Translational Research Consortia TRC for Chikungunya Virus

Topiwala National Medical College (BYNL and TNMC), Mumbai

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	Project
		implementation will	implementation will
		not cause any	not cause any
		adverse air pollution.	adverse air pollution.
Water Pollution and	Minimal Risk	Project	Project
Waste water treatment		implementation will	implementation will
		not cause any	not cause any
		adverse water	adverse water
		pollution	pollution.
Chemical waste	Minimal Risk	Project	Project
		implementation will	implementation will
		not cause any	not cause any
		adverse chemical	adverse chemical
		waste.	waste.
Biological Waste	Minimal Risk	There will be	Inactivated at source
		biological waste of	by Hypochlorite.
		blood samples.	Further, autoclaved
			before handing over
			to Biomedical waste
			management agency
Heavy metals	Minimal Risk	Project	Project
		implementation will	implementation will
		not cause any	not cause any
		adverse heavy metal	adverse heavy metal
		waste.	waste.
Radiation Waste	Minimal Risk	Project	Project
		implementation will	implementation will
		not cause any	not cause any
		adverse radiation	radiation waste
		waste	
Destruction/alteration of	Minimal Risk	Project	Project
surrounding ecosystem		implementation will	implementation will
		not cause any	not cause any
		adverse	adverse
		destruction/alteration	destruction/alteration
		of surrounding	of surrounding
		ecosystem waste	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	Project implementation aspects will not cause any heat
Chemical hazards, including fire and explosions	Minimal Risk	hazards Injuries, property loss	hazards Fire Extinguisher, Fire hydrant system is in place.
Pathogenic and biological hazards	Minimal Risk	There will be blood samples of Chikungunya cases which may cause biological hazards.	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	Potential	Mitigation Steps
	Risk	Impact	
Safety Transportation	Minimal Risk	Human blood	Infected samples will
Management System (for		samples from	be packed in triple
transport of hazardous		suspected cases	layer and transported
material)		of Chikungunya	under cold chain to
		Virus infection	avoid spillage
		might spill.	_

Emergency preparedness	Minimal Risk	Localised	Spill management
and participation of local			training and onsite
authorities and			emergency plan,
potentially affected			mock drills,
communities			communication
			mechanism to
			neighbouring centre

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.

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.