UNIVERSITY OF NOTRE DAME
Biological Sciences

INSTRUMENT DECONTAMINATION FORM

To ensure the safety of your colleagues and employees or those performing any repair, refurb, or disposal actions on the instrument, it is essential that you characterize any potential contaminants to which the instrument was exposed and note any decontamination ("decon") procedures used on the instrument or part (hereinafter referred to as instrument) prior to the instrument being removed from lab.

INSTRUMENT IDENTIFICATION

Manufacturer Name: _____

Serial Number: _____

Device Description: _____

Model Number: _____

Description of Service: _____

POTENTIAL CONTAMINANTS

Has this instrument been exposed to radioactive materials? ☐Yes ☐No
If yes, please identify the radioactive isotopes.

_____

Has this instrument been exposed to biological agents? ☐Yes ☐No
If yes, please state the viable biological agent(s), their Hazard Group(s) and Biosafety Level/Category of Containment

_____

Has this instrument been exposed to chemicals that are very toxic (in quantities harmful to human contact), carcinogenic, mutagenic, toxic for reproduction, sensitizing, and/or which have not yet been fully tested? ☐Yes ☐No
If yes, please identify the hazardous chemicals.

_____

DECONTAMINATION

Describe the procedures used to decontaminate the instrument for radioactive contaminants, also include the radioactivity survey results indicating levels at or below local background level.
*(See **page 2** for specific examples.)*

_____

_____

Radioactive Materials

- Apply an industry standard radioactivity decontaminate (e.g. Radiacwash®, Rad-Con® or equivalent) to the instrument, and wipe surfaces as directed by the decontaminate manufacturer.
- Survey the instrument with an appropriate radioactivity-measuring instrument (e.g. Geiger Counter or scintillation counter).
- Satisfactory decontamination is defined as survey results at or below background level or in the US only, for service work excluding transportation, levels designated to be clean or safe as stated in the regulatory approved Site Radioactive Materials License.

Biological Agents

Commonly used decontamination agents include:

- Sodium hypochlorite S odium hypochlorite (1:10 dilution of domestic bleach) that gives 5g/l concentration is a general all-purpose disinfectant. However, it should be prepared fresh each time. Avoid mixing bleach with acid as this would release toxic chlorine gas.
- Formaldehyde C ommonly marketed as Formalin, a solution of gas in water of about 37% concentration. It is effective for all microorganisms and spores at temperatures > 20°C, but is not active against prions. Formaldehyde is a suspected carcinogen and safety precautions must be followed when working with the chemical.
- Glutaraldehyde G enerally supplied as a solution of about 2% concentration. It is active against vegetative bacterias, spores, fungi and lipid-/nonlipid-containing viruses. However, it takes several hours to kill bacterial spores. Glutaraldehyde is toxic and an irritant. Safety precautions must be followed when using the chemical.
- Phenolic compounds A ctive against vegetative bacteria and lipid-containing viruses and, when properly formulated, against mycobacteria. However, they are not active against spores and produce variable results against non-lipid viruses. Some phenolic compounds may be inactivated by water hardness. Phenolic compounds are toxic and can penetrate the skin. Safety precautions must be followed.
- Alcohols 70% ethanol or 70% isopropanol are active against vegetative bacteria, fungi and lipid-containing viruses but not against spores. Their actions on non-lipid viruses are variable. Alcohols are flammable and must not be used near open flames.
- Hydrogen Peroxide A strong oxidant and can be potent broad-spectrum germicides. However, a 3-6% solution of hydrogen peroxide alone is relatively slow and limited as germicides. Hydrogen peroxide can be corrosive and affect skins and mucous membranes. Safety precautions should be exercised when dealing with the chemical.

Hazardous Chemicals

- Areas exposed to hazardous chemicals should be washed with an acceptable solvent such as ethyl alcohol or isopropyl alcohol.
- Rinse with detergent and water.

ACKNOWLEDGEMENT

I understand and agree that decontamination is critical to issues of health and safety and that thoroughly completing this Certificate is essential. I have removed all and any kinds of biological agents, non hazardous chemicals, hazardous chemicals, and radioactive materials from the instruments and performed all decontamination procedures as described in this Certificate and completed this Certificate accurately, truthfully and in full.

Name: _____ Phone: _____

Lab: _____ Email: _____

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