


Case Study: City of Vaudreuil-Dorion

A WISE CHOICE

An aerial photograph of a city, likely Vaudreuil-Dorion, showing a multi-lane highway on the left, a river, and a residential area with green trees. The image is partially obscured by a dark blue graphic overlay with a pattern of overlapping circles at the top.

In the early 1980s, when the City of Vaudreuil-Dorion had a population of only 10,000 people, the Public Works and technical support departments made a forward thinking infrastructure decision that would benefit taxpayers for the next three decades. After conducting in-depth soil analyses, public officials determined that the metal-based piping originally used in the city's potable water applications was susceptible to premature corrosion.

A Wise Choice Made 30 Years Ago

The city elected to replace the piping with PVC, a material that's much more suitable for the city's soil conditions.

More than thirty years later, the city continues to invest in infrastructure to help meet the demands of a growing population. Since the merger of Vaudreuil and Dorion in 1994, the technical support department has implemented a number of infrastructure projects, including the expansion of water treatment and filtration

plants, substantial modifications to road networks as well as the construction of residential areas, industrial parks and commercial centers. Over that time, the landscape of the City of Vaudreuil-Dorion, and its residential, commercial and industrial sectors have changed considerably.



PVC has been used extensively in our city since 1981, the year I took up office as head of the newly-created technical support department of the City of Vaudreuil. That same year, we made the decision to use PVC for service piping and potable water and sanitary sewer systems. **This decision was driven by the fact that our subsoil is highly aggressive, due to its high electrical conductivity. In the 1960s and 1970s our potable water systems were made of iron, ductile iron or steel piping, which caused many costly leaks in the following decades. We had to implement a rehabilitation program almost 20 years ago to rectify this problem.** The use of PVC pipes, together with PVC fittings, allowed us to solve all of these leaks and we are extremely happy with the results.

MARC CÔTÉ *T.P. AND HEAD OF THE TECHNICAL DIVISION*

Due to its geographic location, Vaudreuil-Dorion has recently experienced significant and steady growth. Between 2006 and 2011, the city's population increased by 29.1% to 34,806. This type of population growth posed several challenges as major infrastructures needed to be upgraded and modernized.

In 2012, a second potable water transmission line was built with PVC pipe, as well as a new water intake in the Vaudreuil Bay, where the flow rate increased from 16,000 cubic meters/day to 40,000 cubic meters/day. Such an increase in potable water volume led to a subsequent increase in wastewater volume.