AEMC® INSTRUMENTS

Chauvin Arnoux, Inc.

"Manufacturers of the AEMC Instruments® product line"

October 18, 2006

William Helfrich, P.E.
Mine Safety & Health Administration
626 Cockrans Mill Road
Bldg: 151
Pittsburgh, PA 15236

Dear Bill:

This letter is to address the statements made in a letter to a Mr. Collier of the Mine Safety and Health Administration by a Mr. Daniel Wiswell, a past employee of AEMC Instruments. The referenced letter was dated on or about August 10, 1987 and addressed the model 3700 Clamp-on Ground Resistance Tester.

Mr. Wiswell made two points that need clarification. First is that the clamp-on ground tester requires a large number of ground rods to be in a series/parallel connection to the rod or system under test to provide accurate results. The second is that the model 3700 is not effective in testing larger systems.

Let me state first that since that letter, we are now on the third generation clamp-on ground resistance tester (models 3711 and 3731), ones that are more sensitive, more accurate and less susceptible to noise than past instruments.

As stated in Mr. Wiswell's letter and my communication to you in a letter dated July 31, 2006, the clamp-on ground resistance tester requires two conditions for proper operation. First, the rod or system under test must not be disconnected from the rest of the system. Secondly, there must be a series/parallel resistance path down stream from the system under test such that the transmitted signal is returned through an earth coupling to the test point and not metal. These two conditions are required for all clamp-on ground testers on the market and not unique to the model 3700 or its follow on generations.

Where clarification is needed is the notion that many parallel rods are needed for an accurate measurement. It is entirely possible for just one or two down stream resistance paths to yield accurate results as long as they are much lower than the rod under test. If this condition does not exist naturally, it can temporarily be created by placing a jumper wire or cable between the rod (or system) under test and another grounding system. Municipal grounded systems work best because the resistance is very low but it could be a fence, a grid or building steel etc.

Regarding large grid systems, there is no difference to the clamp-on ground tester in measurement whether the system is large or small. The only necessities are that the conditions mentioned in the previous paragraph are met.

Bill, I am hopeful that this clarifies the operation for the AEMC clamp-on ground resistance testers for you. We have many successful and accurate measurements being conducted every day in a broad range of applications including mining. The clamp-on ground resistance tester is a major time savor and when used correctly, provides very good test results.

Sincerely,

John Olobri
Director of Sales & Marketing