

Summary of Review of Stakeholder Comments on Proposed New Groundwater and Water Well Act			
Date	Source of Comment	Comment/Question	Disposition
March 22, 2012	Manitoba Water Well Association - Meeting between Manitoba Water Well Association & Manitoba Conservation and Water Stewardship	1) The Manitoba Water Well Association is concerned that improper well hook-ups can lead to well water contamination and other water related problems under certain conditions (i.e., property damage and safety under flowing artesian well conditions). They requested that pump installer certification be included within Part 3 - Licensing and Certification of the proposed Act.	1) The Department recognizes the need to ensure protection of groundwater during well hook-ups and that the requirements for pump installer certification will likely need to cover a number of pump and equipment related considerations (such as excavation, plumbing, pump selection and installation, electrical and inspection). Subsequently, the Department maintains that this program requires further consideration and is best managed through a regulation under the proposed Act. The well drilling industry and plumbers (who do well hook-ups and pump installations) will be invited to participate in regulation development for well hook-up and pump installer certification.
		2) The Manitoba Water Well Association is of the opinion that only well drillers or persons under the supervision of a well driller should seal a well. They are concerned that the improper sealing of a well can cause or lead to water quality problems.	2) The Department recognizes that all persons sealing wells need to know how to properly seal a well. Standards for sealing a well will be developed through a regulation under the proposed Act. Individuals sealing wells as a business (whether or not they are a well driller) will need to be certified to undertake this important work. Restrictions on sealing certain types of wells will also be placed on well sealers to ensure they are working within their ability to seal wells. The well drilling industry will be invited to participate in regulation development for well sealers.
March 22, 2012	Groundwater Web Site - E-mail from Claude Gagne	A concern relates to contamination of the return water in an open loop geothermal system.	The Department plans to deal with geothermal well construction matters such as this through regulation.
March 22, 2012	Groundwater Web Site - E-mail from Richard Small	Concerns relating to 1) monitoring of industry, including any productivity that could result in chemical or odiferous contaminants to affect the human consumption of fresh well water (such as farming effluents, oil industry processing, waste disposal, and drainage systems that could be leaked into the ground aquifers) and 2) enforcement and stricter purification of waste water in all regions.	These concerns are primarily dealt with under <i>The Environment Act</i> and its Regulations.
March 22, 2012	Groundwater Web Site - E-mail from Debbie Watt	Supports whatever needs to be done to save our groundwater from contamination.	The Department acknowledges and appreciates this support.
March 26, 2012	Telephone Conversation - Bob Betcher & Dennis Antony	Enquiry on how installers of shallow venting wells (for hydrocarbon gasses) and shallow groundwater monitoring wells at petroleum clean-up sites would be licensed and certified.	Shallow venting wells would not be defined as wells under the current or proposed Act and so would not be covered. The licensing and certification requirements for installers of shallow environmental groundwater monitoring wells will be specified by regulation. The environmental sector will be invited to participate in the development of such regulation requirements.

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March 28, 2012	Telephone Conversation - Bob Betcher & Grant Koropatnick (Association of Professional Engineers and Geoscientists of Manitoba)	Advised us that the Association of Professional Engineers and Geoscientists of Manitoba (APEGM) had received the Department's consultation letter regarding the proposed Act. They will be 1) sending an e-mail to all their members referring them to the Department's web site, indicating that a Comprehensive Discussion Document which included a consultation draft of the proposed legislation was available upon request, and that members could provide individual comments directly to the Department 2) forwarding the consultation letter to their legislative committee for comment.	The Department appreciates the APEGM contacting all of their members and informing them of the proposed Act on behalf of the Department, and welcomes any comment from their legislative committee. Post Consultation Note, no comment on the proposed Act was received from APEGM's legislative committee.
March 30, 2012	Groundwater Web Site - E-mail from TY	Concern regarding fluoridation of water supplies.	Issues concerning fluoridation of public water supplies should be addressed to The Office of Drinking Water or to Manitoba Health.
March 30, 2012	Groundwater Web Site - E-mail from Aprille Dalman	That considerations be made for existing or new gravel pits and that they follow all guidelines.	Pits and quarries are dealt with in <i>The Mines and Minerals Act</i> under the Quarry Minerals Regulation. The pumping of significant volumes of water from pits or quarries is licensed under <i>The Water Rights Act</i> . The Department has included the sealing of wells drilled for quarry mineral exploration in the proposed Act based on consultation with the Mines Branch. The Mines Branch and quarry minerals industry will be invited to participate in the development of regulatory requirements for the sealing of wells drilled for quarry mineral exploration.
April 3, 2012	Telephone Conversation - Bob Betcher & Ray Bodnaruk	Main point was that Aquifer Management Plans likely should reside in <i>The Water Protection Act</i> . Also suggested that the interface between this proposed Act and other existing Acts could be looked at more closely.	The Department chose to include Aquifer Management Plans in the proposed Act as it encompasses and is a specific link to the management and protection of groundwater.

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April 10, 2012 & April 12, 2012	Groundwater Web Site - E-mails from Rick M. Lemoine (Suncor Energy Products Partnership)	April 10, 2012 - In general, is in agreement with the proposed actions as cited in the Discussion Paper. Questions related to: 1) the opportunity for stakeholder review of the actual draft revisions to the new Act prior to anything being finalized 2) the proposed definition for a "geotechnical hole" 3) well sealer certification for geotechnical holes and monitoring wells 4) confidentiality of drilling reports for geotechnical holes April 12, 2012 - Questions related to: 5) the requirement to submit drilling reports for test holes or wells that do not encounter an aquifer 6) the requirement to report contaminated wells during environmental site assessment work 7) the requirement of a professional engineer or professional geoscientist to provide a copy of a drilling report to the well drilling contractor when the work is under the supervision of such professional	A copy of the Comprehensive Discussion Document was provided to Mr. Lemoine which served to answer questions 2 and 3. In response to the remaining questions: 1) Members of the public may present oral and written submissions concerning proposed Bills during the Committee Stage of the legislative review process. 4) Matters relating to confidentiality of well construction and sealing reports will be dealt with by regulation. The current Well Drilling Regulation addresses this matter under section 9. 5) The requirements for submission of drilling reports will be examined and developed through regulation. Note - The Department likely will not require reporting of shallow test holes or monitoring wells, especially for geotechnical investigations and contaminated site work. 6) There will be no requirement to notify the Department of contamination found during environmental site assessment work. 7) The reporting requirements for professional engineers and professional geoscientists are covered under section 50(2) of the proposed Act. The geotechnical and environmental sectors will be invited to participate in regulation development. The proposed Act will specify the circumstances in which there will be a requirement to "stop and notify" if contamination is found during construction or sealing of a well or test hole.
April 12, 2012	Consultation Meeting with Manitoba Geothermal Energy Alliance and its members	Questions and discussion included: 1) What will be the minimum requirements for certification (experience & training), in particular for start-up of smaller businesses and how certification requirements might slow the growth of the industry. What about grandfathering?	1) The details of well drilling certification (experience, training, continued education and grandfathering for both open and closed loop systems) will be examined and developed through regulation. The geothermal sector will be invited to participate in the development of the regulations. The Department does not intend to create any barriers to entry into the geothermal sector. We will look at what's being done now and what other training is available. Our concern is to protect groundwater by making sure that people know what they are doing and that they follow any established standards.
		2) Will thermal aspects of geothermal systems (i.e., thermal pollution) be included in the proposed Act?	2) Our intent is not to licence thermal aspects of geothermal systems as it is outside of the intended scope of the proposed Act. The terms and conditions of thermal aspects of geothermal systems (such as the temperature of supply and return water in open loop geothermal systems) are dealt with under <i>The Water Rights Act</i> .

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		3) Discussion on different types of geothermal installations (What if ground is excavated (i.e., trench) and not drilled? What is considered a well?) and knowledge of intersecting an aquifer.	3) The various types and aspects of geothermal installations will be examined and considered when developing licensing and certification requirements (type of wells and classes of drillers) and construction standards through regulation development. The geothermal sector will play a vital role in the consultation process of regulation development.
		4) The Manitoba Geothermal Energy Association (MGEA) maintains a quality assurance (QA) program and database. These may be of interest to the Department especially with regards to data and reporting requirements for well construction.	4) The function and usefulness of the MGEA QA program and database will be examined and discussed during regulation development.
		5) What about others who drill holes for piles or posts or foundations? What about sewer installers?	The proposed Act is not intended to deal directly with these types of installations. Some larger projects (such as piles or caissons for bridge construction) may be covered under <i>The Environment Act</i> through the environmental approval process but smaller projects (like piles for a house) would not be captured.
		6) The MGEA is concerned about authority granted to the well drilling officer under the proposed Act. For example, the well drilling officer shouldn't be able to just walk in and go through someone's records and computer etc. MGEA understands it, but would like it to be reviewed – privacy issues.	The level of authority for the well drilling officer is in accordance with that of other Acts for other provincial staff such as environment officers and drinking water safety officers. It is for compliance purposes and a power that will not be abused.
April 13, 2012	Consultation Meeting with Manitoba Water Well Association and its members and provincially licensed water well drillers	Questions and discussion included: 1) When will the new Act come into force and will the current Act remain in place until then?	1) The new Act cannot come into force until regulations are developed. There must also be enough time allotted for well drillers and well sealers to become certified. This will likely take one to two years. The existing Act will remain in place until then.
		2) Have we done any analysis on the impact of cost that the new Act will have on well drillers and to well owners?	2) We do not expect the cost to the driller or well owner to be significant. We don't expect the construction or sealing requirements for wells under new regulations to differ much from how they are currently being constructed or sealed. Any new standards will put all drilling firms on the same playing field in regards to the construction and sealing of wells.
		3) It was stated that the well drillers biggest problem is dealing with the public and whether they are supposed to educate well owners? And conservation districts? Doesn't the Province have responsibility to do so?	3) The Province will educate public, conservation districts, etc. on matters related to wells. There is an opportunity for collaboration between the Province and the well drilling sector to develop education material for the public.
		4) Is it our intent to put all contaminated wells on the proposed public registry?	4) Yes, all those declared to be contaminated under the proposed new Act.

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		5) There were a couple questions/discussion related to determining the source of contamination (i.e., septic fields) and septic fields being built on shallow aquifers.	5) Regulation of waste disposal systems such as septic fields are covered by <i>The Environment Act</i> under the Onsite Wastewater Management Systems Regulation. The new Act also allows defining setback distances from sources of contamination through regulation.
		6) For well sealing and rehabilitation – is training to be done?	6) The level of training required for well sealing will be determined through development of well sealing certification. There will be no certification requirements for rehabilitation of wells. We expect industry to train themselves but the Province and industry will work to determine the level of training required for sealing wells. Certificates for well sealing could have restrictions on the kind of wells that person can seal and can be adjusted as experience is gained.
		7) Will the new Act apply to piles and foundations being drilled?	7) The Act is not intended to deal directly with these types of installations. Some larger projects (such as piles or caissons for bridge construction) may be covered under <i>The Environment Act</i> through the environmental approval process but smaller projects (like piles for a house) would not be captured.
		8) With high lake levels, will there be a regulated set-back distance between bodies of water and a well?	8) Not likely by a set-back distance but perhaps a requirement for well head protection in designated flood areas as specified in the proposed Act.
		9) Will there be a single licence requirement for well hook-up/plumbing installations, such as Manitoba Hydro's deep well pump installation licence, or multiple licence requirements?	9) This will be examined and developed when consultation for well pump installer certification is initiated.
		10) If drilling is halted because contamination is discovered, who will pay for our shut down time? And how quickly will we be able to proceed?	10) No provincial compensation would be made if a well driller or well sealer were notified to halt drilling or sealing due to the discovery of suspected contamination. This will be a matter to be dealt with between the well driller and property owner. In terms of response time to a situation such as this, the Department would try to respond as quickly as possible, but it may depend on the situation. Post-Meeting Note, it has been determined that the Department's Emergency Response Team (EMT) will respond to any matters related to the discovery of contamination during the drilling or sealing of a well or test hole. Response times should be minimal. The proposed Act will specify the circumstances in which there will be a requirement to "stop and notify" the Department if contamination is found during construction or sealing of a well or test hole. The proposed Act will also specify that the reporting of any suspected contamination found during the construction or sealing of a well or test hole shall be done through the Department's emergency response line.

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		11) Could we comment on Section 39(2)(b), costs to related to bringing a flowing well under control, and what if it starts to flow after construction. Is a contract overridden by the act?	11) As stated in section 39, the person drilling the well is responsible for control of the flow during construction. Upon completion, with the flow left in a controlled manner, the well owner is responsible for control of the flow. This matter has been discussed with Legal Council. The Act will over-ride a contract.
		12) Well driller should have the responsibility to seal all wells, as they understand it much better than someone who has taken a one or two day course.	Well sealers (who are not drillers) will be required to have a minimum level of experience and training for sealing wells. Standards for sealing a well will be developed through regulation. Restrictions on sealing certain types of wells will also be placed on well sealers to ensure they are working within their ability to seal wells. The well drilling industry will be invited to participate in regulation development for well sealers.
		13) Will there be a grandfathering clause re: driller who only has a few years before retirement - will they have to have annual certification?	There is not expected to be any grandfathering of well driller certification. All well drillers will require annual certification. Sufficient time and resources will be provided for certification prior to this coming into force.
		14) Has there been any study conducted on well contamination due to wood cribbing versus hand dug, backhoe wells, etc.?	Not directly, but a provincial private well sampling program (of about 1000 private wells in 1999/2000) showed that shallower wells (<50 ft depth) and large diameter wells were more likely to test positive for bacteria than deeper wells (>50 ft depth) and small diameter wells, respectively. Sand point wells were least likely to test positive for bacteria.
		14) Comment that some well problems are due to maintenance or other land use issues.	14) Yes and in the proposed Act well owners will be responsible for maintenance of wells and compliance with regulations.
		15) Comment that engineers don't need licences for drilling as they are smarter?	15) No, rather the proposed Act (section 6) specifies that professional engineers or professional geoscientists, using equipment operated by the engineer or geoscientist, do not need to be licensed or certified for the construction or sealing of a test hole, test well or monitoring well. Under their professional Act they should have the required knowledge to undertake this work. It would normally be related to shallow works.
		16) It is understood that the proposed Act and regulations will come into effect simultaneously. What process will be used for development of regulations? There was also a comment that both the MGEA and MWWA must be part of whole process including the ability to meet with Department lawyers from the beginning of the regulation development process.	16) The process for regulation development has not yet been defined but will include consultation with stakeholders.

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		17) Can you comment on liability insurance or limits?	17) This will be examined and details will be developed as part of the regulations.
		18) British Columbia developed an advisory board to deal with regulation issues as they came up, even after development and implementation was completed.	The Department has not yet determined the process for regulation development. This concept can be considered, especially with a good, successful example as this.
		19) What about aquifer management plans including drilling contractors or associations?	19) The consultation process welcomes any person or group to provide input to the plan (section 73(1)). The requirement to consult with associations such as the MWWA or MGEA will be included in the proposed Act.
		20) Questions and comments regarding flowing wells and liability insurance: <ul style="list-style-type: none"><li>• If flow from a well can't be controlled then would a driller have to use their liability insurance if a driller contacts the Department and they determine the driller can't control the flow? Is the Department liable for such statements?</li><li>• Regulation would have to be very strong for insurance to kick in.</li><li>• Well drillers not sure if they could get insurance for all potential flowing well scenarios.</li><li>• Flowing well conditions can vary greatly over small distances.</li><li>• Does the Department still have a flowing well map area and has it been updated?</li></ul>	20) Section 39 deals with the control of flow of water from a flowing artesian well or test hole during and following its construction, and assigns responsibility to the control of flow. Orders can be used for compliance matters when a driller cannot control the flow of water from a well. Drillers may have to assess where they drill and plan better when drilling in potential flowing well areas. The current flowing well map needs to be updated. These issues can be discussed further during development of the regulation.  It is not expected that well drillers will have difficulty in getting liability insurance for drilling in flowing well areas - Ontario's well drilling regulation has a similar requirement; the Department will not be involved in matters regarding the use of liability insurance - it will be a matter between the well driller and its insurer.
		21) Is there not a clause in the current Act about interconnecting aquifers and interconnecting wells? Didn't see it in proposed Act.	21) Yes, section 16 of the existing Well Drilling Regulation. It's related to entrance of non-potable water into an aquifer and intermixing of water. This same matter can be dealt with through regulation in the proposed Act.
		22) Re: Privacy Act – what if customer pays cash and doesn't want their well GPS'd?	22) Well driller has a responsibility to provide any information specified by the Act.
		23) Any provisions for abandoned shallow wells to be found and cleaned up in farm yards?	23) The existing Well Drilling Regulation states that where a well is dry or abandoned, the owner shall seal it. A similar provision can be included by regulation under the proposed Act. Also Conservation Districts have been sealing abandoned farm wells as part of well sealing programs.

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		24) Well owners should have to be educated about well maintenance and wells should be licensed/permitted.	24) Educational material is being considered. There is an opportunity for collaboration between the Province and the well drilling sector to develop education material for the public.
		25) Will conservation district people have to be certified to seal wells?	25) Yes, under the proposed Act all persons sealing wells (as a business) will have to be certified.
		26) All government water programs are broken up and under different branches, departments, Acts. All water related programs should be under ONE person and work together.	26) We try to coordinate work between these various groups.
April 13, 2012	Groundwater Web Site - E-mail from Jason McFarlene (TransCanada)	Has gone through the implementation of similar regulations in Ontario. Suggests more detail be provided around the classification/description of “monitoring” wells as related to environmental soil/groundwater assessment where contamination is expected. It seemed that the legislation in Ontario was written with a significant focus on the installation of drinking water wells. Using that approach caused many grey areas that could not be easily interpreted by drillers/environmental consultants. This seemed to cause both to err on the side of conservatism which greatly increased the cost of monitoring well/borehole installation. Suggests, 1) a separate section specifically dedicated to environmental soil and groundwater assessments/remediation and to the wells/boreholes that are installed during that work, and 2) develop specifics for decommissioning these types of wells.	This is a really good point. The focus of the existing Act is primarily on monitoring wells as related to water supply investigations and groundwater level and water quality monitoring of non-contaminated sites. Work related to contaminated and impacted sites (including any monitoring well requirements) are the responsibility of the Contaminated and Impacted Sites Program. Most often, environmental consultants specify the required construction or sealing of environmental wells and therefore take on the liability associated with their construction or sealing. Well drillers doing the work for these consultants have also complained about the lack of specific well construction or well sealing standards for environmental assessment work. Therefore, the overall requirement for classification of and standards for different types of “monitoring” wells (including environmental wells) will be examined and developed through regulation. This matter will involve a broad consultation and require a significant amount of work.
April 17, 2012	Groundwater Web Site - E-mail from Peter Tataryn (Smith Carter Architects and Engineers)	Is concerned that the increased licensing and certifications requirements proposed in the new Act as related to the processes during the exploration, development, and construction phases of wells for both open and closed-loop geothermal systems might substantially increase and thus jeopardize project schedules and budgets. Also enquires whether there will be staff additions to take care of additional work that might be required to process any new regulation.	The Department believes there will be no increased administrative burden to projects such as this. Changes to the legislation are meant to cover the drilling and sealing of the wells for geothermal systems, not the thermal aspects. Open loop geothermal systems are already covered under the existing Act and <i>The Water Rights Act</i> . For closed loop systems there will be regulations governing the construction/sealing of these wells but this will likely closely follow current industry standards so there should be little change in the process to jeopardize project schedules and budgets. The issue of staffing requirements to implement any proposed changes will also be examined. The geothermal sector will be invited to participate in regulation development.



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April 17, 2012	Telephone Conversation - Bob Betcher & Lewis Hopper	Enquiry regarding the certification requirements for 1) persons performing rehabilitation work on wells and 2) well sealers.	1) The Department has not considered this aspect of well related work. However, well rehabilitation work (such as acidizing wells, iron bacteria control) would not be considered to be part of well construction work and therefore would not require certification. Any modification work that would result in structural alteration to a well would have to be carried out by a licensed and certified well driller. 2) All well sealers would have to be certified but sufficient time would be provided for certification to be obtained prior to the proposed Act coming into force.
April 19, 2012	Groundwater Web Site - Letter from Ted Ross	A list of concerns, including: 1) Extensive Tree Removal 2) Increasing Use of Pesticides and Herbicides by Farmers 3) Illegal Dumping of Manure 4) Make Ditch Farming Illegal – related to, a rain event following field fertilization and/or pest spraying results in quick pollution of runoff. 5) Tiled Fields – concerned with agricultural chemical application and quick runoff through the tiles into major drains. 6) Fertilization and Spraying of Fields in Areas of Steep Slopage – suggests further set back distances are required and must be enforced. 7) Illegal Drainage – suggests heavy fines are needed. 8) Gas Fracking – suggests the need for extensive controls. 9) Off Road Vehicles – potential impacts on creeks, streams and marshy areas, and fires in dry grass. 10) Back-hoe Wells – suggests there may be a large number of wells dug by back-hoe for which there are no records.	These concerns are primarily dealt with under other Acts and not directly related to the proposed Act. The proposed Act requires submission of a well construction report, regardless of who constructs the well or the type of well construction (such as dug wells).

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April 19, 2012	Groundwater Web Site - E-mail from Anandakumar Palanichamy	<p>Comments are mainly related to sustainable use of groundwater, including limiting wells to their regeneration capacity, requiring a hydrogeological estimate of maximum lowest groundwater level due to pumping, or defining the maximum quantity of water to be pumped out of a well in a particular zone depending on its water availability.</p> <p>Comments that in regards to "construction or sealing to stop if contamination found or suspected", the permission granting process to resume work should be quick and predetermined in the regulation, and that in such cases some sort of compensation from the province should be made available to the company.</p>	<p>Issues related to the withdrawal of groundwater are primarily dealt with under <i>The Water Rights Act</i>. Aquifer management plans can also address matters related to water demand management, water use practices and priorities, the conservation of water supplies, and the reduction of water use and consumption during droughts and other periods of water shortage.</p> <p>In regards sections 31 and 32 of the proposed Act, Construction or sealing to stop if contamination found or suspected, the Act will specify under what circumstances notification is required. These sections of the proposed Act are not intended for environmental site assessment work. Rather, it is expected that there would only be a very small number of cases annually in which contamination might be found and construction or sealing work would have to be halted.</p> <p>The Department's Emergency Response Team (EMT) will respond to any matters related to the discovery of contamination during the drilling or sealing of a well or test hole. Response times should be minimal. No provincial compensation would be made if a well driller or well sealer were notified to halt drilling or sealing due to the discovery of suspected contamination. This would be a matter to be dealt with between the well driller and property owner.</p> <p>The proposed Act will specify the circumstances in which there will be a requirement to "stop and notify" the Department if contamination is found during construction or sealing of a well or test hole.</p> <p>The proposed Act will also specify that the reporting of any suspected contamination found during the construction or sealing of a well or test hole shall be done through the Department's emergency response line.</p>
April 19, 2012	Groundwater Web Site - E-mail from Denton Vandersteen, Manitoba Hydro	<p>Manitoba Hydro supports the Departments efforts to strengthen the existing legislation. The following comments were provided:</p> <p>1) agree that it is very important to include geothermal, geotechnical and monitoring wells in the Act</p> <p>2) recommend that the data base include basic information on all types of open and closed loop geothermal ground loop heat exchangers including horizontal and vertical bore.</p> <p>3) ground loop information that should be considered for tracking could include:</p> <ul style="list-style-type: none"><li>• GPS location of the loop field (ground heat exchanger)</li><li>• Loop type description (i.e., horizontal bore, vertical bore, slinky etc.)</li><li>• Type of antifreeze solution</li><li>• Number of boreholes, borehole spacing and grid pattern</li><li>• A site plan of the ground heat exchanger location as required by CSA C448 Design and Installation of Earth Energy Systems</li><li>• Ground/drilling conditions</li></ul>	<p>The Department acknowledges and appreciates Manitoba Hydro's support. The type of data base and ground loop information to be collected will be specified by regulation. Manitoba Hydro will be invited to participate in regulation development.</p>

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April 19, 2012	Groundwater Web Site - Letter from Ron Robins (Manitoba Geothermal Energy Alliance)	<p>The Manitoba Geothermal Energy Alliance (MGEA) supports in principle and in general the initiative to amend <i>The Ground Water and Water Well Act</i>. They provided background information on their membership requirements, QA program and database program.</p> <p>The MGEA's main concerns include:</p> <p>1) Definitions,</p> <p>a) Whether the definition of a "well" addresses directionally drilled closed loops adequately</p> <p>b) Closed Loop Geothermal Drillers should not be considered to have “certified well driller” qualifications. Closed loop geothermal drillers may or may not be installing casing in their wells. Those who do not install casings are traditionally drilling shallow overburden wells, inserting the piping and sealing the well with grout. These wells may be vertical, diagonal or horizontal and may be at varying depths.</p>	<p>The Department acknowledges and appreciates support from the Manitoba Geothermal Energy Alliance.</p> <p>1) a) The definition of a "closed loop geothermal well" is general. Various types of closed loop geothermal wells, including those directionally drilled, will be considered and defined by regulation as needed; b) the requirement for certification of different types of closed loop geothermal drillers and types of wells will be specified by regulation.</p>
		<p>2) Articles,</p> <p>The authority granted by section 63(1), Use of data processing system and copying equipment, may be excessive and could be used indiscriminately. The MGEA understands that there may be times when authority of 63(1) is required however they feel that it should only be granted by a ministerial directive on a case by case basis.</p>	<p>2) The authority under section 63(1), Use of data processing system and copying equipment, is in accordance with that of other Acts for other provincial staff such as environment officers and drinking water safety officers. It is for compliance purposes and a power that will not be abused.</p>
		<p>3) Regulations Development,</p> <p>The MGEA is offering their input into the regulation development process with regards to geothermal drilling, geothermal loop construction, and record keeping. And they strongly recommend the MGEA be on the committee tasked with the responsibility to develop regulations pertaining to geothermal activity.</p>	<p>3) The process for regulation development has not been determined. The MGEA will be invited to participate in regulation development.</p>
		<p>4) Certification and Training Process,</p> <p>The MGEA currently requires certification of all geothermal designers and installers and plan to integrate the requirement for closed loop installer certification as it becomes available. The MGEA suggest that when developing the regulations regarding certification and training, the existing programs be taken into consideration as well as ongoing technical development of the industry. And that the proposed Act require geothermal loop installers be MGEA certified.</p>	<p>4) The requirements for certification of geothermal drillers will be specified by regulation. Existing MGEA certification and training requirements will be examined and considered as part of the regulation development. The MGEA will be invited to participate in regulation development.</p>
		<p>5) Geothermal installation permits,</p> <p>The MGEA suggest the proposed Act require geothermal installation permits be issued by MGEA for all open or closed loop installations.</p>	<p>5) The requirement for geothermal installation permits will be examined as part of regulation development. The MGEA will be invited to participate in regulation development.</p>

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April 20, 2012	Groundwater Web Site - Letter from Anika Terton (Manitoba Eco-Network Water Caucus)	The Manitoba Eco-Network Water Caucus provided a list of potential issues relating to Manitoba's groundwater including overdevelopment, landfills, oil/gas, industrial waste, septic systems, industrial agriculture, bacterial contamination and changes in precipitation and water scarcity. They also provided a list of 20 recommended management actions and strategies to address the above potential issues. And noted their concern with respect to hydraulic fracturing and/or shale-gas extraction in Manitoba.	The Manitoba Eco-Network Water Caucus provided a detailed response to the proposed new Act. Many of their recommended management actions and strategies are related to a variety of water issues that pertain to various government Divisions and/or Acts. There are no specific review comments pertaining to the Discussion Paper and proposed new Act. Rather, general comments are provided that relate to matters such as the need for groundwater protection, public access to information on groundwater resources and regulations for the construction of wells - these matters will all be addressed in the proposed new Act. The issue of hydraulic fracturing and/or shale-gas extraction in Manitoba will be closely regulated by the Petroleum Branch of Manitoba Innovation, Energy and Mines with input from other provincial departments as necessary.
April 20, 2012	Presentation at the Mining Association of Manitoba Environmental Committee meeting	Two questions related to the proposed new Act: 1) Does a diamond drilled test hole for the purpose of exploring for, mining or producing quarry minerals need to be sealed according to the proposed Act 2) Is fracking covered	1) Although the Act doesn't license or certify diamond drilling for mineral exploration, a diamond drilled test hole for the purpose of exploring for, mining or producing quarry minerals would have to be sealed according to any well sealing standards developed by regulation 2) The issue of hydraulic fracturing and/or shale-gas extraction in Manitoba will be closely regulated by the Petroleum Branch of Manitoba Innovation, Energy and Mines with input from other provincial departments as necessary.
April 20, 2012	Groundwater Web Site - Letter from Allyson Desgroseilliers (AMEC Environment & Infrastructure)	A list of comments/questions based on review of the Discussion Paper: 1) Whether horizontal wells including horizontal geothermal systems are included in the Act 2) The lack of definitions 3) Whether a geotechnical test hole would be classified as a well 4) Whether environmental test holes and monitoring wells would be addressed through licensing and certification 5) How "contamination found during construction or sealing" would apply to environmental site assessment work 6) the need to review well sealing standards so that the associated cost could be determined	A copy of the comprehensive document was provided to Ms. Desgroseilliers which served to answer questions 2 and 3. In response to the remaining questions: 1) Horizontal wells used for water well, geothermal and geotechnical application will be considered and defined by regulation as needed. Other types of horizontal or directionally drilled wells (such as those used in pipeline construction) will not be included. 4) The overall requirement for licensing and certification for different types of "monitoring" wells (including environmental wells) will be examined and developed through regulation. 5) There would be no requirement to notify the Department of contamination found during environmental site assessment work. 6) Well sealing standards will be developed through regulation. Any associated costs could be examined following development of the regulation. The proposed Act will specify the circumstances in which there will be a requirement to "stop and notify" the Department if contamination is found during construction or sealing of a well or test hole.

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April 20, 2012	Groundwater Web Site - Letter from Doug Chorney (Keystone Agricultural Producers)	<p>Keystone Agricultural Producers (KAP) provided a few comments specific to the discussion paper,</p> <p>1) Licensing and certification</p> <ul style="list-style-type: none"><li>• ensure that firms and individuals that drill wells and geothermal loops are properly trained</li><li>• consult with stakeholders in these industries to ensure that certification and licensing is done effectively, reasonably and at a minimum cost to these rural companies</li></ul> <p>2) Management and protection of groundwater resources</p> <ul style="list-style-type: none"><li>• ensure that the Department considers the possible impact that proposed changes could have on a farmer's ability to utilize groundwater resources for irrigation purposes. In certain crop sectors like horticulture and potatoes, irrigation is a critical component to a farm operation's success. Therefore consult with the Manitoba Vegetable Growers Association and Keystone Potato Producers Association prior to changes being made</li></ul> <p>3) Regulations</p> <ul style="list-style-type: none"><li>• ensure that after any legislative changes occur, KAP is contacted again to assist as regulations are developed to ensure that they are workable on the landscape and recognize some of the unique challenges that affect farmers and farmsteads</li></ul>	<p>1) Licensing and certification requirements such as training, experience and continued education will be examined and developed through regulation. There will be considerable consultation with the well drilling industry during the development of regulation(s).</p> <p>2) The Department does not anticipate any impact related to the use of groundwater for irrigation purposes. The Manitoba Vegetable Growers Association and Keystone Potato Producers Association will be invited to participate in regulation development If any changes are going to be made.</p> <p>3) Keystone Agricultural Producers will be invited to participate in the regulation consultation process.</p>
April 20, 2012	Groundwater Web Site - Letter from Jeff Bell (Manitoba Water Well Association)	<p>The Manitoba Water Well Association (MWWA) offers the following membership based comments:</p> <p>1) Members are in general in disagreement with the concept of well sealer certification. MWWA feels that a Department developed well sealing certification program could put the government in a negative situation in terms of liability.</p>	<p>1) A well sealer certification program will ensure all well sealers (as a business) have the required training and experience to seal wells. Standards for sealing a well will be developed through regulation. Restrictions on sealing certain types of wells will also be placed on well sealers to ensure they are working within their ability to seal wells. The well drilling industry will be invited to participate in regulation development for well sealers.</p>
		<p>2) Well hook-ups should have been included in the proposed Act. More discussion is needed on this specific aspect.</p>	<p>2) The Department recognizes the need to ensure protection of groundwater during well hook-ups and that the requirements for pump installer certification will need to cover a number of pump and equipment related considerations (such as excavation, plumbing, pump selection and installation, electrical and inspection). Subsequently, the Department maintains that this program requires further consideration and is best managed through a regulation under the proposed Act. The well drilling industry and plumbers (who do well hook-ups and pump installations) will be invited to participate in regulation development for well hook-up and pump installer certification.</p>

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		3) In the protection of aquifers and groundwater, there is a statement about not being allowed to modify a well that could potentially affect the groundwater quality. This statement could also be interpreted to mean well hook ups.	3) This is likely in reference to section 28, Protecting groundwater - well construction and sealing. And yes it could be interpreted to include well hook-ups, but even so, it would have to be done in a manner that does not contaminate or adversely affect groundwater quality.
		4) There is a statement about groundwater emitting an odour as being contaminated. Groundwater in Manitoba can often emit an odour due to naturally occurring constituents.	4) This comment relates to section 30. The statement refers to suspected groundwater contamination where odour is used as an indicator parameter. Suspected groundwater contamination means that the groundwater emits an odour in such a manner that a reasonable person would believe the groundwater to be contaminated. We feel a well driller or well sealer would have reasonable experience to identify suspected contamination through odour.
		5) a) If contamination is found during the construction or sealing of a well and an order is made to cease activities, which party will pay for the lost time, or the work lost for the driller? b) If the Department steps in and takes control of the site where contamination is found, will the Department accept the liability and responsibility of dealing with the particular issue? c) What would occur if the driller inadvertently made the situation worse unknowingly? Some aspects of contamination are not readily noted during the work conducted by our members.	5) a) The Department's Emergency Response Team (EMT) will respond to any matters related to the discovery of contamination during the drilling or sealing of a well or test hole. Response times should be minimal. No provincial compensation would be made if a well driller or well sealer were notified to halt drilling or sealing due to the discovery of suspected contamination. This would be a matter to be dealt with between the well driller and property owner. b) The proposed Act will specify what action is required to investigate suspected contamination. The required action and assignment of liability will likely be based on the current requirements under the Contaminated and Impacted Sites Program. c) The whole intent of this section of the proposed Act is to help identify suspected contamination and reduce the risk of inadvertently making a situation worse than it is. It is not expected that there would be any legal action against the well driller or sealer if they unknowingly made a situation worse than it was. The proposed Act will specify the circumstances in which there will be a requirement to "stop and notify" the Department if contamination is found during construction or sealing of a well or test hole. The proposed Act will also specify that the reporting of any suspected contamination found during the construction or sealing of a well or test hole shall be done through the Department's emergency response line.

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		6) Whether if it is possible to get liability insurance for the cost of sealing a flowing well that gets out of control. Members feel section 39(2) would be very difficult for liability insurers to accept on the well drillers behalf. They also state that in the current Act, this responsibility was on the land owner. Members feel this concept needs a great deal more investigation and thought, with some additional legal opinions being offered.	6) Section 39 deals with the control of flow of water from a flowing artesian well or test hole during and following its construction, and assigns responsibility to the control of flow. Orders can be used for compliance matters when a driller cannot control the flow of water from a well. It is not expected that well drillers will have difficulty in getting liability insurance for drilling in flowing well areas. For example, Ontario's well drilling regulation states the person constructing the well shall construct the well in a manner that prevents any uncontrolled flow of water from the well or at the well site (section 14.7 (1)). They are also required to maintain a minimum amount of liability insurance (section 4). Regarding the current Act, the responsibility of controlling flow from a well is not solely the responsibility of the land owner. Under section 9(2), Costs of controlling flow, the minister may determine the person who is responsible for controlling the flow or output of the water from a well.
		7) In terms of costs for sealing a flowing well, will the proposed Act override a contract that exists between the driller and the land owner?	The Act will over-ride a contract between a driller and land owner.
		8) Regarding aquifer management plans, the MWWA feels they should be allowed to have one representative on each proposed plan.	8) There are two options for a MWWA representative to provide input to an aquifer management plan: Under section 70(a), as a member of an aquifer planning authority appointed by the minister, or under section 73, through the consultation process. The requirement to consult with an association that represents the water well construction industry in Manitoba will be included in the proposed Act.

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		9) With respect to the regulations, the MWWA formally requests that a Groundwater Regulation Advisory Board be established to develop and detail the required regulations. MWWA request that they have a MWWA representation on such a board.	9) The Department has not yet determined the process for regulation development. Public consultation in regulation development is required under section 85(6). It is expected that the water well industry will play an important role in the consultation process. The Groundwater Regulation Advisory Board referred to by the MWWA is based on British Columbia's development of its Ground Water Protection Regulation. The regulation was based on recommendations made by a Ground Water Advisory Board, an expert panel of groundwater scientists and engineers and representatives of the well industry. As such, the recommendations helped ensure the regulation was practical and science-based. The concept of some type of Groundwater Regulation Advisory Board for regulation development under the proposed Act can be examined.
		10) As part of the Act, the MWWA would like to coordinate and deliver training programs and certifications for contractors in Manitoba. Will this be developed as part of the regulations?	10) The requirements for certification of well drillers and well sealers will be developed through regulation and enforced by the Department. There may be opportunities for the water well industry to contribute to training programs and continuing education requirements. This will be examined through consultation as part of regulation development.



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April 22, 2012	Groundwater Web Site - Letter from Darryl Speer	<p>The main concern is related to the Bird's Hill and the Moose Nose aquifers that are co-joined in the RM of Springfield. They are a water source for many residents including the towns of Oakbank and Dugald (which are served by two shallow wells in a gravel substrate). It is stated that these aquifers are at risk due to:</p> <p>A) Gravel mining that is:</p> <ul style="list-style-type: none"><li>1) Aggressively mining without regard to required buffer zones.</li><li>2) Uncontrolled in their dewatering, gravel washing and deep water dredging.</li><li>3) Rife with careless petroleum storage and handling practices.</li><li>4) Able to side step current regulations without serious penalties for breaches.</li><li>5) Uninformed as to the high porosity and transmissibility of the media they are working in.</li></ul> <p>B) The decommissioned Hillside dumpsite (NE5-12-5E) that:</p> <ul style="list-style-type: none"><li>1) Is a toxic repository of pesticides, old batteries, dioxins, etc., from 40 years of uncontrolled dumping.</li><li>2) Has been breached by gravel excavation and is extruding debris.</li><li>3) Is open to water penetration due to a lack of required maintenance of the impermeable cover.</li><li>4) Required observations are not carried out as the monitoring wells are unserviceable.</li><li>5) Residential well tests are now showing evidence of site leachate elements.</li><li>6) Prodding of municipal and provincial officials has not resolved this serious contamination hazard.</li></ul> <p>It is stated that it appears that the existing regulations such as they are, are not being abided by or properly enforced.</p> <p>Another concern is related to cemetery practices. It is requested they be reviewed as related to locating cemeteries and their burial processes (embalming) due to their potential to compromise a water source.</p>	<p>The concerns related to the Bird's Hill and Moose Nose aquifers and cemetery practices do not fall under regulation of the existing or proposed new Groundwater and Water Well Act. The issues related to gravel mining fall under the Quarry Minerals Regulation of <i>The Mines and Minerals Act</i> and those of the decommissioned landfill fall under the Waste Disposal Grounds Regulation of <i>The Environment Act</i>. Regarding cemetery practices, <i>The Cemeteries Act</i> does not appear to address the concerns expressed.</p>

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April 26, 2012	Groundwater Web Site - Letter from Joe Masi (Association of Manitoba Municipalities)	<p>The Association of Manitoba Municipalities (AMM) supports the intent of the new Act, including:</p> <ul style="list-style-type: none"><li>• measures to improve groundwater supply and quality as well as the sustainable management of aquifers</li><li>• consistent provincial licensing requirements, providing there is adequate provincial capacity to administer them</li><li>• expanding the definition of a well to improve consistency and help prevent contamination of resources and aquifers</li><li>• set-back limits for the construction of wells near potential contamination sources</li><li>• a formal process for the creation of aquifer management plans</li><li>• changes to address compliance and enforcement issues and allow timely and cost effective enforcement</li></ul> <p>The AMM would like to ensure that the proposed Act will not negatively affect residents who depend on wells for their water supply. Specifically the AMM would have concerns if the new requirements for well drillers affect residents access to their wells.</p>	<p>The intent of the proposed Act is well received by The Association of Manitoba Municipalities, specifically in the key areas of:</p> <ul style="list-style-type: none"><li>• licensing and certification;</li><li>• management and protection of groundwater, including a process for aquifer management planning;</li><li>• well drilling, construction, and sealing standards;</li><li>• compliance and enforcement.</li></ul> <p>The Department does not expect the proposed Act to negatively affect any existing or future well user. The proposed changes are intended to allow for the administration of a fair and equitable licensing and certification program, improve the management and protection of groundwater, as well as to strengthen legislation governing the drilling, construction, maintenance, and sealing of wells.</p>