Containment level 1 - Large Scale - Laboratory Facilities

Design Features and Technical Characteristics

- The facility is set up with an emergency exit (door).
- The laboratory is equipped with a sink for hand's washing and decontamination.
- The personnel have access to a changing room. Protective and informal clothes cannot be in contact to each other.
- Bench tops are easy to clean, waterproof and resistant to acids, alkalis, organic solvents, disinfectants and all chemicals used in the laboratory for decontamination.

Safety equipment

- The primary containment (production devices) is conceived in order to avoid any leakage.
- If waste and/or biological materials are inactivated by steam sterilization, an autoclave is available on site.

Work practices*

- The access is restricted to authorized and informed persons, whose presence is required during the production process.
- The door accessing to the facility is labeled with the following information:
 - Containment level;
 - o Coordinates of the responsible person for the area
- Protective laboratory clothing is worn. Protective clothing is dedicated to the contained area and cannot be worn outside of it.
- In case of incident, "Spill kits" are available inside the contained area.
- Viable genetically modified (micro-) organisms are contained within closed systems (tubes, flasks, etc.) when they are not manipulated.
- Splashes and aerosols formation is minimized (such as during sampling, addition of material into a closed system or transfer of material into another closed system) and controlled via the utilization of appropriate practices and equipments.
- During sampling, hermetically closing, unbreakable and easily disinfected containers are used.
- Mechanical pipetting devices are used. Mouth pipetting is prohibited.

- Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption are not permitted in the laboratory.
- All genetically modified (micro-) organisms manipulated and/or stored are recorded in a register.
- Monitoring measures as well as monitoring and protective equipment are adequately and regularly tested.
- Workers wash their hands before leaving the contained area and each time it is proved necessary.
- Working surfaces are decontaminated with an appropriate disinfectant after each work and after any spill of biological material.
- Instructions regarding the use of disinfectants (its activity, concentration, and contact time) are available for the personnel.
- Training of the personnel on biosafety aspects is organized as well as follow-up and regular updates. Procedures relative to biosafety are written down.
- Presence of animals in the laboratory is forbidden.

Waste management

- Management of wastes and/or residual biological material satisfies the following conditions:
 - Contaminated waste and/or residual biological material and contaminated disposable material are inactivated by an appropriate and validated method before disposal, e. g. by autoclaving or incineration. Incineration is performed in an agreed installation. Bags and containers used for infectious waste collect are resistant, sealable, labeled with the biosafety symbol and closed before leaving the contained area.
 - Before washing, reuse and/or destruction, contaminated material (glassware, slides, etc.) is inactivated by an appropriate and validated method.

*Use of a horizontal airflow cabinet is prohibited for the manipulation of genetically modified (micro)organisms.