Department of Media Arts

Work method statement: Hazardous substances



This method statement is referenced to the College's Control of Substances Hazardous to Health (COSHH) policy, and sets out procedures that must be carried out in the acquisition, storage, use (including processes creating dust, etc.) and disposal of harmful substances.

The COSHH regulations define the following as hazardous substances:

- (a) Chemicals or mixtures of chemicals listed in the Classification, Labelling and Packaging of Substances Regulations (the CLP Regulation), and for which an indication of danger is specified as serious long term health hazard, acute toxicity, harmful, corrosive, or irritant. See Appendix 1 Guidance on the CLP Regulations.
- (b) Substances that have been assigned a Workplace Exposure Limit (WEL). These are listed in the HSE publication EH40.
- (c) A dust of any kind, if its average concentration in air exceeds the levels specified in the COSHH Regulations (i.e. >10mgm3 of inhalable dust or 4mgm3 of respirable dust, time-weighted average exposures over an 8 hour period).
- (d) Biological agents which are directly connected with work (e.g. used in laboratories) or a work activity or process (e.g. Legionella bacteria from water aerosols). COSHH applies to incidental exposure as well as deliberate work with biological agents.
- (e) Any other substance hazardous to health, but which does not fall into the above categories. This category includes:
 - carcinogens and mutagens;
 - substances that cause occupational asthma;
 - asphyxiant gases and vapours;
 - pesticides;
 - products or by-products of chemical reactions;

There are likely to be products used in Media Arts which fall under (a), (b), (c) and possibly (e). An audit has been undertaken of technical staff exposure to potentially harmful substances in the workplace and, other than paints used for set decoration, exposure levels are thought to be relatively infrequent and of minimal duration.

There is also potential for students to be exposed to COSHH controlled substances and processes during production work, and so this work method statement makes provision for managing these situations.

Work activity general risk assessment	GRA reference	Risk rating
GRA 1 Office work	1.13	LOW
GRA 3 Studio operations	3.11	LOW
GRA 5 Set construction and art installation	5.2 5.3 5.10	LOW MED MED
GRA6 Maintenance and repair	6.2 6.3	LOW MED
Filming activities (studio and location)	Requires specific risk assessment	As per risk assessment

Example work tasks:

- Painting scenery
- Soldering LV electrical circuits
- Applying theatrical make-up and prosthetics
- Using aerosol cleaning products for servicing production equipment
- Performed smoking
- Cutting sheet materials with a jigsaw
- Topping up the battery on the studio MEWP
- Filling lighting sandbags with ballast

Physical environment:

- Consideration must be given to preventing harm from substances through inhalation, ingestion, physical
 contact, and ignition or as a consequence of leaks and spillages and this will determine the requirements for
 ventilation, storage, containment, isolation, waste disposal, design of floor and worktop surfaces and
 proximity of cleaning facilities in relation to the work area.
- Discrete working areas must be designated to prevent flammable products being ignited by sparks or other
 ignition sources and to prevent food, drink and hand soap from becoming contaminated by harmful
 substances.
- Work areas should have ready access to fresh air, if not throughout the normal course of work then as a temporary measure to provide supplementary airflow (say to assist in clearing theatrical smoke from a performance area) or to allow recovery if someone accidentally becomes over-exposed to a harmful fumes.
- Work areas must be well lit so that instructions and notices can be read clearly and any leaks and spillages
 made visible. Special arrangements need to be in place if there is a requirement to use substances in dimmed
 areas during performances.
- Floor surfaces and worktops must be kept clean and free of debris or improperly stored items.

- There must be ready access to running water for washing hands or to use in the event of eye contamination.
- Storage arrangements must be configured to prevent risk of accidental dropping and spillage, cross contamination, leakage and damage to containers.
- Suitable arrangements must be in place to secure stored substances, control stock flow (taking into
 consideration operating limit for storage of flammable substances) and allow collection and responsible
 disposal of waste products.
- Suitable spillage kits need to be readily available where there is risk of substances causing harm by slipping or by contamination.
- Effective arrangements must be in place to prevent visitors or other uninformed persons from being harmed or causing harm by accessing regulated substances, including during disposal.

Sequence of tasks:

- 1. Reminder members of staff (employees) and students of their responsibility to:
 - Comply with control measures outlined in the COSHH assessment and other safe working procedures.
 - Use work equipment in accordance with instruction.
 - Store, label, transport and use hazardous substances safely, and use them only for department approved activities.
 - Follow the appropriate waste procedures to dispose of hazardous substance waste.
 - Wear personal protective equipment in accordance with instruction.
 - Report unintentional exposure to hazardous substances.
 - Report defects in equipment used with hazardous chemicals.
 - Report defects in personal protective equipment.
 - Attend Health Surveillance programmes where required.
- 2. Designated departmental COSHH assessors must attend a College initial COSSH assessment training course and all subsequent refresher courses.
- 3. Before purchasing any products that fall within COSHH regulations, which may include materials that give off harmful substances during cutting, drilling or other processes, the relevant manufacturer's data sheet must be obtained and the product risk assessed by a trained COSSH assessor in accordance with the College policy and procedure.
- 4. For any products found to present high risk following COSSH assessment, staff will seek alternative lower-risk products or if unavailable decide whether or not it is absolutely necessary to use the substance for the intended outcome. If there is no alternative, then arrangements must be agreed with the relevant line manager for storing, using and disposing of the product, including provision of suitable training, operating arrangements, and any personal protective equipment (PPE) requirements.
- 5. A central inventory must be maintained of all products held in stock, cross-referenced to current COSSH assessment forms and manufacturers' data sheets.

- 6. All handling arrangements will be documented, including any workplace notices that need to be displayed near the designated area of use.
- 7. Consideration must be given to persons who may be especially vulnerable when exposed to particular substances, including through incidental contact, and handling arrangements planned accordingly.
- 8. Once an operating scheme has been devised and any preparatory arrangements put in place, including any specific arrangements for any training or instruction, a suitable quantity of the product may then be ordered for stock, the quantity being determined by the minimum requirement for the specific usage tasks within a given time frame or shelf-life.
- 9. Products must always be stored and used in accordance with the manufacturer's written instructions, taking into account any specific hazard warnings on the container or data sheet.
- 10. An annual review will be conducted to ensure manufacturers' data, stock levels, COSSH assessment forms and associated control methods continue to meet the department's standards and an implementation plan devised for any further required actions.
- 11. Each department producing waste associated with substances to which the COSHH Regulations apply, are required to dispose of it at least once a year. Substances awaiting disposal must be stored in the College hazardous substances waste store, which is under the management of the Technical Operations Manager (TOM) of the School of Biological Sciences. The TOM of the School of Biological Sciences will organise disposal on at least an annual basis; a recharging system is in place for this, which is undertaken in accordance with current statutory waste disposal legislation.

12. SPILLAGE / ACCIDENTAL RELEASE

Supervision:

- The responsibilities of the Head of Department, line managers, Health and Safety Coordinator, students and staff, and other College officials are set out in the College's Control of Substances Hazardous to Health (COSHH) policy
- The Art and Design Technicians have been trained in COSSH assessment and have day to day responsibility for managing the greater proportion of the department's stored products. Staff should normally refer to them for specialist advice in handling any controlled products.
- Students preparing scenery or borrowing any products for use in their productions (such as theatrical blood, smoke machine fluid, etc.) must be briefed by one of the Art & Design Technician so they have sufficient knowledge of the risks, handling and clearing methods before being allowed to use any of the department's controlled products without immediate supervision, including out-of-hours on or off campus.
- Practice course tutors are responsible for considering student production risk assessments, using the
 Production Buddy on-line system, paying particular attention to any work involving potentially harmful
 substances as defined in the COSHH regulations (for example, scenes involving performed smoking),
 seeking specialist advice where necessary.

Written Instructions:

- https://www.royalholloway.ac.uk/staff/assets/docs/pdf/health-and-safety/coshhpolicy.pdf
- Manufacturers' instructions and data sheets as supplied with the specific product (these are held in a COSHH file on the Media Arts Centre shared folder)
- Media Arts Location Filming Code of Practice

Correct equipment:

- All products must be stored in the appropriate manufacturer's container.
- Paints may be decanted into a propriety paint can or tray during the period of use, any unused paint being returned to the original container or disposed of in accordance with College sustainability policy.
- Any protective equipment stocked for handling materials and substances will be proprietary, designed to be
 used for the specific substance being handled in accordance with the particular COSSH assessment form,
 and stored in the relevant handling area. This normally will predominantly include eye protection and dust
 masks

Training:

- Any staff required to do COSSH assessments must attend an initial RHUL COSHH Assessment Training Course and subsequent refresher training courses
- Staff or students will only use a COSHH regulated substance once it has been properly assessed by a suitably trained assessor in accordance with RHUL COSHH policy and procedures and appropriate training and handling procedures identified.
- In each instance, students and staff required to use a COSHH regulated substance must be able to demonstrate the ability to recall:
 - o the particular hazards and risks associated with using each substance;
 - how to store and contain the substance in accordance with manufacturers' instructions;
 - the essential control measures they must apply when using each substance with particular reference to any stated methods of work and exposure limits;
 - o where to locate and how to use any PPE required when using the substance;
 - o how to properly clean any equipment or surfaces that become affected by the substance either during normal use or if accidentally spilled
 - o the appropriate action they must take in the event of any accident involving the substance
 - o how to dispose of waste quantities of the substance after use or when its shelf-life has expired.

Reference material

- http://www.hse.gov.uk/pubns/indg136.pdf
- http://www.hse.gov.uk/coshh/essentials/index.htm
- http://coshh-tool.hse.gov.uk/assets/live/SR24.pdf
- http://coshh-tool.hse.gov.uk/assets/live/SR19.pdf
- http://coshh-tool.hse.gov.uk/assets/live/SR20.pdf
- http://coshh-tool.hse.gov.uk/assets/live/SR18.pdf
- http://coshh-tool.hse.gov.uk/assets/live/SR22.pdf
- http://coshh-tool.hse.gov.uk/assets/live/SR25.pdf

Revised	Written by:
22nd January 2018	Keith Buckman Health & Safety Coordinator