Safety training for staff and contractors

1. Study the safety information for staff or contractors at
   https://www.maxiv.lu.se/user-access/safety/safety-requirements-for-employees/ (for staff)
   https://www.maxiv.lu.se/user-access/safety/safety-requirements-for-contractors/ (for contractors)
2. Complete the corresponding parts of the safety test
3. Provide contact information and sign the certificate

1. Safety information

I have studied the safety information required to get basic access to MAX IV (tick **all** boxes to confirm)
☐ General and fire safety ☐ Radiation safety for supervised areas ☐ Basic chemical safety ☐ Recycling and waste handling
I have been assigned tasks within controlled areas (accelerator areas and/or beamline hutches) and have studied the safety information required to get access to these areas at MAX IV (tick the box to confirm)
☐ Radiation safety for controlled areas
I will engage in hazardous chemical work or bring chemical hazards to the facility and have studied the extended chemical safety information for MAX IV (tick the box to confirm)
☐ Extended chemical safety
I will bring biological samples to the facility or prepare biological samples in the Biolab/preparation labs and have studied the biosafety information for MAX IV (tick the box to confirm)
☐ Biosafety

2. Safety test

The safety test is attached as page 2-4 of this document. Answer the questions corresponding to the safety information ticked above. Questions 1-13 are required for basic access.
Date of completed test (YYYY-MM-DD)

3. Certificate

Contact information etc.	
Employer (print, e.g. MAX IV)	I anticipate that I will spend more than 3 months (> 60 work days) at MAX IV during the coming 12 months (not applicable to MAX IV staff) ☐ Yes ☐ No
MAX IV contact person (for contractors)	
Cell phone number	E-mail (print)
I hereby certify that I am at least 18 years old and that I have studied the safety information as ticked above, completed the corresponding parts of the safety test and provided all contact information	
Name (print)	Signature

FILLED OUT BY THE MAX IV RECEPTION	
Access granted by	*Date (YYYY-MM-DD)*

Safety test (Only one alternative is correct)

----- General and fire safety -----

1. Where is the assembly point after evacuation?

☐ The area south of the start building
☐ The inner yard
☐ Along A building wall close to D building entrance

2. Which of the following statements is true?

☐ It is OK to block an evacuation path if an alternative is available
☐ Safety equipment is not necessary if you know what you are doing
☐ Hazardous work may not be performed as solitary work

3. Are you required to report occupational incidents and injuries?

☐ No, not at all
☐ Only injuries need to be reported
☐ Yes, all occupational incidents and injuries need to be reported

----- Radiation safety for supervised areas -----

4. In which areas are you required to wear a personal TL-dosimeter (TLD), if you have been assigned one?

☐ All controlled areas
☐ All supervised and controlled areas

5. Are you allowed to temporarily move shielding material (e.g. lead, concrete, iron) without prior permission from the radiation safety team if you know that the accelerator/beamline will not be started?

☐ Yes
☐ No, since I need a radiological work permit I contact the radiation safety team

6. A door to a beamline hutch is open, who is allowed to enter?

☐ Everyone
☐ Those who have been assigned tasks that require access to controlled areas and have taken the radiation safety training for controlled areas (and wear an electronic dosimeter)

----- Basic chemical safety -----

7. I need to be able to recognize where hazardous areas are located when walking around the facility.

☐ Yes
☐ No

8. Are you allowed to move gas bottles around after completing the basic chemical safety introduction?

☐ Yes
☐ No

9. What does this hazardous pictogram mean?

☐ Corrosive
☐ Acute toxicity
☐ Health hazard

Safety test continues on next page

Safety test (continued)

10. What does this hazardous pictogram mean?

☐ Corrosive
☐ Bat storage
☐ Gas under pressure

11. Are you allowed to eat or drink wherever you want in the facility?
☐ Yes, it's allowed
☐ No, it's not allowed

----- Recycling and waste handling -----

12. Are you allowed to dispose combustible waste and corrugated paper in the same waste container?
☐ Yes, corrugated paper is combustible and can be disposed in the same waste container as other combustible waste
☐ No, separate waste containers must be used for combustible waste and for corrugated paper

13. Are you allowed to throw containers with residual chemicals in the recycling bins?
☐ No, containers with residual chemicals are treated as hazardous waste
☐ Yes, residual chemicals in a container are such a small amount that it doesn't cause any hazard

----- Radiation safety for controlled areas -----

14. Within which areas are you required to wear an electronic dosimeter?
☐ All controlled areas and when working in the immediate vicinity of the klystrons
☐ All supervised and controlled areas

15. The accelerators cannot be turned on unless everyone is logged out. From which areas is logging out necessary?
☐ The linac tunnel, the 1.5 and 3 GeV ring tunnels and the SPF
☐ All supervised and controlled areas

16. Access to a controlled area is only allowed when
☐ The green light above the door is off
☐ The green light above the door is lit

17. What is your first action on an electronic dosimeter alarm?
☐ Contact radiation safety on-call
☐ Exit the area

18. Are you allowed to remain in a controlled area while its warning lights and sirens are active? It is assumed that you are not presently performing a search of the area.
☐ Yes
☐ No

19. Which of the following statements is true regarding visitors in controlled areas?
☐ I am not allowed to bring visitors younger than 18 years old
☐ For a visitor group it is enough that one person in the group carry an electronic dosimeter

Safety test continues on next page

Safety test (continued)

20. How should you proceed if you want to bring out an item from the 3 GeV ring, e.g. lighting equipment?
☐ Recycle the equipment since it was more than two meters from the electron path
☐ Contact the radiation safety team and, unless otherwise instructed, label the item and leave it in the dedicated container at one of the main access points to the ring

----- Extended chemical safety -----

21. Are you allowed to enter the chemical laboratories after finishing the extended safety training?
☐ Yes, I have the correct training after that
☐ No, a special training is needed to access the chemical laboratories

22. You need to dismantle some equipment containing a Beryllium window. How do you proceed?
☐ I start dismantling it immediately
☐ As I need a work permit, I contact the Chemical Safety group before any dismantling

23. Are you allowed to purchase a new hazardous substrate prior to making a risk assessment and approval by the Chemical Safety group?
☐ Yes
☐ No

24. You transfer some ethanol to a new container that you will use the next two days. Which is the correct way to label the new container?
☐ I write my name and date on it
☐ I don't label it because I will use it the next two days
☐ I label it with the correct pictogram, write Ethanol on it and, and my contact details

----- Biosafety -----

25. Are you allowed to perform major manipulation of biological samples at the preparation labs?
☐ Yes
☐ No, it has to be done in the Biolab

26. You need the access to the biological laboratory, how do you proceed?
☐ I ask the local contact or someone working in the laboratory to open the door for me
☐ As the door is open, I just enter
☐ I need to contact the Biolab manager regarding my requirements well in advance