

WORKPLACE SAFETY PROTOCOL - ROBOTICS LAB

Polar Dynamics Robotics, Inc.

Effective Date: January 15, 2024

Document ID: PDR-SAF-2024-001

1. PURPOSE AND SCOPE

1. This Workplace Safety Protocol ("Protocol") establishes mandatory safety requirements and procedures for all personnel accessing and operating within Polar Dynamics Robotics, Inc.'s ("Company") robotics laboratory facilities ("Labs").
2. This Protocol applies to all employees, contractors, visitors, and third-party personnel conducting work or research within Company Labs where autonomous mobile robots ("AMRs") and related cold-environment testing equipment are developed, tested, and maintained.

2. DEFINITIONS

1. "Restricted Areas" means designated zones within the Labs where experimental AMR units or cold-environment testing chambers are in operation.
2. "Safety Equipment" includes but is not limited to: thermal protective gear, safety goggles, cold-resistant gloves, emergency shutdown devices, and personal monitoring devices.
3. "Qualified Personnel" means individuals who have completed Company's Lab Safety Certification Program and are authorized to operate specific equipment.

3. GENERAL SAFETY REQUIREMENTS

1. Access Control
 - Valid security credentials required for Lab entry
 - Biometric verification for Restricted Areas
 - Visitor escorts mandatory at all times
 - Maintenance of digital access logs
2. Personal Protective Equipment (PPE)
 - Cold-environment protective suits for sub-zero testing areas

- Impact-resistant safety goggles
- Insulated safety gloves rated to -40 C
- Steel-toed safety boots
- Emergency communication devices

4. SPECIFIC OPERATIONAL PROCEDURES

1. Cold Environment Testing

- Mandatory buddy system for cold chamber operations
- Maximum exposure time limits per shift
- Temperature monitoring and recording
- Emergency exit procedure training
- Thermal safety equipment checks

2. Robot Testing Operations

- Designated safety zones during AMR testing
- Emergency shutdown protocol training
- Collision avoidance system verification
- Testing area clearance procedures
- Operation logging requirements

5. EMERGENCY PROCEDURES

1. Emergency Shutdown

- Location of emergency stop buttons
- Protocol for system-wide shutdown
- Communication procedures
- Emergency response team notification

2. Medical Emergencies

- First aid station locations
- Cold exposure treatment procedures
- Emergency contact numbers
- Evacuation routes and assembly points

6. TRAINING AND CERTIFICATION

1. Required Training

- Initial safety orientation
- Annual safety refresher courses
- Equipment-specific certifications
- Emergency response training
- Cold environment safety certification

2. Documentation

- Training records maintenance
- Certification tracking
- Performance evaluations
- Incident reports
- Safety audit records

7. COMPLIANCE AND ENFORCEMENT

1. Safety Violations

- Reporting procedures
- Investigation protocols
- Disciplinary actions
- Corrective measures
- Documentation requirements

2. Regular Audits

- Monthly safety inspections
- Quarterly compliance reviews
- Equipment maintenance checks
- Training program evaluations
- Documentation audits

8. LIABILITY AND ACKNOWLEDGMENT

1. The Company shall not be liable for injuries or damages resulting from failure to follow this Protocol.

2. All personnel must acknowledge receipt and understanding of this Protocol through signed documentation.

9. MODIFICATIONS AND UPDATES

1. This Protocol is subject to revision based on operational needs and safety requirements.

2. Updates will be communicated through official channels with acknowledgment required.

AUTHORIZATION

This Protocol is authorized and approved by:

—

Dr. Elena Frost

Chief Executive Officer

Polar Dynamics Robotics, Inc.

—

Dr. James Barrett

Chief Robotics Officer

Polar Dynamics Robotics, Inc.

—

Sarah Nordstrom

Chief Operating Officer

Polar Dynamics Robotics, Inc.

Date: January 15, 2024

Document Control Number: PDR-SAF-2024-001

Version: 1.0

Review Date: January 15, 2025