Gemstone, LLC 1010 Kennedy Drive, Suite 406 Key West, Florida 33040 305-294-3233 F:305-292-6361



SSPC Certified QP-1/QP-2 National Safety Council NACE International www.gemstonellc.com

September 26, 2011

Mr. Hap Peters Chlor Rid International, Inc. P.O. Box 908 Chandler, AZ 85244

RE:

CT DOT Project 58-282 US Rt. 1 over Mystic River

Subject:

**Removal of Chlorides** 

Dear Mr. Hap Peters,

This is to confirm to you the results of Gemstone's use of Chlor rid on the Mystic River Rolling Leaf Bascule Bridge, painted by Gemstone in Jan. through mid April of 2011.

This bridge sits less than 6' over tidal salt water in the middle of a picturesque tourist village. In addition to salt contamination from adjacent seawater, the bridge has been salted extensively every winter to melt snow and ice from its roadway grating. The bridge was built in the 1920s and has never had a full removal of its original paint system. Serious and significant corrosion with structural section loss existed throughout the underside of the structure, so salts were embedded in heavy rust.

The Connecticut Dept. of Environmental Protection does not allow pressure washing of the states bridges, so a pressure wash with chlor rid added could not be performed. Instead, Gemstone applied by spray a mixture of water and chlor rid at a mix ratio of approximately 20 to 1 to completely soak the unblasted surfaces of the bridge and allowed it to dry. Gemstone then blasted all steel surfaces to SP-10 near white condition and tested for the presence of salts.

The results were as follows:

Prior to blasting and application of chlor rid: average of 48 micrograms per square cm After abrasive blasting: salts were undetectable

in addition to the removal of all salts, the chlor rid helped to hold the near white blast in some cases for several days with no rust flashback.

Needless to say, the Conn. DOT is very pleased with the results achieved on this project. Please contact me if there are any questions.

Sincerely

Cameron R. Jewell, Manager

Gemstone, LC