SAFE WORKING ARRANGEMENTS FOR HANDLING CARCINOGENS, MUTAGENS AND TERATOGENS IN THE CARCINOGENS ROOM (10AY03)

Scope

These Local Rules cover general work with Carcinogens, Mutagens and Teratogens (CMTs) in the Carcinogens Room (10AY03). They specify the required methods of working to reduce exposure to yourself and others when handling these materials, or using the equipment in 10AY03.

Failure to work in accordance with these rules and any additional controls specified in the risk assessment for your project will significantly increase your risk of contact with CMTs, and may also mean that the University and yourself are liable to prosecution under the Health and Safety at Work Act.

Structure

This document consists of nine sections:

1. General Precautions for all work
2. Use of Protective Clothing
3. Respiratory Equipment and other Personal Protective Equipment
4. Conduct of procedures
5. Hygiene
6. Waste disposal instructions
7. Security and Access Control
8. Emergency response procedures
9. Monitoring and Occupational Health Surveillance

Section Format

Each section in this document explains the controls and precautions to be followed.

Some controls and precautions are mandatory to protect the health and safety of all users in the facility. Those controls and precautions that are mandatory are indicated by the words must or shall.

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Section 1

General Precautions and Information for all work in Room 10AY03

1.1 Room 10AY03 is for the weighing and storage of CMTs only. No other work related activities, such as discussions with colleagues, should take place there.

1.2 Report problems with ventilation or protective equipment to the Safety Adviser, immediately.

1.3 Do not undertake work for which you have not been trained.

1.4 Check the CoSHH assessment for the materials you are using and observe all controls specified in the assessment.

1.5 If you have not been given a copy by your supervisor, ask for one.
Section 2

Use of Protective Clothing

1.1 For any work in room 10AY03, you **must** wear:

   - **Face mask (or respirator) for handling of CMTs outside the glove box**
   - **Tyvek disposable laboratory coat or disposable apron**
   - **Gloves**
   - **Overshoes**

1.2 Requirements in some other areas where, for example dilute solutions of CMTs are handled may vary according to local circumstances.

1.3 If the risk assessment for your project specifies different protective equipment requirements (such as Safety Glasses) the risk assessment takes precedence.

1.4 Put on all required protective clothing before entering CMT areas. The protective clothing is available near to the Ames lab in room 09AY03. If you cannot find everything you need contact the Safety Adviser.

1.5 Never take your normal laboratory clothing into 10AY03.

1.6 Personal items must not be brought into 10AY03.

1.7 Do not put used CMT protective clothing in lockers or storage hooks designated for outside clothing.

1.8 If you are advised to wear extra protective equipment by Occupational Health, make sure you have arranged for supplies to be available.

1.9 Remove and dispose of protective clothing correctly before leaving CMT areas. Disposable items must be discarded into the correct waste containers. Masks should be the last item removed.
Section 3

Respiratory Equipment and other Personal Protective Equipment

3.1 Everyone intending to work in 10AY03 must be trained on how to fit appropriate respiratory equipment and how to ensure that an effective seal is obtained. If you have not been trained you should contact the Safety Adviser. The competent face fit trainers in FHMS are Kim Morton and Graham Moorey.

3.2 If you wear glasses, you should remove them before fitting masks as they will interfere with achieving an effective seal.

3.3 Facial Hair – If you have facial hair and it goes beyond the border of the mask, an effective seal will not be achieved. A half mask or powered respirator will be required.

3.4 If you have been advised by Occupational Health to wear a different type of mask or respirator which will provide you with additional protection, make sure that you have arranged for this equipment to be available before using the CMT room.

3.5 Reusable respirators must be maintained by the user and a maintenance record kept at all times.
Section 4

Conduct of procedures in 10AY03

4.1 Ensure that all procedures that you propose to use have been approved by your supervisor.

4.2 Familiarise yourself with the procedures you will be conducting before carrying out work.

4.3 Collect CMTs from the storage cabinet or refrigerator only at the time that they are required for experimental work and return them to the appropriate store as soon as you have finished with them. Do not carry out any experimental procedures inside the CMT room.

4.4 Never transport CMTs in single walled containers between rooms. Transfer them in an appropriate double container or box.

4.5 The doors to the CMT room must be kept closed except when entering or leaving.

4.6 Do not work with CMTs on an open bench in 10AY03.

4.7 Only remove CMTs from these facilities with the express permission of Prof Costas Ioannides.

4.8 The amount of material weighed must be recorded in the weighing log book kept in 10AY03.

4.9 All personal stock/solutions kept within room 10AY03 must be clearly labelled with: name of user, name of compound, concentration of carcinogen, and solvent used (if applicable) and date.
Section 5

Hygiene in 10AY03

5.1 Keep your work area clean.

5.2 Waste materials should be promptly and correctly disposed of into the appropriate waste containers.

5.3 Bench top coatings must be disposed of and trays must be cleaned under an appropriate protocol as soon as your manipulation is over.

5.4 Always wash your hands, even if you have worn gloves, on leaving the CMT area.

5.5 Never eat, drink, smoke, apply cosmetics or take medication in 10AY03 (or any laboratory!)

5.6 Remove your protective clothing before leaving the Unit

5.7 With the exception of liquids, for which there is a designated fume cupboard in 09AY03, all CMT material must be weighed in the Miller Howe Glove box.

5.8 Care must be taken to avoid contaminating the exterior of containers. Any such contamination must be cleaned off within the fume-hood before returning to store and the cleaning material disposed of as carcinogenic waste.

5.9 Spill etc. within the Glove box must be immediately cleared up carefully, and any materials used disposed of as carcinogenic chemical waste.

5.10 Gloves must be disposed of as carcinogenic chemical waste.

5.11 Users must never touch door handles, light switches or telephones with (assumed contaminated) gloves or wear such gloves outside of the laboratory.

5.12 Gloves should be removed carefully using a procedure designed to avoid skin contamination.
Section 6

Waste disposal instructions

6.1 Liquid waste containers are provided in the Carcinogens Weighing Room. Record details of the substances discarded on the labels, together with the approximate amount.

6.2 Organic (chlorinated or non-chlorinated solvents) and aqueous waste must each be discarded into their own waste container. When a container is full please contact the Safety Officer.

6.3 Empty carcinogen bottles should be treated as contaminated waste

6.4 All solvents used for washing must be treated as contaminated waste

6.5 All solid waste must be placed in a yellow plastic bag inside a yellow drum. When the bag is 2/3 full it is sealed, then the drum lid placed in position and pushed down to seal the drum

6.6 It is the responsibility of the generators of the carcinogen waste to ensure that it is correctly packed and labelled for disposal.

Chemicals, and anything other than disposable lab consumables added (such as Agar plates) must be noted on the wastes disposal packing note. This packing note will be attached to the yellow box. If this is not the case, do not add items but instead contact the Faculty Safety Adviser.

6.7 Prior to leaving the University All researchers must discard all their solutions kept in 10AY03 via the appropriate disposal route.

If you have any questions relating to waste please contact Neil Chapman (6497).
Section 7

Security and Access Control

7.1 Security and Access Control are needed in room 10AY03 because work with CMTs in the laboratory carries potential health risks. Uncontrolled access is therefore inappropriate.

7.2 Authorised users should never allow anyone else into 10AY03 when opening the door for themselves, even if they recognise them.

7.3 The only persons eligible to enter 10AY03 are those with their own activated swipe cards or, for example, specialist contractors accompanied by a member of FHMS Staff.

7.3 Check that the door has closed securely behind after leaving the room.

7.4 Keep your swipe card secure and report mislaid or lost cards promptly.

7.5 Report any suspicious behaviour in, or around, 10AY03 immediately to FHMS staff or Security.

7.6 When access to the CMT room is no longer required, you must inform the Faculty Safety Adviser and the Occupational Health Adviser.
Section 8

Emergency Response Procedures in 10AY03

8.1 If any part of the body is accidentally contaminated:

- Immediately remove affected clothing.
- Thoroughly rinse the site of contamination with cold water.
- Wash thoroughly with soap.
- Avoid using hot water as this may increase the rate of absorption of the carcinogen through the skin and encourage vaporisation of volatile compounds.
- Avoid the use of organic solvents, as these may facilitate absorption of the carcinogen through the skin.
- Fill in an incident form and report the accident as soon as possible to the Faculty Safety Advisor (Neil Chapman).

8.2 In the event of a major spillage

8.2.1. Liquid spillage

- Using a Pasteur pipette, immediately remove as much of the carcinogen as possible.
- Wash contaminated area with an appropriate organic solvent, according to the MSDS information used in the risk assessment.
- Wash contaminated area with soap and rinse with water.
- Ensure decontamination has been effective, where possible, with a uv lamp (wearing appropriate eye protection).

8.2.2. Solid spillage

- Using a spatula, remove immediately as much carcinogen as possible.
- Wash contaminated area with soap and rinse with water.
- Ensure decontamination, where possible, with a uv lamp (wear a UV protective mask)

Always inform Costas Ioannides and the Faculty Safety Advisor as soon as possible of any spillages.
9.1 COSHH requires health surveillance of individuals who use carcinogens and this may range from regular medical examinations, for those who handle carcinogens in bulk, to simple record keeping for occasional users. This is arranged through Occupational Health.

Thus all use of CMTs must be recorded for individuals and the records kept even after they leave the University. Against each individual, the data recorded must include the identity of the carcinogen and its category, the amount used and form (powder, pellets, dilute solution etc.), the duration of potential exposure and the protective measures (fume-hood etc.) employed.

9.2 The Occupation Health Provider for FHMS is The Robens Centre for Occupational Health, 4 Huxley Road, The Surrey Research Park, Guildford, Surrey, GU2 7RE. You must register with Occupational Health and discuss your desire for registration as a CMT user before beginning CMT work. If you are an UG student, you must contact the Faculty Safety Adviser first, as UG students do not have direct access to the Occupational Health provider.

9.3 CMT access will not be granted without proof of enrolment/contact with Occupational Health.

9.4 Ensure that the risk assessments for the work that you propose have sent to Occupational Health (pass these to the Faculty Safety Adviser for forwarding) or are brought with you to your initial OH assessment.

9.4 Respond to any surveillance recalls as soon as received. CMT room access depends upon continuing health surveillance.
I was given a copy of the Carcinogens, Mutagens and Teratogens Local Rules

On (please complete date):

I confirm that I will comply with these arrangements when working in the Carcinogens Room, and I understand my role in those procedures relating to Occupational Health.

Name............................................

Card Number (not URN):……………………………..

Signature........................................           Date...........................................

I confirm that the necessary training in procedures and actions has been completed by the person above, and that access to the facility can be granted.

Name.....................................................         (Faculty Safety Adviser)

Signature.................................................

Date.........................................................

Confirmation that the above person has been seen by Occupational Health and they are fit to work with CMTs in the facility:

Name.........................................................       (Occupational Health Adviser)

Signature....................................................

Date............................................................

This slip must be completed and returned to the Safety Adviser before card entry can be granted.