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| **HAZARD MANAGEMENT – RISK ASSESSMENT(LONG FORM)** |

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| --- | --- | --- | --- |
| **Stage 1:**  | **Hazard Identification** | **Residual risk rating****L, M, H, VH** |  |
| **Name or description of the activity(s) to be assessed** |  | **Date**: | \_\_\_\_\_\_/\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_ |
| **Area, School/Branch****Building/Room** |  |
| **Workers completing the risk assessment. Name and contact details** |  | **Mobile/Phone** |  |
|  | **Mobile/Phone** |  |
|  | **Mobile/Phone** |  |

* This template or equivalent template can be used. Please note that this list is not exhaustive, but can be used as the basis for your initial hazard identification**.**
* If you tick yes to any of the hazards listed below, then the hazard is to be transferred and addressed on **Appendix C2.**

Where a number of activities have the same hazards, they may be grouped together on the same assessment and the same control measures applied to each.

**Consider – is there potential for, or identified exposure to any of the following, as part of a process/activity**

|  |  |
| --- | --- |
| **Physical/Environmental Hazards**  | **Plant and Equipment hazards** |
| [ ]  | Animals (e.g. hazardous wild animals, bees, snakes) | [ ]  | Mobile lifting equipment or farm machinery |
| [ ]   | Confined space entry (e.g. pit, tank, silo, entry through a hatch) | [ ]   | Pressurised vessels/systems (e.g. autoclave, boiler) |
| [ ]  | Fall from a height (e.g. ladder, elevated platform, cliff, scaffolding) | [ ]  | Hazardous levels of heat or vibration (to whole or part body) |
| [ ]   | Fire (potential for uncontrolled fire due to ignition sources) | [ ]   | Hazardous plant (e.g. lathes, lasers, microtomes, cryostats, |
| [ ]  | Flying or moving items/plant/vehicles, falling object(s) |  | or operations could result in amputation, eye injury, serious  |
| [ ]  | Hazardous terrain or environment including wet/slippery surfaces |  | laceration, crushing injury) |
| [ ]   | Lighting/visibility is compromised and hazardous | **Radiation hazards** |
| [ ]  | Noise or sound levels > 85dB(A) or peak level of greater than | [ ]  | Sealed sources or unsealed sources |
|  | 135 dB(C) for any period of time | [ ]   | Artificial sources (UV) |
| [ ]  | Temperature or weather extremes (e.g. hypothermia, major burns) | **Biological hazards (e.g. via inhalation, contact, digestion)** |
| [ ]  | Isolation (e.g. work in a remote area, difficult to access work site,  | [ ]  | Contamination (e.g. pathogens, body fluids) |
|  | or a rescue effort would be difficult in the event of an emergency. | [ ]   | Animal handling (e.g. bites, allergies) |
| [ ]  | Boating and/or Diving (e.g. risk of drowning) | [ ]   | Other  |
| **Communications** | **Chemical hazards** |
| [ ]  | Communication problems (e.g. by virtue of location or isolation) | [ ]   | Explosive substances |
| **Electrical** | [ ]  | Flammable substances, gas, airborne contaminants |
| [ ]  | Electric shock | [ ]  | Toxic or asphyxiate gas (e.g. CO2 including dry ice, liquid N2) |
| **Ergonomic/Hazardous Manual activity/task(s)** | [ ]  | Respiratory irritants (e.g. nanotech, dust, asbestos) |
| [ ]  | Work requiring repetitive force or movement | [ ]  | Chemical spraying (e.g. agricultural, pesticides) |
| [ ]   | Sustained force/posture or awkward posture  | [ ]   | Prohibited and restricted carcinogens requiring a permit |
| [ ]  | Working with animals, unpredictable/unbalanced loads | [ ]  | Hazardous chemicals (not included above) |
| [ ]   | Transfer of item(s) up or down stairs, using both hands or  | [ ]  | Other |
|  | requiring the use of lifting equipment from one level to another | **Activity combines a number of different hazards, and** |
| **Stress/Duress hazards** | **the impact/results of interaction is unknown e.g. mixing** |
| [ ]  | Personal threat e.g. aggressive behaviour, abuse, threat, assault | **chemicals or recognised as a risk e.g. water and electricity.** |
|  | (includes home visits)  | [ ]  | Specify - |
| [ ]  | Fatigue e.g. from excessive work related mental/physical exertion | **High Risk Travel** |
| **Remote work location or working in isolation** | [ ]  | Destination is rated [DFAT 3 or 4](http://www.smartraveller.gov.au/zw-cgi/view/Advice/Index) (High/Very High) |
| [ ]  | Medical emergency, difficult to administer/obtain first aid | **High risk work licence required in accordance with WHS Regs** |
|  | gain assistance e.g. access to medical facilities | [ ]  | Boom-type elevating work platform, scaffolding, dogging, |
| **Other** |  | crane and hoist operation, reach stackers, forklift operation, |
| [ ]  |  |  | pressure equipment operation. |
| [ ]  |  |  |  |
| [ ]  |  | [ ]  | **No hazards identified. No risk assessment required.** |

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| **HAZARD MANAGEMENT** |

**Stage 2 and Stage 3 – Risk Assessment and Control**

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| --- | --- | --- | --- |
| **Record the potential hazards/issues** **identified in Hazard Identification Process on Appendix C1****and****When and where the hazard** **is present (i.e. when is the worker exposed?)** | **Inherent risk** **assessment****rating**Before controls are implemented (Refer to the risk assessment Tables – Appendix C3)**L, M, H, VH**  | **List the control measures implemented (i.e. in place)*** Control measures are to be in accordance with the Hierarchy of Control. Refer to Appendix C3 for examples.
* Choose the control(s) that most effectively eliminate the hazard or minimises the risk.
* Record the control measures in place under the relevant control measure (e.g. list in order under the following headings - substitution, isolation, engineering, administrative, Personal Protective Equipment).
* Ensure that control measures do not introduce new hazards.
 | **Residual risk****rating**After controls in placeThe highest rating is to be transferred to the top of page C1. |
|  |  |  |  |
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|  |  |
| --- | --- |
| **Staff related activities** (Note – Low and Medium Residual Risk does not require Manager/Supervisor authorisation) | **Student related activities** |
| **Author** | **Name and****Signature**  |  | **Author** | **Name and****Signature** |  |
| **High Residual Risk –** **Authorised by Manager/Supervisor** | **Name and****Signature/authority** |  | **Low and Medium Residual Risk –** **Authorised by Manager/Supervisor**  | **Name and****Signature/authority** |  |
| **High Residual Risk –** **Authorised by Head of School/Branch** | **Name and****Signature/authority** |  | **High Residual Risk –** **Authorised by Head of School/Branch** | **Name and****Signature/authority** |  |
| **Very High Residual Risk –** **Authorised by VC&P** | **Name and****Signature/authority** |  | **Very High Residual Risk –** **Authorised by VC&P** | **Name and****Signature/authority** |  |

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| **HAZARD MANAGEMENT** |

**RISK ASSESSMENT TABLES**

Three essential steps are taken:

1. The probability or likelihood of an incident occurring is evaluated;
2. The severity of the potential consequences is calculated or estimated;
3. Based on these two factors, the risks are assigned priority for risk control through the use of a risk rating.

Risk assessment involves examining and evaluating the likelihood/severity/consequence in order to prioritise and implement adequate controls. The risk matrix has been adopted based on the principles of AS/NZS ISO 31000 (2009) Risk Management – Principles and Guidelines and Code of Practice “How to Manage Work Health and Safety Risks (2012).

**Likelihood Table**

|  |  |
| --- | --- |
| **CATEGORY** | **DESCRIPTION** |
| Almost certain | There is an expectation that an event/incident will occur. |
| Likely | There is an expectation that an event/incident **could occur** but not certain to occur. |
| Slight | This expectation lies somewhere in the midpoint between “could” and “improbable”. |
| Unlikely | There is an expectation that an event/incident is doubtful or **improbable** to occur. |
| Rare | There is no expectation that the event/incident will occur. |

**Consequences Table**

|  |  |
| --- | --- |
| **CATEGORY** | **DESCRIPTION** |
| Severe | Injury resulting in death, permanent incapacity. |
| Major | Injury requiring extensive medical treatment, hospitalisation, or activities could result in a Notifiable occurrence. |
| Moderate | Injury requires formal medical treatment (hospital outpatient/doctors visit etc), activities could result in an Improvement Notice. |
| Minor | Injury requires first aid. |
| Negligible | Injury requires minor first aid (e.g. bandaid), or result in short term discomfort (e.g. bruise, headache, muscular aches etc), no medical treatment. |

**Risk matrix**

|  |  |
| --- | --- |
| **Likelihood** | **Consequences** |
|  | **Negligible** | **Minor** | **Moderate** | **Major** | **Severe** |
| **Almost Certain** | **Medium** | **High** | **Very High** | **Very High** | **Very High** |
| **Likely** | **Medium** | **Medium** | **High** | **Very High** | **Very High** |
| **Slight** | **Low** | **Medium** | **High** | **High** | **Very High** |
| **Unlikely** | **Low** | **Low** | **Medium** | **Medium** | **High** |
| **Rare** | **Low** | **Low** | **Low** | **Medium** | **Medium** |

**If the level of risk is assessed as high or very high**

* Stop the activity; or
* Tag out the plant/equipment; or
* Secure any chemical; and
* Determine if the activity is to:
* continue; or
* cease

in consultation with your Manager/Supervisor.

Follow the process in 3.5.6.1where the risk cannot be reduced to medium or low.

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| **HAZARD MANAGEMENT** |

**HIERARCHY OF RISK CONTROL**

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| **Hierarchy of control** | **Examples of control measures** |
| **HIGHEST** |  | **Level 1** | **Elimination** | * Not introducing the hazard into the workplace.
* Designing out the hazards before they are introduced.
* Removing the hazard completely.
* Not conducting the activity.
 |  | **MOST** |
| **LEVEL****OF****HEALTH****AND****SAFETY****PROTECTION** |  | **If this is not practicable then** | **🡫** |  |  | **RELIABILITY****OF** **CONTROL MEASURES** |
|  | **Level 2**Where it is not reasonably practicable to eliminate the hazards and associated risks. | **Substitution** | * Replacing or substituting the hazard with something safer.
 |
|  | **Isolation** | * Isolating the hazard from the people by distance or using barriers.
 |
|  | **Engineering** | * Installing/using a control measure of a physical nature, including a mechanical device or process e.g. trolleys, hoists, guards, residual current devices, fume-hoods, extraction/ventilation systems, RCD protection.
 |
|  |  | **🡫** |  |
|  | **Level 3**These control measures do not control the hazard at the source. They rely on human behaviour and supervision, and used on their own tend to be the least effective in minimising risks. | **Administrative** | * Documenting a standard operating procedure (SOP) and include in the induction program for all staff required to perform the activity
* Developing a proficiency based training program if required by the risk assessment (see definitions) (Workers may be trained against the SOP [Appendix E](#AppendixE) or other assessment criteria.)
* Training workers to use control measures implemented when carrying out the activity
* Introducing a second operator
* Providing signage or warning labels
* Restricting access
* Maintenance and testing programs
* Changing the work organisation e.g. relocating equipment or items, rotating workers between different activities
 |
| **LOWEST** |  | Exposure is only limited if the worker wears and uses the PPE correctly. | **Personal Protective Equipment****(PPE)** | Requiring the use of one or more of the following:* ear protection (ear muffs)
* respirators
* face masks
* hard hats/helmet
* gloves, aprons
* eye protection (glasses, shield, visor)
* non-slip footwear
* appropriate clothing
 |  | **LEAST** |

**For further examples and explanation on the Hazard Management and Risk Control process,**

**please refer to the Code of Practice for** [**How to manage WHS Risks (2011).**](http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/model-cop/pages/model-cop)

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