

# **PDR-OPS-018 ARCTIC DEPLOYMENT TEAM SAFETY PROTOCOL**

## **PDR-OPS-018 ARCTIC DEPLOYMENT TEAM**

**Effective Date:** January 15, 2024

**Document Version:** 3.2

**Classification:** CONFIDENTIAL

### **1. PURPOSE AND SCOPE**

1. This Arctic Deployment Team Safety Protocol ("Protocol") establish
2. This Protocol applies to all Company employees, contractors, and a

## **2. DEFINITIONS**

1. "Arctic Deployment Team" or "ADT" means Company personnel sp
2. "Deployment Zone" means any customer facility or testing environm
3. "Safety Officer" means the designated ADT member responsible fo

## **3. MANDATORY SAFETY EQUIPMENT**

1. Personal Protective Equipment (PPE)
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  - Cold-rated protective suits (rated to -40 C)
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  - Insulated safety boots with non-slip soles

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Double-layer insulated gloves

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Arctic-grade face protection

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Emergency thermal blankets

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Personal temperature monitoring devices

## 2. Communication Equipment

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Two-way radio with extended battery

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Backup communication device

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Emergency beacon

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Facility intercom access codes

### 3. Emergency Equipment

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First aid kit with cold-specific supplies

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Portable heater unit

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Chemical hand warmers

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Emergency exit mapping device

## 4. DEPLOYMENT PROCEDURES

### 1. Pre-Deployment Requirements

- a) Medical clearance for cold environment work
- b) Completion of Arctic Safety Training Program
- c) Equipment certification check
- d) Team briefing and role assignment
- e) Weather and facility condition assessment

### 2. Deployment Time Limitations

- a) Maximum continuous exposure: 45 minutes
- b) Mandatory warm-up break: 15 minutes
- c) Maximum cumulative daily exposure: 4 hours
- d) Minimum team size: 3 personnel

### 3. Safety Monitoring

- a) Continuous vital sign monitoring
- b) 15-minute radio check-ins
- c) Real-time temperature logging
- d) Buddy system enforcement

## **5. EMERGENCY PROCEDURES**

- 1. Medical Emergency Response
  - a) Immediate evacuation protocol
  - b) Emergency medical service contact procedure
  - c) Facility security notification process
  - d) Incident reporting requirements
- 2. Equipment Malfunction Response

- a) AMR emergency shutdown procedure
- b) Backup power implementation
- c) Manual override protocols
- d) Technical support escalation process

### 3. Facility Emergency Response

- a) Power failure procedures
- b) Ventilation system failure protocol
- c) Emergency exit routes
- d) Muster point locations

## **6. TRAINING AND CERTIFICATION**

### 1. Required Certifications

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Arctic Environment Safety Certification

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Cold Weather First Aid Certification

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BlueCore(TM) Emergency Response Training

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Facility-Specific Safety Orientation

## 2. Renewal Requirements

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Annual certification renewal

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Quarterly safety refresher training

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Bi-annual medical evaluation

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Monthly equipment operation verification

## **7. COMPLIANCE AND DOCUMENTATION**

### **1. Required Documentation**

- a) Deployment authorization forms
- b) Safety equipment inspection logs
- c) Team member certification records
- d) Incident reports and resolution documentation

### **2. Compliance Monitoring**

- a) Weekly safety audit requirements

- b) Monthly equipment inspection schedule
- c) Quarterly protocol review process
- d) Annual compliance assessment

## **8. LIABILITY AND ACKNOWLEDGMENT**

1. All ADT members must acknowledge and accept the inherent risks
2. Company maintains appropriate insurance coverage for arctic deployment
3. This Protocol shall be reviewed and updated annually or as required

## **9. AUTHORIZATION**

This Protocol is authorized and approved by:

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Dr. Elena Frost

Chief Executive Officer

Polar Dynamics Robotics, Inc.

Sarah Nordstrom

Chief Operating Officer

Polar Dynamics Robotics, Inc.

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