



## CABD ACCESS RULES AND REGULATIONS

All personnel assigned to the CABD must be familiar with these regulations, the rules governing access to the centre and waste management, and undertake to comply with them. Users of radioisotopes and the animal facility must additionally sign a document of commitment to comply with the rules that authorises them as users of these services.

### RULES OF ACCESS TO THE CENTRE

Assignment of research staff to the CABD. The principal investigators of the CABD are those who are accepted as such by the Scientific Advisory Board, the Board of the Centre, and the Governing Board. These are the full researchers attached to the centre. All other researchers and support staff are included as authorised staff attached to a specific principal investigator. Only the principal investigator, with the authorisation of the centre's management, may register or deregister the personnel attached to his or her group. The same concept of principal investigator, with an invitation to attend with voice but without vote at the centre board, applies to responsible investigators not belonging to the CABD who have the transitional authorisation of the centre board and the governing council.

Procedure for access to the CABD. For reasons of occupational liability and safety, it is compulsory for all personnel accessing the centre to have the corresponding authorisation. The principal investigators are responsible for the personnel assigned to their group, both in terms of employment and health insurance, and in terms of subsidiary liability. It is therefore the principal investigators of the CABD, and only they, who can request authorisation from the Centre Manager, the vice-director or the director (preferably by e-mail) for the access of new personnel assigned to their group. The request must indicate name, ID number, position in which access is requested, and level of access requested (see below). In any case, the management only authorises access when the applicant principal investigator guarantees that this person has occupational and health risk insurance to cover any incident within the centre during his/her stay.

The levels of access to the CABD:

- Visitor. Any person (family member, sales representative, etc.) can access the CABD for a short visit during working hours. This visit is carried out as follows:
  - The control person is asked to locate (by phone) the person to be visited. Only when the person to be visited is located and accepts the visit is access authorised.
  - The visitor must sign in the logbook, where name, time of entry, reason for visit and person visited are noted.
- Authorised personnel. A principal investigator may temporarily host persons in his or her group for research tasks without them being part of it, e.g. external collaborators and internal students.



(final year undergraduate and postgraduate students). Students are not authorised to access the centre for teaching purposes. The control staff has an updated list of personnel authorised to access the centre. Once authorised by the centre's management, these staff may access the centre after identification by the control staff. This access is limited to the working hours of the control staff (from 8 a.m. to 9 p.m. from Monday to Friday). Outside these hours, access may only be granted accompanied by the person in charge.

- Staff with free access. All persons who are authorised by the management as a member of a research group, or as staff of the centre, in addition to being included in the list of authorised staff, are provided with a card for free access to the centre. For short stays (typically less than one year), a non-personalised numbered card is provided. For long stays (typically for the completion of doctoral theses or post-doctoral grants and contracts), a personalised card is issued.



## **BASIC SAFETY AND HYGIENE STANDARDS IN LABORATORIES**

The main rule is not to be afraid of working in the laboratory, but losing respect for it can cause an accident.

### **REASONS FOR COMPELLING THE RULES TO BE FOLLOWED**

Investment in health and safety is needed:

- Our own security.
- The safety of others.
- Obtain optimal results in our work.
- Extending the life of laboratory equipment.

The objective of Health and Safety regulations is to avoid an accident that could damage our health, and in some cases even cause us to lose our lives. To do so, we must provide the necessary means, and in order to do so, we must know them.

### **RULES TO BE TAKEN INTO ACCOUNT**

- \* Always and at all times wear a buttoned dressing gown, closed shoes and hair tied up.
- \* No eating, drinking or smoking in the laboratory.
- \* Do not wear contact lenses, wear eye protection (safety glasses).
- \* Know the location and use of the safety shower, eye wash fountain and fire extinguisher.
- \* Consult the safety specifications of the products to be used, on the label of the can and in the safety data sheet of each product.
- \* Keep the work area clean and tidy, as well as personal belongings in hangers, drawers and lockers provided for this purpose.
- \* Keep chemical containers tightly covered and tidy.
- \* Avoid contact and inhalation of chemicals, wear appropriate gloves and masks, wash hands often.



- \* Use appropriate PPE (Personal Protective Equipment) whenever necessary.
- \* Handling volatile products in the fume hood which give off toxic fumes.
- \* Do not pipette any liquid by mouth. Use aspirators or electronic dispenser.
- \* Slowly add the acid over a considerable amount of water.
- \* Avoid exposing chemical products near a heat source (Bunsen burner), close the burner and the gas tap after use.
- \* When heating glassware or porcelain, use tongs to pick them up and place them on a heat insulator.
- \* Collect the waste generated in appropriate containers for each one of them.
- \* The Occupational Risk Prevention Services of the Universidad Pablo de Olavide and the Consejo Superior de Investigaciones Científicas OBLIGATES all female workers to REPORT the state of PREGNANCY as soon as they become aware of it, in order to be referred to Health Surveillance.  
In the event of refusing the assistance of the Prevention Service, this must be stated in a signed document.
- \* The access of minors to the CABD as visitors is restricted to the common rooms of the building where the chairs are located and they must always be accompanied by an adult. Under no circumstances should they have access to the laboratories of the research groups or to the general experimental areas.
- \* VERY IMPORTANT: If in doubt, ASK the person in charge.



## REGULATIONS ON THE MANAGEMENT OF TOXIC AND HAZARDOUS WASTE IN THE DCWP

Hazardous waste are substances or objects that the holder must dispose of because they are harmful or potentially harmful to human health or the environment. For this reason, they must be handled, stored and treated in a special way.

In the case of the CABD, the *holder* of the external management is the UPO (in charge, Alfredo Cortés), and the company in charge of the removal is EGMASA.

### COORDINATION OF WASTE MANAGEMENT WITH UPO

The technician who coordinates the internal waste management at the centre is Isabel Alonso Pérez (ext.: 77565, e-mail: imaloper@upo.es) who will control the waste at the CABD deposit site and when necessary will manage (through the Occupational Risk Prevention Service at the UPO) its removal and the replacement of empty containers by GEMASUR.

### WASTE DEPOSIT AND CONTAINERS

B.26 located on the ground floor, opposite the BIOMEDAL laboratories.

Empty containers are also located in this room.

Each *waste manager in the group* will be responsible for removing the empty containers from the waste room, and depositing them once full and correctly labelled in the same place.

### RESPONSIBLE PER GROUP

Each research group must appoint a responsible person, indicating the contact telephone number and e-mail address.

In the common services, the persons in charge are appointed by the director:

Kitchen:

Name: Tamara Freire Ext.:

77571

e-mail: tfregar@upo.es

In the ANIMALARIUM the management will be independent. On the part of the centre, the person in charge is:

Name: Ana Jesús Franco Gómez

Ext.: 77440

e-mail: ajfragom@upo.es



## LABELLING

The labels of the different products can be found on the UPO website: UPO homepage --Our services --Labour --Prevention of occupational hazards

## WASTE MANAGEMENT -- **Labels**

\*The waste category is selected and the label is printed on self-adhesive foil.

When containers are removed they shall be labelled with the name of the waste to be stored.

The labels, at being deposited the containers, shall have The following information must be recorded:

- Weighing (there is a scale in the waste room),
- group that has generated them, and
- date of storage.

We are trying to change the label so that, in the same label, these data are requested and you cannot forget to put them; but in the meantime they will be put in some space left on the label.

## SOLID WASTE

Solid waste shall be deposited in a common container located in the kitchens on each floor.

Bio-sanitary waste (mainly animal) should be accumulated in the freezer of the animal house and transferred to the drum only at the time of removal.

## TYPES OF WASTE

A copy of this procedure has been placed inside the waste room with all the types of waste that exist in this centre, as well as a laboratory safety manual where the guidelines to follow in the event of an accident with any of them are briefly and clearly described.

## ATTACHED INFORMATION

There are incompatible wastes and neutralisation differs in procedure and price for different types of waste, so it is essential that users and coordinators are fully informed of the types of waste that can be deposited in each container.



The waste table according to types and incompatibilities is as follows:

These incompatibilities must be taken into account to avoid possible dangerous chemical reactions.

Incompatible substances:

- Acids with bases.
- Strong acids with weak acids giving off toxic fumes - Oxidising agents with reducing agents -Water with amides, anhydrides, boranes, carbides, halides, acid halides, hydrides, isocyanates, alkali metals, phosphorus peroxide, Grignard reagents, trichlorosilanes.

High affinity incompatible substances:

- Oxidants with: Nitrates, halogenates, oxides, peroxides, fluorides.
- Reducers with: Flammable substances, carbides, nitrides, hydrides, sulphides, alkali metals, aluminium, magnesium, and zirconium powder.
- Strong acids with: Strong bases. -Sulphuric acid with: Sugar, cellulose, perchloric acid, permanganatopotassium, chlorates, sulphocyanides.

Substances which react violently with air or oxygen (spontaneous ignition):

- Arsines. - Finely divided metals. - White phosphorus.
- Boranes. - Metalloids and alkaloids. - Phosphides.
- Hydrides. - Alkali nitrides. - Silenes.
- Carbonyl metals. - Phosphines. - Silicides.

Substances that react strongly with water:

- Strong anhydrous acids. - Alkaline hydroxides.
- Amides. - Hydrides.
- Anhydrides. - Imides.
- Calcium. - Alkali metals.
- Carbides. - Alkali oxides.
- Fluorine. - Inorganic peroxides.
- Phosphides. - Silicides.
- Acid halides
- Acyl halides.
- Inorganic halides anhydrides (other than alkaline)



### DANGEROUS REACTIONS OF ACIDS

REAGENT	REAGENT	UNLABELLED
SULPHURIC ACID	Formic acid	Carbon monoxide.
	Oxalic acid	Carbon monoxide
	Ethyl alcohol	Ethane
	Sodium bromide	Bromide and sulphur dioxide
	Sodium cyanide	Carbon monoxide
	Sodium sulphocyanide	Carbonyl sulphide
	NITRIC ACID	Iodide
hydrogen		hydrogen
Some metals		Dioxide
CHLORHIDRIC	metals Some metals	sulphur. Dioxide from
	Sulphides Hypochlorite	nitrogen Sulphur
	s Cyanides	m hydrogen Chlorine Cyanide hydrogen

NOTE: This procedure will be expanded and modified according to the needs of existing and newly established laboratories.