R126 : Water System Quality - Annual Report

Corporate NO: R126 Report COUNCIL DATE: June 4, 2001

REGULAR COUNCIL			
TO:	Mayor & Council	DATE:	May 29, 2001
FROM:	General Manager, Engineering	FILE:	1228-004
SUBJECT:	Water System Quality - Annual Report		

RECOMMENDATION

For Council's information.

INTENT

To inform Council of the results of the 1999 and 2000 Water System Quality Annual Report.

DISCUSSION

As a water purveyor, the City must monitor the quality of the water it delivers to its customers. The City, with the South Fraser Health Board and GVRD, has developed a water quality monitoring and reporting plan. A protocol document was developed that sets out monitoring parameters, reporting structure and the response plans to emergency situations such as incidences of high bacteria or chemical contamination.

The Executive Summary of the 1999 and 2000 Water System Quality Annual Report is attached. The full report is available at the Engineering Department and has been submitted to the Medical Health Officer. Since the City purchases its water from the GVRD, most of the parameters are monitored by the GVRD at the source. The City monitors for such things as bacteria and turbidity (cloudiness). Starting in 2001 the City will start monitoring for chemical and physical parameters unique to distribution systems.

Of the over 1600 samples analyzed in 2000, only one sample detected the presence of fecal coliforms. This location was immediately resampled and no further presence of fecal coliforms was found. A possible cause might be unrelated contamination of the sampling bottle. No samples tested positive for fecal coliforms in 1999. Eight of the City's 49 sampling periodically exceeded, in the warmer months, the guideline set for

heterotrophic plate counts (HPC). HPCs are a benign bacteria but their presence is an indicator for other possible bacterial presence. These sample sites are primarily in dead-end or low flow areas and are more frequently flushed. These areas will also be more frequently tested for adequate chlorine residual.

Other than the above noted exceptions, the water samples fully met the Canadian Drinking Water Quality Guideline.

In April of this year, the Province passed a new Drinking Water Protection Act as well as new regulations for drinking water quality standards. The most significant impact of the new regulations is the lowering of the standard for turbidity from 5 NTU to 1 NTU. Turbidity is thought to decrease the effectiveness of disinfection and may be linked to gastrointestinal illness. Over the next few months, our Staff will be involved in discussions and workshops to determine the impact of the new regulations. Council will be kept apprised as further information becomes available.

Jorgen Johansen, P. Eng. General Manager, Engineering MD/sew/brb Attachment g:\wp-docs\2001\utilities\sewer\05231039md.doc KJJ 6/4/01 3:03