

Answers to Written Questions received at the North Kent Wind Community Meeting

1. What is your solution to this growing problem of black water? Are you accepting responsibility for the wells gone bad?

We respect the concerns of the community and we want people to know that we did our homework. We studied this issue significantly before beginning construction and our monitoring program during construction builds on that work.

Extensive research and investigations by independent experts demonstrate our activities could not harm wells, are not harming wells, and will not harm wells. All investigations conducted by licensed experts to date have concluded that pile-driving is not impacting water well quality or function. There is no physical way for dirt to travel from the location of the piling activity all the way to water supply wells, and the vibrations are not strong enough to impact water supply wells at these distances from the piling activity.

2. Since the windmills were installed why are the water wells now bad?

Information published by the Ministry of the Environment more than a decade ago shows that water drawn from the aquifer formed by the glacial deposits and on top of the Kettle Point Formation can be of poor quality with dissolved solids, sodium, chloride, hardness and iron exceeding drinking water standards. Mineral deposition, odour and other issues exist. The aquifer is also known to discharge natural gas into water wells. In some areas, the water can be corrosive to well components.

Water well quality issues are most likely affected by regional water quality characteristics and their natural variability, near-well conditions (within a few metres), well construction details, well and pump conditions, and pump operations.

The ten complaint investigations completed to-date by licensed experts concluded that the wind project is not impacting water well quality or function. The majority of investigations completed had baseline pre-construction, untreated water quality data from wells to compare to new samples. In all cases, there was no indication of water quality or quantity impacts relative to the baseline data. In several cases, the raw, baseline water quality was poor to begin with.

In some cases, water quality or quantity concerns appeared related to well construction, the condition of existing well pumping and treatment equipment, ongoing maintenance or structural deficiencies with the wells.

3. What is the long term solution for people that have had well and water troubles after construction began besides water being trucked in?

The ten complaint investigations completed to-date by licensed experts concluded that the wind project is not impacting water well quality or function. In all cases, there was no indication of water quality or quantity impacts from the well intake. The investigations focus on the well and not the landowner's home plumbing system. We will work with the individual well owners to narrow down the potential cause of their concerns and recommend a solution.

While complaint assessments are in progress and under review by the MOECC, we have provided temporary water supplies sourced locally from the municipal water system. In some cases, large water tanks have been provided for general household purposes and additional

coolers and bottles of water for cooking and consumption. We've done this even though there was no reason to believe we caused the issue. We will coordinate with the well owners prior to removing any temporary water supplies.

We will continue to investigate any water complaints we receive either directly from the landowner or from the MOECC, and we will be transparent with the results of the analyses.

4. If our water well is affected, will you give us a source of water at no cost to us? Are you going to supply every home drinking water when a well becomes not drinkable?

While complaints are investigated and the assessments are reviewed by the MOECC, we will provide a water supply at the well owner's request and at no cost to the well owner. The water will be sourced locally from the municipal water system.

In some cases, large water tanks have been provided for general household purposes and additional coolers and bottles of water for cooking and consumption. We've done this even though there was no reason to believe we caused the issue. We will coordinate with well owners prior to removing any temporary water supplies.

If a qualified expert (P.Eng or P.Geo) determines that the project caused or may have caused an adverse effect to a complainant's well or well water, we will provide an adequate quantity of water to the impacted party until such time that the issue has been resolved.

5. How do I get compensated for the crop damage that occurred on my property from cable installation?

Farmers are encouraged to report all crop loss due to our construction activity by emailing info@northkentwind.com or calling our local office at 519-397-5711. We compensate for crop loss on private farmland and for crops planted in the municipal right of way where collector cables were installed.

6. Do you live in the affected area?

Pattern and Samsung do have employees that live in Chatham-Kent related to our North Kent Wind project and our South Kent Wind facility in the southern portion of the municipality. Additionally, approximately half of the construction workers currently on-site are from Chatham-Kent.

7. Why so many windmills?

We chose this area for its excellent wind resource and access to transmission capacity. After screening Ontario based on multiple criteria, we selected this area as one of the best locations to build a high-quality wind energy project. Chatham-Kent is receiving an economic boost from hosting wind projects. The 100 MW North Kent Wind project alone will inject more than \$40 million of direct spending into the local economy over its first 20 years of operation.

The Province committed to phasing out coal-fired generation in 2002 due to coal-fired power plants being a major contributor of the smog problem that was creating a public health crisis, and the development of wind energy helped Ontario meet that goal in 2014. Today, turbines are harnessing the wind across Ontario and generating clean, homegrown energy without producing any harmful emissions and without using water to operate.

Once operational, North Kent Wind will generate the amount of electricity used annually by 35,000 Ontario homes. And, every year, compared to Ontario's former coal fleet, the facility will avoid 300,000 tonnes of carbon dioxide emissions – the equivalent of taking 60,000 cars off the roads – and conserve enough water to meet the needs of 9,000 people.

8. Why do we need more windmills when we have to pay the United States and Quebec to take the extra power?

The government has made a commitment to diversify its electricity generation, and energy from nuclear, wind, solar, and hydro are all part of Ontario's energy future. Wind energy is part of our larger energy transformation. There are no solutions that will please everyone but wind energy is among the most mature and fastest-growing renewable energy technologies and can complement the provincial base load generation. It ultimately helps to create a more stable and reliable grid.

9. With the amount of windmills, why do they not lower our hydro rates?

According to a January 2017 study by Environmental Defence, the biggest components of the average Ontario household electricity bill are delivery (31%), nuclear-generated electricity (24%), HST (12%), natural gas generation (8%), and hydro-electric power (7%). Wind power makes up about 6% of the average electricity bill in the province at a cost of about \$11 per month.

New wind energy generation is extremely cost competitive and one of the cheapest sources of new energy in Ontario. This is even more obviously the case when all costs are considered in choosing an energy source – including impacts on the air we breathe and the water we drink.

Electricity prices will continue to increase across Canada as a result of necessary investments in new electricity generation and infrastructure – the Conference Board of Canada has stated that \$347 billion in investment is required between 2011 and 2030.

But the fuel that turns the turbine blades is free. This means that once a wind farm is built, the price of electricity it produces is set and remains at that level for the entire life of the wind farm. Many traditional sources of energy are more likely to experience price volatility, so the long-term cost-certainty and stabilizing effect of electricity rates from wind farms provide important protection for consumers.

10. Why are there so many windmills shut down at the same time?

There are several reasons wind turbines may be periodically shut down. It could be there isn't sufficient wind in the area at the time. While it is expected that the North Kent Wind project could generate energy between 80-90% of the time on any average year, there will be periods where the wind is simply not blowing.

There are times when specific wind turbines are shut down temporarily for maintenance activity. It may also be due to curtailment by the grid operator. A benefit of wind is that it can ramp up and ramp down very quickly in response to a market signal or when the resource becomes available. Being able to ramp down in a matter of minutes provides extremely valuable flexibility for the Independent Electricity System Operator as Ontario has a significant amount of nuclear capacity (60% of Ontario's installed capacity), which has minimal ability to follow changes in demand.