Health, Safety and Environment related guidelines for projects funded by ANRF

The Anusandhan National Research Foundation (ANRF) has been set up by the government as a Statutory body through an Act of Parliament, 2023. The ANRF is an overarching apex body for coordinating across Central government, State Governments, Public Authorities, Industries and Research Institutions and encouraging collaboration with scientists from within and outside India, including scientists of Indian origin. The ANRF has the mandate to ensure the quality and quantity of research across universities and institutions and promote a quality workforce, human resources development and capacity building.

As the apex funding agency of the country, ANRF mandates that, during the execution of funded projects (both indoor/laboratory and outdoor/field), the implementing institution (henceforth referred to as "institution") is responsible for ensuring a safe and conducive working environment. The institution must comply with all applicable health, safety, and environmental norms issued by the Government of India from time to time, for the benefit of all project personnel, including the PI, irrespective of gender, caste, religion, or other social identities.

1. General Safety and Ethical Obligations

All project PIs and their host institutions/competent authorities must:

1.1 Maintain a safe, inclusive, and non-discriminatory working environment for all project personnel, in compliance with Government of India norms, regardless of gender, caste, religion, disability, or other social identities.

1.2 Comply with national and international regulations concerning laboratory safety, field safety, ethical standards, and risk mitigation.

1.3 If projects have risks related to Health, Safety and Environment, besides getting approvals of the mandatory and statutory committees at the institute, state and central level, a dedicated Committee must be formed for overseeing the implementation, monitoring, and periodic evaluation at the implementing institution level. This committee must:

1.3.1 Conduct a comprehensive review of institutional health and safety protocols at least once annually, or more frequently in high-risk research environments (both indoor/laboratory and outdoor/field).

1.3.2 Ensure compliance with applicable safety standards and legal requirements.

1.3.3 Investigate incidents or near-misses, recommend corrective actions, and follow up on their implementation.

1.3.4 Promote a culture of safety awareness by organizing mandatory training sessions, workshops, and orientation programs for all project staff, including Principal Investigators.

1.3.5 Keep the records of training participation, risk assessments, and audits for accountability and future reference.

2. Risk Management and Operational Protocols

All institutions receiving ANRF support must adhere to the Government norms and international standards/certifications wherever required for the following:

2.1 Standard Operating Procedures (SOPs) and Risk Assessment Protocols with special consideration for projects with sites like confined spaces, historical, archaeological, geologically sensitive areas, uninhabited or ecologically protected regions.

2.2 Safe Handling Procedures for-

2.2.1 Hazardous chemicals and reagents

2.2.2 Biological agents (including GMOs, pathogens, and biohazardous material)

2.2.3 Radioactive substances and ionizing/non-ionizing radiation

2.2.4 Complex and potentially dangerous equipment

2.3 Field Work Hazards and Safety

2.4.1 Identification of field work Hazards, Risks and possible control measures

2.4.2 Field Work safety plans, safety equipment, crisis management

2.4.3 Required certifications from applicable Authorities

3. Bioethics, Biosafety and Environmental Compliance

Projects involving human/animal/plant subjects or hazardous biological/chemical/medical materials or executed at the restricted areas must obtain necessary clearances and adhere to the rules and regulations of the appropriate agencies, this includes the following clearances, but not restricted to;

3.1 Institutional Ethics Committee (IECs) clearance
3.2 Institutional Animal Ethical Committee (IAEC) clearance
3.3 Institutional Biosafety Committee (IBSC) clearance
3.4 Review Committee on Genetic Manipulation (RCGM) clearance
3.5 Institutional Committee for Stem Cell Research (IC-SCR) clearance
3.6 National Apex Committee for Stem Cell Research and Therapy (*NAC-SCRT*) clearance
3.7 Central Drugs Standard Control Organisation (CDSCO) clearance
3.8 Reserve Forest / National Park / Wildlife sanctuary entry permission
3.9 Scheduled animals research permission
3.10 Tribal Area Entry permission
3.11 Archaeological Survey of India Permission
3.12 National Biodiversity Authority Permission
3.13 Atomic Energy Regulatory Board (AERB) approvals
3.14 Occupational Health Provisions, including:
3.14.1 Mandatory health check-ups
3.14.2 Vaccination protocols
3.14.3 Use of PPE kits and protective clothing
3.14.4 Monitoring and management of work-related illness

4. Workplace Ergonomics and Emergency Preparedness

Institutes & PIs must ensure:

4.1 Ergonomically designed workstations to reduce strain and prevent repetitive stress injuries
4.2 Clear and rehearsed Emergency Response Plans covering:
    4.2.1 Fire safety and evacuation protocol
    4.2.2 First Aid and medical access
    4.2.3 Eye-wash and safety shower stations
    4.2.4 Safe exits and hazard signage

4.3 Emergency equipment (e.g., fire extinguishers, spill kits) must be:

4.3.1 Clearly marked

4.3.2 Easily accessible

4.3.3 Regularly inspected and maintained

5. Day-to-Day Safety Practices and Laboratory Hygiene

5.1 Workspaces must be organized and free of clutter, particularly in high-risk areas.

5.2 Floors and walkways must be kept free from tripping/slipping hazards such as cords, chemical spills, or unattended equipment.

5.3 Work surfaces must be sanitized and cleared after each workday.

5.4 Project staff must be trained to understand:

5.4.1 Awareness and safe handling of potential hazardous materials and equipment

5.4.2 Safe use protocols for new chemicals or unfamiliar apparatus (e.g., through MSDS, product manuals)

5.4.3 Ensuring appropriate safety measures while handling high voltage equipment, heavy machinery, etc.

5.4.4 Consumption of food or application of cosmetics in areas handling hazardous materials (radioactive, chemical, or biological) is strictly prohibited.

6. Responsibilities at restricted entry areas

For projects executed in archaeologically or environmentally sensitive sites, PIs must:

6.1 Must obtain entry permits from the appropriate agencies/authorities

6.2 Comply with relevant regulations and guidelines of the approving authorities (Eg. Archaeological Survey of India, MoEFCC, etc.)

6.3 Avoid physical damage or disturbance to protected structures and ecosystems

6.4 Coordinate with designated site custodians where applicable

7. Personal Conduct, Hygiene, and National Duty

Personnel involved in ANRF-funded research must uphold high standards of personal hygiene, health, and safety consciousness.

8. Hazardous and other waste management and disposal

Institutions should strictly comply with the regulations of Hazardous and other wastes (Management and Transboundary movement) Rules 2016 while transporting and disposing the hazardous wastes.

9. Compliance of Health, safety and environment related guidelines

Project implementing institutions must ensure that the Principal Investigator (PI) and all project personnel strictly adhere to Health, Safety and Environment related guidelines and regulations. The institution shall assume full responsibility for any litigation arising from violations of these guidelines or regulations.

10. Reference Resources

Beneficiaries are advised to consult the following web-resources, published online materials for detailed reference. This list is non-exhaustive and may be updated periodically:

8.1 DBT Biosafety Rules

8.2 Ministry of Labour – Industrial Safety and Health

8.3 National guidelines for stem cell research https://dbtindia.gov.in/sites/default/files/National_Guidelines_StemCellResearch-2017.pdf

8.4 Policies on Safety, Health, and Environment at Workplaces

8.5 ICMR National Ethical Guidelines

8.6 Department of Atomic Energy, AERB safety protocol

8.7 DGFASLI Safety Protocols

8.8 Ministry of Health and Family Welfare

8.9 ISO 45001 – Occupational Health and Safety Standard

8.10 NSF – Responsible Research Conduct

8.11 IFC – Environmental, Health, and Safety Guidelines

8.12 Environment Protection Act

8.13 https://repmismoef.nic.in/writereaddata/Public/Guidelines%20for%20R&D%20Scheme%20.pdf

8.14 Hazardous and other wastes (Management and & Transboundary movement) Rules 2016