

# Safety Measures

"All electrical incidents are preventable!
Keep employees safe with an up to date
Electrical Safety Program and appropriate training."

# CSA Z462-2018 Will Be Here Soon... Are You Ready? What Should You Do?

By Terry Becker, P.Eng.

The next Edition of the CSA Z462 Workplace electrical safety Standard will publish in January 2018. If you have read previous articles you will know that the 2015 Edition included significant revisions that changed the context and mandatory requirements. If your Electrical Safety Program hasn't been updated since the 2012 Edition, your company may still be identifying arc flash and shock hazards for a work task and then determining PPE. Significant changes in the 2015 Edition included the requirement to complete a formally

documented Risk Assessment Procedure for energized electrical work tasks as a component of your company's Electrical Safety Program.

The 2018 Edition will now include additional changes further refining the Risk Assessment Procedure and making additional changes to the Arc Flash Risk Assessment and Shock Risk Assessment for an energized electrical work task. There are several other changes intended to make the field application of your Electrical Safety Program's requirements

more effective (e.g. changes to equipment labelling).

If you have identified the CSA Z462 Workplace electrical safety Standard as your company's basis for due diligence to OH&S Regulations, it is critical that you are able to prove your compliance, specifically if your company ever experiences an electrical incident where a worker is injured or worse. The key to effective due diligence is to document, document, document!!

# Create a checklist of items for effective change management:

Assessment (Audit)
Update your Electrical Safety Program
Establish training criteria
Train your entire workforce
Roll out your updated Electrical Safety Program

### **Assessment:**

If you believe you have a compliant Electrical Safety Program, you should consider having it audited.

# **Update Your Electrical Safety Program:**

Account for all of the updated requirements in the CSA Z462 2018 Edition. If you don't have an Electrical Safety Program as a component of your company's overall Occupational Health & Safety Management System, you need to develop and implement one. Ultimately, you can prove due diligence and ensure you have sustainable and measurable results for arc flash and shock hazard management with your company's Electrical Safety Program.

Within your Electrical Safety Program, it will dictate the Hierarchy of Control Methods to be applied in the Risk Assessment Procedure. One of the key administrative controls is training. With respect to the CSA Z462 2018 Edition arc flash and shock training requirements would be outlined for the Qualified Electrical Worker.

# **Establish Training Criteria:**

While you are updating your Electrical Safety Program you should schedule CSA Z462 compliant arc flash and shock training from a prequalified company with defendable subject matter expertise. You should specify the training with a detailed description of requirements. This training should NOT be: arc flash awareness training, arc flash/electrical safety standard training, training that reviews arc hazard categorization or is training that claims to be compliant and that it will certify your workers. The training should always include both electrical hazards – arc flash and shock! The training should not be fear-based or include "shock and awe" tactics using exhaustive pictures and videos claiming "this will happen to you!!!" In order to be classified as training, it needs to include exercises and a final test.

We recommend employers prequalify the training company they hire and specifically confirm that there is a subject matter expert. Ask qualifying questions, including references to CSA Z1001 Occupational health and safety training Standard, and specifically CSA Z1001 Clause 6.3.5 Training provider qualifications. This clause provides specific mandatory requirements: subject matter expertise, training delivery

skills, continuing education, documentation of training course provider qualifications and evaluation of training providers.

CSA Z1001 indicates that its principles and specified requirements apply to any type of training service or product: theoretical, practical, classroom, in the field, on the job and online.

### **Train Your Entire Workforce:**

Be cautious and ensure you perform appropriate due diligence when you and your company specify and procure CSA Z462 based arc flash and shock training for your Qualified Electrical Workers and Non-Electrical Workers. You and your company will be held accountable to confirm the validity of the training if your workers are ever involved in an electrical incident.



# **Roll Out Your Updated Electrical Safety Program:**

The best time to roll out your updated Electrical Safety Program is immediately following the completion of electrical safety training. By using a blended learning model combining both online and classroom instruction, you're able to provide the equivalent of multiple days' worth of training without having to fully demobilize your workforce. When training workers on your updated program be sure to include practical application exercises using your updated field level documentation and revised safety-related work practices. Use relevant work task exercises that represent typical work tasks employees perform at your facility.

Are you ready to take control, update your Electrical Safety Program, provide compliant training and move ahead with implementing the updated or new requirements of the CSA Z462 2018 Edition?

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