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| **HSEM assistance with the RA process is available. Please allow a 5 day turnaround for feedback** |
| Risk Assessment Name: Collection or use of Hazardous Substances/Dangerous Goods/Medicine/Poison/Infectious Agents during fieldwork Risk Assessment |
| Risk Assessment Description:  | Location/Date: |
| Risk Assessment Owner *(Person developing RA*)Name:………………………………………………………………………..Position:……………………………………………………………………..Signature:……………………………………………………………………Date: / /20 | Risk Assessment Approver *(Person authorising RA)*Name:………………………………………………………………………..Position:……………………………………………………………………..Signature:……………………………………………………………………Date: / /20 |
| Documentation: *Certificates, Permits, relevant Australian Standards and other documents applicable to this activity* |

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| **IDENTIFY** | **ASSESS** | **CONTROL** |
| **Step 1** Enter risk description | **Step 2**Select hierarchy of control and describe the existing control | **Step 3**Level of risk with existing controls | **Step 4** Select hierarchy of control and describe your proposed treatment | **Step 5**Who is responsible and due date | **Step 6**Level of risk after treatment |
| **Risk Description (Hazard)** | **Existing Controls****Hierarchy of Control**1. **Eliminate,** eg: eliminate task, remove hazard
2. **Substitute** eg: replace with less hazardous process
3. **Isolate** eg: enclosures, restricted access
4. **Engineering** eg: guarding, separation, redesign
5. **Administrative** eg: SWP, training, schedule
6. **Personal Protective Equipment (PPE)** eg: gloves
 | **Consequence** | **Likelihood** | **Risk Score** | **New/Additional Controls**Select the hierarchy of control and describe your proposed treatment | **Who is responsible for implementing the control(s)** | **Due Date** | **Consequence** | **Likelihood** | **Risk Score** |
| Hazards associated with preparing the substance/s for use in the field |  |  |  |  | 🞏 Substance to be prepared inside a fume cabinet🞏 Substance to be diluted down to suitable strength prior to transport and use in the field🞏 Gloves required to be worn🞏 Safety glasses required to be worn🞏 Laboratory coat required to be worn🞏 Eyewash station and safety shower available in the preparation laboratory🞏 Sample/substance to be correctly labelled.  |  |  |  |  |  |
| Hazards associated with transporting the substance/s to and from the fieldCylinders Storage of substance on site  |   |  |  |  | 🞏 Chemicals are not to be transported in private vehicles🞏 SDS available in vehicle being used. 🞏 Substance correctly diluted prior to transport🞏 Substance to be double bagged prior to transport 🞏 Substance to be transported in a bund if possible🞏 Substance to be sealed inside a box/esky prior to transport🞏 Substance to be kept at the required temperature at all times 🞏 Powders and liquids to be transported in vehicle boot 🞏 Gas cylinders to be transported in an appropriately secured cage or using straps or chock blocks🞏 Regulators have been removed prior to transport of the cylinders 🞏 Toxic cylinders are capped or plugged if possible. 🞏 Substances/chemicals are securely stored on site, restricted access where necessary.. 🞏 Substance to be transported in specially licensed & placarded vehicle at all times 🞏 [Register of Chemicals/substances](https://www.dmirs.wa.gov.au/) being transported |  |  |  |  |  |
| Hazards associated with using the substance/s in the field |  |  |  |  | 🞏 Gloves required to be wornSafety glasses required to be worn🞏 Laboratory coat required to be worn🞏 Safety boots required to be worn🞏 Mobile eye wash station available on site🞏 Shower available on site 🞏 Spills/leaks procedure available 🞏 If decanting/mixing, this is to be done in a bund, away from water ways.  |  |  |  |  |  |
| Hazards associated with collecting the substance/s on site |  |  |  |  | 🞏 Suitable mask or respirator with correct classification of cartridge to be worn while collecting the substance 🞏 Suitable gloves to be worn🞏 Spills/leaks procedure available 🞏If decanting/mixing, this is to be done in a bund, away from water ways. 🞏 If there is a risk of infection from the samples suitable vaccines etc to be in place |  |  |  |  |  |
| Hazards associated with disposal of the substance/s |  |  |  |  | 🞏 Appropriate Waste Container to be used (No food containers)🞏 Substance to be clearly labelled “Waste”🞏 Container to be kept sealed and disposed of intact through chemical disposal process🞏 Substance to be transported back to campus for disposal🞏 All biological waste to be autoclaved on return to campus 🞏 Chemical waste to be disposed by chemical contractor  |  |  |  |  |  |
| SDS, Licenses and or permits to collect and or use the substance are not in place |  |  |  |  | 🞏 All permits received prior to commencement of the trip🞏 Copies of permits taken with participants on the trip🞏 Contracts or agreements with external organisations are executed prior to approvals for the trip being provided |  |  |  |  |  |
| Risks to the environment through spilling/uncontrolled release the substance |  |  |  |  | 🞏 Suitable spill kit taken to site for use as required🞏 Fresh Water available for flushing if required🞏 Clean equipment/tools used to prevent contamination.🞏 Substance only to be collected in wind free situations |  |  |  |  |  |
| Manual Handling Risks – will we include this on the Hazardous materials RA? |  |  |  |  | 🞏 Proper manual handling techniques used when handling substances (Cylinders for example) |  |  |  |  |  |
| Are you working with any substances that would require exposure monitoring? If so: |  |  |  |  | 🞏 Monitoring devices to be made available e.g gas detectors, radiation badge etc |  |  |  |  |  |
| Will you be working with human patients in a clinical setting? |  |  |  |  | Follow https://www.safeworkaustralia.gov.au/system/files/documents/1702/nationalcodeofpractice\_control\_workrelatedexposure\_hepatitis\_hivviruses\_nohsc2010-2003\_pdf.pdf 🞏 Ensure that appropriate immunisations as listed in the current Australian Immunisation Handbook, have been completed)https://beta.health.gov.au/health-topics/immunisation/health-professionals .  |  |  |  |  |  |
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| Will you be performing research involving human participants? |  |  |  |  | 🞏 Seek and gain approval from the Human Research Ethics Committee. |  |  |  |  |  |
| Will you be working with animal participants? |  |  |  |  | 🞏 Seek and gain approval from the Animal Ethics Committee. |  |  |  |  |  |
| Will you be collecting animals, samples from animals or material discarded by animals?(e.g. fish, vertebrates, insects, invertebrates, fur, skulls, feathers, carcasses, bones, scats) |  |  |  |  | 🞏 Seek and gain permission to enter and sample from land - Landgate, Main Roads WA or the owner.🞏 Wear PPE including gloves, eye protection and breathing protection until your sample has been contained, and wash your hands before touching your face or eating. 🞏 Vaccination if available. 🞏 For collecting native animals or their parts then you will need a fauna licence <http://www.dpaw.wa.gov.au/plants-and-animals/licences-and-permits/134-fauna-forms> or a fish licence http://www.fish.wa.gov.au/Pages/Home.aspx .🞏 Transport the samples double contained and labelled.🞏 If collecting into alcohol, other preservative, or into cryogenic refrigerant then manage those chemical hazards. |  |  |  |  |  |
| Will you be collecting native plants? |  |  |  |  | 🞏 Seek and gain a flora licence http://www.dpaw.wa.gov.au/plants-and-animals/licences-and-permits/135-flora-licences . |  |  |  |  |  |
| Will you be collecting fungi or other microorganisms? |  |  |  |  | 🞏 Seek and gain permission to enter and sample from land - Landgate, Main Roads WA or the owner.🞏 Wear PPE including gloves, eye protection and breathing protection until your sample has been contained, and wash your hands before touching your face or eating. 🞏 Vaccination if available. 🞏 Transport the samples double contained and labelled. |  |  |  |  |  |
| Will you be collecting soil or water samples from WA? |  |  |  |  | 🞏 Seek and gain permission to enter and sample from land - Landgate, Main Roads WA or the owner.🞏 Wear PPE including gloves, eye protection and breathing protection until your sample has been contained, and wash your hands before touching your face or eating. 🞏 Vaccination if available. 🞏 Transport the samples double contained and labelled. |  |  |  |  |  |
| Will you be collecting samples of/from soil, water, animals, or plants interstate or overseas for importation into WA? |  |  |  |  | 🞏 Work within the State and Federal biosecurity regulatory system, to seek appropriate Import Permits, and to follow the 🞏 🞏 Import Conditions on the Import Permit.🞏 Transport the samples following the International Air Transport Authority (IATA) Dangerous Goods Regulations for Category 6. |  |  |  |  |  |
| Will you be leaving Australia and taking with you any goods on the Defence and Strategic Goods List? |  |  |  |  | 🞏 Perform a DSGL self-assessment and seeking any required Export Controls. |  |  |  |  |  |
| Will you be collecting or transporting samples that fall under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)? |  |  |  |  | 🞏 Seek and gain a CITES Permit. |  |  |  |  |  |

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**Health and Safety Risk Matrix**

# Determine the Risk Rating (Level of Risk)

1. **Select the Likelihood** - Select the appropriate Likelihood or Frequency rating of the Risk Event occurring for the selected Consequence level, given the controls are in place.
2. **Select the Consequence** - For the given Risk Event select the relevant Consequence categories and apply a rating. The ratings are determined with the existing controls in place. Where there are multiple ratings for a risk, the highest combination of Consequence/Likelihood is taken as the final risk rating (do not average out the ratings).

**There are 3 types of risk ratings:**

**Inherent** - no controls in place or total control failure; **Current** - with existing controls in place; **Residual** - with proposed treatment action plans (TAPs) in place.

Curtin requires the **Current** risk rating (as a minimum).

# Risk Acceptance Criteria Table

**Make an acceptance decision.** Based on the current risk rating, use the Risk Acceptance Criteria Table to determine an appropriate decision and response



**Controls Rating Table**

**Select the Overall Controls Rating (for ALL controls as a whole)**

1. **Controls** - A control is any measure or action currently in existence that modifies or manages the risk. Examples of controls could include a policy, procedure, practice, process, technology, technique, method, or device. A control should be demonstrable, i.e. auditable.
2. **Treatment Action Plans (TAPs)** - TAPs are additional controls, where required. It could be an improvement of an existing control and/or a new initiative altogether. TAPs become controls, or modify existing controls, once they have been implemented.

The adequacy of the controls is assessed on a common sense, qualitative basis. This can be viewed as a reasonableness test, i.e. are you doing what is reasonable under the circumstances to prevent or minimise the impacts of the risk?

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| **Level** | **Descriptor** | **Foreseeable** | **Detail** |
| E | Excellent | More than what a reasonable person would be expected to do in the circumstances. | Controls fully in place and require only ongoing maintenance and monitoring. Protection systems are being continuously reviewed and procedures are regularly tested. |
| A | Adequate | Only what a reasonable person would be expected to do in the circumstances. | Being addressed reasonably. Protection systems are in place and procedures exist for common or typical circumstances. Periodic review. |
| I | Inadequate | Less than what a reasonable person would be expected to do in the circumstances. | Little to no action being taken. No protection systems exist or they have not been reviewed for some time. No formalised procedures. |

Once the **Overall Controls Rating** (above) has been conducted on **ALL** controls as a whole, a **Controls Assurance** should be conducted on EACH control to determine if the controls are in place and effective.

**Controls Assurance Questions:**

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| 1. Is the control in use?
2. Is the control documented?
3. Is the control up to date?
4. Is the control effective?
 | *If you answered ‘Yes’ to all 4 questions, the control is effective (the control text should be Green).* |
| *If you answered ‘Yes’ to 2 or 3 questions, the control may require some improvements (the control text should be Blue).* |
| *If you answered ‘Yes’ to 1 or less questions, the control may require significant improvements (the control text should be Red).* |

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| **This risk assessment has been developed through consultation with our employees and has been read, understood and signed by all employees undertaking the works** |
| **Print Names:** |  **Signatures: Position:** |  **Dates:** |
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| **Review No** | **01** | **02** | **03** | **04** | **05** | **06** | **07** | **08** | **09** |
| Initial: |  |  |  |  |  |  |  |  |  |
| Date: |  |  |  |  |  |  |  |  |  |