

Translational Research Consortium for Establishing Platform Technologies to Support Prophylactic and Therapeutic Strategies for Dengue Discovery to Proof-of-Concept

National Institute of Immunology, New Delhi

Environmental and Health Risk Management Plan

1. Environmental Impact and risk mitigation

Risks	Project Specific Risk	Potential Impact	Mitigation Steps
Air Pollution	Minimal Risk	Running of diesel generators during power failures	Project implementation will not cause any adverse air pollution
Water Pollution and Waste water treatment	Minimal Risk.	There is no release of waste water into municipal drainage.	NII has an efficient sewage treatment and the treated water is utilized for horticulture purposes.
Chemical waste	Minimal Risk.	Chemical waste is disposed as per the biosafety guidelines.	Chemical waste is disposed as per the biosafety guidelines.
Biological Waste	Minimal Risk	There will be biological waste of Human blood	IBSC approval and GLP practices will be followed.
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	IBSC approval and GLP practices will be followed.

		of surrounding ecosystem waste	
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2. Occupational Health and Safety and risk mitigation

Risks	Project Specific Risk	Potential Impact	Mitigation Steps
Heat Hazards	Minimal Risk	Heat Hazards	BSL-2 lab practices and GLP practices for occupational safety. Training of Manpower
Chemical hazards, including fire and explosions	Minimal Risk	Chemical hazards, including fire and explosions.	BSL-2 lab practices and GLP practices for occupational safety. Training of Manpower
Pathogenic and biological hazards	Minimal Risk	The project involves handling human blood.	BSL-2 lab practices and GLP practices for occupational safety. Training of Manpower
Radiological hazards	Minimal Risk	Project implementation aspects will not cause any adverse radiological hazards.	BSL-2 lab practices and GLP practices for occupational safety. Training of Manpower
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.	BSL-2 lab practices and GLP practices for occupational safety. Training of Manpower

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	Clinical samples will be transported to our site.	SOPs is in place and Clinical samples will be transported to our site.
Emergency preparedness and participation of local authorities and potentially affected communities	Minimal Risk	Localised	There are Institutional policies and procedures for emergency preparedness.
<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. <i>In addition to the systematic waste disposal procedure, NII has institutional committee that ensures implementation of standard bio-safety guidelines. NII also complied with the governemnt emergency regulations with fire exit signs, necessary equipments to control fire and periodic trainings of the staff at work place.</i></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.