



JUST
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FACTS

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O C P A

**Ontario
Concrete Pipe
Association**

The choice of a lifetime

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Just The FACTS!

Fact- In Ontario, OPSS1840 Material Specification for Non-Pressure Polyethylene Pipe Products is the specification used for polyethylene pipe. OPSS1840 references CAN/CSA-B182.6-M92, the Profile Polyethylene Sewer Pipe and Fittings Standard. AASHTO and ASTM are referenced as the basic material standards for polyethylene used in pipe.

Fact- Since 1996, polyethylene pipe gravity standards for the determination of long term strength through the use of the hydrostatic design basis test has not been required. Without an appropriate long term strength test, however, customers are left without critical information as to the long term strength of polyethylene pipe products. The test was cited as being too expensive to conduct, too time consuming and not relevant to gravity pipe applications. Requirements for environmental stress crack resistance testing were maintained.

Fact- In 1997, NCHRP (National Cooperative Highways Research Program) initiated Project 04-24 to find a replacement for the current stress crack resistance testing found in AASHTO M294 and AASHTO Section 18. The new test, being developed by the Geosynthetic Research Institute, would be used as a means of predicting long term strength as well as stress crack resistance.

Fact- In May 1999, Report NCHRP 04-24 was released identifying the single point notched constant tensile load test as an alternative for the determination of stress crack resistance. The report recommended a stress level of 15% of yield with a minimum average failure time of 24 hours as the acceptable parameters.

Fact- In August 1999, this information was presented to the AASHTO Subcommittee on Materials. At the same meeting, the Plastic Pipe Institute, on behalf of the Corrugated Polyethylene Pipe Association, recommended significantly lower testing limits to 10% of yield for a period of 10 hours. These proposed limits are less restrictive than the current standards in AASHTO M294 and AASHTO Section 18.

Fact- The NCHRP Project 04-24 tested polyethylene pipe, including new and installed pipe. Testing of new pipe, which was furnished to the researchers by Polyethylene Pipe Manufacturers, resulted in eight of fourteen samples failing for the stress crack resistance based on the current standard. For the new test procedure proposed by the Geosynthetic Research Institute, nine samples failed for stress crack resistance. This study showed that current polyethylene pipe is subject to cracking. Some new pipe samples also failed to meet current requirements such as carbon black content, which provides U.V. protection subject to cracking under the specified test procedures.

WHY ARE THE MANUFACTURERS OF POLYETHYLENE PIPE TRYING TO CHANGE THE TESTS?

Just The FACTS!

Fact- In 1965, the Ontario Water Resources Commission (OWRC) and the Ontario Concrete Pipe Manufacturers established the Plant Prequalification Program for the producers of concrete pipe. The program set uniform manufacturing standards and procedures for quality control. The Plant Prequalification Program is currently administered by the Plant Prequalification Advisory Committee, comprised of representatives from the Municipal Engineers Association, Ministry of Transportation of Ontario, Ontario Provincial Standards and the Ontario Concrete Pipe Association.

Fact- Ontario Provincial Standard Specification (OPSS) 1820 makes Plant Prequalification mandatory for all suppliers of concrete pipe.

Fact- Quality assurance is achieved through the use of established methods. Structural integrity is measured using the three edge bearing test. Composition of the raw materials that make up concrete pipe are recorded at the plant. Pipe performance is tested using the hydrostatic test. Test records are available for scrutiny at any time.

Fact- Concrete pipe that fails to comply with the requirements of the Plant Prequalification Program for Precast Drainage Products does NOT leave the plant.

Fact- Concrete pipe dates back to the late 1800's in North America and even further back in Europe. Its expected service life is 100 years. This longevity is proven through field performance, NOT predicted through laboratory testing. More concrete sewer pipe has been installed than any other single sewer pipe material.

Fact- Concrete pipe is a known entity comprised of cementitious materials, aggregate and water. These inert materials are commonly found in the natural environment.

Fact- The Plant Prequalification Program for concrete pipe ensures that high quality products are delivered to ALL projects ALL the time.

THE MANUFACTURERS OF CONCRETE PIPE HAVE NOTHING TO HIDE!

Would you like more facts? Just contact us at:
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