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| --- | --- | --- | --- | --- | --- |
| Name and nature of activity | Demonstrating the Van de Graaff generator | | | | |
| Location and date of activity |  | | | | |
| Name of teacher/technician |  | | | | |
| Activity type | Technician procedure Teacher demonstration Student activity – Student year group | | | | |
| Physics and general equipment | Type of hazard | | | Controls and other measures | |
| Van de Graaff generator  Attachments for VDG | Radiation  ionising  laser  Electrical  Thermal  Projectiles  Sharps  Other – | | | Relevant signage  Perspex safety shield  Sharps container  Glassware free from cracks or chips  Safety glasses  Thermally insulated gloves  Other – Avoid operating near electronic equipment, metal objects and flammable liquids. | |
| Chemicals used and produced | Type of hazard | | | Controls and other measures | |
| NA | xploding bomb Explosive  lame Flammable  lame over circle Oxidising  as cylinder Gases under pressure  orrosion Corrosive | | kull and cross bones Acute toxicity  xclamation mark  Health hazards  ealth hazard Chronic health hazards  nvironment Environmental  Other – | Limit quantity/concentration  Perspex safety shield  Ventilation: natural/exhaust  Fume cupboard  Safety glasses  Laboratory coat/apron  Gloves: latex/nitrile/neoprene/PVC  Safety shower  Other – Fire extinguisher | |
| Biological/geological materials used | Type of hazard | | | Controls and other measures | |
| NA | Biohazard  Dust/aerosols  Sharps  Manual handling  Other – | | | Steriliser  Disinfectant  Sharps container  Dust mask  Safety glasses  Gloves  Other – | |
| Waste produced | Waste disposal procedure | | | | |
| NA | Pre-treatment of waste –  Sink with water –  Regular waste –  Licenced hazardous waste company –  Other – | | | | |
| Standard Operating Procedures | | | | | |
| I have read the relevant Standard Operating Procedure.  I am experienced/trained in using all the equipment listed.  All chemicals used and produced are approved for use.  I have read the current SDSs for all hazardous chemicals used and produced.  I am aware of safety guidelines for using all chemicals, materials and equipment.  I will follow local guidelines for waste disposal (water authority, local council, EPA).  I am aware of first aid procedures if required. | | | | | |
| Other comments: If a person is pregnant, has a cochlea implant, a heart condition or pace maker, metal plates or joints or any other electronic devices they must remain well away from the operating unit. Ensure that the van de Graaff generator has regular Portable Appliance Testing | | | | | |
| Conclusion:  Risks not significant now and not likely to increase.  Risks significant but effectively controlled at the moment.  Risks significant and not adequately controlled at the moment.  Uncertain about risks; more detailed assessment required. | | | | | |
| Assessment carried out by: | | Signature: | | | Date: |
| Assessment approved by: | | Signature: | | | Date: |
| Next assessment due: | | | | | |
| **This Risk Assessment assumes that the activity will be conducted in a science teaching area with the following facilities: electricity, running water, emergency shut-offs for electricity, gas if applicable, and water, regular testing and tagging of portable appliances; emergency contingencies such as evacuation/emergency plans, appropriate fire extinguishers, spill kits, hand washing facilities, eyewash/safety shower and first aid supplies. It is also assumed that all the necessary licencing requirements and approvals are obtained prior to the activity.** | | | | | |