

STAFF REPORT: ENGINEERING AND PUBLIC WORKS DEPARTMENT



REPORT TO: **Engineering and Public Works Committee**
MEETING DATE: **April 22, 2008**
REPORT NO.: **EPW.08.50**
SUBJECT: **Chemicals Pall Membrane Equipment and
PVC Watermains**
PREPARED BY: **John Caswell, Water & Wastewater
Services Manager**

A. Recommendations

THAT Council receive Report EPW.08.50 entitled “Chemicals Pall Membrane Equipment and PVC Watermains”, for their information.

B. Background

At a previous Engineering & Public Works Committee meeting, the Committee requested Staff to bring a report back regarding lead content and chemicals affecting PVC (Poly Vinyl Chloride) piping, specifically the Pall Membrane cartridges.

The Ministry of Environment has required municipalities to commence lead testing programs in their drinking water systems and Committee Members requested details that the Pall Membrane System is safe.

Pall Membrane Corporation has sent information indicating their system adheres to current legislation meeting NSF (National Sanitation Foundation) and ANSI (American National Standards Institute). CSA (Canadian Standards Association) is the governing Canadian body for the materials used in contact of potable water and includes standards written or administered by the above organizations.

The following information will help explain the purpose, scope, and content of NSF/ANSI Standard 61:

1. NSF/ANSI Standard 61 Drinking Water System Components – Health Effects is the standard that establishes minimum health effects requirements for the chemical contaminants and impurities that may be indirectly imparted to drinking water. The standard provides the criteria used to evaluate the public health safety or materials, components, products, or systems that contact drinking water, drinking water chemicals, or both.
2. NSF/ANSI Standard 61 covers many items, including, but are not limited to:
 - a. Plastic materials, plastic and metal pipe and related products (fittings, tanks, etc.)
 - b. Protective materials (coatings, linings, liners, cement, cement ad-mixtures, etc.)
 - c. Joining and sealing materials (adhesives, lubricants, elastomers, etc.)

- d. Process media (carbon, sand, ion exchange resin, etc.)
 - e. Treatment/transmission/distribution devices (valves, pumps, filters, chlorinators, etc.)
 - f. End-point devices (faucets, end-point control valves, etc.)
3. NSF/ANSI Standard 61 does not address all aspects of product use. The Standard is focused and limited to addressing potential health effects except where specific application and performance standards are referenced. Some items not addressed by this Standard are performance (such as burst pressure), taste and odor, microbiological growth support, and electrical safety. Other standards may address these aspects of products.

Pall Membrane Corporation was contacted and has provided information that indicates they use an HDPE (High Density Polyethylene) material in their components and also provided information regarding the wetted portion of piping which satisfies NSF/ANSI Standard 61. Staff have verified on the NSF website that Pall Membrane Corporation has achieved this Standard.

Therefore, Staff are confident that the Pall Membrane Corporation's equipment and associated piping has been approved by regulatory agencies and is suitable for potable water use.

C. The Blue Mountains' Strategic Plan

This Report helps to address the Strategic Plan's goal # 2 "Addressing the Town's Municipal Infrastructure needs".

D. Budget Impact

None.

E. Attached

None.

Respectfully submitted,

John Caswell
Manager, Water and Wastewater Services Division

Reg Russwurm
Director, Engineering and Public Works