



2600SEG131

## STANDARD FOR SAFE WORKING PRACTICES FOR LOW VOLTAGE ELECTRICIANS

### 1.0 PURPOSE

Establish standard safety requirements to protect employees who perform electrical work on systems operating on voltages up to 600 volts.

### 2.0 BACKGROUND

This standard supersedes the provisions contained in Sections 331 to 335, Title 29, Part 1910, Subpart "S" and Sections 400 to 418 of the CFR technical standards, Title 29, Part 1926, Subpart "K."

### 3.0 SCOPE

This standard is applicable to all employees of the Panama Canal Authority (ACP), contractors and third parties that perform jobs or low voltage electrical work in installations or areas under PCA responsibility.

### 4.0 LEGAL FOUNDATION

This Standard is established pursuant to Agreement No. 12 of the Board of Directors of the Panama Canal Authority (ACP), Safety and Health Regulations, Chapter II, Section Three, Article 16, Item 7.

### 5.0 DEFINITIONS

For the purpose of this Standard, the following definitions apply:

**5.1 Low Voltage:** When the potential difference from the ground is 600 volts or less. Equipment and circuits operating up to 1000 volts are included for the purposes of this standard,

**5.2 Electrical Subcommittee:** A PCA Safety and Industrial Hygiene Unit subcommittee with representatives from all PCA Divisions involved in the practice and performance of electrical work.

### 6.0 GENERAL

**6.1** Safe working practices for low voltage electricians are covered by the Safe Working Practices for Low Voltage Electrician Manual contained in APPENDIX A.

**6.2** Compliance with the APPENDIX A is mandatory.

**6.3** Electrical system design and installation techniques are covered by the Electrical Installation Code in force, and shall adjust to the practices accepted and recognized by the industry.

### 7.0 RESPONSIBILITIES

**7.1** The **ELECTRICAL SUBCOMMITTEE** shall:

**7.1.1** Periodically review the Manual to ensure its effectiveness and conformance to the safe working practices accepted and recognized by the industry.

**7.1.2** Advise the Safety and Industrial Hygiene Unit (RSH), affected Divisions, and concerned parties on the proper interpretation of the guidelines contained in the Manual.

**7.1.3** Serve as technical advisor to RSH on issues relative to safe working practices for low voltage electricians.



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### 7.2 SAFETY AND INDUSTRIAL HYGIENE UNIT (RSHH) shall:

7.2.1 Follow up on the implementation of the guidelines contained in the Manual.

### 7.3 MANAGERS AND DIVISION SUPERVISORS WHOSE EMPLOYEES ARE EXPOSED TO ELECTRICAL RISK shall:

7.3.1 Implement the guidelines contained in the Manual.

7.3.2 Identify and train workers in their areas according to employee hazard levels.

7.3.2.1 A record of the training provided to employees shall be kept.

7.3.2.2 Contractor shall provide training for their own employees.

## 8.0 INQUIRIES

Any information or clarification of the content or application of this standard may be requested in writing to RSHH.

## 9.0 EXCEPTIONS

Any deviations from or temporary exceptions to compliance with this standard may be requested in writing to RSHH.

## 10.0 TERM

This standard shall remain in force until revised or amended.

## 11.0 REFERENCES

11.1 National Fire Protection Association. NFPA 70E, Standard for Electrical Safety Requirements for Employee Workplaces. Quincy, Massachusetts, USA, 2000 Edition. pp98.

11.2 PCA Occupational Health and Safety Manual, January 2000 Revision, Section 5: Electrical Safety (p. 55).