



Ministry of the Environment and Climate Change

**HYDE PARK RESIDENCES INC. WELL SUPPLY
Inspection Report**

Site Number:	260029549
Inspection Number:	1-7GS16
Date of Inspection:	Aug 20, 2009
Inspected By:	Jean Veilleux

OWNER INFORMATION:

Company Name:	HYDE PARK RESIDENCES INC.		
Street Number:	6143	Unit Identifier:	
Street Name:	PERTH St		
City:	RICHMOND		
Province:	ON	Postal Code:	K0A 2Z0

CONTACT INFORMATION

Type:	Owner	Name:	Steve Hyde
Phone:	(613) 838-4717	Fax:	(613) 838-7228
Email:	hyde.steve@hydeparkrichmond.com		
Title:	President		
Type:	Main Contact	Name:	Andrew Stockman
Phone:	(613) 686-1222	Fax:	
Email:	stockman.andrew@hydeparkrichmond.com		
Title:	Manager		
Type:	Operator	Name:	Jamie Blakely
Phone:	(613) 226-7381	Fax:	(613) 226-6344
Email:	jblakely@patersongroup.ca		
Title:	Trained Person		

INSPECTION DETAILS:

Site Name:	HYDE PARK RESIDENCES INC. WELL SUPPLY
Site Address:	311 CHESTNUT GREEN Private RICHMOND ON K0A 2Z0
County/District:	OTTAWA
MOECC District/Area Office:	Ottawa District
Health Unit:	CITY OF OTTAWA HEALTH DEPARTMENT
Conservation Authority:	
MNR Office:	
Category:	Non-Municipal Year-Round Residential
Site Number:	260029549
Inspection Type:	Announced
Inspection Number:	1-7GS16
Date of Inspection:	Aug 20, 2009
Date of Previous Inspection:	

COMPONENTS DESCRIPTION

Site (Name):	MOE DWS Mapping	Sub Type:	
Type:	DWS Mapping Point		
Site (Name):	Well # 1	Sub Type:	
Type:	Source		

Comments:

Well # 1 was drilled using a rotary air percussion machine that installed a 16cm diameter steel casing from 40 cm above surface down to 13m. The final depth of the well is 83m. The well is grouted with cement to 13m. The well is grouted well into medium hard limestone. Water was found at 40m, 72m and 78m. This is a flowing artesian well (flows at 23 L/min.).

Site (Name): Well # 2**Type:** Source**Sub Type:****Comments:**

Well # 2 was drilled using a rotary air percussion machine that installed a 25 cm diameter steel casing from 40 cm above surface down to 15m. The final depth of the well is 92m. The well is grouted with cement to 14m. The well is grouted well into the layered limestone. Water was found at 51.8m, 67m and 82m. This is a flowing artesian well (flows at 68 L/min.).

Site (Name): Well # 3**Type:** Source**Sub Type:****Comments:**

Well # 3 was well drilled using a rotary air percussion machine that installed a 20.91 cm diameter steel casing from 40 cm above surface down to 46.1m. The well is grouted with cement and hole plug to 46.1m. The well is grouted well into the layered limestone. Water was found at 71.7m, 78.8m and 86.8m. This is a flowing artesian well (flows at 55 L/min.). This well will provide water to Phase III of the Hyde Park Residences Inc. Project.

Site (Name): Hyde Park Well Pumping Station**Type:** Source**Sub Type:****Comments:**

The Hyde Park Well Supply System consists of two groundwater well submersible pumps pumping water into the pump house. These two pumps are controlled by an automatic switchover that defaults to a standby-pump when one fails. The control panel alternates between pumps in normal operations, however, at this time well # 2 is not in use. A flow control valve is used to prevent flow exceedences. An ABB Kent electromagnetic flow meter measures the flow into the station from either well. Sodium Hypochlorite is injected into the ground water by GALA prominent metering pumps (one duty and one standby) drawing from a 100 litre chemical solution tank. Water is then directed to three interconnected storage reservoirs. This provides contact time for the system. The reservoirs then feed two alternating high lift pumps rated at 8.13 L/s at 60.5 TDH that supply the distribution subsystem. An ABB Kent electromagnetic flow meter measures the flow of treated water to the system. Turbidity and chlorine are monitored at this point by two continuous analysers. An ABB Kent turbidity analyzer is used for turbidity and a Prominent Dulcometer is used for free chlorine levels. A SCADA system compiles records and generates alarms for the required system parameters. A data logger records the well flows, treated water flows, chlorine residuals and turbidity. Alarms are activated on well chlorine and high lift pump failures and disables the high lift on low and high level reservoir cut-offs alarms.

INSPECTION SUMMARY:

Introduction

- **The primary focus of these inspections is to confirm compliance with Ministry of the Environment legislation and control documents, as well as conformance with Ministry drinking water related policies for the inspection period. The Ministry has taken a multi-barrier approach in the inspection of this water system focusing on the water source, treatment and distribution components, monitoring programs, and response to adverse water quality incidents.**

This inspection does not in any way suggest that all applicable legislation and regulations were evaluated. It is, and remains the responsibility of the owner, to ensure compliance with all applicable legislative and regulatory requirements.

Safe Drinking Water Branch (SDWB) Inspector, Jean Veilleux conducted an inspection of Hyde Park Residences Inc. Well Supply on August 20, 2009. A site visit, microbiological sample collection and detailed inspection as well as an interview with Mr. Keith Brownlee, operator and Mr. Andrew Stockman, Property Manager, was conducted. The following documents were used during the inspection:

- Safe Drinking Water Act 2003
- O. Reg. 170/03
- Permit to Take Water (PTTW) # 5717-6EQJN3
- Certificate of Approval (C of A) # 1626-5E2JZT
- C OF A # PB260029549RR-01 Relief from regulatory requirements Lead
- PTTW Pumping Test # 5127-7S2QUK

Source

- **The drinking-water system was registered with the Ministry of the Environment.**
- **The owner had updated the drinking-water system registration information to reflect pertinent changes to the profile.**

All information is correct, however, one operator mentioned as a contact is no longer with the operating authority and should be amended.

- **There were no obvious potential sources of pollution in or around the source that could impair source water quality.**

The wells for this system are well away from any surface source of contamination. To the North, where phase three of the project will be developed, a third well has been drilled and a pond nearby will be filled. To the East, an existing municipal recreational area with soccer, baseball and tennis fields are not likely to pose any concerns for the wells. To the South is a municipal street and to the West is a grocery store.

- **The owner was maintaining the well in a manner sufficient to prevent entry into the well of surface water and foreign materials.**

During the inspection this inspector mentioned that better mounding could be used around the wells which were covered by small wooden ornaments. The owner immediately ordered this item be addressed and an e-mail received by this on September 1, 2009, the owner affirmed that this minor issue was addressed.

Treatment Processes

Treatment Processes

- **The system is capable of providing the required minimum level of treatment, as confirmed by a statement prepared by a Professional Engineer, or an exemption from Schedule 2 of O.Reg. 170/03.**

C of A # 126-5E2JZT requires that the disinfection facilities in the water treatment plant are operated and maintained in such a manner and with such facilities as is necessary to be in accordance with the Ministry Procedure B13-3 entitled "Chlorination of Potable Water Supplies in Ontario", dated January 2001, as amended from time to time. The facility has all the instruments and equipment required by the C of A.

- **An Engineering Evaluation Report was prepared as required by Schedule 21 of O. Reg. 170/03.**

An engineer's statement of equipment compliance was submitted under s. 21-2(3) as a result of this system possessing a C of A issued after Aug. 1, 2000. P III form 9 NOTICE OF COMPLETION OF AN ENGINEERING EVALUATION REPORT FOR NEW OR ALTERED SYSTEMS and P III form 10 DECLARATION OF PROFESSIONAL ENGINEER TO BE INCLUDED WITHIN AN ENGINEERING EVALUATION REPORT both signed and dated October 21, 2003 were present in the facility binder. This in turn revokes C of A # 1626-5E2JZT issued under Section 52 of the Ontario Water Resources Act on November 25, 2002 according to Section 10 subsection 3. of O. Reg. 170/03. Well # 2 is not in use at this time. There is an existing hydrogeological report prepared by Golder for well # 2 and it will be included with an EER presently being prepared for the owner. This EER will be presented to the Ministry in the near future since Phase III of the Hyde Park Residences Inc. Well Supply System is to be undertaken shortly.

- **On the date of the inspection, all treatment specified within the Engineering Evaluation Report was in place and being used.**

Logbooks

- **Logs or other record keeping mechanisms were provided to record information concerning the drinking-water system.**

Detailed log sheets are kept as records for the operations of the system. A Weekly System Inspection Record for the Hyde Park Well Supply System is used to record the date and time, operator's name, raw and treated flow information, pressure and turbidity, chlorine-pH analyzer, chlorination tank levels, pump settings and chlorine residuals and cisterne level. A comment section permits the operator to include details on the system. Detailed sampling records are also kept for:

- Distribution sampling
- Raw water sampling
- Turbidity readings
- Quarterly sampling
- Additional sampling

A daily calendar also records the daily chlorine residuals taken from the system. The time, residual level and operator identity is recorded on this calendar. THE LOCATION OF THE DISTRIBUTION TEST OF FREE CHLORINE SHOULD BE INCORPORATED ON THE CALENDAR SHEET.

Consumer Relations

- **Required documents were made available free-of-charge during normal business hours at a location accessible to the public.**

Certification and Training

- **All operators and trained persons did possess the required certification.**

The Hyde Park Residences Inc. Well Supply is a Limited Groundwater Subsystem. During the inspection period, the

Certification and Training

system was operated by Brownlee Water Quality Management Inc. Keith Brownlee holds a Limited Ground Water System certificate # 16983 expiring on July 31, 2011. Evan Thompson, an operator, holds a Water Treatment Subsystem Class 1 certificate # 56401 expiring on June 30, 2011. Holly Keller, another operator at the system holds a Limited Surface Water Subsystem certificate # 57837, expiring on November 30, 2011.

- **A person other than a certified operator or water quality analyst conducted tests and that person was working under the supervision of a certified operator.**

Four individuals are trained to take free chlorine residuals in the Water Distribution System: John McCullough, Brian Landon, Ralph Heazle and Henry Janssens and are supervised by a certified operator.

Water Quality Monitoring

- **Raw water microbiological sample requirements prescribed by legislation were being met.**

Raw water samples are taken monthly.

- **All microbiological water quality monitoring requirements for distribution samples have been met.**

Distribution samples are taken bi-weekly. This inspector noticed that all distribution bacteriological samples are grabbed from a single location, 192 Oakleaf St. As a best practice, it would be prudent to vary the sampling location to represent the whole of the distribution subsystem.

- **All physical/chemical water quality monitoring requirements prescribed by legislation were being met.**

- **Sampling requirements for lead were being met as prescribed by schedule 15.1 of O. Reg. 170/03.**

Previous lead testing for the Hyde Park Residences Inc. was as follows:

DATE: LOCATION RESULTS

04-Jul-05	Distribution: Hyde Park Residences Inc. Well Supply	1 ug/L
17-Jan-07	Distribution: Hyde Park Residences Inc. Well Supply	1 ug/L
12-Jul-07	Distribution: Hyde Park Residences Inc. Well Supply	1 ug/L
14-Feb-08	301 Chestnut Green Pb1 Plumbing	1 ug/L
14-Feb-08	301 Chestnut Green Pb2 Plumbing	1 ug/L
28-Feb-08	308 Chestnut Green Pb1 Plumbing	28 ug/L
28-Feb-08	308 Chestnut Green Pb2 Plumbing	1 ug/L
06-Mar-08	192 Oakleaf Pb1 Plumbing	1 ug/L
06-Mar-08	192 Oakleaf Pb2 Plumbing	1 ug/L
06-Mar-08	410 Grassendale Pb1 Plumbing	1 ug/L
06-Mar-08	410 Grassendale Pb2 Plumbing	1 ug/L
07-Mar-08	308 Chestnut Green Pb1 Plumbing	1 ug/L
07-Mar-08	308 Chestnut Green Pb2 Plumbing	1 ug/L
14-Mar-08	338 Chestnut Green Pb1 Plumbing	1 ug/L
14-Mar-08	338 Chestnut Green Pb2 Plumbing	1 ug/L
28-Aug-08	401 Grassendale Pb1 Plumbing	1 ug/L
28-Aug-08	401 Grassendale Pb2 Plumbing	1 ug/L
28-Aug-08	301 Chestnut Green Pb1 Plumbing	1 ug/L
28-Aug-08	301 Chestnut Green Pb2 Plumbing	1 ug/L
04-Sep-08	192 Oakleaf Pb1 Plumbing	1 ug/L
04-Sep-08	192 Oakleaf Pb2 Plumbing	1 ug/L

It is noted that for the period of December 15, 2007 to April 15, 2008 seven (7) plumbing samples were collected for

Water Quality Monitoring

the system and tested for lead. This includes an adverse result necessitating re-samples.

It is noted that for the period of June 15, 2008 to October 15, 2008 three (3) plumbing samples were collected for the system.

This system has received a Relief from Regulatory Requirement under Part VI, of the SDWA for parts of Schedule 15.1 of O. Reg. 170/03. The owner has provided documentation informing the inspector that conditions 4.2 i. – ii. (Sic) of C of A # PB260029549RR-01 has been complied with. The owner has sampled one point of distribution on April 16, 2009:

DATE: LOCATION RESULTS

16-Apr-09 Hyde Park Pb 1 ug/L

A lead test was conducted on April 16, 2009 on the Distributed Drinking Water by an accredited laboratory and was labelled as HYDE PARK PB. Please note that the samples were collected one day past the April 15, 2009 deadline in PART 4 – TERMS AND CONDITIONS of C of A # PB260029549RR-01. No other results for lead testing for the period of December 15, 2008 to April 15, 2009 were apparent in the documentation this inspector received. This indicates that the owner has not completely complied with the requirements of the above C of A.

The next period of lead testing is now in force (June 15, 2009 to October 15, 2009) The owner and operating authority are instructed to follow the requirements of PART 4 – TERMS AND CONDITIONS of C of A # PB260029549RR-01 to ensure compliance. A minimum of one sample from a private residence's plumbing will be required. It is important to note that this sample is still to conform to Schedule 15.1-7 subsections (1) and (2) of O. Reg. 170/03.

- **Disinfectant residual was being monitored in accordance with the legislation.**

Chlorination is used to disinfect the well water for this system. Two pumps supply sodium hypochlorite to the well water as it enters the reservoirs. Contact time is achieved by three underground storage reservoirs located adjacent to the station. Water is supplied from the reservoirs to the system using two high lift pumps. Free chlorine residual for the primary disinfection system is monitored as the water exits the pumping station on its way to the distribution system. A Prominent Dulcometer direct reading free chlorine and pH analyzer is on line and provides a direct reading of the residual. The analyzer is monitored by an ABB Kent SM 1000 electronic recorder and a Metcon Echo Dial automatic dialler. The chlorine analyzer is set to alarm if the free chlorine residual lowers to 0.40 mg/L. If an alarm occurs, an operator is dispatched immediately to respond to the occurrence.

- **Chlorine monitoring for secondary disinfection was being done in accordance with regulatory requirements.**

Free chlorine residuals are verified daily by trained persons. These persons have direct communication with an operator from the operating authority.

- **Chlorine monitoring was being done with an appropriate device.**

A HANNAH instrument portable chlorine analyzer is used to verify free chlorine residuals in the distribution system.

- **Turbidity monitoring was being carried out in accordance with regulatory requirements.**

Records indicate raw water turbidity is tested on site every month.

Water Quality Assessment

- **Records show that the water provided by the system met the requirements of the prescribed Ontario Drinking-Water Quality Standards.**

Reporting & Corrective Actions

- **All required notifications of adverse water quality incidents were provided to the Spills Action Centre and**

Reporting & Corrective Actions

to the Medical Officer of Health.

- All reporting requirements for lead sampling were complied with as per schedule 15.1-9 of O.Reg. 170/03.
- Corrective actions (as per Schedule 18) had been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health.

Other Inspection Findings

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

Not Applicable

SIGNATURES

Inspected By:

Jean Veilleux

Signature: (Provincial Officer)

Reviewed & Approved By:

James Mahoney

Signature: (Supervisor)

Review & Approval Date: 05/10/2009

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.