

## October 2020



# Celebrating Cortec Milestones in 2020!





## **Boris Mikšić, Inventor: 43 Years in Business and 43 Issued US Patents!**

October 1<sup>st</sup>, 2020 marked the 43<sup>rd</sup> anniversary of Cortec® Corporation. Forty-three years ago, Cortec® President and CEO, Boris Mikšić, started the fledgling corrosion solutions company at his home in Hugo, Minnesota. Since then, Cortec® has grown into a multinational organization with a global reach. In the course of Cortec's 43-year history, Boris has been awarded 43 U.S. patents for various inventions in the field of corrosion inhibitors and biodegradable materials.

Counting one additional patent Boris received just prior to starting Cortec® Corporation, the total number of patents in Boris's own name adds up to 44, dating back to September 27th, 1977! For Cortec® as a whole, the number exceeds 60, including foreign patents. Boris's (and Cortec's) most recent patent covers Cortec's latest advance in corrosion inhibiting films technology and was awarded just a few months ago on June 30<sup>th</sup>, 2020.

Congratulations to Cortec® founder and inventor, Boris Mikšić, for his ongoing achievements and for a company that has grown from its first order of 1200 VCI emitters (made at home in 1977) to a selection of 400+ products with a distribution network to help us fight corrosion in over 100 countries around the world!





### Ten Years of Biotechnology!

Another milestone for Cortec® in 2020 is the 10<sup>th</sup> anniversary of acquiring Bionetix® International, our biotechnology subsidiary in Montreal, Canada. When Bionetix® came under Cortec's full ownership one decade ago, it brought us to our third technological platform (first: organic corrosion inhibiting chemistries; second: biodegradable and biobased building blocks) and allowed us to enter the most elite group of specialty chemicals, while also becoming a corporate citizen of Canada.

Bionetix® is an important demonstration of our commitment to developing environmentally responsible technologies wherever possible. Bionetix® biologicals go beyond the use of traditional chemicals by harnessing the natural power of beneficial microorganisms and nutrients to clean up the environment in safer, more natural ways.



Furthermore, our location in Canada adds to our strong international base and gives us opportunities to participate in special Canadian international trade programs that put us in touch with key stakeholders, such as those in Latin America where there has been a growing interest in biological treatment for aquaculture and wastewater.

Learn more about what we have to offer by browsing our Bionetix® website: <http://www.bionetix-international.com/>!

### A Decade in the Wisconsin Green Tier!

June 2020 marked a decade of participation in the Wisconsin Green Tier program for Cortec® Coated Products (CCP) in Eau Claire, Wisconsin, and Cortec® Spray Technologies (CST) in Spooner, Wisconsin. This voluntary program, which is run by the Wisconsin Department of Natural Resources, recognizes environmental performance above and beyond minimal Wisconsin state regulatory requirements. It requires participants to meet 12 Green Tier requirements, including the maintenance of an Environmental Management System (EMS) that is functionally equivalent to ISO 14001.

As part of its yearly requirements, CCP and CST submitted annual reports for 2019 in March 2020. These reports help us track our improvements and keep an eye on environmentally significant aspects, two activities in line with Cortec's strong commitment to promoting a "green" business culture. This culture is exemplified by our use of environmentally responsible raw materials that exempts or reduces our need for regulatory reporting in the areas of hazardous waste, air permitting, and chemical inventory. Learn about key improvements here: [https://www.cortecvci.com/whats\\_new/announcements/Green-Tier-Report-NA.pdf](https://www.cortecvci.com/whats_new/announcements/Green-Tier-Report-NA.pdf)



# GREEN TIER



# PRINT & ONLINE RESOURCE NEWS

## New Websites!

We were pleased to unveil two new website redesigns earlier this year. Both our BioCortec® and Cortec® Advanced Films websites have a fresh new professional look to welcome site visitors interested in environmentally responsible corrosion solutions and VpCI® or compostable films and bags. Browse the new sites to see for yourself!

BioCortec®: <https://www.biocortec.com/>

Cortec® Advanced Films: <https://www.cortecadvancedfilms.com/>

## New Brochures!

We have revised and expanded our [BioCortec® brochure](#) of environmentally responsible solutions to corrosion and clean-up. The latest edition includes several items that have been added to our portfolio of USDA Certified Biobased Products. It also has a new section of Bionetix® biologicals and biostimulants that serve as waste treatment, biological cleaning, and oil and gas cleanup solutions.

Even more recently, our brochure on “[Solutions to Corrosion for Industrial Water Applications](#)” was translated into the Spanish “Soluciones a la Corrosión para Aplicaciones en Aguas Industriales,” for greater accessibility to our Latin American base.

Our “Cooling Water Layup Guide” is another great resource that was updated this year and is available from Cortec® Technical Services. Read more about it here: [https://www.cortecvci.com/whats\\_new/announcements/Cooling-Water-Layup-Guide-NA.pdf](https://www.cortecvci.com/whats_new/announcements/Cooling-Water-Layup-Guide-NA.pdf).



**SOLUCIONES A LA CORROSIÓN**  
Para Aplicaciones en Aguas Industriales

**Cortec®**  
**VpCI® Technology**

**CORTEC CORPORATION**  
Environmentally Safe VpCI®/MCI® Technologies

ISO 9001  
QUALITY SYSTEM REGISTERED

ISO 14001  
ENVIRONMENTAL MANAGEMENT SYSTEM REGISTERED

ISO 17025  
CALIBRATION SYSTEM REGISTERED

September 14, 2020 [www.CortecVCI.com](http://www.CortecVCI.com) | (800) 4-CORTEC | [Info@CortecVCI.com](mailto:Info@CortecVCI.com)



## NEWS ALERT

ISO 9001 • ISO 14001  
ISO/IEC 17025

### Updated Cooling Water Layup Guide Now Available!



We are excited to announce that our product line guide for cooling water layup has recently been updated and is now available through Cortec® Technical Services! This is a great reference tool for anyone helping with layup of closed loop or open evaporative cooling water systems. Users can see at a glance what products are available, whether they are for use in open or closed loop systems (or both), what size of system they treat, and what their dosages are.



A key benefit of the guide is its explanation of layup methods. For wet layup, the system is preserved before it is shut down; it is then maintained at normal water level for the duration of the layup. In dry layup, preservation is done after the systems have been shut down and fully drained. Wet-dry layup involves adding product to a filled system, circulating it for a day or two, then shutting it down and draining it either fully or partially. The chart identifies three products designated for wet layup, one product for dry layup, and three products for wet-dry layup.

The cooling water layup product line guide is an excellent starting point for anyone interested in applying Cortec® corrosion control technologies to industrial cooling water systems. Contact us for more information about these products and to get a copy of the guide yourself: <https://www.cortecwatertreatment.com/contact-us/>!

Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001 and ISO 14001 Certified, and ISO 17025 Accredited.

**CORTEC CORPORATION**  
Environmentally Safe VpCI®/MCI® Technologies



### Cortec® Responds to COVID Shutdowns with Practical Layup Guides

With the uncertainty of unplanned shutdowns early this year in response to COVID-19, we worked hard to release a variety of layup guides applicable to different industries affected by the closures. Following the adage to “Hope for the best; plan for the worst,” we shared guidelines for grounded aircraft, ships, manufacturing facilities, drilling rigs, and many other entities on how to preserve valuable assets for an unknown period of time in a way that allows equipment to come back on line with minimal effort. These guides will continue to be valuable resources for anyone facing layup in the present or in the future. Browse our “library” of layup guides below:

#### Extended Layup of Boeing 747:

<https://www.cortecvci.com/extended-layup-of-boeing-747/>

#### Long-Term Storage of Modern Aircraft:

<https://www.cortecvci.com/long-term-storage-of-modern-aircraft/>

#### Long Term Storage of Ships:

<https://www.cortecvci.com/long-term-storage-of-ships/>

#### Layup of Manufacturing Facility:

<https://www.cortecvci.com/layup-of-manufacturing-facilities/>

#### Layup of Land-Based Drilling Rigs:

<https://www.cortecvci.com/layup-of-land-based-drilling-rigs/>

#### Layup of Offshore Drilling Rigs:

<https://www.cortecvci.com/layup-of-offshore-drilling-rigs/>

#### Protecting Commercial and Institutional Facilities During Extended Shutdowns:

<https://www.cortecvci.com/protecting-commercial-and-institutional-facilities-during-extended-shutdowns/>

#### Layup of Various Types of Power Plants:

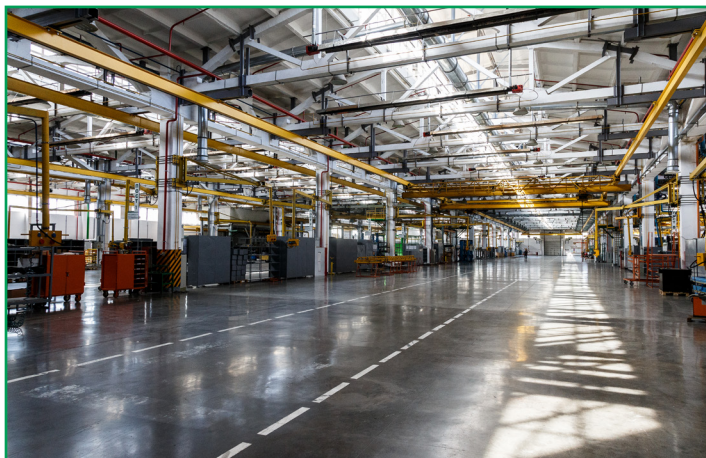
<https://www.cortecvci.com/layup-of-various-types-of-power-plants/>

#### Layup of Surface Mines:

<https://www.cortecvci.com/layup-of-surface-mines/>

#### Layup Guidelines for Floating Production Storage and Offloading (FPSO), Floating Storage and Offloading (FSO), Floating Liquefied Natural Gas (FLNG) Ships, and Floating Production Units:

<https://www.cortecvci.com/layup-guidelines-for-floating-production-storage-and-offloading-fpso-floating-storage-and-offloading-fso-floating-liquefied-natural-gas-flng-ships-and-floating-production/>





## PRODUCT NEWS

### **New CorroLogic® Fogging Fluid VpCI®-339 for Complex Internal Voids!**

In June, we officially released [CorroLogic® Fogging Fluid VpCI®-339](#), a ready-to-use 100% Vapor phase Corrosion Inhibitor (VpCI®) product for preservation of void spaces comprised of multi-metals. The product is water and hydrocarbon soluble and leaves no solid residues. It is nonflammable and free of chrome, phosphorus, halogen, and silicon elements. It is user-friendly and contains no EPA or OSHA hazard. It is also free of HAP (hazardous air pollutants).

### **New Fast-Dry Version of Top-Performing Water-Based Coating**

[EcoShield® 386 FD](#) was announced in late July. This product combines the worker and environmental advantages of a water-based coating with the outstanding performance of EcoShield® 386 micro corrosion inhibiting technology in a top-coat that will force-dry in five to 10 minutes. This is ideal for manufacturers of pipes, tubes, and other metal components without enough time to cool and dry the coated parts before continuing the production process.

### **New Boiler Iguana™ Says Goodbye to High-Maintenance Wet Layup of Boilers!**

September marked the release of three new water treatment “animals.” The first was [Boiler Iguana™](#), a ready-to-use waterborne corrosion inhibitor for use in operating hot water systems or wet layup of standby boilers. It is easy to apply and does not require frequent monitoring—unlike traditional layup strategies that require maintenance of high pH and regular testing of oxygen scavenger levels. Boiler Iguana™ allows quick startup because it is compatible with other water treatment chemicals and there is no need to drain the boiler before bringing it back online.

### **New Boiler Salamander™ for Wet Layup of High-Purity Steam Boilers**

The second September release was [Boiler Salamander™](#), a ready-to-use waterborne corrosion inhibitor liquid for wet layup of high-purity steam boilers. Boiler Salamander™ is effective at a very low dosage and provides contact and vapor-phase corrosion protection. Boiler Salamander™ can be easily added into feedwater or condensate lines. Application does not require the boiler to be drained or opened.

### **New Boiler Turtle™ Offers Greater Flexibility for Wet or Dry Layup**

The new [Boiler Turtle™](#) also came out in September. This is a ready-to-use waterborne corrosion inhibitor that lets boiler operators choose between wet or dry layup and does not even require them to drain or open the boiler for application. In addition, its combination of contact and Vapor phase Corrosion Inhibitors protect multi-metal surfaces both below and above the waterline for more thorough preservation.

### **Popular BioPad® Earns USDA Certified Biobased Content Label!**

On March 6<sup>th</sup>, 2020, [BioPad®](#) became yet another name in a long line of Cortec® corrosion solutions to become a USDA Certified Biobased Product. BioPad® is now able to display a unique USDA label that highlights its percentage of biobased content. This is the portion of a product that comes from a renewable source, such as plant, animal, marine, or forestry feedstocks. In the case of BioPad®, which contains 58% USDA certified biobased content, this includes byproducts of corn processing.

### **Testing Compares EcoLine® ELP to Name-Brand Competition**

End users can be understandably skeptical about the performance of biobased or sustainable products. Even though they have been told over and over to act responsibly, they may still wonder if environmental benefits will outweigh any losses in performance or cost. To demonstrate and help potential users weigh the pros and cons, EcoLine® ELP was tested against three major name brand lubricants: WD-40®, LPS 2®, and CRC 3-36®. In the end, EcoLine® ELP offered more than just environmental benefits. Learn more about the results here: [https://www.cortecvci.com/whats\\_new/announcements/EcoLine-ELP-and-the-Competition-PR.pdf](https://www.cortecvci.com/whats_new/announcements/EcoLine-ELP-and-the-Competition-PR.pdf)



## Recycled Content Law Underscores Importance of Cortec® VpCI® Plastics Recycling Program

Cortec's VpCI® plastics recycling program takes on new meaning in light of a recent article in *Plastics News*. The article, entitled, "[New Jersey legislators consider recycled content law](#)," highlights efforts in the New Jersey legislature to pass what some consider a historic recycling law for the state. *Plastics News* reports, "While the provisions are still being negotiated, state legislators are looking at a wide-ranging bill that could require 35 percent recycled content in rigid plastic containers and 20 percent in retail bags, along with requirements in trash bags, plastic beverage bottles and glass containers."

The article notes that this comes on the heels of other recycled content mandates in California (50 percent recycled content for plastic bottles) and Washington (goal of 20 percent recycled content in plastic packaging by 2025). While the recycling industry is eager to move forward on the New Jersey bill to make up for a drop in international demand for recyclables, representatives of the packaging industry have expressed concern about it they will have enough supply. On the other hand, the senator introducing the bill bemoaned the cost of recycling to taxpayers and said the system is "falling apart" and not giving them a good return.

When compared to the backdrop of this article, Cortec® stands out as a company that has worked independently of mandates and public recycling programs to develop its own successful recycling economy for VpCI® plastics. The strong commitment to environmental responsibility behind this program is decades old. For years, we have worked on incorporating recycled content into our VpCI® films and bags, beginning with our patent for VCI bags with recycled resin in the 1990s and continuing with our more recent launch of a recycling partnership to take back used VpCI®-126 Bags from a large manufacturing company and turn them into new quality product. We regularly use 15% recycled content (pre- and post-consumer combined) on average in our VpCI®-126 Film and Bags and can ensure quality at up to 20 percent recycled content. We have been able to make this profitable for our recycling partner while voluntarily taking individual responsibility for the environment.

Our high levels of recycled content will be important as more vendors and customers face tightening restrictions on the types of packaging that they can sell or use. We also look forward to potentially expanding our circular economy to include and benefit more recycling partners, both at Cortec® Advanced Films in North America and at EcoCortec® in Europe. Contact us to learn more about the possibility of becoming a Cortec® recycling partner: <https://www.cortecpackaging.com/contact-us/>

Read about our VpCI® Plastics Recycling program here: [http://cortecrecycling.com/wp-content/uploads/2017/07/Recycling\\_Brochure.pdf](http://cortecrecycling.com/wp-content/uploads/2017/07/Recycling_Brochure.pdf)

### New Jersey legislators consider recycled content law

By Steve Tolokan  
Plastics News Staff

New Jersey lawmakers are taking a serious look at mandating that plastic containers and other packaging sold in the state be made with recycled content, seeing it as a strategy to shore up weak markets.

While the provisions are still being negotiated, state legislators are looking at a wide-ranging bill that could require 35 percent recycled content in rigid plastic containers and 20 percent in retail bags, along with requirements in trash bags, plastic beverage bottles and glass containers.

New Jersey's debate comes a few weeks after California legislators passed a bill requiring up to 50 percent recycled content in plastic beverage bottles. Similarly, Washington state has set a general target of 20 percent recycled materials in plastic packaging by 2025.

In New Jersey, the bill's lead author, state Sen. Bob Smith, said at a lively Sept. 17 hearing that lawmakers hoped to move quickly and see the legislation as helping address financial challenges facing government recycling programs.

"Plastics are killing us, as a starting point. The recycling industry is costing every taxpayer in this state a gazillion dollars because we're not getting a return on recycling," said Smith, D-Piscataway. "Recycling is an industry that is falling apart. We've got to do everything we can to get it going."

The political prospects for the legislation, known as Senate Bill 2515, are not clear, but Smith heads the Senate's Environment and Energy Committee.

New Jersey's legislature is also considering another big plastics bill authored by Smith. A separate legislative committee Sept. 17 passed a ban on plastic and paper bags as well as some polystyrene foodservice products.

The recycled content bill, introduced in June, has drawn support from recycling companies and environmental groups. But it's also raised concerns with business groups, including packaging makers, the state's chemical industry and manufacturing associations. They argue that while they support boosting recycling markets, the state should take a deliberate approach because manufacturing supply chains are complex.

"California took years to get their bill done, and it's not nearly as comprehensive as this bill," said Ray Cantor, vice president of government affairs with the New Jersey Business and Industry Association. "There are changes that need to be made to have it be a working, functional bill that's going to achieve the goals that you want to achieve without putting undue burdens on industry."

Recycling business groups, however, urged Smith and New Jersey legislators to move ahead.

The head of the plastics committee at the Washington-based Institute of Scrap Recycling Industries, which represents recycling companies, testified that they



New Jersey Senate Environment and Energy Committee Chairman Bob Smith, left, greets Sunil Bagaria of the Institute of Scrap Recycling Industries during a hearing on mandating recycled content. Institute of Scrap Recycling Industries photo

percent recyclable material." Reiter said, questioning why the EPS peanut ban was in the legislation. "This material fits in so well with the other things the bill is trying to accomplish."

He said the EPS sector has programs that allow consumers to return the packaging peanuts to stores. But Smith asked what the recycling or return rate is for the EPS peanuts, and Reiter said he did not know.

"We're not trying to be hostile to anybody and we don't want to see anybody lose a job, but I have to tell you, you need to come back to us with what's the return rate," Smith said. "I think you're going to find it's a very low percentage."

Smith said lawmakers will review the suggestions at the hearing and come back with additional changes, likely within the next two months.

He and his staff introduced 22 changes to the bill after a July hearing, to respond to concerns, but he also said lawmakers want to move quickly.

"No bill is ever perfect but time is passing," Smith said. "We've got to get this done."

Similarly, the Association of New Jersey Recyclers urged lawmakers to move quickly, suggesting it could help with the loss of export markets for recyclables.

"This is clearly one of the most important pieces of legislation for recycling in New Jersey history and is exactly what we need to address the collapse in international markets," ANJR lobbyist J. Sondemeyer told the hearing.

"strongly supported" the legislation to build domestic markets for recyclables after China stopped taking U.S. scrap materials.

"One thing this will do is produce a consistent and continued demand for recycled plastic," said Sunil Bagaria, head of ISRI's plastics committee and president of New Brunswick, N.J., plastics recycler GDB International Inc.

"We did not create adequate recycling infrastructure [in the U.S.] because we never paid attention to creating demand."

While it supported the bill, ISRI also said in written comments that it urged tougher provisions, such as higher recycled content requirements for trash bags, which are currently set at 10 percent in the bill, and for containers. As well, Bagaria said ISRI was worried that the bill had vague provisions for granting waivers, including language allowing packaging makers to get an exemption for "anomalous" market conditions.

"We are afraid that a lot of companies will take advantage of that and shy away from the responsibility of using minimum recycled content," he said. "There are times when recycled plastic will cost more than virgin plastic and that cannot be treated as the reason for the manufacturer to ... exercise the anomalous market conditions [provision]."

But a trade association representing the packaging supply chain said there may not be enough materials to reach the bill's 35 percent requirement for containers, particularly with the quick, two-year implementation period in the legislation as it's currently written.

"We're not sure that the supply is there," said Andrew Hackman, a lobbyist for the American Institute for Packaging and the Environment, which urged more study.

"Thirty-five percent might be

the right number, but we would just like [the state Department of Environmental Protection] to be able to evaluate and determine if there is that type of supply in the state," he said.

Besides the recycled content requirements, the legislation would also ban expanded polystyrene foam loose-fill packaging, a provision that drew opposition from the EPS sector.

Walter Reiter, deputy director of the EPS Industry Alliance in Crofton, Md., testified that the ban would hurt Edison, N.J.-based EPS packaging maker Storopack Inc., which makes loose-fill packaging peanuts.

"Expanded polystyrene is 100

percent recycled content," he said.

Walter Reiter, deputy director of the EPS Industry Alliance in Crofton, Md., testified that the ban would hurt Edison, N.J.-based EPS packaging maker Storopack Inc., which makes loose-fill packaging peanuts.

"Expanded polystyrene is 100 percent recycled content," he said.

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## NEW ARTICLES

Cortec® has written or been featured in a number of exclusive articles in industry magazines over the last six months. Many of these are great resources for understanding more about Cortec's technology. Read them for yourself and share with others!

### **'COVID-19's Effect on Large Buildings'**

*Pumps & Systems*  
May 6, 2020

This article interviews Scott Bryan, our Technical Sales Manager – Water Treatment, about responding to the unprecedented shutdown of large buildings during COVID and how to deal with forced layup of boiler and cooling water systems that normally do not face facility-wide closure. Read Scott's insightful answers here: <https://www.pumpsandsystems.com/covid-19s-effect-large-buildings>

### **'Building for infrastructure durability'**

*The Construction Specifier*  
June 5<sup>th</sup>, 2020

This article elaborates on three Cortec® MCI® case histories about infrastructure projects in harsh environments in Israel. The article also addresses the benefits of using a "performance-based design" approach, accompanied by MCI®, rather than a "prescriptive" approach. This is a great read for anyone interested in MCI® or the construction industry. Read here: <https://www.constructionspecifier.com/building-for-infrastructure-durability/>

### **'Come Rain or Shine'**

*Oilfield Technology*  
July/August 2020

Uncertainty and corrosion go hand in hand in the oil and gas industry. This article shares the importance of a good preservation plan specifically focused on VCI technology. Read the article for ideas on how to ride out uncertain times in the upstream drilling market: <http://publications.oilfieldtechnology.com/flip/oilfield-technology/2020/July/oja78q.html#42>

### **'Corrosion Protection with Direct-to-Metal Coatings'**

*Chemical Engineering*  
August 1<sup>st</sup>, 2020

Cortec® was invited to write an article for *Chemical Engineering* about coatings technology for harsh environments. The article explores how micro-corrosion inhibiting coatings protect metals, how to choose the right coating for the job, and how to ensure coating integrity. Read the article: <https://www.chemengonline.com/corrosion-protection-direct-metal-coatings/?printmode=1>

### **'Navigating the COVID 19 crisis'**

*PCE International*  
July – September 2020

In this series of articles about "Lifting the Lid on COVID-19 Response," *PCE International* spotlights how Cortec® and EcoCortec® have been navigating the crisis to carry on with manufacturing and customer testing while also offering online consultation options for customers. Read here: <https://flickread.com/edition/html/5f5f81b98d408#17>

## NACE WHITEPAPERS

Even though it was not possible to meet in person for the NACE International CORROSION convention this year, Cortec® or Cortec® technologies still had a good showing of technical papers published by the organization. Read them at the links below.

**'Improving the Durability of Packaging Materials using Vapor Phase Corrosion Inhibitors':** <https://www.cortecvci.com/Publications/Papers/C2020-14294%5b5%5d.pdf>

**'Development of a New Corrosion Inhibitor for Corrosion Under Insulation at Elevated Temperatures':** <https://www.cortecvci.com/Publications/Papers/C2020-14293%5b4%5d.pdf>

**'Protect and Prolong- A New Multi-functional Diesel Fuel Additive':** <https://www.cortecvci.com/Publications/Papers/C2020-14855%5b2%5d.pdf>

**'USDA-certified Biobased, Low VOC and Biodegradable Paint Stripper and Graffiti Remover':** <https://www.cortecvci.com/Publications/Papers/C2020-14503%5b2%5d.pdf>

**'Comparison of VCI and CP Performance Using Floor Scan Data from Several 10-Year Old AST Floors':** <https://www.cortecvci.com/Publications/Papers/C2020-15065%5b2%5d.pdf>

## NEW CASE HISTORY HIGHLIGHTS

It is exciting to receive new case histories from those of you around the world who have seen Cortec® VpCI®/MCI® Technology at work firsthand. Thanks to all who have taken the time and effort to submit your story to share with us and others. We invite you to reflect on a few of the highlights from this last half year!

### Case History 682: Pilot Trial of Eco-Corr Film® for Major Global Automaker

A subsidiary of one of the world's three largest automakers was looking for "greener" packaging and tested Eco-Corr Film® on engines sent by ocean freight from Europe to Pune, India. The parts arrived corrosion free, and the Eco-Corr Film® was disposed in specially built compost bins to eliminate plastic waste at the Pune plant. Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch682.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch682.pdf)



### Case History 679: Seasonal Boiler Layup at Alabama Theatre

In 2020, the Alabama Theatre decided to use Cortec's Boiler Lizard® for seasonal dry layup in their boilers instead of desiccant. This will provide as much as 12+ months of corrosion protection and allow the boiler to be refilled as normal, no removal necessary, at startup. Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch679.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch679.pdf)





### Case History 675: Protecting Ship Engines in Outdoor Storage

For many years, a major marine engine manufacturer has been using VpCI® materials for external protection in outdoor seaside storage. In 2018, they tested BioPad® in three engines for six months of outdoor testing to see if it could replace a competitor's VCI material for internal protection. The test was successful, and the manufacturer decided to order BioPad® to protect 150 engines per year (a less expensive option since it provided double protection per square meter of material [1.2 yd²]). Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch675.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch675.pdf)



### Case History 672: Preservation of Subsea Pipelines

An offshore platform operator in the Middle East needed to preserve all new topside and subsea pipeline systems until demand for production increased. The case history outlines how this was done using EcoPouches for short-term preservation of subsea crude oil and gas lift lines and VpCI®-706 (as a failsafe back up to nitrogen, which is expensive and difficult to monitor offshore) for long-term preservation of subsea pipelines. Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch672.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch672.pdf)



### Case History 669: Protecting HMI Electronics Panels for Wastewater Treatment

Wastewater treatment facilities face a very corrosive atmosphere. This was causing recurring problems with failures on HMI (human machine interface) electronics panels at pumphouses located throughout the sewer system of a Midwestern city. One or two HMIs failing every six months cost \$15,000-\$40,000 apiece for replacement. In April 2019, the wastewater utility began protecting the panels with ElectriCorr® VpCI®-239, Corrosorber®, and VpCI®-111 Emitters. By April 2020, they had not experienced any HMI panel failures, saving an estimated tens of thousands of dollars of direct costs for the two to four HMI replacements typically required each year. Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch669.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch669.pdf)



## **Case History 666: Designing the Kinnet Tunnel for a 100-Year Service Life**

A channel for floodwater collection was designed for construction in a highly aggressive environment in the Arava region of Israel. MCI®-2005 was specified as the performance design principal in conjunction with other facets under a "Performance-Related Design Method." MCI®-2005 provided a built-in solution for non-constructive application errors that could otherwise significantly reduce long-term structural service life by allowing early corrosion initiation. Log in to read more: [https://www.corteccasehistories.com/?s2member\\_file\\_download=access-s2member-level1/ch666.pdf](https://www.corteccasehistories.com/?s2member_file_download=access-s2member-level1/ch666.pdf)



Have a great story to share? Submit it here: <https://www.corteccasehistories.com/case-history-application/>!

## **UPCOMING EVENTS**

The future remains uncertain, but we hope to be able to see you along with brighter days in 2021 at the following events! Check back on our trade show page to stay updated: <https://www.cortecvci.com/whats-new/trade-show-schedule/>

### **NACE CORROSION**

Conference & Expo 2021  
April 18<sup>th</sup>-22<sup>nd</sup>, 2021  
Salt Palace Convention Center  
Salt Lake City, UT  
Booth # 1316  
<http://www.nacecorrosion.org>

### **World of Concrete 2021**

June 8<sup>th</sup>-10<sup>th</sup>, 2021  
Las Vegas Convention Center  
Las Vegas, NV  
Booth # C5433  
<https://www.worldofconcrete.com>

### **SSPC**

December 13<sup>th</sup>-16<sup>th</sup>, 2021  
Phoenix Convention Center  
Booth # 638  
<http://www.sspc.org>





# Cortec® Corporation



## Quality Management System (ISO 9001 Certified)

### World Class Product Offerings

An innovative producer of leading edge products.

### World Class Customer Service

A positive, long-lasting impression through every link of our company.

### World Class Environmental Commitment

Cortec® commits to continued development of processes and products that are useful, non-hazardous to the environment, and recyclable whenever possible.

### An Ethical and Respectful Company Culture

Respect and treat our colleagues, customers, and vendors as we would our own family members.



## Environmental Management System (ISO 14001 Certified)

Cortec's strong environmental concern is demonstrated in the design and manufacturing of products that protect materials of all kinds from environmental degradation. A strong commitment to produce recyclable products made from sustainable resources has been and will be our future policy. This brochure can be recycled.



## Laboratory Accreditation (ISO/IEC 17025)

Cortec® Laboratories, Inc. is the only lab in our industry that has received ISO/IEC 17025 Certification, which ensures quality in recording and reporting data, as well as calibrating equipment within the laboratory.



## LIMITED WARRANTY

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