Subject: Portable Generators - GFCI Protection

Purpose

To clarify the exemption and / or the requirement for GFCI protection on portable or vehicle-mounted generators.

Scope

This instruction applies Minnesota-OSHA-wide.

References

OSHA regulation 29 CFR 1926.404(b)(1)(ii)

Cancellations

This instruction supersedes STD 3-9.2A, dated October 28, 2015.

Background

29 CFR 1926.404(b)(1)(ii) requires GFCI protection for receptacle outlets on construction sites, unless the receptacles are on a two-wire, single-phase portable or vehicle-mounted generator rated not more than 5kW, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces.

Action

Portable / vehicle-mounted generators in use on construction sites must be equipped with GFCI unless it meets all of the following criteria:

1. The output is a two-wire, single phase system - both wires are normally current carrying.
a. Note: Reference to the two-wires does not include the ground or equipment grounding conductors

b. Examples of systems that do not meet the criteria:
   1) Systems with a neutral conductor
   2) Three phase generators (have four wires)
   3) Dual voltage systems (120V / 240V) (have three wires)

2. The generator has a rating of 5kw or less.

   a. This information generally can be found on the manufacturer’s nameplate on the generator.

3. The Circuit Carrying Wires of The Generator Are Insulated And / Or Isolated (Not Connected) From the Generator Frame or Other Grounded Surfaces

If all criteria are not met for the portable/vehicle-mounted generator and the generator is not equipped with GFCI, a citation for 29 CFR 1926.404(b)(1)(ii) is issued.

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For the MNOSHA Management Team

Distribution: OSHA Compliance and WSC Director

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