GENERAL HEALTH AND SAFETY RISK ASSESSMENT FORM

| Site | | | **Public engagement events** | | | **Department** | | | | | **School of Chemistry** | | | | | | | **Version / Ref No.** | | **1** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity Location** | | | **Indoors and outdoors** | | | **Activity Description** | | | | | **Magnetic Tile Crystals – hands-on activity for public engagement** | | | | | | | | | | |
| **Assessor** | | | **Hamish Yeung** | | | **Assessment Date** | | | | | **02/07/24** | | **Date of Review** | | | | | **02/07/25** | | | |
| **Academic / Manager Name** | | | **Hamish Yeung** | | | **Signature** | | | | | **Hamish Yeung (02/07/2024)** | | | | | | | | | | |
| Description of activity assessed: | | | | | Setting up, running and packing up of Magnetic Tile Crystals: a hands-on interactive activity for public engagement  Setup: Transporting activity boxes and equipment, setting up the activity.  Running: Public engagement involving assembling models of a crystal using magnetic tiles.  Packing up: Packing away the activity. | | | | | | | | | | | |  | | | | |
| Hazard Assessment | | | | | Control Assessment | | | | | | | | | | | | Actions | | | | |
| Hazard Category | Hazards Identified | Who might be harmed? | | How might people be harmed? | Existing Control Measures | | Initial Risk Rating | | | Are these adequate?  Yes/No | | Changes to/ Additional Controls | | Residual Risk Rating | | | Owner | | Due  Date | | Action Complete |
| S | L | R | S | L | R |
| Physical injury | Loading and unloading activities from car | Staff, students | | Back injuries from lifting and lowering heavy objects | Use gripper gloves for heavy loads and multiple objects.  Observe good practice in manual handling; e.g., lift from the legs and keep back upright.  Handle heavy objects with multiple people. | | Medium | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Physical injury | Packing and unpacking heavy boxes, potentially containing broken parts after transit | Staff, students | | Back injuries from lifting and lowering heavy objects.  Skin piercing from sharp broken objects. | When lifting boxes, observe good practice in manual handling; e.g., lift from the legs and keep back upright.  Handle heavy objects with multiple people.  Take care when opening boxes and inspect visually before reaching in in case contents have broken in transit.  If contents have broken, carefully remove from box.  Place contents carefully into boxes and ensure any fragile items are suitably wrapped.  Do not overfill boxes. | | Medium | Medium | Medium | Yes | | None | |  |  |  |  | |  | |  |
| Physical injury | Congestion – people, tables, equipment and activities in close proximity | Staff, students, members of public | | Bruising on elbows, knees, heads or other extremities | Ensure a gap of at least 1m between tables to allow free movement of people.  Ensure tables are placed such that participant areas are obvious and only demonstrators can go behind them.  Place floor mat for activities at least 1m away from tables.  Keep area clear by storing activities not in use in their boxes and placing boxes out of the way, e.g., under tables. | | Low | Medium | Low | Yes | | None | |  |  |  |  | |  | |  |
| Magnetic | Magnetic tiles | Staff, students, members of public | | Interference with pacemakers disrupts heartbeat | Magnets are very low strength and are unlikely to interfere with pacemakers.  Advise participants not to hold several magnets close to the chest. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Pinching | Magnetic tiles may pinch fingers during connecting | Staff, students, members of public | | Pinched fingers | Advise participants to connect pieces slowly and carefully.  Remove and dispose of any broken pieces. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Swallowing and choaking | Small magnets contained within magnetic tiles may become accessible if the tiles are broken. | Children | | Swallowing or choking on small magnets | Manufacturers recommended age is 3+; advise adults to closely supervise children below the age of 3+.  Do not give pieces to any unsupervised child below the age of 3.  Remove and dispose of any broken pieces. | | Medium | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Allergic reaction | Allergic reaction to stickers | Staff, students, members of public | | Development of itchy, red raised skin | When giving out stickers, advise participants to place them on clothing, avoiding skin. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |
| Paper cuts | Paper cuts from paper and card materials | Staff, students, members of public | | Paper cuts to fingers from paper and card materials | Handle paper and card materials with care.  Do not run fingers along edges of paper materials. | | Low | Low | Low | Yes | | None | |  |  |  |  | |  | |  |