

# Hand and Arm Protection Standard

# 1.0 PURPOSE

This standard supports the Personal Protective Equipment Policy and specifies the selection, use, inspection and care of hand and arm protection at SaskPower. The Gloves of Rubber Insulating Material Standard has been combined with this standard.

## 2.0 **DEFINITIONS**

### 2.1 Arc Flash Protection

The ability of a glove to protect an individual from heat flux created by an electrical arc.

### 2.2 Cut Resistance

The ability of a glove to resist cuts from blades and other sharp objects.

#### 2.3 Hand and Arm Protection

Hand and arm protection includes gloves that are designed to protect the hand from electrical, chemical and physical hazards.

### 2.4 Puncture Resistance

The ability of a glove to resist punctures from pointed objects.

## 2.5 Third Party

Third party standards are developed from outside agencies and represent a consensus of best practice across industry.

# 3.0 METHOD / PRACTICE

3.1 General

- Employees shall obtain and wear suitable hand and/or arm protection in accordance with legal requirements and SaskPower Standards.
- Hand and arm protection shall meet the requirements of a hazard/aspect identification and risk assessment.
- The hand or arm protection should be properly fitted and shall protect the employee from hand/arm injury, including:
  - o contact with chemical or biological substances;
  - exposure to extreme temperatures;
  - prolonged exposure to water;
  - o puncture, abrasion or irritation of the skin; or
  - protection against energized high voltage electricity. Refer to the Gloves of Rubber Insulating Material Section 3.2.
- Where the hazard/aspect identification and risk assessment highlights a significant cut and puncture hazard, gloves with a minimum ANSI 105 cut rating of 3 and a puncture rating of 4 shall be used.
- When operating a chainsaw, gloves designed specifically for this hazard are to be used.
- Gloves needed for arc flash protection shall be tested in accordance with ASTM F2675\F2675M-13.
- Hand and arm protection shall be used as per the manufacturer specifications.
- Hand and arm protection shall be inspected for damage and leaks that could affect its ability to provide protection before each use.



- Hand and arm protection shall be cleaned and stored according to the manufacturer's specifications.
- Hand and arm protection shall be replaced when damage could affect its ability to provide protection.
- Hand and arm protection shall be supplied through SaskPower Central Stores or through the Division purchasing process.

3.2 Gloves of Rubber Insulating Material

- If an electrical hazard has been identified, and the hazard cannot be eliminated, determine the appropriate controls and barriers to reduce the risk of exposure to the hazard.
- If rubber insulating gloves (medium or low voltage rubber gloves) has been identified as one of the controls to reduce the risk, the gloves shall be worn while performing hand contact work on electrical apparatus that has not been de-energized.
- Refer to the Safety and Environment Rulebook to determine the class of rubber insulating gloves required, which is based on the type of electrical work being performed.
- Employees shall be trained in the proper use, maintenance and inspection of the rubber insulating gloves.
- The appropriate rubber insulating gloves shall be made available and shall be used as required.
- The rubber insulating gloves shall be visually inspected and air tested before use.
- Rubber insulating gloves shall meet the requirements of CAN/ULC-60903-15 or ASTM D120-14a.
- Rubber insulating gloves shall be tested as per CAN/ULC-60903-15 or ASTM F496-14a. Dielectric testing shall be every 6 months for all rubber insulating gloves. These testing frequencies are the current SaskPower standard for rubber insulating gloves.
- The rubber insulating gloves shall be supplied through SaskPower Apparatus Repair or through the Division's purchasing process.

# 4.0 REFERENCES

- Saskatchewan
  - The Occupational Health and Safety Regulations, 2020.
  - SaskPower (Located on SafetyNet)
  - Personal Protective Equipment Policy
  - Hazard/Aspect and Risk Assessment Policy
  - o Hazard/Aspect and Risk Assessment Standard
  - Electrical Safe Work Standard
  - Safety and Environment Rulebook
  - Hazard/Aspect Control Policy
- Third Party
  - ASTM F2675/F2675M-13
  - o ANSI/ISEA 105 (2016)
  - o CAN/ULC-60903-15, Live Working Gloves of Rubber Insulating Material
  - o ASTM D120-14a, Standard Specification for Rubber Insulating Gloves
  - ASTM F496-14a, Standard Specification for In-Service Care of Rubber Insulating Gloves
  - CAN/ULC-S801-10, Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission and Distribution