



## **10-Yr report: Termarust\* stops severe crevice corrosion on a Pennsylvania Turnpike bridge**

### **Overview:**

- In about 1998 the bridge was sandblast cleaned and a ‘typically specified’ 3-coat, zinc-based coating was applied to the whole bridge, but it did not stop the development of severe corrosion in connections; which became a serious structural problem.
- In 2004, the connections between steel plates in the entire bottom chord members had 3” thick pack rust that had bent 1” thick steel plates & over stressed the rivets – **the crevice corrosion had to be stopped** – before the bridge would have to be load posted.
- In 2006 the Turnpike let a contract that specified zone pressure wash cleaning and application of the Termarust coating system. The project was covered by a 5-yr warranty, with no exclusions.
- **2016 – 5 Yr warranty is over – crevice corrosion has been stopped – no warranty claims.**

\* Termarust is a high performance high ratio, co-polymerized calcium sulfonate HRCSA coating



Bridge was built in the 1970’s



3” Pack rust bent steel plates and overstressed rivets – in all lower chord members



After 10 years – no active crevice corrosion



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