V-Bio® Enhanced Polyethylene Encasement and Corrosion Control

The Ductile Iron Pipe Research Association (DIPRA) and its member companies are always improving the products and services they provide to the water and wastewater industry – especially the long service life municipalities have come to expect from their ductile iron pipelines. Polyethylene encasement is the most popular, economic and successful method of corrosion control for Ductile Iron Pipe. Since its first installation in a water system in 1958, it has been used to protect hundreds of millions of feet of cast and Ductile Iron Pipe in aggressive environments.

The iron pipe industry has always been an innovative industry and now, with V-Bio®, the result is an enhanced polyethylene encasement that addresses, specifically, the potential influence of anaerobic bacteria and inhibits the formation of corrosion cells under the warp.

Key facts about the V-Bio® Enhanced Polyethylene Encasement:

- Builds upon a proven method of corrosion control - polyethylene encasement - that has been protecting iron pipe from aggressive soils since it was first installed in 1958.
- Represents a significant evolutionary advancement in corrosion protection for Ductile Iron Pipe.
- Consists of three layers of co-extruded linear low density polyethylene (LLDPE) film that are fused into one.
- Features an inside surface that is infused with a proprietary blend of anti-microbial additive to mitigate microbiologically influenced corrosion (MIC) and a volatile corrosion inhibitor (VCI) to control galvanic corrosion.
- Addresses two concerns raised over the years – the potential influence of anaerobic bacteria through MIC, and the concern about the possibility of corrosion occurring under intact polywrap.
- Protects against corrosion without involving consumption or degradation of either the anti-microbial additive or the corrosion inhibitor. The film’s enhanced properties will not wear out!
- Meets all requirements of the American National Standards Institute and the American Water Works Association (ANSI/AWWA C105/A21.5) standard for polyethylene encasement.
- Is, in fact, the next step in a proven, successful method of corrosion control.

For details about the benefits of Ductile Iron Pipe or the Ductile Iron Pipe Research Association visit www.dipra.org