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PROTOCOL FOR MANAGEMENT AND SETTLEMENT OF CLAIMS RELATED TO PRIVATE WELL INTERFERENCE AND ASSOCIATED DAMAGES DUE TO CONSTRUCTION ACTIVITIES FOR YORK REGION

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, January 12, 2005, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council adopt the proposed well interference claims resolution protocol outlined in this report.
2. Regional Council delegate authority to the Chief Administrative Officer and the Commissioner of Transportation and Works to take all actions required giving effect to the management and settlement of all well interference claims for all water and wastewater projects as outlined in this report.
3. The Commissioner of Transportation of Works report to Regional Council on the use of the delegated authority on an annual basis.

2. PURPOSE

This report has been prepared pursuant to a request by Regional Council at its meeting on June 24, 2004 to submit a Regional protocol to manage well interference claims due to construction activity. It outlines the principles for the due consideration of valid claims and the mechanism for proper settlement of said claims.

3. BACKGROUND

The implementation of water and wastewater infrastructure within York Region sometimes requires temporary dewatering at strategic locations to facilitate construction activities. This dewatering activity, while kept to a reasonable minimum, may have a temporary effect on the private wells within the dewatering zone of influence. Consequently, there may be private well interference complaints during and for a specified period following completion of construction activities. These complaints may cover both water supply quantity and water quality issues. The Region is responsible for ensuring all well interference confirmed to be caused by dewatering associated with the construction activity, is fairly and constantly remedied.

The Region is committed to the investigation of all complaints and will provide alternative water supplies for all cases where the Region's construction projects have

interfered with the quantity and/or quality of water supply. This includes the reimbursement for direct costs incurred by impacted residents. As a result, the Region will implement a well mitigation program for construction of all Regional water and wastewater infrastructure.

4. ANALYSIS AND OPTIONS

The basis of addressing any claims related to impacts due to private well water quantity and quality issues was committed to by Regional Council on November 21, 2002 through the adoption of Clause No. 1, Report No. 9 of the Transportation and Works Committee meeting and the protocol established by the Well Mitigation Program under the 16th Avenue Trunk Sewer Project as approved by Regional Council on March 27, 2003. This program relies on the basis of establishing a valid well interference claim due to construction activity. (*see Attachment 1*).

4.1 Regional Well Mitigation Program

All well interference claims must withstand the scrutiny of an independent audit. Therefore, the claims must be quantifiable for a specified period of time and defensible through the use of Ministry of Environment (MOE) accepted water quality testing methods. In establishing the framework for the settlement of claims, the Region must implement the following components:

- An impact assessment program.
- A well mitigation program.
- Rigorous monitoring practices.
- A secondary review process.

4.1.1 Impact Assessment

In conducting a preconstruction impact assessment, Regional hydrogeologists will work with the regulatory agencies and the affected local municipalities towards establishing the predicted zone of influence due to the temporary construction dewatering activities. The assessment shall be made through; private well surveys in the area, MOE well records, pump tests and the use of the “YPD Groundwater Modelling Tool” which is accepted as the most current model in determining such impacts within the Greater Toronto Area by the regulatory agencies and the Geological Survey of Canada.

The well surveys are conducted to gather both quantitative and qualitative data. This information is a crucial step in helping the Region to determine in advance the resident’s water supply risk due to dewatering activities.

The end product of a properly conducted impact assessment is a predicted zone of influence for potential residential well impacts.

4.1.2 Well Mitigation

The Region's well mitigation program is established to ensure that residents are not inconvenienced due to dewatering activities. The well mitigation program is classified under two categories; proactive and reactive mitigation.

4.1.2.1 Proactive Well Mitigation

The proactive well mitigation is the mitigation of wells identified to be impacted prior to construction dewatering activities. The implementation of the proactive measures will include one of the following:

- Lowering of the pumps in the existing wells.
- Providing a new deeper drilled well.
- Connecting to a local watermain where feasible.
- Provision of water in tanks for anticipated short-term impacts (shorter than 12 months).

4.1.2.2 Reactive Well Mitigation

The reactive well mitigation program implementation is available for any unforeseen well interference complaints that may arise during the construction dewatering activities. All residents who experience well issues will have their concerns addressed in the following sequence:

- A temporary tank and bottled water will be provided within 24 hours.
- The complaint will be investigated.

If the well issue is confirmed to be a result of the dewatering activity, the reactive implementation measures will be one of the following; lowering of the pumps in the existing wells, provision of a new deeper drilled well or a connection to a local watermain where feasible.

If the well issue is found not to be the result of the dewatering activity, the Region will provide a letter to the resident explaining the outcome of the well investigation complaint and the reason for the decision.

4.1.3 Monitoring

A rigorous well monitoring program is established to gauge the zone of influence during the construction period. This well monitoring program will provide an on-going assessment of the groundwater trends.

Integral to the monitoring activity is the monitoring of the groundwater recovery. Upon 80% recovery of the groundwater water levels, confirmation of an upward trend in the water level over the course of the following month and no ongoing negative impacts to the well, any temporary works provided to mitigate the well interference will be removed.

4.2 Complaint Review Committee Process

York Regional Council approved the establishment of the Complaint Review Committee (CRC) on May 29, 2003.

The CRC exists to review the cases of residents who are not satisfied with the outcome of the Regional assessment of their well. Described simply, the CRC provides residents with an opportunity to present their case as to why the Region should implement an alternative alternate/permanent water supply solution for them. Thus, the mandate of the CRC is to provide dissatisfied residents with a forum to present their case.

The scope of the CRC is to review situations where the Region's project team has determined that the scientific evidence does not support a resident's claim of project-related well impact.

The CRC is authorized to recommend that the project team provide an alternate/permanent water supply to the resident, subject to ratification by Regional Council.

4.2.1. CRC Deliberation Criteria

The deliberation criteria the CRC uses to make its decisions in reviewing the well mitigation response program includes:

- The protocol followed.
- The basis of the hydrogeologist's decision.
- The length of time the resident resided at the address.
- A determination if the problem existed before the project commenced.
- Well maintenance information and a review of the well maintenance records.
- An assessment of the condition of neighbouring wells.
- Any other pertinent influencing factors.

4.2.2 CRC Process

The CRC process is outlined below:

- Resident calls the 24 call centre at 1-888-445-4418 to request a review by CRC.
- The Region contacts resident to gather information and provide options for review date.
- The CRC Review is held. Regional Council then reviews CRC recommendation and renders final decision.
- The decision is communicated to the resident within 3 days of the Regional Council decision.

Any decision to provide a permanent solution is implemented by the project team within 30 days of the Regional Council decision while any decisions to remove any temporary water supply is implemented after 30 days has passed since the Regional Council decision.

4.2.3. Independent Technical Advisory Support

On October 1, 2004, the Minister of the Environment, conditioned the provision of an independent technical advisor for the individual property owners to facilitate well interference complaints.

Accordingly, the Region is proposing to provide the following enhancements to the CRC process.

The Region will set up a list of prequalified hydrogeologists who have expertise and experience as expert witnesses in this area. When the resident calls in for a CRC review, the Region will provide the resident with the contacts on this list and the resident can then choose one individual to review the assessment conducted by the Regional hydrogeologist and can have the technical advisor accompany them to the CRC to assist in presenting their case.

It is currently proposed that a fee of up to \$1,500 (GST exclusive) be dedicated for the independent technical advisor for each CRC request.

4.3 Post Construction Claims

For all construction projects with dewatering related well interference claims following completion of construction and where these construction projects did not have a well mitigation program, the following methodology is recommended towards addressing these claims (*see Attachment 2*).

The Region must ensure that all well interference related claims received following construction of the works are legitimate and represent the direct costs incurred by the resident in addressing any well interference as a result of any Regional water or wastewater construction project. In addition, these claims will only be entertained if they are submitted within two years of Total Performance of the constructed works. This timeframe is accepted by the regulatory agencies as being reasonable for evidence of well recovery due to construction impacts.

In order to ensure fairness and integrity of the process, when more than three post-construction claims are received relating to well interference, the local municipality shall advertise twice in the local newspaper. The residents within that particular community will be given 90 calendar days to submit any outstanding claims to the local municipality. The local municipality shall then receive, collate and submit all of these claims to the Region's Commissioner of Transportation and Works for review.

4.3.1 Eligibility of Direct Costs for Post-Construction Well Claims

Under normal circumstances, if any private well is deemed to be interfered with by virtue of the dewatering activity, all costs associated with potable water supply, bulk water supply, tank installation inclusive of heating during the winter season, well investigation, well system repairs, new well system installation and connection to a local watermain may be deemed to be eligible.

While most of the noted costs above may be paid directly to the resident upon determination that the well interference claim is legitimate, hydro costs associated with treatment enhancements such as Ultra Violet treatment and heat tracing of any temporary water supply will be compensated directly to the resident's account with the local electrical utility. The Region will work with the local electrical utility in determining the

resident's normal consumption pattern and compare it to the usage during the claim period. Any differences noted will be reviewed and the appropriate adjustments will be credited against the resident's electricity account.

As part of the well interference complaints, compensation may also be entertained for any damage to internal plumbing fixtures or clothes due to quality issues such as iron staining. In order for this type of claim to be entertained, the resident must provide water quality data from a MOE accredited laboratory demonstrating water quality data prior to construction being better than water quality data at the point of well interference. This approach will also be used to review claims relating to high salt content and microbial contamination (Coliform indicators). Any treatment system employed to address such changes in water quality will only be entertained with conclusive evidence that the water quality prior to construction was better than the water quality at the noted point of well interference.

4.3.2 Review of Post-Construction Well Claims

The Region shall review all claims submitted by the local municipality through the use of an independent certified hydrogeologist. In reviewing the claim, the Region will only entertain claims from residents within the zone of influence identified by the Hydrogeological assessment conducted for the project or a radius of one kilometre from the point(s) of dewatering, whichever is greater.

All claims received by the Region will then be reviewed by an independent hydrogeologist and a decision made within 90 calendar days of receiving the claims. For a claim to be deemed valid, it must satisfy all of the following conditions:

- The well must be located within the greater of the dewatering zone of influence or a one kilometre radius of the project.
- The well interference investigation satisfies a hydrogeological assessment based on the well monitoring program undertaken for the project. This monitoring program encompasses both water quantity and quality issues.
- The resident provides receipts for all direct costs borne to mitigate the well interference.
- The resident allows the on-site inspection of their well system by a Regional inspector for corroboration of work undertaken.

The decision of the independent hydrogeologist will then be reviewed and recommended to both the project manager of the Region and the Director of Engineering of the local municipality.

4.3.3 Payment of Post-Construction Well Interference Claims

Prior to settlement of any well interference claims submitted by residents, the Region must receive a signed release from the local municipality and a signed release from the resident.

Accordingly, once the claims have been approved for payment, the local municipality will then secure the necessary releases and submit them to the Region's Commissioner of Transportation and Works.

Upon receipt of the releases, the Region shall transfer the appropriate funds to the local municipality in order to compensate the approved well interference claims.

At the conclusion of the claims process or within two years of the total performance of the construction project, Regional staff will submit to Regional Council an update report of the well interference claims approved under the project.

5. FINANCIAL IMPLICATIONS

All approved well interference claims will be funded from development charges (80%) and wastewater user rates (20%). It will be treated as the well mitigation program costs associated with the relevant water or wastewater project.

6. LOCAL MUNICIPAL IMPACT

Addressing well interference complaints in a timely and consistent manner will undoubtedly lead to a more effective means of mitigating any inconveniences experienced by local residents due to Regional construction projects. It will ultimately lead to a fair and equitable means of identifying legitimate well interference claims and resolving these claims in a just manner.

7. CONCLUSION

This well interference claims resolution mechanism for claims received during and up to a period of two years following construction will facilitate a consistent, equitable and defensible approach.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause are attached to this report.)