

Translational Research Consortia TRC for Chikungunya Virus
Institute of Life Science, Bhubaneswar

Environmental and Health Risk Management Plan

1. Environmental Impact and risk mitigation

Risks	Project Specific Risk	Potential Impact	Mitigation Steps
Air Pollution	Minimal Risk	Project implementation will not cause any adverse air pollution.	Project implementation will not cause any adverse air pollution.
Water Pollution and Waste water treatment	Minimal Risk	Project implementation will not cause any adverse water pollution	Project implementation will not cause any adverse water pollution.
Chemical waste	Minimal Risk	Project implementation will not cause any adverse chemical waste.	Project implementation will not cause any adverse chemical waste.
Biological Waste	Minimal Risk	There will be biological waste of blood and tissue samples of mice and CHIKV.	Inactivated at source by Hypochlorite. Further, autoclaved before handing over to Biomedical waste management agency
Heavy metals	Minimal Risk	Project implementation will not cause any adverse heavy metal waste.	Project implementation will not cause any adverse heavy metal waste.
Radiation Waste	Minimal Risk	Project implementation will not cause any adverse radiation waste	Project implementation will not cause any radiation waste
Destruction/alteration of surrounding ecosystem	Minimal Risk	Project implementation will not cause any adverse destruction/alteration of surrounding ecosystem waste	Project implementation will not cause any adverse destruction/alteration of surrounding ecosystem waste

2. Occupational Health and Safety and risk mitigation

Risks	Project Specific Risk	Potential Impact	Mitigation Steps
Heat Hazards	Minimal Risk	Project implementation aspects will not cause any heat hazards	Project implementation aspects will not cause any heat hazards
Chemical hazards, including fire and explosions	Minimal Risk	Injuries, property loss	Fire Extinguisher, Fire hydrant system is in place.
Pathogenic and biological hazards	Minimal Risk	There will be blood and tissue samples of mice and CHIKV	Inactivated at source by Hypochlorite. Further, autoclaved before handing over to Biomedical waste management agency
Radiological hazards	Minimal Risk	Project implementation aspects will not cause any radiological hazards.	Project implementation aspects will not cause any radiological hazards.
Noise	Minimal Risk	Project implementation aspects will not cause high noise level.	Project implementation aspects will not cause high noise level.
Process safety	Minimal Risk	Engineering and equipment maintenance shall be undertaken as per SOPs.	Process risk assessment and engineering control.

3. Community Health and Safety and risk mitigation

Risks	Project Specific Risk	Potential Impact	Mitigation Steps
Safety Transportation Management System (for transport of hazardous material)	Minimal Risk	Human blood samples from suspected cases of Chikungunya Virus infection might spill.	Infected samples will be packed in triple layer and transported under cold chain to avoid spillage
Emergency preparedness and participation of local authorities and potentially affected communities	Minimal Risk	Localised	Spill management training and onsite emergency plan, mock drills, communication mechanism to neighbouring centre
<p>In case your organization already has EHS guideline, please summarise the same. If not, please describe the impact because of hazardous material, release of chemicals, biologicals, management of catastrophic events like fire/explosion.</p>			

Notwithstanding the above other risk (relevant to the project activities) that will be identified in the course shall be addressed as per standard mitigation monitoring parameters and manner of records keeping shall be in accordance to the recommendations of the project monitoring committee on subject experts engaged by BIRAC