

Editorial Contact:  
Cortec® Advertising Agency:

Jeni Duddeck  
(651) 429-1100 Ext. 1114

[jduddeck@cortecvci.com](mailto:jduddeck@cortecvci.com)

Company Contact:  
Cortec® Corporation

Julie Holmquist  
(651) 429-1100 Ext. 1194

[jholmquist@cortecvci.com](mailto:jholmquist@cortecvci.com)

Technical Contact:  
Cortec® Corporation

Ben Voight  
(651) 429-1100 Ext. 1174

[bvoight@cortecvci.com](mailto:bvoight@cortecvci.com)



**Attention: Editor**

**January 23, 2020**

**PRESS RELEASE**



## **MCI® ‘Green’ Technologies Revolutionize Industry Approach to Infrastructure Corrosion!**

The most basic and common-sense aspect of environmental stewardship is resource conservation. When it comes to concrete structures, that means building, maintaining, and repairing them in ways that will extend their service life. Corrosion is a major and persistent threat to structural durability as it leads to cracking, spalling, and ultimate deterioration. Finding practical and environmentally sensible technology to protect against



corrosion is therefore one of the best ways to steward the use of an energy intensive material like concrete.

Cortec’s Migrating Corrosion Inhibitor™ (MCI®) Technology covers both aspects in a variety of ways and has revolutionized the industry’s approach to corrosion protection. Migrating Corrosion Inhibitors can be incorporated into concrete as admixtures or applied to existing structures as liquid surface treatments. They work their way through concrete pores via capillary action (liquid MCI® is soaked up like a sponge) and/or

vapor diffusion. Upon reaching the surface of rebar, they form a protective molecular layer on the metal, interrupting the natural corrosion reaction of steel in the presence of oxygen, moisture, and chlorides. This protective action not only delays time to corrosion initiation but also reduces corrosion rates once started, thus extending service life.

### Biobased Concrete Admixtures



One of the most prominent “green” aspects of MCI<sup>®</sup> Technology is the use of biobased material in several MCI<sup>®</sup> admixtures, such as [MCI<sup>®</sup>-2005](#). MCI<sup>®</sup>-2005 is a USDA Certified Biobased Product that contains 67% USDA certified biobased content. It is derived from corn, a renewable resource, and has a lower toxicity and environmental impact than traditional corrosion inhibiting admixtures based on calcium nitrite. Because it is made from rapidly renewable resources, MCI<sup>®</sup>-2005 can help construction projects [earn credit toward LEED certification](#). MCI<sup>®</sup>-2005 also earns LEED credit as a regional material when used within a 500-mile (805 km) radius of its manufacturing sites in Saint Paul, Minnesota, or Sarasota, Florida. MCI<sup>®</sup>-2005 is applied at a low, fixed dosage rate and has minimal effect on concrete properties, receiving many positive responses from ready-mixers.

### NSF Standard 61 Certification for

Another advantage of Cortec’s MCI<sup>®</sup> portfolio is that several key products are NSF/ANSI Standard 61 certified for use in potable water structures.\* By extension, these products will also have a low impact on the environment if they are suitable for use in large drinking water structures. Cortec’s NSF Standard 61 certified products include corrosion inhibitors for both new and existing structures:

- [MCI<sup>®</sup>-2005/MCI<sup>®</sup>-2005 NS](#) (corrosion inhibiting water-based admixture)
- [MCI<sup>®</sup>-2006 NS](#) (corrosion inhibitor powder admixture)
- [MCI<sup>®</sup>-2018](#) (combination sealer/corrosion inhibitor)
- [MCI<sup>®</sup>-2020](#) (corrosion inhibiting surface treatment)



## Water-Based Rebar Coatings



Two important companion MCI® brand products, MCI® CorShield® and MCI® CorrVerter®, also have environmental advantages as water-based coatings with low VOC. [MCI® CorShield®](#) is ideal for protecting new rebar from corrosion for 6-24 months\*\* of unsheltered outdoor storage. It cures to a soft non-tacky film and eventually hardens. Because of exceptionally good results in testing for bond strength of steel reinforcing bars (ASTM A944-99), MCI® CorShield® does not have to be removed before placing rebar in concrete. [CorrVerter® MCI® Rust Primer](#) converts rust into a passive layer and is ideal for concrete repairs where good surface prep on rusty rebar would be otherwise difficult to achieve.

## A Green Technology for Every Stage of Concrete

Together, these MCI® “green” technologies form an excellent network of environmentally responsible corrosion protection for all three stages of concrete construction, maintenance, and repair. By mitigating corrosion of embedded rebar, they help to extend service life of concrete bridges, buildings, parking ramps, docks, water tanks, and more. To investigate these technologies further and see if they are right for your own application, please visit our website at: <https://www.cortecmci.com/>.



*\*For a full listing, visit <https://iq.ul.com/water/> and enter “Cortec” in the “Company” search bar.*

*\*\*Depends on conditions.*

Need a High-Resolution Photo? Visit: [www.cortecadvertising.com](http://www.cortecadvertising.com)

Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Our relentless dedication to sustainability, quality, service, and support is unmatched in the industry. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001, ISO 14001:2004, & ISO 17025 Certified.

Cortec Website: <http://www.cortecvci.com> Phone: 1-800-426-7832 FAX: (651) 429-1122