## Scope

**AIR COMPRESSOR**

This document is to be completed for staff and student use of machinery, plant and equipment as a part of a school curriculum activity or program.

Refer to the [ITD Guidelines](http://education.qld.gov.au/health/pdfs/healthsafety/itd-staff-guidelines.pdf) for further staff advice on the risk management process for practical ITD curriculum activities in schools.

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| Plant/Equipment Description: | |
| Teachers/Leaders: | |
| Room Locations: | |
| Assessment Date: | Review Date: |

*N.B. This assessment can remain active for up to 5 years. However, an annual monitoring and review process should be undertaken and recorded – refer to the last page of this document.*

*Below are the details of the manufacturing or production processes attributed to this item of equipment categorised by their assessed inherent risk levels (refer to the Equipment/Process Risk Matrix). The actions required for approval for each level of inherent risk are mandatory.*

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| **Inherent Risk Level** | | **Details of Processes** | **Action Required/Approval** |
| 🗹 | **Medium** | |  | | --- | | * When carrying out routine repairs and maintenance on the stationary air compressor unit – including all associated components and fixed lines. | | * Document controls in planning documents and/or complete this *Plant Risk Assessment.* * Consider obtaining parental permission. |

Minimum standards

| Minimum qualifications and experience *Listed below are the general “minimum” recommendations for the management of this Plant/Equipment.*  🗹 *Indicate the minimum management controls.* |
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| Registered teachers with experience, ability and competency in the safe use of this plant/equipment  *(indicate one or more of the following):*  Specific knowledge of the safe and correct use of this plant/equipment  Experience (i.e. previous involvement and familiarity) in the safe use of this plant/equipment  Demonstrated expertise, ability and competency with this plant/equipment  Documented qualifications relating to the use of this plant/equipment (e.g. in a staff profile)  **OR**  An adult staff member or leader, other than a registered teacher, with:  Expertise in the safe and correct use of this plant/equipment  Documented qualifications that demonstrate experience, ability and competency in the safe use of this plant/equipment. |
| Will any ITD staff require initial and/or ongoing training for the safe use of this plant/equipment?  If yes, give details: |
| Will students be operating this plant/equipment?  If yes, state how student use of this plant/equipment will be managed (e.g. Workshop Safety Induction)  Give details: |
| Further information if required: |
|  |
| Minimum control requirements |
| Supporting documentation available in the school on this plant/equipment includes:  Operators Manual  Safe Operating Procedures (SOP)  Equipment Maintenance Records (EMR)  A process for recording student safety induction e.g. Student induction register  A process for recording staff training and experience, e.g. ITD Staff induction register |
| All guards are in place and in good working order for this plant/equipment |
| Safe Working Zones are defined for this plant/equipment (e.g. yellow lines and/or appropriate signage) |
| Suitable personal protective equipment (PPE) is available to be used by all operators |
| This plant/equipment complies with relevant safety standards |
| Further information if required: |

Hazards and control measures

*Listed below are indicative hazards/risks and suggested control measures. These are by no means exhaustive lists. Add details of any other hazards/risks or additional controls you intend to implement.*

🗹 *Indicate the control measures adopted. Detail their implementation and any additional controls required.*

| **Hazards/Risks** | **Hierarchy of Recommended**  **Control Measures** | **Yes** | **No** | **Details of how this will be implemented***(and any additional controls)* |
| --- | --- | --- | --- | --- |
| **Exposure to Rotating**  **or Moving Parts:**   * **Entanglement and**   **Entrapment**  Could hair, clothing, ties, jewellery or other materials become entangled with moving parts of plant or materials in motion?   * **Crushing and Pinching**   Could anyone be crushed or pinched due to falling, uncontrolled or unexpected movement of plant or its load tipping or rolling over, or contact with moving parts during testing, inspection or maintenance? | 1. Where possible, potentially hazardous portable power tools, including the stationary air compressor unit, are substituted or replaced with less hazardous alternatives. |  |  |  |
| 1. All necessary guards and safety devices are in place around the stationary air compressor protecting workers from all rotating and moving parts. |  |  |  |
| 1. “Lock Out” or warning “Danger” tags are affixed to all air compressors under repair or maintenance preventing workers from using the equipment. |  |  |  |
| 1. Safe operating procedures (SOPs) for the stationary air compressor are available and clearly displayed. |  |  |  |
| 1. “Safe Working Zones” around the stationary air compressor are clearly defined by yellow safety lines or similar. |  |  |  |
| 1. “Safe Working Zones” are clearly defined in workspaces where jigsaws are to be used. |  |  |  |
| 1. All appropriate and approved personal protective equipment (PPE) is used where required |  |  |  |
| **Slips, Trips, Falls   and Abrasions:**  Can anyone using the plant or in the vicinity of the plant, slip, trip or fall due to the working environment or other factors?  e.g. Poor housekeeping, dust on floors, slippery or uneven work surfaces, power cables across work areas causing injuries and abrasions? | 1. Slip resistant flooring is encouraged. Regular checks are made for unsafe wear and damage. Inspections are made for any power leads or air hoses, etc. |  |  |  |
| 1. Procedures are in place for the disposal of all waste materials around the fixed air compressor unit. |  |  |  |
| 1. Staff training is provided to minimise exposure to these hazards. |  |  |  |
| **Environmental:**   * **Noise**   Is it likely that the normal operation of this plant will produce excessive noise levels?   * **Dust, Fumes and Vapours**   Is it likely there will be airborne dust particles, toxic fumes or volatile vapours produced and therefore be present in the workspace? | 1. The fixed or stationary air compressor unit is regularly maintained. All maintenance is documented in a register. |  |  |  |
| 1. Exposure to any noisy environments where fixed or stationary air compressor units are normally housed is monitored. |  |  |  |
| 1. Engineering controls (or physical changes) such as mandatory machinery guarding or any protective safety screens and enclosures are in place in all workspaces and all in good working condition. |  |  |  |
| 1. All appropriate and approved personal protective equipment (PPE) is used where required. |  |  |  |
| **Electrical:**  Can the operator be injured by electrical shock due to working near or contacting with damaged or poorly maintained live electrical conductors such as power outlets, extension leads, safety switches, starters and isolators or casual water on the floor near plant and machinery? | 1. The fixed or stationary air compressor unit has a wall or machine mounted isolating switch that disconnects all motive power. . |  |  |  |
| 1. The stationary air compressor unit is fitted with a Direct on Line (DOL) Start/Stop switch - (Red & Green buttons). |  |  |  |
| 1. “Lock Out” or warning “Danger” tags are affixed to the stationary air compressor unit when under repair or maintenance preventing workers from using the equipment. |  |  |  |
| 1. Visually checks are made of all electrical switches, plugs and power leads, etc. |  |  |  |
| 1. Electrical safety inspections are completed regularly as per department guidelines for all fixed or stationary air compressor units. 2. Electrical maintenance on all plant and equipment, including air compressors, is documented in EMRs. |  |  |  |
| **Explosion and Fire:**  As a consequence of using this particular item of plant and equipment, could anyone be injured by the release of stored energy triggered by volatile, explosive substances such as stored gasses, vapours or liquids?  Could fire and explosion also result from a build up of wood dust under the table saw, in the dust extraction system or in confined ceiling spaces? | 1. All ducted dust, fumes and vapour extraction systems are regularly maintained and cleaned. |  |  |  |
| 1. Fire extinguishers of the correct type are readily available in all workspaces and positioned near exit doorways. |  |  |  |
| 1. Staff training is provided regarding procedures for the correct and appropriate use of fire safety equipment. |  |  |  |
| 1. Exits from buildings and other work areas are defined and access to them kept clear of obstructions. 2. Safety signage is posted clearly denoting the location of all fire safety items and emergency exits. |  |  |  |

| **Other Hazards/Risks** | **Additional Control Measures** *These would relate to the specific student needs, locations and conditions in which you are conducting your activity.* |
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| **Approval** | | | |
| Submitted by: | | | Date: |
|  | Approved as submitted. | | |
|  | Approved with the following condition/s: | | |
|  | Not Approved for the following reason/s: | | |
| By: | | Designation: | |
| Signed: | | Date: | |

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| ITD staff members involved in the use of this risk assessment & the associated plant & equipment: | |
|  | *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:*  *Signature:*  ……………………………….. *Date:* |

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| **Monitoring and Review** *This Plant & Equipment Risk Assessment is to be monitored and reviewed annually for a further four (4) years.* |

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| **Review 1:** | | **Yes** | **No** |
| * Are allocated risk levels and “Actions required” unchanged over the past 12 months? * Are Minimum Standards and Recommended Control Measures unchanged over 12 months? * ITD staffing details at this school have remained unchanged over the past 12 months? | |  |  |
| If the responses are “NO” for any question, record current details here, and list all staff changes *(with signatures)* | | | |
| Reviewed by: | Designation: | | |
| Signed: | Review Date : | | |

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| **Review 2:** | | **Yes** | **No** |
| * Are allocated risk levels and “Actions required” unchanged over the past 12 months? * Are Minimum Standards and Recommended Control Measures unchanged over 12 months? * ITD staffing details at this school have remained unchanged over the past 12 months? | |  |  |
| If the responses are “NO” for any question, record current details here, and list all staff changes *(with signatures)* | | | |
| Reviewed by: | Designation: | | |
| Signed: | Review Date : | | |

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| **Review 3:** | | **Yes** | **No** |
| * Are allocated risk levels and “Actions required” unchanged over the past 12 months? * Are Minimum Standards and Recommended Control Measures unchanged over 12 months? * ITD staffing details at this school have remained unchanged over the past 12 months? | |  |  |
| If the responses are “NO” for any question, record current details here, and list all staff changes *(with signatures)* | | | |
| Reviewed by: | Designation: | | |
| Signed: | Review Date : | | |

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| **Review 4:** | | **Yes** | **No** |
| * Are allocated risk levels and “Actions required” unchanged over the past 12 months? * Are Minimum Standards and Recommended Control Measures unchanged over 12 months? * ITD staffing details at this school have remained unchanged over the past 12 months? | |  |  |
| If the responses are “NO” for any question, record current details here, and list all staff changes *(with signatures)* | | | |
| Reviewed by: | Designation: | | |
| Signed: | Review Date : | | |