Milestones in PVC Water Pipe History

Technology and performance have made PVC pipe the most popular choice for water and sewer lines.

1932 – First tubes were made from polyvinyl chloride (PVC) in Germany.

1935 – The first PVC pipes were manufactured (Germany).

1936 – PVC pipes began to be installed for residential drinking water distribution and waste pipelines (Germany). Most are still in service.

1949 – Initial use of PVC pipe in North America.

1952 – PVC pipe introduced in the U.S.

1955 – First PVC water distribution pipes laid in the U.S.

1960 – Original publication of ASTM D1785 – Standard Specification for PVC Plastic Pipe, Schedules 40, 80, and 120.

1963 – Publication of the first national standard for PVC pipe pressure rated for water – Commercial Standard CS256-63, Polyvinyl Chloride (PVC) Plastic Pipe (SDR-PR and Class T), a recorded voluntary standard of the trade published by the U.S. Department of Commerce.

1964 – Initial publication of ASTM D2241 – Standard Specification for PVC Pressure-Rated Pipe (SDR Series).

1966 – AWWA appointed a committee to study and report on the adaptability of plastic pipe for use in the water industry.

1967 – AWWA recommends that a task group be appointed to prepare standards for plastic pipe.

1968 – The AWWA Standards Committee on Thermoplastic Pressure Pipe was established.

1970 – The Canadian Standards Association (CSA) publishes the first edition of CSA B137.3, “Rigid PVC Pipe for Pressure Applications”.

1971 – First meeting (Oct. in Philadelphia) of the non-profit, Integral Gasketed Joint Plastic Pipe Association (re-named the Uni-Bell Plastic Pipe Association in April 1972). Headquarters were located in New York City. (We have a 7 x 10, B&W photo of the meeting.)

1972 – Uni-Bell published first PVC municipal water pipe standard (UNI-B-2), which was the predecessor to AWWA Standard C900.

1975 – AWWA's Board of Directors approved the first edition of AWWA C900, "AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for Water".

1976 – Uni-Bell moves to Dallas, Texas and hires full-time Director.

1977 – Publication of the first edition of the Uni-Bell Handbook of PVC Pipe – Design and Construction.

1980 – AWWA publishes Manual No. 23, "PVC Pipe - Design and Installation".

1981 – AWWA approves the second edition of AWWA C900.

1985 – The 750,000th mile of PVC rural water pipe was installed in the U.S.

1986 – Uni-Bell publishes recommended standard for water transmission pipes (UNI-B-11) up to 36 inches in diameter.

1988 – Initial approval and publication of AWWA C905, "AWWA Standard for PVC Water Transmission Pipe, Nominal Diameters 14 in. through 36 in."

1989 – AWWA approves third-edition of AWWA C900.

1991 – Original publication of AWWA C907, "AWWA Standard for PVC Pressure Fittings for Water – 4 in. through 8 in."

1994 – AWWA approves and publishes C605, "AWWA Standard for Underground Installation of PVC Pressure Pipe and Fittings for Water".

1996 – PVC water pipes' (>3 in.) market share exceeds 50%, making PVC the number one water pipe in the U.S. and Canada.

1997 – Fabricated fittings added to AWWA C900 in the approved forth-edition.

1997 – Size range increased to 48 inches with publication of the second edition of AWWA C905, "AWWA Standard for PVC Pressure Pipe and Fabricated Fittings, 14 in. through 48 in., for Water Transmission and Distribution".

1998 – Approval and first publication of AWWA C909, "AWWA Standard for Molecularly Oriented PVCO Pressure Pipe, 4 in. through 12 in., for Water Distribution".

2002 – Size range increased to 24 inches with publication of the second edition of AWWA C909, "AWWA Standard for Molecularly Oriented PVCO Pressure Pipe, 4 in. through 24 in. for Water Distribution".

2002 – AWWA publishes the second edition of Manual No. 23, "PVC Pipe – Design and Installation.

2004 – The unequaled performance and cost effectiveness of PVC water pipes resulted in a 78% share of the water distribution pipe in 2004 (over 71,100 miles), according to a study of the U.S. and Canadian buried pipe markets for pipe diameters 4-inch and larger.

2005 – AWWA publishes second edition of Standard C605, "Underground Installation of PVC Pressure Pipe and Fittings for Water".

2005 – AwwaRF publishes the results of extensive multi-year evaluation of PVC water pipe, which projects that the failure rates for PVC pipes in service for 110 years will be less than those currently being experienced with other pipe materials. The AwwaRF publication is entitled, "Long-Term Performance Prediction for PVC Pipes".

2005 – PVC is the largest volume plastic pipe material in North America with annual sales in excess of 6.8 billion pounds in 2005.

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