# **Technical Bulletin**

#### Wells Regulation – Licensing (Class 5) for Individuals who Perform Tests on Wells

This technical bulletin is one in a series of seventeen <sup>1</sup> on well issues created for a person who:

- may have a new test hole <sup>2</sup> or dewatering well <sup>3</sup> constructed in the future,
- is using testing, sampling and monitoring equipment in a well, including a test hole or dewatering well, or
- currently owns a test hole or dewatering well.

The purpose of this technical bulletin is to summarize the information found in the *Test Holes and Dewatering Wells – Requirements and Best Management Practices* manual published by the Ministry of the Environment, April 2014 (hereon in referred to as the "Manual") regarding licensing for certain activities performed on a well, including a test hole or dewatering well.

This technical bulletin should be read in conjunction with the Wells Regulation – Well Construction Licensing, Wells Regulation – Test Hole & Dewatering Well Construction Licensing and Wells Regulation - Exempted Activities Performed on Wells, Including Test Holes & Dewatering Wells technical bulletins.



 $<sup>^1</sup>$  A list of the seventeen technical bulletins is shown in the Additional Information Sources section near the end of this technical bulletin.

<sup>&</sup>lt;sup>2</sup> A "test hole" means a well that, (a) is made to test or to obtain information in respect of ground water or an aquifer, and (b) is not used or intended for use as a source of water for agriculture or human consumption, subsection 1(1) of the Wells Regulation, e-laws: <u>http://www.e-laws.gov.on.ca/html/regs/english/elaws\_regs\_900903\_e.htm</u>

<sup>&</sup>lt;sup>3</sup> A "dewatering well" means a well that is not used or intended for use as a source of water for agriculture or human consumption and that is made, (a) to lower or control the level of ground water in the area of the well, or (b) to remove materials that may be in the ground water, subsection 1(1) of the Wells Regulation, e-laws: <u>http://www.e-</u>laws.gov.on.ca/html/regs/english/elaws\_regs\_900903\_e.htm

Well construction licensing requirements are found in the Ontario Water Resources Act and Regulation 903 (Wells Regulation) as amended made under the Ontario Water Resources Act. Constructing wells using trained individuals helps reduce the risk of contaminating water supplies and groundwater resources.

#### **Understanding the Term Construct**

"Construct" when used with respect to a well, means bore, dig, drill or otherwise make, extend or alter <sup>4</sup>. "Construct" also means installing equipment in or connected to a well <sup>5</sup>.

Many individuals install equipment in or connected to a well for sampling, testing and monitoring purposes.

Installing equipment in or connected to a well for inspecting, testing, sampling or monitoring purposes meets the definition of "construct" with respect to a well.

Licensing requirements are in place for constructing wells using equipment such as a drill or auger rig. Those requirements are detailed in the *Wells Regulation – Licensing for Test Hole and Dewatering Well Construction* and *Wells Regulation – Well Construction Licensing* technical bulletins.

There are some exemptions to licensing and construction requirements in the Wells Regulation and Ontario Water Resources Act for activities that are generally considered to pose a lower environmental risk; however, any construction activity on a well, including a test hole or dewatering well, must not cause or have the potential to cause impairment to the quality of the water in the well or the groundwater, as required under subsection 30(1) of the Ontario Water Resources Act.

The exemptions are outlined in the *Wells Regulation - Exempted Activities Performed on Wells, Including Test Holes & Dewatering Wells* technical bulletin.



<sup>&</sup>lt;sup>4</sup> Ontario Water Resources Act, R.S.O. 1990, c. O. 40: ss. 35(1), e-laws: <u>http://www.e-laws.gov.on.ca/html/statutes/english/elaws\_statutes\_90040\_e.htm</u>

<sup>&</sup>lt;sup>5</sup> Ontario Water Resources Act, R.S.O. 1990, c. O. 40: ss. 35(2), e-laws: <u>http://www.e-laws.gov.on.ca/html/statutes/english/elaws\_statutes\_90040\_e.htm</u>

#### **Class 5 (Monitoring, Sampling, Testing and Non-Powered Construction) Well Technician Licence**

A class 5 well technician licence is a licence authorizing the holder to do the following:

- Install and supervise the installation of monitoring, sampling or testing equipment in a well, other than equipment used to test the yield of the well or the aquifer,
- Install and supervise the installation of pumps in a test hole or dewatering well for monitoring, sampling or testing purposes, and
- Construct and supervise the construction of test holes and dewatering wells by any method that does not use powered equipment.

Typically, activities such as sampling well water or measuring water levels or installing sampling, monitoring and testing equipment in a test hole or dewatering well are exempt from the licensing sections of the Ontario Water Resources Act (sections 36 to 50) and the Wells Regulation. See the *Wells Regulation - Exempted Activities Performed on Wells, Including Test Holes & Dewatering Wells* technical bulletin for further information.

#### Examples When the Class 5 Well Technician Licence Applies

The following are examples of activities for which a Class 5 well technician licence is required:

- Installing permanent monitoring equipment in a municipal or domestic well where a pumping test or yield test is not being performed,
- Installing a pump and associated pumping equipment in a test hole to test the yield of the well or the aquifer, and
- Constructing a test hole or dewatering well without the use of powered equipment if the shallow works exemption does not apply.

#### Other Licensed Persons Who Can Perform Class 5 Licensed Work

A person who holds a class 4 (pump installation) well technician licence can perform and supervise the equipment installation activities found in the Class 5 licence but not the construction of a well by non-powered equipment activities.

A person who holds a class 1 (Drilling) or 2 (Digging or Boring) well technician licence can perform and supervise the non powered construction activities found in the Class 5 licence, but not the installation activities.



There is an exemption from Class 5 licensing requirements for experienced, qualified professionals that are either employed by a duly licensed well contractor or are a holder of a well contractor licence. See the "Professional Exemption from Class 5 Well Technician Licence" section of this technical bulletin.

## **Responsibilities of a Class 5 Well Technician Licence Holder**

The responsibilities of a well technician licence holder are to:

- Ensure that s/he works for a licensed well contractor or a provincial Ministry of the Crown.
- Ensure that s/he and any person under his/her supervision meet the requirements of the Wells Regulation, the Ontario Water Resources Act and any other applicable provincial legislation relevant to constructing a well.
- Ensure that s/he only works or supervises work as specifically authorized by the well technician licence that s/he holds.
- Ensure that s/he only supervises up to two pieces of well construction equipment at any one time. This number refers to the pieces of equipment and not necessarily the number of people a well technician can supervise.
- Have the well technician licence or a photocopy of the entire licence onsite at all times during well construction activities and produce it upon request of an employee or agent of the Ministry.
- Report, in writing, any change to the information previously provided to the Ministry in relation to the licence to the Director under the Act within ten (10) days of the change.
- Submit an application form and the required fee to renew the licence by March 31 of each year.
- Return any assistant well technician identification card immediately to the Ministry, when s/he becomes a well technician.
- Successfully complete continuing education courses. After a licence has been renewed for the first time, a minimum of 14 hours of Ministry approved continuing education courses must be taken every 3 years in order to renew a well technician licence that is identified as a Class 5.

## Exemption from Class 5 Well Technician Licence for Certain Professionals

An experienced professional who works for a licensed well contractor does not require a well technician licence for Class 5 well technician licence activities if the professional:

• holds a licence, limited licence or temporary licence under the Professional Engineers Act,



- holds a certificate of registration under the Professional Geoscientists Act, 2000 and is a practicing member, temporary member or limited member of the Association of Professional Geoscientists of Ontario, or
- is registered under subsection 8 (2) of the Ontario Association of Certified Engineering Technicians and Technologists Act, 1998, being chapter Pr7, and is an ordinary member of the Association continued under that Act.

When undertaking activities as described in Class 5, experienced professionals exempted from the Class 5 well technician licensing requirement must be either employed by a duly licensed well contractor or be a holder of a well contractor licence.

The requirement for a well contractor licence ensures that there is minimum liability insurance coverage and that experienced professionals are working at well construction activities.

The licensed well contractor does not need to be on site when the exempted professional (e.g., P. Eng, P. Geo or CET) is undertaking Class 5 well technician licence activities.

## **Exempted Professionals Supervising Unlicensed Persons**

An exempted professional [e.g. Professional Engineer (P. Eng), Professional Geoscientist (P. Geo), and Certified Engineering Technologist (CET)] who does not hold a well technician licence, but who works for a holder of a well contractor licence can only supervise a person who is conducting well construction activities associated with a Class 5 well technician licence if the supervised person:

- is an exempted professional or
- holds a valid Class 5 well technician licence.

If the exempted professional intends to supervise an "assistant well technician", the exempted professional must hold the correct class of well technician licence.

#### Individual Land Owner Exemption

The requirement to hold a class 5 well technician licence does not apply to a person who works at the construction of a well:

- on land owned by the person or by a member of the person's household; or
- for another person on land owned by the other person or by a member of the other person's household without remuneration or financial exchange.



Individual land owners and their families can work on wells on their own property as long as no remuneration or financial exchange occurs. If the land owner is a business (corporation, partnership, sole proprietor) or a provincial government agency, an employee must have a proper well technician licence to construct a well and the business or government agency must have a well contractor licence.

Although there are exemptions from the licensing requirements in the Ontario Water Resources Act (sections 36 to 50), the person must still meet the requirements in the Wells Regulation. Knowledge of the Wells Regulation and the equipment, materials and expertise needed to properly and safely construct a well can exceed the average land owner's abilities and resources.

For instance, there may be explosive gas or pressurized groundwater within the well. If the person, including the well owner, does not have the necessary equipment or cannot employ proper safety procedures, then s/he should not perform the construction activity on a well.

A properly qualified professional or a well technician with a valid well technician licence of the correct class, working for a well contractor with a valid well contractor licence should be retained to perform the well construction activity on the well.

## **Exempted Wells & Shallow Works**

The Wells Regulation exempts certain types of wells, such as a pond or trench, from the Wells Regulation and from the sections on licensing of the Ontario Water Resources Act that pertain to wells <sup>6</sup>.

A person who constructs, maintains or abandons a shallow works that meets the conditions set out in section 1.1 of the Wells Regulation:

- is exempt from the sections on licensing of the Ontario Water Resources Act that pertain to wells, <sup>7</sup> and
- need only meet the requirements found in section 1.1 of the Wells Regulation.



<sup>&</sup>lt;sup>6</sup> Sections 36 to 50 of the Ontario Water Resources Act, R.S.O. 1990, c. O. 40, e-laws: <u>http://www.e-laws.gov.on.ca/html/statutes/english/elaws\_statutes\_90o40\_e.htm</u>

<sup>&</sup>lt;sup>7</sup> Sections 36 to 50 of the Ontario Water Resources Act, R.S.O. 1990, c. O. 40, e-laws: <u>http://www.e-laws.gov.on.ca/html/statutes/english/elaws\_statutes\_90o40\_e.htm</u>

The shallow works exemption contained in section 1.1 of the Wells Regulation does not apply to a monitoring well that is constructed as part of a phase one or two environmental site assessment for a record of site condition  $^{8}$ .

See the Wells Regulation – Understanding a Well, Test Hole and Dewatering Well and Wells Regulation – Shallows Works technical bulletin for further information.

## Water Supply Wells

Certain licensing and construction requirements for water supply wells are different from the requirements for test holes and dewatering wells as defined by the Wells Regulation. For further information on the requirements for water supply wells see the *Water Supply Wells – Requirements and Best Management Practices* Manual, published by the Ministry of the Environment, December 2009 and the Wells Regulation.

## **Additional Information Sources**

The seventeen technical bulletins on test holes and dewatering wells are:

- Wells Regulation Understanding the Meaning of Well, Test Hole and Dewatering Well
- Wells Regulation Shallow Works Test Holes & Dewatering Wells
- Wells Regulation Exempted Activities Performed on Wells, Including Test Holes & Dewatering Wells
- Wells Regulation Test Hole and Dewatering Well Licensing
- Wells Regulation Licensing (Class 5) for Individuals who Perform Tests on Wells
- Wells Regulation Site Considerations & Initial Planning for Test Holes & Dewatering Wells
- Wells Regulation Constructing New Uncased Test Holes & Dewatering Wells in Operation for No Longer than 30 Days
- Wells Regulation Constructing New Test Holes & Dewatering Wells in Operation for No Longer than 180 Days
- Wells Regulation Constructing New Test Holes & Dewatering Wells
- Wells Regulation Constructing New Multi-level Monitoring Test Holes



<sup>&</sup>lt;sup>8</sup> Ontario Regulation 153/04 as amended made under the Environmental Protection Act, R.S.O. 1990, c. E. 19, e-laws: http://www.e-

laws.gov.on.ca/html/statutes/english/elaws\_statutes\_90e19\_e.htm

- Wells Regulation Completing the Structure of the New Test Hole or Dewatering Well
- Wells Regulation Flowing Test Holes & Dewatering Wells
- Wells Regulation Test Hole & Dewatering Well Maintenance
- Wells Regulation Well Record, Reporting & Tagging for a Test Hole & Dewatering Well
- Wells Regulation Test Hole & Dewatering Well Repairs & Alterations
- Wells Regulation Well Abandonment When to Plug & Seal a Test Hole or Dewatering Well
- Wells Regulation Well Abandonment How to Plug & Seal a Test Hole or Dewatering Well

These technical bulletins are available on Ontario.ca.

Further information on the Class 5 Well Technician Licence can be found in Chapter 3: *Exemptions: Wells, Activities & Experienced Professionals* and Chapter 4: *Well Contractor and Technicians – Licences, Responsibilities & Exemptions* of the Manual.

A copy of the *Test Holes and Dewatering Wells – Requirements and Best Management Practices* manual can be obtained on Ontario.ca.

A copy of the Ontario Water Resources Act, Wells Regulation and other regulations can be obtained from the e-Laws website at <u>www.e-laws.gov.on.ca</u>.

The publications are also available by calling the Publications Information Centre at 1-800-565-4923 or (416) 325-4000.



For further information about wells, contact the Wells Help Desk at 1-888-396-9355 (Well) or the nearest Ministry of the Environment office listed in the blue pages of the telephone directory.

Notice: This bulletin is being provided for information purposes only and is not intended, nor should it be construed as providing legal advice in any circumstances. The applicable environmental legislation, including the following, should be consulted.

- Ontario Water Resources Act, R.S.O. 1990, c. O. 40
- R.R.O. 1990, Regulation 903 (Wells) as amended made under the Ontario Water Resources Act, R.S.O. 1990, c. O. 40
- Ontario Regulation 153/04 as amended made under the Environmental Protection Act, R.S.O. 1990, c. E. 19

Legislation and regulations change from time to time so it is essential that the most current versions be used.

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#### Table 1: Activities Permitted by Class of Well Technician Licence–Test Holes and Dewatering Wells

 $\mathbf{x}$  – indicates that the activity is not permitted

 $\checkmark$  – indicates that the activity is permitted

 $\checkmark$  – indicates that the activity is permitted under specific circumstances and/or with restrictions

	Activities	No Licence Required	Class 5	Class 4	Class 3 (Driving/Jetting Wells Only)	Classes 1 & 2*
Test Hole & Dewatering Wells	Inspect well	<ul> <li>Must not leave equipment unattended</li> </ul>	~~	<b>~</b>	<ul> <li>Must not leave equipment unattended</li> </ul>	<ul> <li>Must not leave equipment unattended</li> </ul>
	Install Equipment to Monitor, sample or test	<ul> <li>No alteration other than notching the top of casing</li> <li>Equipment must not be used to test yield of well or aquifer</li> </ul>	√√	11	<ul> <li>No alteration other than notching the top of casing</li> <li>Equipment must not be used to test yield of well or aquifer</li> </ul>	<ul> <li>No alteration other than notching the top of casing</li> <li>Equipment must not be used to test yield of well or aquifer</li> </ul>
	Install pump (for purposes other than sampling)	×	×	<b>~</b>	×	×
	Construct well	×	✓ Only with non- powered equipment	×	<ul> <li>Driving or jetting only</li> </ul>	<ul> <li>Class 1 – drilling only</li> <li>Class 2 – digging or boring (augering)</li> </ul>
	Abandon well	×	✓ Only with non- powered equipment	×	<ul> <li>✓</li> <li>If well was driven or jetted</li> </ul>	<ul> <li>Class l can abandon all wells</li> <li>Class 2 can only abandon dug or bored wells</li> </ul>

\*For the purposes of this table classes 1 and 2 are combined as they both apply to physically constructing the well. Class 1 is for drilling equipment and class 2 is for digging and boring equipment.

