



UNIVERSITEIT
GENT

ENVIRONMENTAL, HEALTH and SAFETY GUIDELINES

release 2015



flammable
e.g. diethylether, (m)ethanol, aceton, ...



harmful
e.g. chloroform, toluene, xylene, ...



serious health hazard
e.g. ethidium bromide



explosive
e.g. picric acid, ...



oxidising
e.g. perchloric acid, chromtrioxide,
potassium permanganate, ...



toxic
e.g. hydrogen fluoride, ...



environmental hazard
e.g. ammonia, kaliumdichromate, ...



corrosive
e.g. strong acids and bases



gas under pressure
e.g. nitrogen gas



radiation risk - radioactive substances



harmful or irritating substances



UV light



dangerous electric tension



explosive atmosphere



poisonous substances



important magnetic field



explosive substances



corrosive substances



inflammable substances



biological risk



hanging loads



oxidizing substances



laser ray



low temperature



danger



hot surface



suffocation



obliged to wear safety glasses



obliged to wear safety gloves



obliged to wear overshoes



obliged to wear hearing protection



obliged to wear safety shoes



obliged to wear countenance protection



obliged to wear breath protection



obliged to wear safety helmet



obliged to wear breathing protection



first aid



eye shower



emergency shower



warning button



fire extinguisher



fire hose

1. Introduction	4
2. Together for a sustainable university	6
2.1. Energy and water	6
2.2. Mobility	7
2.3. Material- en purchase management	7
2.4. Events	8
3. Psychosocial well-being	9
4. Hazardous substances	10
4.1. Danger symbols on receptacles	11
4.2. Purchase and registration of hazardous substances	11
4.3. Handling of hazardous substances in a lab	12
4.4. Storage	13
4.5. Transport	16
4.6. Waste	17
4.7. Waste water	20
4.8. Specific hazardous substances	22
5. Work equipment	27
6. Personal Protective Equipment	29
7. Workplace equipment	30
7.1. Description	30
7.2. First Aid	30
7.3. Fume hoods	31
7.4. Ergonomics	32
8. Specific fields of risk	33
8.1. Maternity protection	33
8.2. Third parties	33
8.3. Students on work placement	35
8.4. Handling with animals	35
8.5. Asbestos	35
9. Risk analysis	36
10. Emergency procedures	37
10.1. Emergency Centre UGent (PerC)	37
10.2. Warning, alarm and evacuation	38
10.3. First aid	39
10.4. Intervention in case of emergency	40
Declaration	41
Contact details of the department	44

The Environmental, Health and Safety Guidelines of the University of Ghent (UGent) inform the staff of the university of the rules, guidelines and codes of good practice which have to be followed – in particular with regard to a safe, healthy, environmentally acceptable and legal working area.

The environmental, health and safety guidelines must be considered as the internal regulation on well-being and environment at the UGent. At the same time this regulation stresses the responsibility of the hierarchical line, the employee, the student and every other person who is considered part of the university staff.

This guide is considered a practical manual for looking up information easily – although the information is limited. Frequently, there will be references to specific contacts and more detailed standard operation procedures, which can be consulted on the website of the UGent. The guide should be expanded with location-specific operation procedures depending on the activities in the workplace. The last page of this document provides a list of contacts that should be updated and completed regularly.

The Environmental, Health and Safety Guidelines are directed towards all staff of the university, in particular to people exposed to hazardous substances, equipment and/or activities in workplaces at the university. The head of the department ensures that the rules are complied with and implemented correctly. He expects the staff of the department to follow the guidelines. Every staff member must sign the declaration under point 8 as read and agreed to and return it to the head of the department. Thus, not only employees at Ghent University but also those of equal status, in particular students, must have knowledge of the content of the rules and the manual's annexes.

At Ghent University, the policy on well-being at work as well as the environmental policy are coordinated by the central administration. The services for Health, Safety and Environment offer advice and support. Check page 5 for the contact details.

IMPORTANT CONTACT DETAILS !

www.ugent.be/veiligheid
www.ugent.be/gezondheid
www.ugent.be/straling
www.ugent.be/milieu

the phone number **88** or
09/2648888

(Emergency Centre UGent (PerC) of
the UGent in case of emergency -
24h/24, 7d/7)

Internal Service for Prevention and Protection at Work (IDPBW)

headmanager: Benny Vandenberghe

Safety Department (DV) - Sint-Pietersnieuwstraat 25

headmanager – safety advisor: Benny Vandenberghe

safety advisors: Bart Christiaans, Franky Hoste, Nathalie Praet, Ilse Van Laere

emergency planning: Mathias Vanhaverbeke, Dennis Montégnes

Department of Occupational Health (DMT) - De Pintelaan 185, 2K5

occupational health physicians: Luc Cobbaut, Paul De Pauw,

Ludo Vanmarsnille, Rini Verpraet

Radiation Protection Service (DFC) - Proeftuinstraat 86

radiation expert: Myriam Monsieurs

radioactive waste policy: Isabelle Meirlaen

personnel dosimetry: Nancy Van Aerschot

Psychosocial well-being - Sint-Pietersnieuwstraat 25

Confidential counsellors: Sara Drieghe, Danielle Wouters

External Service for Prevention and Protection at Work (EDPBW)

Prevention advisors psychosocial aspects

Idewe vzw – Grote Steenweg Noord 9, 9052 Zwijnaarde

Prevention advisor: Evy Grootvriendt

Environment Office (Milieu) - Sint-Pietersnieuwstraat 25

headmanager – environmental coordinator: Riet Van de Velde

environmental advisors:

Hazardous substances and waste: An Van Goethem

Environmental permissions - nature: Koen Houthoofd

biosafety: Mario Vaerewijck

soil – air - water: Greet Persoon

sustainable energy and mobility: Pieter Van Vooren

stock management of hazardous substances: Steven Dierickx,

Mario Vaerewijck

Internal security - Emergency Centre UGent (PerC) - Stalhof 6

Dominique Van Acker

Coordinator Security: Geert Van de Merckt

veiligheid@ugent.be
tel. 4151

noodplanning@ugent.be

gezondheid@ugent.be
tel. 09/3323076
fax 09/3324981

straling@ugent.be
tel. 6519
fax 6696

vertrouwenspersoon@ugent.be
tel. 4253 - 4299

tel. 09/264 12 30
fax 09/264 12 39

milieu@ugent.be
tel. 8949
fax 3581

permanentie@ugent.be
tel. 88 (09 264 88 88)
tel. 7171 – fax 7289

Ghent University wants to focus on social, ecological and economic sustainability for its education, research and organization. A very ambitious goal, for which everyone has to be responsible. The sustainability vision is the framework in which as much people as possible must be engaged.

2.1. ENERGY AND WATER

Ghent University has the ambition to build and renovate according to the nearly zero energy principle and to invest in sustainable and cost-effective energy measures. But a lot of the energy is consumed by the users of a building. Everyone should be engaged to save energy. People are informed and stimulated by campaigns, there are funds for the purchase of low-energy fridges or water-saving devices. On the other hand, Ghent University can impose energy requirements when purchasing machinery, install counters on high-energy devices and oblige departments to mention defects or excessive energy consumption.

ENERGY TIPS

- ◆ use the thermostatic tap of your radiator smartly: stand 3 is enough, if you ventilate the room, switch off the tap;
- ◆ shut windows and doors in cool periods;
- ◆ switch off machines after use; ask for a timer at energie@ugent.be;
- ◆ choose for the energy saving settings when installing your PC;
- ◆ share the dish washer, the fridge, the coffee machine, the copier, ...
- ◆ drink water tap instead of water from coolers; if you have doubts about the quality of the water, contact milieu@ugent.be for an analysis of a water sample;
- ◆ choose for energy friendly electrical appliances and water saving devices;
- ◆ mention the purchase of machines with an electric potential of >10kw and ask for advice at energie@ugent.be;
- ◆ report defects or (suspecting) excessive energy use at energie@ugent.be (If you don't do this, costs for electricity and water can be charged to the department).

2.2. MOBILITY

Almost 50% of UGent staff commutes in a sustainable way. But still there are persistent mobility problems: not enough parking, traffic jams, ... Besides there are the problems due to hazardous emission, traffic safety, the quality of city life and lack of space. For this reason, UGent continues to promote sustainable mobility.

CHOOSE FOR SUSTAINABLE TRANSPORT!!

- ◆ use the bicycle facilities such as cycling allowance, bike sheds, showers, bike reparation service, ... or test an e-bike;
- ◆ use the services to promote the use of public transport, such as the public transport compensation, the bike sheds or the bikes at the railway stations;
- ◆ when you travel for work, use the UGent service bikes, the bus, the train (if the occasion arises combined with Blue Bike) or share a car (cambio);
- ◆ when you organize an event: mention on the invitation how to reach the location in a sustainable way.



For more information:

www.ugent.be/mobiliteit

2.3. MATERIAL- EN PURCHASE MANAGEMENT

17% of the GDP goes to government purchases. This means that government institutions can lead the change to more sustainable products with a green public procurement. In general agreements, Ghent University takes also social and ecological aspects into account, besides the price. For purchases without framework agreement, ask for advice.



For more information: Sustainable purchase wizard:

www.ugent.be/aankoopwijzer and second hand shop of Ghent University:

kringloopwinkel@ugent.be

BUY SUSTAINABLE GOODS

- ◆ consume less! Do you really need it? Maybe you can borrow it from someone;
- ◆ look if the article is available in the second hand shop of Ghent University before buying a new one; or, when it's a lab product, first check the stock management system, maybe you still have it in stock;
- ◆ negotiate with your suppliers for less packaging;
- ◆ avoid prepacked food (take your own dish to the student restaurant for the take away!) and avoid vending machines: they produce a lot of extra waste;
- ◆ drink tap water instead of cooled water or bottled water;
- ◆ set a good example to the students: ask for bachelor and master papers in digital form or at least two-sided printed.

2.4 EVENTS

At events, a lot of people are brought together. Ideal to set a good and sustainable example!

A SUSTAINABLE CATERING!

- ◆ avoid throw-away glasses, dishes, cutlery, ...;
- ◆ pay attention to the packaging of the food (no or biological degradable packaging);
- ◆ provide various non-alcoholic drinks, also tap water;
- ◆ follow the engagements of Ghent University: provide also vegetarian dishes, don't offer tuna fish or other endangered species, supply fair trade products, ...;
- ◆ mention on the invitation how you can reach the location with public transport or bike;
- ◆ avoid gadgets or goodie bags; if you still want to give a present, choose for sustainable and usable products, or let the invitees fill their goodie bag by themselves.

Legislation with regard to psychosocial well-being at work aims to protect co-workers as much as possible from psychosocial risks at work. These risks can relate to the organization of the work, the working conditions, the work content or the labor relations (the interpersonal relationships at work). Such risks may be reflected in emotional, behavioural and/or physical symptoms like stress, somatic complaints, alcohol and drug abuse, conflicts, burn-out, violence and harassment.

Contact can be established with the confidential counsellor and/or the authorized prevention advisor regarding any problems in this area. The confidential counsellor is the contact person within Ghent University for reporting psychosocial risks. The confidential counsellor listens from an objective and neutral perspective and will look for a constructive solution together with the staff member concerned in a confidential and informal setting.

If the confidential counsellor cannot take action due to circumstances or if the confidential counsellor seems not to be the appropriate person for the staff member, an appeal can be made to the authorized prevention advisor.

Both the confidential counsellor as well as the authorized prevention advisor are bound to professional secrecy and take care of a confidential and proper follow-up of reported problems.

REMEMBER!

- ◆ everyone has a right to a pleasant work environment, as free as possible of psychosocial risks;
- ◆ if you are confronted with violence and harassment or sexual harassment at work or other psychosocial risks, you can address the confidential counsellor and/or the authorized prevention advisor;
- ◆ report conflicts and cases of violence and harassment or sexual harassment at work as soon as possible; the sooner problems are reported, the easier they usually are to solve;
- ◆ do not take part in violence and harassment or sexual harassment at work.



For more information, contact the confidential counsellor or check the website: www.ugent.be/vertrouwenspersoon

Hazardous substances

























4

Products with hazardous properties or hazardous substances are substances classified as harmful, inflammable, explosive, corrosive, etc. including radioactive substances and materials, medicines, pesticides, herbicides, biological agents, chemical, medical and animal waste. Such substances must be handled with care with respect to safety, health and environment.

In order to outline a prevention policy on health and safety issues, on people's working and living environment, as well as on emergency intervention, it is important to know who uses which substances, with what frequency, in what concentrations, where, how and in what quantities these substances are stored. This type of information is gathered in risk evaluations, drawn up by the people involved.

In practice the SDS or material safety data sheets, but most importantly the labels with danger symbols on substances, are used as a guidance to define the danger and the preventive measures. Recognizing and comprehending danger symbols is therefore essential.

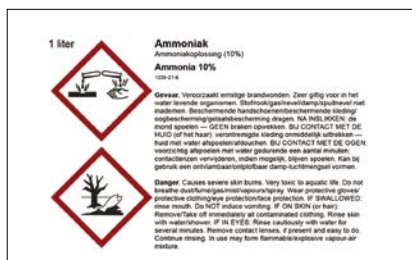
The criteria of classification and the labelling prescriptions are changed. Since 1 June 2015, all hazardous substances must be labelled according to the GHS-regulations. The GHS-symbols are diamond shaped and the R- and S-sentences are replaced by Hazard and Precautionary statements.

old	new	old	new
	 (extremely) inflammable e.g. diethyl ether, ...		 oxidising e.g. perchloric acid, chromtrioxide, potassium permanganate, ...
	 explosive e.g. picric acid, ...		 toxic e.g. methanol, benzene
	 very toxic e.g. hydrogen fluoride		 irritant e.g. sodium carbonate
	 corrosive e.g. strong acids and bases		 dangerous-to-the-environment e.g. ammonia, potassium dichromate, ...
	 harmful to health e.g. chloroform, toluene, xylene		 gas under pressure e.g. nitrogen gas
	 radioactivity e.g. thorium nitrate, iodine-125, uranyl acetate, phosphorus-32, ...		 serious health effects e.g. ethidium bromide

REMEMBER!

4.1. DANGER LABELS AND CONTAINERS

Hazardous substances are stored in the original, non-expired packaging, provided with the correct labels and danger symbols. Anyhow, when moving substances from one container to another, the receiving container has to meet the required rules of packaging and carry the labels and symbols required by regulation.



The Safety Data Sheets or SDS provide this information more extensively. The supplier is legally obliged to deliver an updated SDS for each supplied substance. In practice, unfortunately, the user often needs to claim it himself. The Safety Data Sheets of most common used substances are available in the hazardous substances database on Apollo. For certain specific substances the users have to provide these sheets themselves. The Safety Data Sheets must be accessible to the staff of the department at any time. Hazard labels can be printed from the Hazardous Substances Database (PMGE User Manual 10.3).

4.2. PURCHASE AND REGISTRATION OF HAZARDOUS SUBSTANCES

The purchase and stock management of hazardous substances is done using the PMGE-system. This applies to chemicals as well as to radioactive substances. Some substances require a licence or should be notified to the government. They can only be used after all legal requirements and procedures are fulfilled.

- ◆ it is forbidden to overwrite labels;
- ◆ 'old' labels must be removed before sticking new ones;
- ◆ a safety container, available at suppliers of safety gear and lab products, is obliged as receptacle for inflammable liquid contents of more than 3 l;
- ◆ the maximal content of hazardous substances in glass receptacles may never surpass 3 l;
- ◆ food or drink packaging may never be used as packaging for hazardous substances.
- ◆ The new GHS-labelling is obligatory since 1 June 2015



SDS, radioactive data sheets and labels:
athena.ugent.be > [apollo](#) >
[welzijn en milieu](#) > [stoffeninformatie](#)



KNOW WHAT YOU ARE BUYING!

- ◆ hazardous substances, including the radioactive substances, must be purchased and registered using the central system of supply management for hazardous substances of the UGent (PMGE-system);
- ◆ use less hazardous substances, look for safer and more environmental friendly alternatives on MIT Green Chemical Alternative Wizard.
- ◆ the purchase of hazardous substances should be in proportion to what is necessary;
- ◆ gas cylinders should better be rented than bought; the cost of elimination is very high and has to be paid by the department;
- ◆ a licence is needed for the purchase of explosive, hormonal, narcotic, etc. substances; this licence can be requested at the Environment Office;
- ◆ the presence of (very) toxic cyanides, cyanogen compounds and their preparations must be notified to the Labour Inspection (FPS Employment, Labour and Social Dialogue); complete the notification file in consultation with the Safety Department before using these substances;
- ◆ the products may not stay unattended on receipt, store these products immediately in an appropriate storage depot;
- ◆ the supplier is obliged to deliver an SDS-sheet for each substance.



Central system of supply management for hazardous substances (PMGE-system):

athena.ugent.be > [apollo](#) > [welzijn en milieu](#) > [voorraadbeheer](#)

Notification file for the presence of cyanides, cyanogen compounds and their preparations, to complete in consultation with the Safety Department:

www.ugent.be/gezondheid > [cyanide](#) > [formulier kennisgeving cyaanverbindingen](#)

4.3. HANDLING OF HAZARDOUS SUBSTANCES IN A LAB

The use of hazardous substances requires an evaluation of the potential risks to avoid or minimize exposure to humans and to the environment. The doors of each laboratory should show the potential risk as well as the co-ordinates of contact persons.

The emergency instructions, the manual of the lab and specific standard operation procedures should always be available in the lab, as well as the SDS of the handled products or the technical sheets of the waste streams produced.

PROTECT YOURSELF, OTHER PEOPLE AND THE ENVIRONMENT!

- ◆ always wear a lab coat and, according to the risk, safety gloves, safety boots, safety glasses, breathing protection, facemasks, etc. ;
- ◆ identify and date the experiments and used substances;
- ◆ secure experiments and equipment (e.g. secure gas cylinders);
- ◆ work in a fume hood, a biological safety cabinet or a separate lab;
- ◆ never store or consume food or drinks in laboratories or workplaces, storage rooms or cupboards;
- ◆ never fill a pipetor by mouth suction, but use a pipetor bulb;
- ◆ never use cosmetics in the neighbourhood of hazardous substances;
- ◆ never smoke in the neighbourhood of hazardous substances even in open air;
- ◆ inform your colleagues and head master about allergies, pregnancy, etc.;
- ◆ avoid spills of hazardous substances in the environment.

4.4. STORAGE

4.4.1. Storage of amounts in use

The presence of hazardous substances in laboratories and workplaces should be limited. In practice, this means only those amounts necessary for ongoing experiments should be present. At the end of the day, inflammable substances must be stored in an appropriate storage depot, so called group 1-room* or a safety cupboard. (Very) toxic substances should be stored immediately after the activities in a locked area. It's forbidden to store more than 50l of inflammable liquids in a room, if this room is not equipped in accordance with storage room requirements.



Storage of hazardous substances in a lab is not allowed. They should be stored in a special room equipped in accordance with storage room requirements. If such a storage room is not available, or if the quantities are very limited, the storage of inflammable substances may be allowed in safety cupboards. Other dangerous substances can be stored in a suitable cupboard or shelf. Corrosive substances are best stored in an acid and alkali storage cabinet. Cupboards for liquids must be provided with ledgers with standing boards

LIMIT THE PRESENCE OF HAZARDOUS SUBSTANCES IN THE LAB TO AMOUNTS IN USE!

- ◆ store inflammable substances (> 3l) in a safety container;
- ◆ store inflammable or flammable substances, as well as (very) toxic substances in an appropriate storage depot at the end of the day;
- ◆ Inflammable, flammable, oxidising and toxic gases belong in safety cupboards
- ◆ never use fume hoods as storage depot.



4.4.2. Long term storage

Appropriate storage depots for the storage of hazardous products are storage rooms, cupboards and sheds designed with that purpose. They should comply with the safety and environment regulations*.

Inflammable substances must be stored in a group-1 room. The rooms must be cleaned up and ventilated. Moreover, products must be classified by danger category with the labels in the front and last but not least, hazardous substances should be put in rooms, cupboards or sheds with standing boards. Don't put these substances any higher than shoulder height. Substances which can react dangerously with others shouldn't be placed together.

STORE HAZARDOUS SUBSTANCES IN APPROPRIATE STORAGE DEPOTS!

- ◆ provide enough storage accommodation
 - ◆ preferably in a separate room near the lab;
 - ◆ smaller quantities can be stored in a storage cupboard in the lab;
- ◆ keep inflammable substances in a group 1-room or, in lack of this, in a safety cupboard; those liquids that have to be conserved in a cool room are kept in an explosionproof fridge;
- ◆ be sure that dangerous liquids are put in a storage depot or a cupboard with standing boards; substances which can react dangerously with each other should not be placed together;
- ◆ do not store (extremely) highly inflammable substances and gases in a cellar;
- ◆ store containers with the label clearly visible;
- ◆ never place glass containers above shoulder height;
- ◆ never place oxidising substances near inflammable or oxidising substances; if possible, store them separately according to the data on the SDS;
- ◆ depending on the stability, always keep explosives in a locked area, such as an explosionproof fridge or safety cupboard (provided with an earthing); keep a logbook of the use and consumption; never place explosive substances near other products in the same cupboard;
- ◆ store (very) toxic products in a locked area;
- ◆ keep toxic cyanides, cyanogen compounds, biocides and narcotic products in a locked area; keep a logbook of the use and consumption;
- ◆ only store radioactive waste in permitted rooms and keep a logbook of the use and consumption;
- ◆ label the door of the storage room with the right danger symbols;
- ◆ stock of all hazardous substances is registered and managed using the PMGE-system.



For more information about the design of storage depots and the placement of safety cupboards or storage cupboards, contact the Safety Department or consult:
www.ugent.be/veiligheid/pmge

4.5. TRANSPORT

The internal and external transport of hazardous substances involves some risks, not only for the health and safety of the employees who are directly involved, but also for the people living along the transport routes and for the environment. To eliminate or minimise these risks, international, national and local regulations exist concerning the road- (ADR) , rail- (RID) and air- (IATA) transport. The transport of hazardous substances at Ghent University only occurs in consultation with the Environment Office. Transport of radioactive substances is organised by the Radiation Protection Service and carried out by a specialized firm.

LIMIT TRANSPORT TO A MINIMUM!

- ◆ check if the quantities are kept within the fixed maximum; for several substances and in case of overstepping the maximum, you are obliged to call on a specialized firm in consultation with the Environment Office or the Radiation Protection Service;
- ◆ use a regulated and secure container that is protected from any leakage during transit;
- ◆ provide a right labeling and marking, as well as a clear data of the sender and the addressee;
- ◆ take along the Safety Information Sheets of the carried products.



For more information about the transport of dangerous goods:
www.ugent.be/milieu > *gevaarlijke stoffen* > *transport van gevaarlijke stoffen*

4.6. WASTE



Waste production and collection also cause risks, especially in the case of hazardous waste. Waste is categorised in non-hazardous waste and hazardous waste that contains medical, animal, radioactive and small dangerous waste. Hazardous waste is under the supervision of the Environment Office, except for radioactive waste that is managed by the Radiation Protection Service. Each department of the faculty is responsible for the internal organisation of the selective collection. Waste is only collected in consultation with the services mentioned above, which keep the required waste inventories.

Students and staff know which waste belongs to which waste stream by a clearly marked 'waste corner', provided with waste posters. Technical sheets – available for all present waste streams in a room – give more detailed information about waste containers, labeling, collecting conditions, transport, etc. Filled barrels are brought to storage depots prior to their transport. At the end of the day, inflammable waste is placed in a fireproof storage depot or in a safety cupboard. Anyway, hazardous waste should be transported before the expiry date of the plastic containers (5 years).



TAKE CARE OF HAZARDOUS WASTE!

- ◆ order waste containers at the central warehouse, depending on the waste stream. Preferably use 10l-jerrycans for liquid waste streams;
- ◆ mention the co-ordinates of the contact person and department on the label; the code of the container and the data must be added on the label for the waste streams of lab products and medicines;
- ◆ stick the ADR-symbol on the same side of the label;
- ◆ place the waste container in a waste corner or in a waste storage depot;
- ◆ make sure you close the containers properly; never leave containers filled with inflammable liquids open in fume hoods or other places;
- ◆ respect the guidelines for waste collection, in particular for each waste stream;
- ◆ respect the maximal rate of filling (90% and 20 kg for jerrycans, 40 kg for 60 l drums with removable lid, 20 kg for medical waste containers);
- ◆ jerrycans with liquid waste are placed in a container or depot with standing boards;
- ◆ at the end of the day, inflammable waste should be placed in safety cupboards or fire-proof storage depots;
- ◆ explosive substances don't belong with the chemical waste, contact milieu@ugent.be;
- ◆ transfer filled containers to a waste storage depot of hazardous waste;
- ◆ always put needles or syringes with a needle into the medical waste (yellow box or sharps bin) – never recap a needle

RADIOACTIVE WASTE

- ◆ order waste containers at the Radiation Protection Service;
- ◆ record the date the container was closed, the co-ordinates of the contact person and department, radionuclides present and their total activity, the waste category and if possible the chemical compounds in liquid waste;
- ◆ respect the guidelines for the collection and storage of radioactive combustible waste;
- ◆ respect the maximal rate of filling (e.g. 6-12 kg for containers of solid waste);
- ◆ transfer filled containers to the storage depot of radioactive waste.

HAZARDOUS BIOLOGICAL WASTE (RMA)

- ◆ order yellow RMA-containers and sharps containers at the central warehouse;
- ◆ mention on the yellow A4-label 'hazardous biological waste', delivered by the barrel supplier: 'UGent', the co-ordinates of contact persons and department;
- ◆ respect the guidelines for the collection and storage of biological waste;
- ◆ respect the maximal rate of filling (20 kg for RMA-containers);
- ◆ transfer filled containers to a cold storage depot, in particular for hazardous biological waste;
- ◆ needles are considered as RMA, don't put them with the chemical or residual waste.

BUT FIRST OF ALL: WASTE PREVENTION!

- ◆ never buy more than necessary and use containers for reuse (gases, solvents, etc.) as often as possible;
- ◆ look for less hazardous alternatives if possible; after all, the transport and removal of e.g. explosive substances is very expensive and problematic;
- ◆ never prepare more reagents than necessary;
- ◆ collect discarded PC's, empty toners and old lab equipment for reuse or recycling: contact the Environment Office for this;
- ◆ use the online swap shop of the UGent.

Waste instructions for chemical and biological waste:

www.ugent.be/milieu > *afval*

Waste instructions for radioactive waste:

www.ugent.be/straling > *radioactief afvalbeleid*

Containers for chemical and biological waste can be ordered at the central warehouse.

To order waste labels and ADR-symbols, contact the Environment Office:

milieu@ugent.be

Containers and labels for radioactive waste can be ordered from the Radiation Protection Service or the central warehouse:

straling@ugent.be



Online swapshop:

kringloopwinkel.ugent.be

Wrong collection, waste water disposal, dumping, or anything that is not according to the regulations is inconsistent with the waste policy of the UGent. Therefore, such practices must be reported immediately. Possibly extra costs in the waste processing or penalties will be refunded by the responsible department.

4.7. WASTE WATER

In the environmental permission, emission standards for waste water are defined. Exceeding these emission standards is an environmental crime and can lead to a financial penalty. This shall be paid by the producers of pollution, according to the polluter-pays principle. The extra costs for remediation, e.g. extra samplings, will also have to be paid for when the causes are known, but not dealt with.

DO NOT DISCHARGE WASTE INTO THE WATER!

- ◆ do not discharge water into the water via the sink;
- ◆ be conscious that also rinse water can contain significant concentrations of hazardous substances; in that case, also this rinse water must be collected;
- ◆ take the water solubility of the hazardous substances into account;
- ◆ contact the environmental office in case of doubt.



For more information about the collection of waste and waste water, contact
milieu@ugent.be

The most critical parameters:

- heavy metals as Pb, Zn, Cd, Hg, Ag
- organic halogenated solvents as dichloromethane, chloroform
- some poly-aromatic hydrocarbons
- tributyltin
- nonylfenol
- chloroalcanes
- polybrominated diphenyl ethers
- pentachlorobenzene

It's strictly forbidden to discharge these.



4.8. SPECIFIC HAZARDOUS SUBSTANCES

Besides the above-mentioned guidelines for hazardous substances, some additional rules are given for a few specific hazardous substances.

4.8.1. Ethidiumbromide and other DNA markers

Because ethidiumbromide is a marker for DNA, it is used by many biotechnological laboratories. Moreover, ethidiumbromide is a very toxic substance (mutagen and carcinogen). For that reason, manipulations and the use of protective equipment are strictly regulated. Use for this work a separate room or – when not available – look for a conform ethidiumbromide room, that can be shared with other research groups. Within the room, the contamination zone should be clearly distinguished from the zone without contamination.

For the use of SybrSafe and other DNA markers, the same guidelines as for the use of ethidiumbromide apply. **SybrSafe** has the advantage that no UV-light is required.

HANDLE CAREFUL!

- ◆ keep the lab coats, gloves and shoe covers in the not contaminated zone;
- ◆ cover the benches with benchcoats, which must be removed in every case of contamination;
- ◆ contaminated materials may never leave the room;
- ◆ at the end of the activity, check on possible contamination; first do this without UV-lamp (little red spotlights), afterwards with UV-lamp (carry a UV-mask).



For instructions for the use of ethidiumbromide check:
www.ugent.be/milieu > *gevaarlijke stoffen* > *gebruik van Ethidiumbromide*



4.8.2. Biological agents

Pathogens, hazardous biological agents for human, plant, animal and environment (bacteria, viruses, parasites, fungi, etc.) and genetically modified micro-organisms should be used and stored in accordance with the biosafety regulation. A risk level is pointed according to the biological agents and the activity. Therefore, containment levels count for infrastructure as well as for working practices. A specific permission by the Department of Environment, Nature and Energy of the Flemish Government is required for every biotechnological activity.

KEEP IT CONTAINED!

- ◆ check if your activities are in accordance with the description in your permission;
- ◆ only work in contained labs, animal facilities or greenhouses that meet the requirements in accordance with the risk rate ; provide a clear and correct signalisation on the door;
- ◆ provide a biosafety guide and respect the guidelines;
- ◆ remove the disposal as hazardous biological waste or inactivate it properly and validate the method of inactivation with a bio-indicator;
- ◆ follow the regulations when sending and transporting biological material.



For more information concerning the use of biological agents, check:
www.ugent.be/milieu > *bioveiligheid*

Bio-indicators are available in the central warehouse (Centraal Magazijn) of the UGent.

4.8.3. Radioactive substances and sources of ionizing radiation

Before using radioactive substances or ionizing radiation, contact the Radiation Protection Service and the Department of Occupational Health. A licence of the Federal Agency for Nuclear Control (FANC), a specific waste-procedure, a specific medical examination and often personal dosimeters are required for these activities. Concerning the specific guidelines in each department, please contact the certified person.

WORK CAREFULLY!

- ◆ make sure you wear impenetrable gloves while working with radioactive substances;
- ◆ put lead screens and lead aprons in rooms where professional exposure to X-rays or gamma rays is possible;
- ◆ put screens in plexiglass while working with beta-emitters;
- ◆ use benchcoat on the benches;
- ◆ check for contaminations before and after the experiments;
- ◆ follow a course on "Working safely with ionizing radiation".*



More information about working with radioactive substances and sources of ionizing radiation:
www.ugent.be/straling

In labs working with radioactive substances, all desks must be easy to clean and the room must have standing boards.

The purchase and stock management of radioactive substances is done using the PMGE-system.



4.8.4. Gas

Gases have the CLP labels, the danger labels for road transport, and a colour indication at the top of the gas cylinder, in accordance with the European regulation*. Gas cylinders must be checked, with a periodicity depending on the gas group (3y, 5y or 10y)* .

HANDLE GASES CORRECTLY!

- ◆ always secure gas cylinders separately on 2/3 of their height to the wall;
- ◆ make sure the number of gas cylinders in the lab or at the working place is limited to the strict minimum needed for the ongoing project;
- ◆ always use an expander;
- ◆ never use an expander as a closing tap;
- ◆ put inflammable, flammable, oxidising and toxic gases in a safety cupboard;
- ◆ gases do not belong in a cellar, neither for use, neither for storage;
- ◆ put full and empty gas cylinders in the outside storage depot in the right compartment;
- ◆ likewise, gas cylinders need to be secured separately on the wall, provided with their cylinder head;
- ◆ before transport, remove the expander and use transport cars for gas cylinders;
- ◆ keep an eye on the expiry date of the gases and the cylinders;
- ◆ follow a course “Working safely with industrial gases”;
- ◆ wear safety shoes when you manipulate gas cylinders;
- ◆ when using the elevator to transport the gas cylinders, it’s forbidden for you or any other person to take the elevator at the same time. Use the priority switch if possible or make the necessary arrangements with a colleague on the destination floor.



For more information about working with gases, contact the Safety Department.

4.8.5. Cryogen liquids

Liquid nitrogen is one of the most used cryogen liquids. Liquid nitrogen is a gas that has been condensed to a liquid. It has an extremely low temperature of about -196°C . When this liquid is exposed to outside air, it shifts boiling into its gas form. The transition from liquid to gas triggers a forceful increase in pressure and/or an increase in volume. In its transition to gas, liquid nitrogen's volume increases 700 times. This increase in pressure can lead to explosions. The transition to the gas stage also implies that the nitrogen concentrations in the air increase, and that the oxygen concentration, normally amounting to 21%, strongly decreases, heightening the danger of suffocation for people that enter the space at that moment.

PROTECT YOURSELF!

- ◆ only work with liquid nitrogen in well ventilated areas;
- ◆ wear a facial protective shield, temperature-proof gloves in accordance with EN511, a lab coat that is completely buttoned up and closed shoes;
- ◆ transport liquid nitrogen only in closed containers, never use the elevator together with the container;
- ◆ do not keep the container sealed (danger of pressure build-up and explosion);
- ◆ carry out a risk analyses for the rooms where one works with liquid nitrogen;
- ◆ do not heat cryogene liquids outside a fume hood;
- ◆ rinse lengthily with water, upon contact with skin or eyes;
- ◆ treat any sustained injuries as burns;
- ◆ prevent gas forming by using a draw-off installation;
- ◆ liquid nitrogen may not be used or stored in basements or technical areas.



A risk analyses form for working with liquid nitrogen can be obtained at:

www.ugent.be/veiligheid/risicoanalyse

In order to avoid or limit risks as much as possible, work equipment must comply with current legislation. Work equipment is all machinery, appliances, installations, mechanised tools and testing devices necessary to perform certain labour. Pursuant to the prevention policy, the Safety department must be involved in both purchasing (for safety requirements) and entry into service (for the entry into service report), as well as in modifying existing work equipment or the application of new techniques.

Additional obligations exist for some work equipment, for instance with regard to work equipment subject to authorization (such as autoclaves, compressed air tanks, cooling installations, sources or appliances with ionising radiation, ...), or when necessary infrastructure modifications are to be made.

Due to their specific risks, certain types of work equipment require periodic inspection duty by an External Service for Technical Inspections (ESTI), an independent inspection body recognised by the government. A framework agreement was concluded by the Safety department for the periodic inspections of a number of types of work equipment, including steam appliances, compressed air tanks, fixed tanks for gases, high-voltage power usage appliances and centrifuges.

Specifically, upon entry into service new work equipment subject to authorisation is immediately recorded by the safety advisor in the inspection inventory maintained by the Safety department. The Safety department makes the necessary arrangements with ESTI for possible entry into service inspection in consultation with the contact person within the department. ESTI will contact the contact person within the department directly in order to plan the periodic inspections. For the inspection of steam appliances and compressed air tanks, technical support from the equipment's supplier or manufacturer is required each time. To this end, the department must make the necessary arrangements itself.

After each inspection, a label is applied on the work equipment, which indicates whether the equipment was approved (green label mentioning the final date for the next inspection), approved with comments (orange label) or was rejected (red label).

All work equipment requires appropriate training of the users. If the use or operation of the work equipment can create an additional risk for others, it is considered as a safety function (eg. operating a forklift, cranes, roller bridges,...). In that case, a specific training is obligatory. The Safety department organizes these (mandatory) courses. Safety functions also require a mandatory annual health check-up.

PURCHASE OF NEW WORK EQUIPMENT

- ◆ contact IDPBW before the purchase of new work equipment to receive the safety requirements;
- ◆ the supplier must prove compliance with these safety requirements, therefore he must deliver the EC declaration of conformity and the manual; ;
- ◆ contact IDPBW after delivery for drafting of the entry into service report (ESR);
- ◆ verify whether or not the new work equipment is subject to a periodic inspection obligation, inform the Safety department of work equipment subject to inspection not included in the inventory;
- ◆ take into account any necessary additional authorisations;
- ◆ create a safety dossier for all work equipment, which includes the safety requirements, the entry into service report, the original manual, the usage instructions, the maintenance registry, the risk analyses and any inspection reports or authorisations;
- ◆ in the case of electric appliances and installations, select energy efficient work equipment as much as possible, for appliances using cooling water, purchase a closed cooling circuit;
- ◆ report safety functions to the Safety Department and make the necessary arrangements about the mandatory trainings.



For more information about the prevention policy related to work equipment (safety demands, bring into service, inspection, safety functions, etc.), contact the Safety Department or consult:

www.ugent.be/veiligheid/arbeidsmiddelen

In order to protect yourself from safety and/or health risks during work, usage of personal protective equipment (PPE) is often required. PPE must be used when risks cannot be avoided at their source (for example, by not using a dangerous product), when collective technical protection equipment (for example, a fume hood) is insufficient or when risks cannot be sufficiently limited through organizational measures and methods (for example, by the application of procedures).

PPE consists of any equipment which is carried or held and which protects its user against safety and health risks present, as well as all accessories and additions which contribute to its protective function (for example, facial mask, gloves, helmet, safety glasses, ...). Correct PPE is always provided with a CE-marking (in conformity with European Directive 89/686/EEC) with reference to any applicable standards (for example, for disposable gloves in the chemical lab: packaging provided with CE-marking and reference to European standards EN420 and EN347-1 including corresponding pictograms).

The choice of the right PPE is made based on the risk analysis. Here, the risks associated with a certain task are analysed and evaluated, after which the PPE's characteristics are set. Determination and purchasing of the right PPE always occurs in consultation with the Safety department.

PROTECT YOURSELF!

- ◆ buy your PPE through the framework agreement <http://www.ugent.be/veiligheid/pbm;>
- ◆ prevention policy applies to the purchase of PPE not included in the framework agreement;
- ◆ contact the Safety department before choosing and purchasing PPE;
- ◆ contact the Radiation Protective Service for PPE for working with ionising radiation;
- ◆ always use PPE in a correct manner, consult the user's manual before use;
- ◆ pay attention to the expiration date on specific PPE (filters, facial masks, helmet, ...);
- ◆ students are responsible for their own personal protective equipment, pay attention that they always use it in the correct manner;
- ◆ notify colleagues about wearing necessary PPE and lead by example.

The workplace needs to be clean, well organized and labelled. The fume hood should work well, the apparatus should be tested and there should be a waste corner where it is possible, to collect waste selectively. Loose electric cables should be avoided. In case something happens it must be possible to use a fire extinguisher, an emergency or eye shower, a first aid case and absorption material.

7.1. DESCRIPTION

Doors of the working places, either labs or mechanic studios, should point out the potential risks through an icon, together with the names of contact persons. An additional green, orange or red label provides guidelines for the cleaning staff.

Moreover, inside the lab, specific risks need to be indicated by icons on, for example, laser appliances, appliances which require the use of safety glasses, on doors of fridges with biological agentia, etc. Icons are also useful in order to find the first aid case, the fire extinguisher, the emergency exit, means of protection, etc. (see p.2)

7.2. FIRST AID

A first aid kit must be available in an easily accessible place for all laboratories, auditoria, workplaces, kitchens and student housing. All available first aid kits are registered, including their location and the designated responsible person. Registered first aid kits can be recognised by the sticker with the inventory number. If you haven't done this so far, contact the department of Occupational Health (EHBO@ugent.be). Updates of the content can be ordered using the website. Missing first aid kits can also be reported to the department of Occupational Health.



For a list of all registered first aid kits, their location and the name of the designated responsible person, as well for any orders of new kits or updates: www.ugent.be/gezondheid > EHBO



7.3. FUME HOODS

When there is a real risk of inhaling dangerous volatile substances or of infection by biological agents, activities need to take place in a well-functioning fume hood or a biological safety cabinet.

MAKE SURE THE FUME HOOD IS FUNCTIONING WELL!

- ◆ don't fill the fume hood needlessly with appliances and don't use it as a storage place;
- ◆ reduce the opening of the sliding door to the space necessary for manipulations; always work behind the sash window and in the indicated "safety zone" (maximum work opening 50cm, indicated by a red colour strip);
- ◆ close the window of the fume hood when it is not in use, open fume hoods consume a lot of energy in labs;
- ◆ decrease the use of the heat sources in the fume hood, since they disturb the air stream;
- ◆ make sure to minimise the number of manipulations and always work with calm movements;
- ◆ make sure the biological safety cabinet is tested every year.



Defects need to be reported as quickly as possible :

www.ugent.be/intranet > *Gebouwen en logistiek* > *Herstellingen en verzoeken*

More information concerning the correct use of a fume hood:

www.ugent.be/veiligheid/PMGE

7.4. ERGONOMICS

Good ergonomics are important in laboratories, in workshops as well in offices. Limiting loads, the use of proper lifting techniques, regularly changing the body position and a well-equipped working place all contribute to good ergonomics. Computer ergonomics require a proper placement of monitor, desk and keyboard and a customized office chair to avoid any ergonomic complaints in the long run. Always think about the ergonomic aspects when changing a workplace, making adjustments to individual workstations and with the renewal of furniture. Therefore, always contact the Department of Occupational Health in time to get some ergonomic advice.

ERGONOMIC TIPS

- ◆ ensure some daily exercise, change your body position regularly;
- ◆ know your limits when lifting loads, do not lift more than 10kg, use the correct lifting techniques and the right lifting tools if possible;
- ◆ provide customized furniture for each activity, the furniture should be easy to decontaminate and maintain, and designed for the activities carried out;
- ◆ ensure the correct positioning of your computer, invest in a customized ergonomic office chair and a good desk;
- ◆ follow a training in ergonomics or ask for a specific one, tailor made;
- ◆ when changing the workplace and with renewal of furniture, be sure to ask for the necessary advice in time.



contact the ergonomics team of the department of Occupational Health at ergonomics@ugent.be

8.1. MATERNITY PROTECTION

Pregnant women and women in the breast-feeding period should pay special attention to radioactive substances, teratogenic and/or mutagenic substances. Those are substances that can lead to structural or functional deviations and anomalies of the prenatal development or of the hereditary material, which is present but not necessarily revealed at birth. Similarly, working with biological agents, ionizing radiation, raising heavy loads and exposure to heavy vibrations and noise (more than 80dB(A)) should also be reported to the Department of Occupational Health.

PROTECT YOUR (UNBORN) CHILD!

- ◆ inform the Department of Personnel and Organization as quickly as possible when you are pregnant or breast-feeding (zwanger@ugent.be);
- ◆ if necessary you will be invited to an appointment with the Department of Occupational Health;
- ◆ the occupational health physician will draw up a health assessment form, send this form to the department Personnel and Organization;
- ◆ in consultation with your supervisor, the necessary steps will be taken, such as an adapted job or permission to have maternity leave.



For the standard procedure for motherhood protection:

www.ugent.be/gezondheid > *Moederschap*

For more information, please contact the Department of Occupational Health.

8.2. THIRD PARTIES

For safety and environment considerations, third parties such as students, cleaning and technical staff, visitors, etc. need to be aware of potential risks. They should be well informed about acting safely and environment-minded.

Students should read the basic information in this regulation and sign it for agreement. This should happen in the first year of their Bachelor's and Master's degree. Moreover, they also need to be specifically guided in their assignment. Cleaning and technical staff, visitors, etc. should be clearly instructed about possible risks and preventive measures. Third parties should always check-in with the contact person before entering the workplaces.



For third parties, the rules on maternity protection apply undiminished, as described in 8.1.

ACCOMPANY!

- ◆ make sure that third parties are not needlessly exposed to dangerous substances and apparatus and inform them about the risks and the specific guidelines of the lab, e.g. what to do after spilling incidents;
- ◆ during student practice, avoid contact with (very) toxic substances and other substances with a considerable risk for human beings and their environment and search for alternatives; otherwise, the university professor should give the SDS and contact the services for Health, Safety and Environment;
- ◆ during student practice, it is forbidden to use hazardous aromatic or halogenated hydrocarbon, derivatives from hydrogen with fluorine and bromine, biological agents with risk level 3 and sources of ionizing radiation; if this does happen, the Department of Occupational Health must be warned;
- ◆ as a university professor, make sure everybody uses collective and personal protective equipment (lab coat, safety glasses, gloves) correctly; if necessary, the department is responsible for personal dosimeters for the students in case they work with radioactive substances or sources of ionizing radiation;
- ◆ students on work placement should contact the Department of Occupational Health and their professor, in order to make a description of the job with a risk analysis;
- ◆ ensure that all technical areas, HVAC and electrical distribution boards are always accessible in a safe manner; technical areas are not storage rooms;
- ◆ check whether the third parties have fully understood all instructions and procedures about warning signals and evacuation.



Specific instructions about working with hazardous substances in practices for students:
www.ugent.be/milieu > *gevaarlijke stoffen*

8.3. STUDENTS ON WORK PLACEMENT

Students on work placement are equal to personnel for the safety and health prescriptions. The department of Occupational Health is responsible for the preliminary health assessment examination (also possible via the trainee post).

Before this examination the employer at the trainee post has to draw up a risk analyses to determine if there is any risk and if therefore a medical examination is necessary. In addition a job description form has to be filled in. If necessary the student must be vaccinated beforehand.

8.4. HANDLING WITH ANIMALS

When working with animals, there are specific rules on safety, hygiene and environment.



The script of the faculty of Veterinary Medicine 'safety of students and staff':

www.ugent.be/di/nl/faculteit/raden/documenten/Handboek%20Facultaire%20veiligheidscommissie

8.5. ASBESTOS

The presence of asbestos requires a detailed approach for control and disposal. There is a risk of health damage when asbestos fibres are inhaled, after manipulating or damaging the asbestos. Therefore, never perform activities without contacting the experts for advice and checking the asbestos inventory in advance.



For more information about (the) asbestos(inventory), please contact the the Safety Department or the department of Occupational Health.

GOING ON WORK PLACEMENT? PREPARE IN TIME!

- ◆ give as a work placement responsible the necessary information to students going on work placement;
- ◆ as a student, ask your work placement responsible to make up a risk analysis and to fill in a job description form; get the necessary vaccinations via your family doctor or the student doctor and ask a certificate (for healthcare professions, an antibody determination for Hepatitis B surface is imperative);
- ◆ make an appointment with the department of Occupational Health, bring all documents with you and if necessary your vaccination card.



For the procedure and the forms, contact the work placement responsible of your department and consult:

www.ugent.be/gezondheid > informatie over studenten-stagiairs

The foundations of the health, safety and environmental policy are based on the risk analysis. By means of a risk analysis hazards and risk factors can be identified, determined and evaluated. As a result precautionary measures can be taken if necessary.

The risk analysis needs to be performed on three levels, i.c.: the organisation (UGent), the workplace (department) and the individual (personnel/staff).

The risk analysis on the level of the organisation and the individual are performed by the IDPBW, respectively by means of the GPP and the medical examinations. The risk analysis on the level of the workplace needs to be executed by the department itself, supported by the Safety department (IDPBW).

The risk analysis does not only relate to the work equipment, it also concerns the organisation of the lab, the hazardous substances that are being used, the performed experiments, the equipment, ... A

ENSURE A CORRECT AND COMPLETE RISK ANALYSIS

- ◆ make sure your department has the necessary risk analysis and consider them as a useful work tool;
- ◆ risk analyses for experimental and self-build installations must be incorporated in the design
- ◆ draw up a step-by-step plan for the lacking risk analysis;
- ◆ use the forms available on the UGent website;
- ◆ contact the Safety department for support;
- ◆ use the results of such a risk analysis;
- ◆ keep the risk analysis as long as necessary;
- ◆ a risk analysis is a random indication: if the work equipment or the workplace changes, a new risk analysis should be performed.

risk analysis (or assessment) is also necessary when there is a risk of formation of explosive atmospheres. In that case, an explosion protection document, including a classification of the identified hazardous places into zones, must be drawn up. This classification must be seen and approved by an external service for technical inspections at the workplace. For each of these topics an appropriate form is available on the UGent website. The performed risk analysis needs to be saved as long as the work equipment, hazardous substances or the workplace is being used.

Contact the Safety department before performing a risk analysis.



For more information about risk analyses (standard forms, methods,...):

www.ugent.be/veiligheid/risicoanalyse

10.1. EMERGENCY CENTRE UGENT (PERC)

In spite of all preventive measures and strict appliance of the rules, it is still possible that the policy of prevention fails in certain circumstances. In similar cases, an appropriate reaction may restrict the damage. From this point of view, a protection and intervention policy is set out for Ghent University by the services of Health, Safety and Environment in cooperation with the Facility Management office of the Department of Infrastructure and Facility Management.

The Emergency Centre UGent (PerC) plays a central role in the protection and emergency policy of Ghent University. This internal switchboard is continuously staffed and centralizes all the reports of irregularities in and around the university buildings, automatically (fire detection, test placing, electronically steered doors, etc.) as well as manually (telephonic reports).

PerC deals with these reports and contacts the competent internal and external services in order to solve the problems. The centre should be contacted for technical irregularities (faulty elevators, electric breakdown, water inconvenience, etc.) as well as incidental ones.

REPORT IRREGULARITIES!

- ◆ immediately report every irregularity (even the small ones) to PerC (88) and to your headmaster;
- ◆ answer all questions as accurately as possible and provide all the information needed:
 - ◆ who are you: name, contact details, etc.
 - ◆ nature and seriousness of the incident: fire, explosion, gas leakage, theft, defect, etc.
 - ◆ which hazardous substances are involved: chemical, biological, nuclear, etc.
 - ◆ are there victims: number, kind of injuries, etc.
 - ◆ where did the incident occur: site, building, floor, etc.
 - ◆ which actions have been undertaken: evacuation, first aid, attempt to extinguish the fire, etc.
- ◆ better make too many instead of too few reports!



The Emergency Centre UGent (PerC) can be reached:

By phone in case of emergency: **emergency number 88**

(09/264 8888 with mobile or external phones)

In any other case: 09/264 71 45 or via e-mail: permanentie@ugent.be

10.2. WARNING, ALARM AND EVACUATION

In case of fire or smoke detection or if the red alarm button is pushed, a warning signal will resound in the concerned zone. The sound will be monotonous and interrupted, warning everybody who is working in this zone. It will also spur on the EIP (the First Intervention Team), i.e. the employees who are responsible in emergency situations. They monitor the situation, report the people present and contact the PerC. Everybody should stay in place and make sure that the working environment is safe. If necessary, a first intervention can take place and the zone can be cleared at command of the EIP.

In case of collective danger, it may be necessary to evacuate. The according signal is a continuous alarm consisting of two tones. In that case, the building needs to be left as soon as possible and the employees should gather at a fixed meeting point. The escape route, emergency exits and the meeting point are indicated by green and white icons. A survey of all the meeting points for each building of the UGent can be found on the website.



More information about alarm and evacuation:
www.ugent.be/veiligheid/noodplanning > *Evacuatie*



Exit



Escape routes to the emergency exit



Meeting point

During the evacuation, always follow the instructions of the First Intervention Team (EIP). This team, specific for each building, consists of staff members who have been trained in the basics of fire fighting, first aid and evacuation. They are recognizable by their yellow jacket and/or red helmet. Every EIP has one or more coordinators, recognizable by their orange jackets, who are responsible for the local coordination at the evacuations.

Every year evacuation exercises are organised in the different buildings of Ghent University, in co-operation with the EIP. These exercises are designed to test the emergency procedures but also the occupants' ability to effectively and efficiently evacuate in response to an emergency. In that way, they are the ideal opportunity for the employees and students to learn to know the alarm signals, the meeting point and the EIP. A perfect co-operation to these actions is important for your own and other people's safety.

10.3. FIRST AID

In a lot of university buildings, it is possible to ask for first aid assistants. These people have had a training of a few days in resuscitation, wound care, manipulation of injured people, etc.. This training is heavier than the standard first aid training, which is given to all EIP members and is directed to primary medical assistance, for example reanimation.

REMEMBER!

- ◆ know the difference between warning and evacuation signals and act properly;
- ◆ never question an evacuation alarm – start the evacuation immediately;
- ◆ stop possible courses and practices, evacuate the room for which you are responsible and accompany your students to the meeting point;
- ◆ during the evacuation, use escape routes and emergency exits as much as possible;
- ◆ know the location of the meeting point and follow the instructions of the EIP;
- ◆ try to participate in the evacuation exercises;
- ◆ look for more information about the basic info sessions for the EIP – more info about it can be found on the website.



More information about EIP
www.ugent.be/veiligheid/noodplanning > *Eerste InterventiePloegen*

All staff members can follow this type of training. In case of accidents, the PerC should always be contacted at the alarm number **88**.



For more information about first aid or when interested in becoming a first aid assistant, contact the Department for Occupational Health or consult

www.ugent.be/gezondheid > *EHBO*

10.4. INTERVENTION IN CASE OF EMERGENCY

Never act alone in case of emergency! The PerC should be called every time, in order to contact the right people. Just make sure that you are well informed about the procedures and the use of the present protective and intervention equipment, such as fire extinguishers, eye and emergency showers, first aid cases, breath protecting masks, etc..

The responsible internal services for Health, Safety and Environment are present at every incident and coordinate the intervention. When more serious incidents occur, PerC will contact the public emergency services (fire brigade, police, medical emergency services, etc.). In these cases, these services might need the present information about the building and the present substances which are possibly hazardous and to which some people might have been exposed.

IN CASE OF AN INCIDENT!

- ◆ never act alone;
- ◆ follow the guidelines of the competent services;
- ◆ inform the auxiliary services on the spot about possibly relevant information connected to people who stayed behind, dangerous situations and PMGE;
- ◆ know the guidelines and emergency procedures;
- ◆ don't lose sight of your own safety.



DECLARATION

The head of the department, part of the chain of command, is responsible for implementing and following the Environmental, Health and Safety Guidelines of the UGent.

However, every person who works at UGent must know and act according to this internal regulation. This means that, not only the UGent-staff, but also students and particularly cleaning staff and maintenance and technical staff must know the regulations and the appropriate annexes. Therefore, the certificate mentioned below should be read and agreed on. It should then be handed over to the head of the department or registered in a signed list of names. The head of the department is obliged to place the signed declarations or the lists of names at the disposal of the internal and external control services.

I, the undersigned declares

- to have taken note of the Environmental, Health and Safety Guidelines of the UGent
- to know where to consult the Environmental, Health and Safety Guidelines and
- to respect the guidelines and obligations stemming from this regulation

Name function

Date signature

Undersigned declares

- to have taken note of the Environmental, Health and Safety Guidelines of the UGent
- to have received a specimen of the Environmental, Health and Safety Guidelines and
- to respect the guidelines and obligations stemming from this regulation

modelform

<i>Name</i>	<i>Function</i>	<i>Date</i>	<i>Signature</i>



Download the official release here:
www.ugent.be/welzijns-en-milieugids > namenlijst

LIST OF ABBREVIATIONS

ADR	accord européen relatif au transport internat. des marchandises Dangereuses par Route
C	corrosive
CBM	collective protective equipment - CPE
DGFB	Department of Infrastructure and Facility Management
DPO	Department of Personnel and Organization
E	explosive
EHBO	first aid
EIP	First Intervention Team
F+ / F	extremely / highly inflammable
GGO	genetically manipulated organism
IATA/TI'S	International Air Transport Association; Technical Instructions for the safe transport of dangerous goods by air
IDPBW	Internal Office for Prevention and Protection at work
SDS	Material Safety Data Sheet
N	dangerous for the environment
(N)RMA	(non) hazardous biological waste
O	oxiderend
PerC	The Emergency Centre UGent (PerC)
PBM	personal protective equipment - PPE
PMGE	hazardous substances
R	risk sentences
S	safety sentences
T+ / T	(very) toxic
Vlaem	Vlaams reglement betreffende de milieuvergunning
XI	irritating

COLOFON

Responsible publisher:

*Benny Vandenberghe
Riet Van de Velde*

Editors:

*Luc Cobbaut
Kenny De Bosschere
Paul De Pauw
Sara Drieghe
Franky Hoste
Isabelle Meirlaen
Myriam Monsieurs
Greet Persoon
Nathalie Praet
Hubert Thierens
Benny Vandenberghe
Riet Van de Velde
An Van Goethem
Mathias Vanhaverbeke
Ilse Van Laere
Ludo Vanmarsnille
Rini Verpraet*

copyright © release 2015

realisation : 2Mpact - www.2mpact.be

For the online version of the Environmental,
Health and Safety Guidelines:
www.ugent.be/welzijns-en-milieugids

REF E-008





CONTACT DETAILS OF THE DEPARTMENT

The services of Health, Safety and Environment play a supportive as well as an advising and serving role. However, a system that works excellently is supported by all the staff members, especially the people responsible for waste, biosafety, guarding, EIP-members, etc. They all contribute to a quick and efficient spread of information and can interfere in case of emergency. For your convenience, the contact details of these people are listed below.

However, the head of the department, the department's chairman and the chain of command stay responsible for the implementation of the prevention policy on well-being and environment, including safety, health, hygiene, radioprotection, security, emergency planning, psychosocial well-being and environment, as described in the regulations.

<i>Modelform</i>	<i>Name</i>	<i>N° of the room.</i>	<i>Phone number</i>
Head of the department			
Person in charge of the lab or workplace			
Contact person environment, health and safety			
Contact person for waste			
Certified person for radioactivity			
Person in charge of first aid			
First Intervention Team			

The relevant contact details need to be displayed at the front door of each lab or workplace.



The Emergency Centre UGent (PerC) can be reached:

By phone in case of emergency: **emergency number 88**

(09/264 8888 with mobile or external phones)

In any other case: 09/264 71 45 or via e-mail: permanentie@ugent.be