g., illumination, glare, etc)                                  | Y                      | Plant working area. Auxiliary lighting Sources. | O,M                    | H                            | Light stands. Platform lighting. | Lighting levels should be monitored via use of a lux meter to ensure that adequate lighting is provided throughout the use of the Material Hoist at all times. | L                          | Y                           | 3,4,5,6                     |



# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|      |                                                                                               |   |                |   |   |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |       |
|------|-----------------------------------------------------------------------------------------------|---|----------------|---|---|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-------|
|      |                                                                                               |   |                |   |   |                                                        | External light stands, temporary or fixed lighting should be available at all times during the use of the Material Hoist.<br>Operator should stop work if they feel lighting conditions are NOT sufficient.<br>In situations of extensive illumination or glare appropriate PPE should be considered such as tinted safety glasses, wide brim hats and implemented via a toolbox talk.<br>Reference to Table 1 appendix 1.1 should be made if a SWMS identifies lighting concerns.                                                                                                                                |   |   |       |
| 10.2 | Restricted visibility or work area (e.g., operating position/layout, generation of dust, etc) | Y | Plant Platform | O | H | Barricading.<br>Use of spotters.<br>Traffic Management | A separate SWMS / JSA or Risk Assessment of the work environment is to be completed prior to use of equipment by the operator specifically detailing work environment conditions that may adversely affect the use of the Material Lift..<br>Be aware of limited sight distance and blind spots when operating.<br>Check work area for overhead obstructions and other possible hazards.<br>Always barricade work areas when working in public or high traffic zones.<br>Also consider the use of fencing, signage and spotters or traffic control management.<br>Clearly demarcated exclusion zones to be set up | L | Y | 3,4,5 |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|               |                                                                                                                                |                        |                             |                        |                              |                              |                                                    |                           |                             |                             |
|---------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|------------------------|------------------------------|------------------------------|----------------------------------------------------|---------------------------|-----------------------------|-----------------------------|
|               |                                                                                                                                |                        |                             |                        |                              |                              | around active working areas of the Material Hoist. |                           |                             |                             |
| 10.3          | Injury due to poorly designed, located or faulty seating.                                                                      | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.4          | User error through poor design of controls (e.g., human factor principles, replacement, marking of or functioning of controls) | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.5          | Manual handling risks due to heavy or awkward loads, repetitive lifting, sudden jerky movements, etc)                          | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.6          | Repetitive activity, forceful exertions, static or awkward posture                                                             | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.7          | Noise levels exceeding recommended exposure levels (Leq 85 dB(A) (8h))                                                         | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10            | <b>Working environment/ ergonomics (e.g., visibility, noise, vibration, manual handling) (continued)</b>                       |                        |                             |                        |                              |                              |                                                    |                           |                             |                             |
| Refer<br>ence | Column 1                                                                                                                       | Column 2               | Column 3                    | Column 4               | Column 5                     | Column 6                     | Column 7                                           | Column 8                  | Column 9                    | Column 10                   |
|               | Risk or Safety concern                                                                                                         | Potential hazard Y / N | Location & nature of hazard | Lifecycle (C,D,O, M,R) | Preliminary risk (C,H,M,L,I) | Plant (engineering) controls | Operator/ Procedural controls                      | Residual risk (C,H,M,L,I) | Risk level acceptable Y / N | Corrective action reference |
| 10.8          | Adverse effects on communication with others on or near plant                                                                  | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.9          | Vibration (e.g., personal exposure, impact on structures, etc)                                                                 | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.10         | Introduction of moisture, water, or contaminants to work areas or systems                                                      | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.11         | Radiation – ionising (i.e., UV, X ray, Gamma, etc)                                                                             | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |
| 10.12         | Radiation – non-ionising (i.e., RF, microwave, infrared, laser, etc)                                                           | N                      | -                           | -                      | -                            | -                            | -                                                  | -                         | -                           | -                           |

|    |                             |          |          |          |          |          |          |          |          |           |
|----|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 11 | <b>Temperature extremes</b> |          |          |          |          |          |          |          |          |           |
|    | Column 1                    | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

| Reference | Risk or Safety concern                                         | Potential hazard<br>Y / N | Location & nature of<br>hazard | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary<br>risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls | Operator/<br>Procedural<br>controls | Residual risk<br>(C,H,M,L,I) | Risk level<br>acceptable<br>Y / N | Corrective<br>action<br>reference |
|-----------|----------------------------------------------------------------|---------------------------|--------------------------------|------------------------------|------------------------------------|------------------------------------|-------------------------------------|------------------------------|-----------------------------------|-----------------------------------|
| 11.1      | Open flame, steam, heated air                                  | N                         | -                              | -                            | -                                  | -                                  | -                                   | -                            | -                                 | -                                 |
| 11.2      | Exposure to high or low temperature extremes (thermal comfort) | N                         | -                              | -                            | -                                  | -                                  | -                                   | -                            | -                                 | -                                 |
| 11.3      | Contact with hot or cold plant components or materials         | N                         | -                              | -                            | -                                  | -                                  | -                                   | -                            | -                                 | -                                 |

| 12        | Transport / movement of plant      |                                       |                                            |                                          |                                                |                                                |                                                 |                                             |                                                   |                                                |
|-----------|------------------------------------|---------------------------------------|--------------------------------------------|------------------------------------------|------------------------------------------------|------------------------------------------------|-------------------------------------------------|---------------------------------------------|---------------------------------------------------|------------------------------------------------|
| Reference | Column 1<br>Risk or Safety concern | Column 2<br>Potential hazard<br>Y / N | Column 3<br>Location & nature of<br>hazard | Column 4<br>Lifecycle<br>(C,D,O,<br>M,R) | Column 5<br>Preliminary<br>risk<br>(C,H,M,L,I) | Column 6<br>Plant<br>(engineering)<br>controls | Column 7<br>Operator/<br>Procedural<br>controls | Column 8<br>Residual<br>risk<br>(C,H,M,L,I) | Column 9<br>Risk level<br>acceptabl<br>e<br>Y / N | Column 10<br>Corrective<br>action<br>reference |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|           |                                                                           |                           |                             |                              |                                 |                                    |                                                                                                                                                                                                                                                                                    |                              |                                       |                                   |
|-----------|---------------------------------------------------------------------------|---------------------------|-----------------------------|------------------------------|---------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------|-----------------------------------|
| 12.1      | Loading / unloading of plant                                              | Y                         | Transport                   | D,R                          | E                               | Tie down points.<br>Truck winch.   | A separate SWMS / JSA or Risk Assessment should be completed prior to movement of plant via transport.<br>Loading & Unloading of plant to be done in designated area/s only.<br>Exclusion area to be set up around loading / unloading zone.<br>Avoid congested work areas.        | L                            | Y                                     | 3,4,5                             |
| 12.2      | Stability and security of plant and components during transport           | Y                         | Transport                   | D,R                          | E                               | Tie down points.<br>Truck winch.   | A separate SWMS / JSA or Risk Assessment should be completed prior to movement of plant via transport.<br>Transport driver to hold EWPA "T" ticket.<br>Plant should be secured by means outlaid by the OEM.<br>Transport brake should be engaged throughout the transport process. | L                            | Y                                     | 3,4,5                             |
| 12.3      | Factors affecting road movement of plant (license, escort, permits, etc). | N                         | -                           | -                            | -                               | -                                  | -                                                                                                                                                                                                                                                                                  | -                            | -                                     | -                                 |
| 13        | <b>Operator Licensing</b>                                                 |                           |                             |                              |                                 |                                    |                                                                                                                                                                                                                                                                                    |                              |                                       |                                   |
| Reference | Column 1                                                                  | Column 2                  | Column 3                    | Column 4                     | Column 5                        | Column 6                           | Column 7                                                                                                                                                                                                                                                                           | Column 8                     | Column 9                              | Column 10                         |
|           | Risk or Safety concern                                                    | Potential hazard<br>Y / N | Location & nature of hazard | Lifecycle<br>(C,D,O,<br>M,R) | Preliminary risk<br>(C,H,M,L,I) | Plant<br>(engineering)<br>controls | Operator/<br>Procedural<br>controls                                                                                                                                                                                                                                                | Residual risk<br>(C,H,M,L,I) | Risk level<br>acceptabl<br>e<br>Y / N | Corrective<br>action<br>reference |
| 13.1      |                                                                           | N                         | -                           | -                            | -                               | -                                  | -                                                                                                                                                                                                                                                                                  | -                            | -                                     | -                                 |

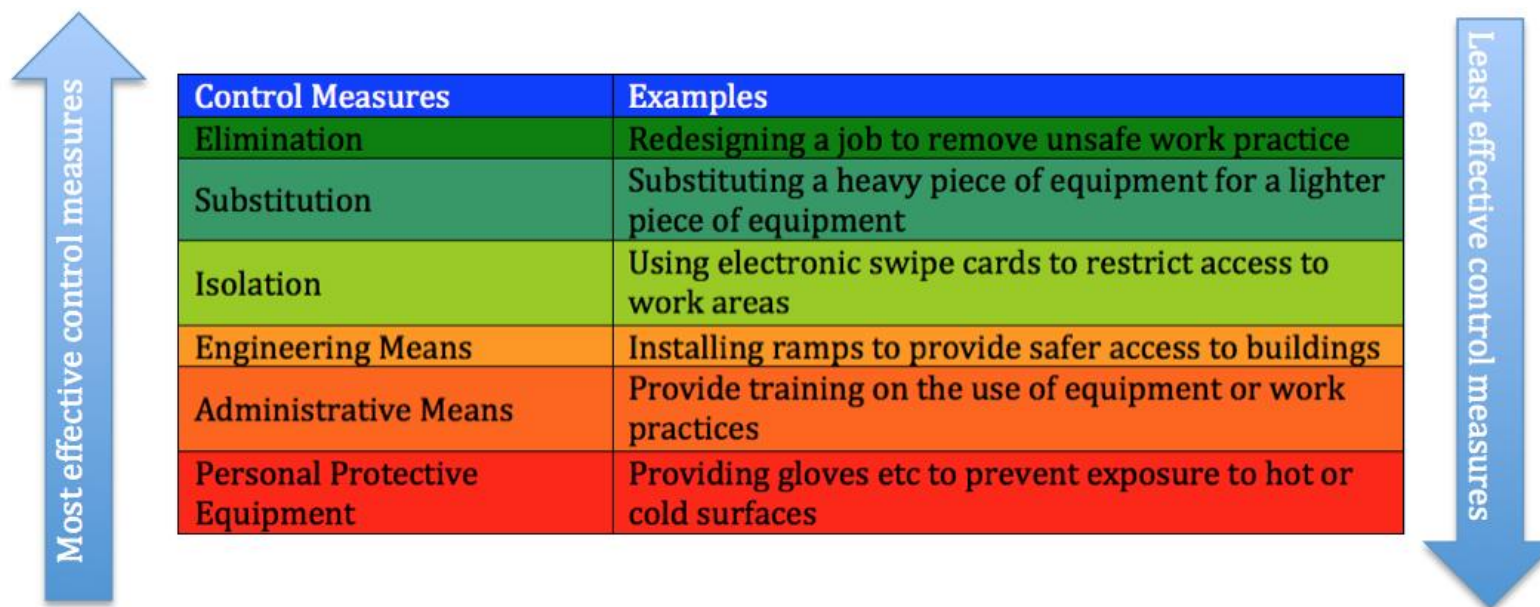
# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|  |                       |  |  |  |  |  |  |  |  |  |
|--|-----------------------|--|--|--|--|--|--|--|--|--|
|  | Non Ticketed Operated |  |  |  |  |  |  |  |  |  |
|--|-----------------------|--|--|--|--|--|--|--|--|--|

## ADDITIONAL INFORMATION / CORRECTIVE ACTIONS

| Reference | Additional information / Details of corrective actions |
|-----------|--------------------------------------------------------|
|           |                                                        |
|           |                                                        |
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|           |                                                        |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E



## RISK LEVEL CALCULATOR (1)

The risk associated with a hazard is related to the severity of a single incident, and the frequency and duration of exposure to the hazard. In many instances, other hazards present may increase the risk of an individual hazard.

**STEP 1:** Consider how likely a risk is encountered, and what might happen.

**STEP 2:** Use the risk level calculator to determine the likely risk level (outcome) to persons who may be exposed to the hazards.

**STEP 3:** Identify and develop effective control measures. (Consult the hierarchy of risk control measures when carrying out this step).

| LEVEL OF CONSEQUENCES | LIKELY CONSEQUENCES OF EVENT OCCURRING<br><i>What is the likely outcome of an exposure to the risk?</i>                                              | RISK LEVEL (OUTCOME) |        |          |          |      |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|----------|----------|------|
|                       |                                                                                                                                                      | Almost certain       | Likely | Possible | Unlikely | Rare |
| Catastrophic (C)      | Fatality or permanent disability; toxic release of chemicals, long-term environmental impact; loss of facilities; very high \$ loss                  | E                    | E      | E        | E        | H    |
| High (H)              | Long-term illness or serious injury; serious medium-term environmental effects; major property damage; loss of production; high \$ loss              | E                    | E      | E        | H        | M    |
| Moderate (M)          | Medical treatment requiring up to several days off work; spillage contained with outside assistance; significant property damage; med – high \$ loss | E                    | H      | M        | M        | L    |
| Low (L)               | Minor injury requiring First-Aid; spillage contained on site; moderate property damage; low-med. \$ loss                                             | H                    | H      | M        | M        | L    |

# PLANT HAZARD & RISK ASSESSMENT FOR MATERIAL HOIST – REV E

|                   |                                                                          |   |   |   |   |   |
|-------------------|--------------------------------------------------------------------------|---|---|---|---|---|
| Insignificant (I) | No injuries; minor property or environmental damage;<br>very low \$ loss | H | M | L | L | L |
|-------------------|--------------------------------------------------------------------------|---|---|---|---|---|

| LIKELIHOOD OF EVENT OCCURRING<br><i>How likely is it that an exposure will occur?</i> |                                                   | DETERMINATION OF RISK CONTROL ACTIONS |                                                              |
|---------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------|--------------------------------------------------------------|
|                                                                                       |                                                   | RISK LEVEL (OUTCOME)<br>(from matrix) | ACTION REQUIRED<br>(refer to the hierarchy of risk controls) |
| <b>Almost certain</b>                                                                 | Event is expected to occur in most circumstances  |                                       |                                                              |
| <b>Likely</b>                                                                         | Event will probably occur in most circumstances   | <b>E</b> (EXTREME)                    | <b>URGENT</b> - Immediate action required to control risk.   |
| <b>Possible</b>                                                                       | Event might occur at some time                    | <b>H</b> (HIGH)                       | Highest management decision required urgently.               |
| <b>Unlikely</b>                                                                       | Event could occur at some time                    | <b>M</b> (MEDIUM)                     | Follow management instructions regarding risk.               |
| <b>Rare</b>                                                                           | Event may occur only in exceptional circumstances | <b>L</b> (LOW)                        | These risks may not require immediate attention - monitor.   |

| LIKELIHOOD OF EVENT OCCURRING – Consider the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LIKELY CONSEQUENCES OF EVENT OCCURRING – Consider the following:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | HIERARCHY OF RISK CONTROLS                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| How often is the task/activity performed?<br>How many people are exposed to the hazard?<br>How long is the exposure?<br>Are engineering controls preventing exposure at present?<br>Does workplace layout and condition affect exposure?<br>Are abnormal conditions which may result in a greater exposure reasonably foreseeable?<br>What are the results of any biological or atmospheric monitoring?<br>Do workers have appropriate skills and knowledge to perform tasks?<br>Do current work practices expose workers to a hazard?<br>Are there other contributing factors? | What are the consequences in the short term?<br>What are the consequences in the long term?<br>What is the history of injuries related to exposure to the hazard?<br>How close are workers to the hazard?<br>What is the energy level of the hazard (i.e., weight, voltage, volume, height above ground, temperature, amplitude, concentration, aggressive state)?<br>If a substance is hazardous, what are the health effects associated with –<br>Inhaling it<br>Ingestion (swallowing) it<br>Skin contact, or<br>Eye contact? | 1. <b>Eliminate</b> the risk.<br>If it is not reasonably practicable to eliminate the risk, minimise it by (in descending order) –<br>2. <b>Substitution</b><br>3. <b>Isolation</b><br>4. <b>Engineering Means</b><br>5. <b>Administrative Controls</b><br>6. <b>Personal protective equipment (PPE)</b> |