

Checklist

For

Contained Use (Animal Units)

of Genetically Modified Organisms (GMOs) in Kenya

Biosafety Level 1 - 3

Guideline for Inspections

June 2004

Specification		Containment level		
		1	2	3
1	Isolation of animal unit	Optional	Yes	Yes
2	Animal facilities separated by lockable doors	Optional	Yes	Yes
3	Animal facilities designed to facilitate decontamination (waterproof and easily washable material, cages etc.)	Optional	Optional	Yes
4	Floor and/or walls easily washable	Optional	Floor	Floor and walls
5	Floor to wall, wall to ceiling and wall to wall junctions should be rounded for easy cleaning	Yes	Yes	Yes
6	All joints between door frames and wall should be sealed	Yes	Yes	Yes
7	Animal facilities have to be cleaned regularly. Sinks have to be disinfected regularly.	No	Yes	Yes
8	Surfaces have to be disinfected after work	No	Yes	Yes
9	Used cages have to be decontaminated	Yes	Yes	Yes
10	Material to be sterilized or incinerated as well as used cages have to be transported so that the environment is not contaminated	Yes	Yes	Yes
11	Hands have to be decontaminated and washed if there is the possibility of contamination and after handling animals and waste.	Yes	Yes	Yes
12	Access to animal facilities is restricted	Yes	Yes	Yes
13	An animal unit shall install devices to detect fires, ventilation and heating failures and the intrusion of unauthorized personnel	Yes	Yes	Yes
14	Where appropriate, an inspection window should be fitted at the door	Yes	Yes	Yes
15	Animal facilities have to be aerated appropriately	Yes	Yes	Yes
16	Wild forms of the animals inside the facility should not be able to enter the facility. Separate male and female of the species to avoid reproductive transmission, unless reproductive studies are part of the experiment	Yes	Yes	Yes
17	Measures to control undesired species such as insects and rodents	Yes	Yes	Yes
18	Drains and any other services that enter through the walls or floor should prevent the ingress of rodents and insects	Yes	Yes	Yes
19	Accidents, bites and scratches caused by animals have to be reported to the project leader who makes a written report	Yes	Yes	Yes
20	Personnel has to be trained in the handling of the animals	Yes	Yes	Yes
21	There have to be written records about the transfer of foreign genes, about the breeding experiments and the disposal of animals	Yes	Yes	Yes
22	Transgenic animals have to be identified easily. The insert can deal as an additional marker	Yes	Yes	Yes
23	Food and tobacco has to be stored so that it cannot come in contact with transgenic animals	Yes	Yes	Yes
24	Protective clothing and shoes have to be worn. They have to be changed or cleaned when the facility is left.	Yes	Yes	Yes
25	Protective clothing has to be stored separately	No	Yes	Yes
26	Rodent-barrier in front of doors should be installed, alternative doors should be self-closing, to rooms where animals are housed and handled to prevent the escape of animals	Yes	Yes	Yes

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		1	2	3
27	Animal species shall be housed in appropriate cages, runs, pens suitable for their requirements	Yes	Yes	Yes
28	No animals should be admitted other than for experimental purposes	Yes	Yes	Yes
29	Biohazard sign	Yes	Yes	Yes
30	Doors have to be closed if infected animals are held. There must be a sign indicating the kind of work	No	Yes	Yes
31	The laboratory should contain a washbasin with taps that should be of a type that can be operated without being touched by hand, facilities for hand disinfecting shall be provided	Yes	Yes	Yes
32	Use of safety cabinets where aerosols are released	No	Yes	Yes
33	An autoclave should be available when genetically modified micro-organisms are used in experiments	Yes	Yes	Yes
34	In experiments where genetically modified micro-organisms are used contaminated material and waste should be inactivated	Yes	Yes	Yes
35	If GMO's can be transmitted, working tools and equipment has to be in containers	No	Yes	Yes
36	Waste contaminated with GMO's must only be transported in suitable containers	No	Yes	Yes
37	GMO's must only be transported in breakproofed and closed containers	No	Yes	Yes
38	Where risk assessment indicates the animal room and contents will need to be fumigated the room should be capable of being sealed by appropriate means and consideration should be given to the means of removing or extracting the fumigant	No	Yes	Yes
39	Hygiene plan	No	Yes	Yes
40	The animal facility has to be entered via a lock equipped with two self closing doors, hand washing basin, disinfection dispenser and shower	No	No	Yes
41	Acceptability of windows that open	Yes	Yes	No
42	Emergency power supply for safety relevant equipment such as ventilation system	No	No	Yes
43	Where mechanical ventilation is provided, the airflow should be inwards. Air should not be recirculated to any part of the building	No	Yes	Yes
44	The ventilation system should be designed to prevent accidental reverse flow and positive pressurization in any part of the animal unit	No	No	Yes
45	In case of work with airborne pathogens negative pressure relative to the pressure of the immediate surroundings, extract air should be HEPA filtered	No	No	Yes
46	HEPA filters should be sited so that they are accessible for testing and allow their safe removal. HEPA filters have to be sterilized at site or immediately sealed in an airtight plastic sack for later sterilization	No	No	Yes
47	Animals infected with risk group 3 micro-organisms shall be housed in cages in isolators with ventilation passing through HEPA filtration to the exterior. Alternatively, animals shall be housed in cages within the ventilation units with ventilation exhausts placed behind cages	No	No	Yes
48	Carcasses have to be sterilized prior to disposal. If this is not possible inside the facility, carcasses but have to be transported in closed, leakproofed and disinfected containers	No	No	Yes
49	Waste water has to be sterilized	No	No	Yes