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| C:\Users\susanb\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\PRIMARY_A_Vertical_Housed_RGB.PNG | Health & Safety  radioactive material risk assessment Form |

| Ra No./ERMS Ref: | Date: | Version No.: | Review Date: | Authorised by: |
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| STEP 1 – ENTER INFORMATION ABOUT THE ACTIVITY/TASK, ITS LOCATION AND THE PEOPLE COMPLETING THE RISK ASSESSMENT |
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| Location name: | Building No.: | Room No.: | Date: | Assessed by: | HSR/Employee representative: |
| Radioactive material being used: | | Radioactive material physical state:  Gas Liquid Solid | | | |
| **Detail the properties of the radioactive material:**  Activity (Bq):        Activity concentration (Bq/g):  Energy (eV):        Half-life:  Decay mode:  Beta  Alpha  Gamma  X-ray  Neutron | | **Shielding requirements of the radioactive material:**  Nil Perspex Lead Other: | | | |
| **Monitoring requirements of the radioactive material:**  Personal dosimetry Survey meter Dose meter Other: | | | |
| **Licensing requirements:** | | **Disposal Requirements:**  Dilution and dispersion  Delay and Decay  Concentration and containment | | | |
| Description of the how the radioactive material is being used (the activity/work using the radioactive material) | | | | | |
| Workplace conditions (Describe layout and physical conditions - including access and egress) | | | | | |

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| List systems of work for the radioactive material:  ● Training ● SOPs  ● Manufacturer’s information and instructions ● Inspections  ● Security requirements ● Licensing  ● Emergency situations |  |
| Is there past experience or background material/requirements with the radioactive material that may assist in the assessment?  ● Existing controls ● SOPs ● Standards  ● Industry standards ● Incidents & near-hits ● Legislation and Codes  ● Training ● Incident Investigation ● Guidance material  ● Emergency situations |  |

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| Step 2: RISK RATING – RISK MATRIX AND DEFINITIONS |

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| **Likelihood** | **Consequence** | | | | | |
|  | **Insignificant** | **Minor** | **Moderate** | **Major** | **Severe** |
| **Almost certain** | Medium | High | High | Extreme | Extreme |
| **Likely** | Medium | Medium | High | Extreme | Extreme |
| **Possible** | Low | Medium | Medium | High | Extreme |
| **Unlikely** | Low | Low | Medium | High | High |
| **Rare** | Low | Low | Low | Medium | High |

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| **Likelihood** |  | **Consequence** |
| Almost certain – will occur in most circumstances when the activity is undertaken (greater than 90% chance of occurring) |  | Insignificant –First aid treatment, minor injury, no time off work |
| Likely - will probably occur in most circumstances when the activity is undertaken (51 to 90% chance of occurring) |  | Minor – Single occurrence of medical treatment, minor injury, no time off work |
| Possible – might occur when the activity is undertaken (21 to 50% chance of occurring) |  | Moderate – Multiple medical treatments, non-permanent injury, less than 10 days off work |
| Unlikely – could happen at some time when the activity is undertaken (1 to 20% chance of occurring) |  | Major – Extensive injuries requiring medical treatment (e.g. surgery), serious or permanent injury/illness, greater than 10 days off work |
| Rare – may happen only in exceptional circumstances when the activity is undertaken (less than 1% chance of occurring) |  | Severe – Severe injury/illness requiring life support, actual or potential fatality, greater than 250 days off work |

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| **Risk Rating Priority for Action** | | | |
|  | **Risk acceptance guide** | **Action** | **Recommended action time frame** |
| **Extreme** | Not acceptable | Cease or isolate source of risk  Implement further risk controls  Monitor, review and document controls | Immediate  Up to 1 month  Ongoing |
| **High** | Generally (in most circumstances) not acceptable | Implement risk controls if reasonably practicable  Monitor, review and document controls | 1 to 3 months  Ongoing |
| **Medium** | Generally (in most circumstances) acceptable | Implement risk controls if reasonably practicable  Monitor, review and document controls | 3 to 6 months  Ongoing |
| **Low** | Acceptable | Monitor and review | Ongoing |

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| STEP 3 – Identify hazards and associated risk Scores and controls | |
| For each of the following prompts:   * **Review the prompts/examples** for each hazard category that may potentially exist for the activity/task; * Determine and record an **inherent risk score** using the risk matrix; * In the **comments** box, describe when and where the hazard is present; * Specify the risk **control type**, for each current or proposed risk control; * Provide a **control description** for each current or proposed risk control; * Where **proposed risk control(s)** have been identified complete a [Health & Safety: Action plan](https://safety.unimelb.edu.au/__data/assets/word_doc/0005/4698680/health-and-safety-action-plan.docx); * Determine the **residual risk score** using the risk matrix. | Hierarchy of Control (Control Type)  El – Elimination  S – Substitution  En – Engineering Is – Isolation G – Guarding  Sh – Shielding  A – Administrative T – Training In – Inspection  M – Monitoring H – Health Monitoring  P – PPE |

| Category | Inherent Risk score | Comments (when and where hazard is present) | Control type | Control description  (Current and Proposed) | Residual Risk Score |
| --- | --- | --- | --- | --- | --- |
| Purchasing/receipt of radioactive material |  |  |  |  |  |
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| Use/activity: |  |  |  |  |  |
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| Storage: |  |  |  |  |  |
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| Disposal: |  |  |  |  |  |
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| Other: |  |  |  |  |  |
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| STEP 4 – ImpleMEntation and consultation process | | | | |
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| Determine the person responsible for reviewing and implementing the risk assessment including the identified controls. Ensure a [Health & Safety: Action plan](https://safety.unimelb.edu.au/__data/assets/word_doc/0005/4698680/health-and-safety-action-plan.docx) has been completed, reviewed and signed off where proposed controls have been identified.  Obtain the authorisation of the management representative.  Ensure the DRSO has been consulted. Ensure the HSR (if applicable) has been consulted. Ensure the employees undertaking the activity have been consulted.  **Record below the names of the persons consulted.** | | | | |
| Management representative |  | | HSR/Employee representative |  |
| DRSO |  | | Employee(s) |  |
| Employee(s) |  | | Employee(s) |  |
| Person Responsible for implementation or escalation | |  | | |

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| Extra writing room - use this page to enter extended comments or descriptions |
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For use in conjunction with the [Health & Safety: Risk management requirements](https://safety.unimelb.edu.au/__data/assets/pdf_file/0009/4708161/health-and-safety-risk-management-requirements.pdf) and the [Health & Safety: Ionising radiation requirements](https://safety.unimelb.edu.au/__data/assets/word_doc/0003/4592154/health-and-safety-ionising-radiation-requirements.docx).

For further information contact your [Health and Safety Business Partner](https://safety.unimelb.edu.au/health-and-safety-contacts).