



125 South Wacker Drive, Suite 600  
Chicago, IL 60606  
tel: 312 346 5000  
fax: 312 346 5228

June 24, 2013

Mr. Matthew A. Supert  
Director of Municipal Services  
Village of Western Springs  
740 Hillgrove Avenue  
Western Springs, IL 60558

Subject: Low Pressure Reverse Osmosis Water Treatment Plant  
Water Quality

Dear Director Supert:

The new low pressure reverse osmosis (LPRO) system installed at the treatment plant has been in continuous operation for approximately two months. To prove conformance with the contract requirements, the Contractor hired a certified laboratory to measure the permeate water quality produced from Well #3 and Well #4. Additionally, the Village took two additional samples to measure the finished water quality entering the distribution system. A summary of the water quality data and the maximum contaminant levels regulated by the United States Environmental Protection Agency and the Illinois Environmental Protection Agency are shown in **Table 1**. For comparison, the table also includes water quality data from the plant prior to initiation of the plant upgrades.

The water quality data indicate that the finished water from the new LPRO system exceeds all federal, state and local water quality standards.

If you have any questions or need any further information, please do not hesitate to call.

Very truly yours,

Robert S. Isabel, P.E., BCEE  
Principal Engineer & Senior Project Manager  
CDM Smith Inc.





Mr. Matthew A. Supert  
 June 24, 2013

Page 2

**Table 1: Finished Water Quality Before and After the Plant Rehabilitation Project**

<b>Parameter</b>	<b>Lime Softening WTP Prior to Plant Rehabilitation Project</b>	<b>LPRO WTP After Plant Rehabilitation Project</b>	<b>EPA Regulated Maximum Contaminant Level</b>
Radium – 226 & 228 (pCi/L)	3.05	1.7 – 3.2	5.0
Iron (mg/L)	0.05	ND	0.300
Fluoride (mg/L)	1.02	0.53 - 0.55	2.0
Hardness (mg/L as CaCO <sub>3</sub> )	119	93 – 99	NL
Calcium (mg/L as Ca)	19.2	25 – 27	NL
Magnesium (mg/L as Mg)	NR	7 - 8	NL
pH	8.3 to 8.5	7.3	6.5-8.5
Total Dissolved Solids (mg/L)	NR	58 - 228	500

Abbreviations:

- LPRO – Low Pressure Reverse Osmosis
- mg/L – milligrams per liter
- ND – Not Detected
- NL – No Limit
- NR – Not Reported
- pCi/L – picocuries per liter
- WTP – Water Treatment Plant