CORTEC® Vision

January 2008

Biolubes
A new world demand.

Featuring:

Biolubes

A new world demand.

In a study by D. Horner in 2002, it was found that "up to 50 percent of the world's global lubricant production could be lost into the environment through emissions into the air such as engine oil exhaust, spillage, or dumping of used oil. Such a large percentage coupled with ecological concerns has led to resurgence in the use of biodegradable feedstocks."

Generally, a biolube lubricant is classified as biodegradable and non-toxic (or having very low toxicity). Biolubes can also be formulated from renewable resources such as vegetable oils, CO_2 balanced, and have performance requirements specified for the end application.

The future of biolubes will focus on two different applications. The first are the high-risk applications, with likelihood that the lubricant will be lost to a sensitive environment. The second is a total-loss situation, wherein the lubricant is inevitably and almost entirely lost.

Environmental concerns aside, the biolube market is growing due to other factors as well, such as the unreliable nature of the mineral oil market and the agricultural industry's drive to create alternative for petroleum lubes. Another aspect is the equalization of the price difference between base stocks and mineral oils. Biolubes are also increasingly popular due to their nonhazardous nature: They are less harmful to the skin and respiratory system during application.

Abstract from LUBES'N'GREASES
November 2007
By Eric Nehls & Danielle Moore

Examples of policies that are driving biolube sales growth include:

Belgium: Biodegradable lubricants must be used in all operations near or on non-navigable waters.

France: French Law 2006-11 mandates the use of biolubes in environmentally sensitive zones.

Germany: Mandatory use of biolubes in environmentally sensitive areas.

Italy: The tax on mineral oil based lubricants promotes the use of naturally derived lubricants wherever possible.

Netherlands: Implementation of preferable purchasing policy for sustainable goods and services. Other policies support accelerated depreciation on environmental investments in biolubricants.

Portugal: The first country to mandate the use of biodegradable lubricants (for two-stroke engine oils).

EcoLine® products exemplify Cortec's long-standing commitment to conserve our natural resources by utilizing renewable resources such as the soybeans. The cornerstone of Cortec's past and future is based on the development of innovative and environmentally responsible materials protection technologies.

New Products

MCI®-2061

An exciting addition to the MCI® line. This unique product combines chemistry and biology to remove problematic oil stains and improve the appearance of concrete. It contains biodegradable surfactants that can quickly and effectively clean oil stains and bacteria (spore forming Bacillus microbes) that remain after the concrete has been cleaned to degrade residual hydrocarbon constituents of the stain that weren't removed during the initial cleaning process. Spores that are rinsed away may also germinate and work to purify the rinse water. Oily stains on concrete surfaces are often complex mixtures of automotive or maintenance products. This product cleans parking lots and garages, factory floors, maintenance garages, etc. MCI-2061 is a safe alternative to harsh caustic or acidic cleaners, it has a neutral pH, contains virtually no (< 1%) VOCs, and is a non-corrosive and non-irritating formulation which is safe for users and the environment.

1. Garage doorway before

2. Garage doorway 12 hours after cleaning; MCI®-2061 was applied to the right side.

Right:
Field Test at Smith and Nielson Automotive Service: MCI®-2061

S-607 Bioremediation Additive

Substantial pressure has been placed on industry to provide safe solutions for the elimination of various pollutants in soil and water. S-607 Bioremediation Additive works to degrade petroleum, crude oil, and other stubborn organics. S-607 is comprised of naturally occurring strains of bacteria (Pseudomonas) that work to digest pollutants. During the bioremediation process the microorganisms will use available oxygen to convert the organic components into carbon dioxide, water, biomass, and inorganic salts. The biological treatment destroys most organic waste, leaving only harmless end products, thus eliminating any future environmental risks or liabilities. S-607 is a great addition to Cortec's product line because it meets Cortec's standards for biodegradability and safety. S-607 Bioremediation Additive is EPA approved and was developed in partnership with Osprey Biotechnics.

New Products

VpCI™-149 Corrosion Inhibiting Paper

Cortec® VpCI™-149 is a new and unique corrosion inhibiting paper for the protection of a wide variety of metals. Formulated to provide extra protection for sensitive metals such as copper, aluminum, and cast iron. VpCI™-149 is an excellent product for virtually all packaging needs. Manufactured using a neutral, natural kraft paper, the coating provides a very soft and conformable feel to the paper. It wraps easily around metal parts, making for simple use during packaging. Because it is not a saturated paper, it will not tear.

Designed specially to provide a superior level of VpCI™ protection compared to other VpCI™ papers VpCI™-149 can be used for a variety of applications. The soft feel makes it easy to use when individually wrapping parts while the strong vapor phase protection provides a great product for interleaving and protecting void spaces.

VpCI™-340 CLP

Cortec® VpCI™-340 CLP is a unique formulation performing a multiplicity of functions; cleaning, water displacement, freeing stuck mechanisms, superior lubrication, and metal protection. It penetrates to undercut contaminants, rust, salt, and moisture which are then easily brushed or wiped away. Cortec® VpCI™-340 CLP also forms a thin, longlasting lubricating film, which dramatically reduces friction and wear. Parts that are moving work smoother and will last longer.

Cortec® VpCI™-340 CLP can be used for indoor and outdoor applications. Its superior water displacing characteristics make it an ideal choice for applications on equipment and components that are exposed to outside weather. The product conforms to MIL-L-63460 specification for “Lubricant, cleaner and preservative for weapons and weapons systems.”

New Products

VpCI™-Eco*Flow*™ System

Cortec® has worked to develop the best environmentally-friendly solutions for pipeline operators. The Eco*Flow*™ system is an optimal combination of flow enhancing, VpCI™, MIC inhibitors, antiscallant, allowing increased throughput with the unique synergy with Vapor phase Corrosion Inhibiting (VpCI™) protection for pipelines carrying water or a mixture of water and hydrocarbon.

Eco*Flow*™ is the total solution for world's pipelines. Its benefits can be fully implemented at different locations within the recovery process, increasing throughput, reducing formation back pressure, and eliminating the negative operational effects caused by corrosion. The combination of Eco*Flow*™ and the correct engineered solution will lead to increased oil production and increased overall recoverable reserves. The reduction of operating pressure will in turn give a lower back pressure at the well head and lead to additional oil production, enabling the operator to realize a substantial annual revenue increase.

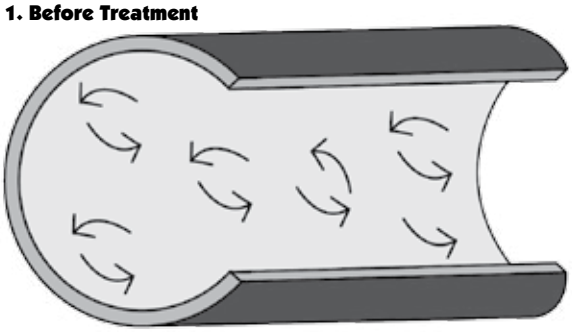
Upper Right:
Before Treatment - Heavy corrosion, low operating pressure, low throughput.

Loss of operating pressure due to corrosion, limited operational flexibility, and pipeline capacity from bottle- necking are some of the issues pipeline owners and operators are facing. Our growing dependence on pipelines for transporting water, oil, gas multi-phase, and other liquids means this infrastructure requires increasing engineering attention. Solutions for these growing issues can have long implementation time and may result in serious capital investment.

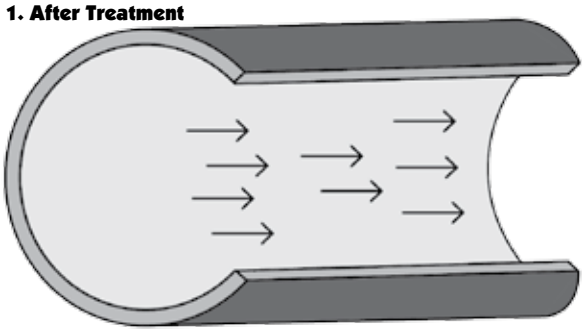
After Treatment - Corrosion stopped, operating pressure maintained, increased throughput.

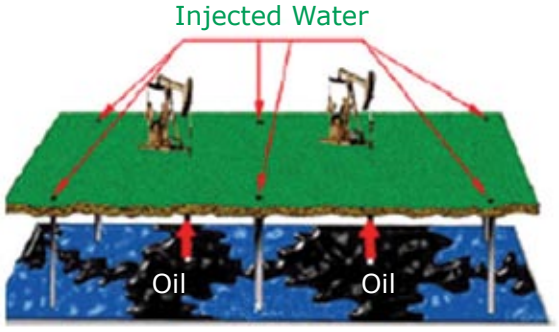
Eco*Flow*™ combines a high quality, proven chemical solution with innovative engineering and state-of-the-art equipment designed to provide a solution for the majority of pipeline applications. Eco*Flow*™ provides an effective way to manage pressure and/ or capacity limitations due to increased water production in existing oil fields and increasing throughput, while reducing scale build up and internal corrosion.

1. Before Treatment



1. After Treatment





Jim Holden at our booth at AWT Convention (American Water Treaters) in November 2007.

Colorado Springs, Colorado

Cortec® knows India

Several dozen Minnesota business and political leaders embarked on a trade mission to India.

Minnesota Gov. Tim Pawlenty is leading the delegation and says India's 1.1 billion people represent a huge and "largely untapped" market for Minnesota goods and services. But what's it like doing business with India?

St. Paul, Minn. — At a plant in White Bear Lake, a company called Cortec® makes paints and other coatings that combat corrosion. On the factory floor, tireless mechanical arms stir the concoctions in vats about the size of hot tubs.

What's surprising is the sweet smell in the air. Most of Cortec's products are made from orange peel, sugar beets, corn and other agricultural products. So they're biodegradable.

Cortec® CEO Boris Miksic says his sales to India have been steadily increasing.

"It's getting better and better. They are pretty much doubling every year."

Miksic says his sales are now $2 million a year. He says more Indian manufacturers are striving to meet international standards for environmental friendliness. And prices for competing petroleum-based products have been rising with the price of oil.

"Our natural products based on Minnesota raw materials and Minnesota technology are very well received there," he says. "And I expect India someday to be the biggest market for Cortec®, along with China." Miksic's enthusiasm about India is shared by many business people who'll join him on the trade mission to India.

About 50 million Indians are middle class by that nation's standards. But some experts predict the number of Indians with middle class buying power will balloon to nearly 600 million by 2025.

Minnesota Governor Tim Pawlenty, Cortec® Corrosion Solutions India PK Mathew, and Cortec® President/CEO Boris Miksic at the Hyatt, New Delhi. -Oct., 2007

Minnesota business and political leaders in India.

Article and Photo courtesy of the Minnesota Public Radio and written by Martin Moylan

Grand Opening

October 11, 2007
Beli Manastir, Croatia

ECO® Cortec d.o.o.

On October 11th, 2007, EcoCortec® held its grand opening, which was attended by many Reps, Distributors, and Customers from around the world. Everyone had a chance to see this state of the art facility with its new, fully-integrated, energy-conserving equipment. Tours of the plant included its laboratory. The EcoCortec® facility embodies Cortec's commitment to exceeding the standards of quality and effectiveness.

Please join all of the Cortec® family in welcoming EcoCortec® to what promises to be a bright and productive future.

REACH: Registration, Evaluation and Authorization of Chemicals

REACH, the Registration, Evaluation, and Authorization of Chemicals regulation came into force on June 1, 2007. REACH has been recognized as the most complex piece of legislation to affect the global chemical supply chain. This new policy from the European Commission reverses the burden of proof and puts the responsibility on the producer and importer to show that substances are safe before they can be placed on the market.

Cortec® Corporation has taken several steps to ensure the compliance with this recently implemented regulation. This gives us the opportunity to demonstrate to our customers that we have taken a proactive approach to this ground-breaking legislation. We have established a task group and are diligently working on meeting the deadlines set for the upcoming pre-registration and subsequent registrations.

As we are a non-European company, Cortec® Corporation has selected an Only Representative agent located in the United Kingdom. This company will work with us to handle the filing aspect of this legislation. Rest assured that we are fully committed to ensuring a smooth passage to compliance with the REACH regulation.

New Project: Cortec® Coated Products-Eau Claire, WI

An upgrade coming to Cortec Coated Products!

Cortec® Corporation is continually upgrading facilities, processes, and equipment to meet the ever-growing needs of our customers. Utilizing the latest technology, Cortec Coated Products (CCP) will implement the widening of the current High Tech Coater and Cameron printer, slitter, and unwinder, which will allow coating widths of up to 100" (2.5 meters) for linerboard and other papers or films. This will not affect the coating quality or Cortec's usual standards but will provide increased production capabilities for paper and film substrates.

HAPPY HOLIDAYS

From: Katie Surrett (Cortec® Customer Service Representative), Bill Campbell, Pretty (horse to left), Bella (dog), and Xena (horse to right)

CORTEC CORPORATION
Environmentally Safe VpCI™/MCI® Technologies

ISO 14001 CERTIFIED — ENVIRONMENTAL SYSTEM REGISTERED

ISO 9001 CERTIFIED — QUALITY SYSTEM REGISTERED

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