



Control levels for waste containing GM material

The following table gives guidance on the level of control required by legislation. *In all cases, when determining disposal/treatment of waste, you must consider any additional properties that the waste may have that would result in it being hazardous. This may include the presence of chemical or biological agents or radioisotopes.*

Containment Level	Containment Measures
Level 1	
Effluent from sinks etc	No requirement to inactivate
Contaminated material/waste (including culture media etc)	Inactivate
Animals	Autoclave on site then incinerate OR may be sent directly to approved supplier for incineration
Level 2	
Effluent from sinks etc	No requirement to inactivate
Contaminated material/waste (including culture media etc)	Inactivate
Animals	Autoclave on site then incinerate OR may be sent directly to approved supplier for incineration
Level 3	
Effluent from sinks etc	Following risk assessment inactivate if necessary
Contaminated material/waste (including culture media etc)	Inactivate within laboratory suite
Animals	Autoclave on site then incinerate OR may be sent directly to approved supplier for incineration

Containment Level	Containment Measures
All Levels	
Bedding, faeces, urine & milk	No requirement to inactivate waste from transgenic animals. Risk assess inactivation requirement for waste from animals treated with GMMs

Plants

If you are working with transgenic plant material then you must also ensure that waste is inactivated by validated means prior to disposal so that it does not cause harm to humans or to the environment. Autoclaving is the recommended method for achieving this. Disposal by incineration is also acceptable and this may be done through an approved supplier. Special arrangements may be required if the risk assessment demonstrates that large volumes of run-off water require inactivation.

Definition of inactivation

To ensure adequate containment, inactivation must be by validated means and the regulations define inactivation as

'the complete or partial destruction of Genetically Modified Micro-organisms(GMMs) so as to ensure that any contact between the GMMs and humans or the environment is limited to an extent commensurate with the risks identified in the risk assessment and to provide a high level of protection for humans and the environment'.

In all cases GM waste must be transported in leak-proof containers and if the waste is being disposed off site then the supplier may have additional containment requirements with which you must comply.