



*Complete Corrosion Control.*

## **Engineered Corrosion Solutions, LLC**

### **Project Case Studies – Mission Critical Data Centers**

**Type:** Single Story Tier III Enterprise Data Center  
**Project Name:** PWC Data Center - Lithia Springs, Georgia\*

Three years after construction, the PWC Data Center began to experience leaks in the double interlock preaction fire sprinkler system piping. ECS was contracted to provide a fire sprinkler system corrosion management plan and nitrogen generation system to provide supervisory gas for the double interlock preaction fire sprinkler systems at the facility. ECS was further contracted to conduct a corrosion assessment to determine the nature and scope of the corrosion damage that had occurred prior to installation of the nitrogen generation system.

**Specifying Engineering Firm:** KW Mission Critical  
**Fire Sprinkler Contractor:** Advantage Fire Sprinkler Co.  
**Project Begin Date:** Corrosion Management Equipment Commissioned in Oct. 2013  
**Project End Date:** Assessment Performed in June 2014  
**Data Center Size:** 80,000 sq ft  
**Fire Sprinkler Type:** Double Interlock Preaction  
**Fire Sprinkler Piping:** Galvanized Steel

#### **Services Provided by ECS:**

- Provide comprehensive corrosion assessment on existing preaction systems
- Recommend remediation and control strategy for existing fire preaction systems
- Review all fire sprinkler design drawings
- Design nitrogen generator system for pressure maintenance gas
- Design monitoring system to ensure quality control of corrosion management system
- Commission all systems on site with facilities personnel, fire sprinkler contractors
- Provide training on operation and maintenance of the ECS corrosion management and nitrogen generation systems
- Provide owner's manual and operational protocols for all ECS corrosion management and nitrogen generation systems

#### **Equipment Provided by ECS:**

- ECS Nitrogen Generators
- ECS Permanent and Hand Held Gas Analyzers
- ECS SMART Dry Vents

#### **Performance**

Since the ECS equipment was installed and commissioned there have been no recorded operational problems and no recorded corrosion related leaks.

\*Note that all information contained herein is publicly available