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Safe System of Work Form

(Refer to Notes for Guidance before completing this form)

School Assessment No:	CDBS-SSW-041
Title of Activity:	Handling dry ice (solid Carbon dioxide)
Location(s) of Work:	Hugh Robson Building
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Brief description of work:

This Safe Systems of Work (SSW) covers all aspects of the safe handling, transport, storage and disposal of dry ice.

Safe Systems of Work:

1. Purpose

To ensure safe handling, transport, storage and disposal of dry ice to prevent injury from cold burns, asphyxiation, or pressure-related incidents.

2. Responsibilities

- Principal Investigators / Supervisors: Ensure all staff are trained and SSOW is followed.
- Employees: Follow this procedure and report any safety concerns.
- First Aid Personnel: Respond to any incidents involving exposure to dry ice.

3. Required Personal Protective Equipment (PPE)

- Insulated cryogenic gloves
- Safety goggles or face shield
- Lab coat or protective clothing
- Closed-toe, non-slip footwear

4. Safe Handling Procedure

Before Use

- Check area is well-ventilated. Use CO₂ detectors in enclosed spaces.
- Inspect containers: only use insulated, vented containers.
- Review <u>Dry Ice Safety Data Sheet</u> and emergency procedures.

During Handling

- Always use gloves or tools (e.g., scoops, tongs) when touching dry ice.
- Do not place dry ice in sealed or airtight containers.

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- Minimize time of handling and avoid breathing near sublimating ice.
- Avoid placing dry ice on metal, glass, or unprotected surfaces.

Transporting Dry Ice

- Use appropriate insulated and vented containers.
- Label container with "Dry Ice Solid Carbon Dioxide" and handling precautions.
- Do not transport in sealed vehicles without ventilation.

*When preparing packages for samples to be shipped via courier on dry ice, the weight of dry ice contained within must be indicated on the waybill, and a UN1845 warning label must be attached to the outside of the parcel. These are available from stores.

Disposal

- Allow to sublimate in a well-ventilated area.
- Never dispose in sinks, toilets, or confined spaces.
- Do not place in regular waste bins.

5. Emergency Procedures

- Cold burn: Remove from contact, rinse with lukewarm water, seek medical help.
- CO₂ inhalation symptoms (dizziness, headache, nausea): Move to fresh air, call for assistance.
- Explosion risk from sealed container: Evacuate area and inform Supervisor, Building Manager and Health & Safety Manager.

6. Training Requirements

All personnel must be trained in:

- Hazards of dry ice.
- Proper PPE use.
- Emergency procedures.
- This Safe System of Work.
- UoE Dry Ice Guidance.

7. Monitoring and Review

- Principal Investigators / Supervisors must regularly monitor compliance.
- SSOW must be reviewed annually or after any incident or process change.

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Verification by users: Sign below to indicate you have read and understood the safe system of work.

Signature:	Date:

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