

Meeting Environmental Advisory Committee April 13, 2022 6:00 p.m.

The following were in attendance:

Staff:

Cassandra Banting

Janice Peyton

Council:

Councillor Mark Bagu

Councillor Harry Wells

Public

George McKibbon

Members: Jac

Jack Hellinga

Katherine Klauck

Tim Lamb Kerry Royer Trent Doan

This was an online Microsoft Teams meeting.

1. Call to Order

George called the meeting to order at 6:00 p.m.

2. Adoption of the Agenda

Moved by Harry Wells Seconded by Katherine Klauck

That the agenda dated April 13, 2022, be accepted as circulated. CARRIED.

3. <u>Disclosures of Interest</u>

Nil.

4. Approval / Review of Previous Meeting Minutes

Moved by Trent Doan Seconded by Jack Hellinga That the minutes of February 9, 2022, be accepted as written. CARRIED.

5. Items Arising from Previous Minutes

a) Annual Report 2021

The annual EAC report has been provided to the Clerk. George thanked everyone for their comments.

6. Climate Change

a) Climate Change and Port Colborne's Strategic Plan

Trent noted that there is very little regarding climate change in the Strategic Plan.

Good ideas are coming from this committee, but where are they going outside of this group? How can the EAC better assist Council?

George reviewed the report on why we need a climate change statement on Port Colborne's infrastructure within Port Colborne's Strategic Policy. A copy is attached to the minutes.

The committee resolved to send the report to Council and ask that the Port Colborne Strategic Plan be amended to include policies on climate change. George will make some amendments to the report.

Harry commented that Council and staff recognize the need to consider climate change. Harry expressed concern that very little items come to the EAC through Council and staff for comment and he feels that some things are slipping by. He would like to see a process in place to help Council make educated decisions.

Jack referred to Fort Erie's EAC terms of reference; Port Colborne EAC terms of reference is very different.

b) 50by30 Niagara Climate Change Team

Tim advised that he is a member of a group called 50 by 30 Niagara, a group that is pushing for Niagara's 12 municipalities to reduce carbon emissions by 50 percent by 2030 and then to zero by 2050.

There are significant actions that can be taken that are well established, such as, fossil fuel heating and cooling, especially district heating recruits for buildings, walkable communities, public transportation, and electric vehicles for transportation. 50 by 30 Niagara strongly encourages Niagara region to move assertively in this direction.

50 by 30 Niagara is currently putting together a document to send to the region. Tim will bring the document to EAC when it is complete.

7. <u>Draft Regional Official Plan and the Provincial Housing Task Force</u> Report

George advised he has read through the Regional Official Plan and there is a significant section on climate change. Also, there is a release of a housing task force report. Single family zoning designation is changing to include multifamily residential and if this is approved a lot of policies become void. Single family zoning will not be eliminated though.

8. PC Quarry JART Committee Update

A copy of this document is attached to the minutes.

a) Land Use Compatibility

George provided a summary of the committees review of documentation produced by consultants for Port Colborne Quarry's pit expansion applications and the review being done by the Region's Joint Agency Review team (JART). Comments were provided on the planning, land use compatibility, social impact and the water and wetland updates.

b) Hydrology

Submission 2 of documents filed for the Port Colborne Quarries rezoning and OP amendment application to the City of Port Colborne and the Quarry License Application include hydrology and drainage responses. Jack gave a review of the hydrology recommendations and explained the basis of his summary.

The committee resolved to forward a copy of the update to JART at the Regional level and to the PLC at the City level.

A Request to Comment on Correspondence from the Multi Municipal Turbine Working Group Regarding Ontario's Energy Plan and Wind Turbines

A copy of correspondence referred to the EAC by Council is attached to the minutes.

George has begun to assemble background material for review and asked for volunteers for a sub-committee to prepare comments.

George, Harry, Katherine, and Trent will prepare a response. When completed, George will bring a draft response to this committee. Jack would like to follow and receive correspondence related to this item.

10. West Street Air Filter Analysis and Budget Clarification

George advised that some members were considering having an analysis done on Norbert's air filter, as Norbert reported an increase in particulates in the air filter at his residence/business on West Street. George learned that there is no longer an EAC budget that would cover this expense. We have had a budget in the past (\$12-\$15k) and are still funding low flow toilet and tree planting rebates. Harry will take on the task to seek the funds for the filter analysis through DCS Bryan Boles. Jack suggested having other sights analysed such as the Port Cares reach out centre, to get an idea of the air quality in the downtown area and in the East Village. Tim suggested setting up air monitoring stations in certain locations to give a more accurate reading. George advised that he has tried to set this up in the past, without much success. Harry advised that both Vale and MOE have monitoring stations within the area. He will investigate this with some of his contacts. Mark mentioned that he saw a lot of dust coming off a ship that was docked at the grain elevator one morning. Members will continue working on this issue and will report back at the next meeting. Mark reminded the group that budget time is approaching, and he would submit a budget request on behalf of the committee.

11. Draft Urban Forest Management Assessment RFP

George shared the history of this item with the committee.

The draft Urban Forest Management Assessment RFP was forwarded to the committee for comment. George expressed concern that the committee was given a turnaround time of only one week and that the draft RFP did not take into consideration recommendations from the EAC report on boulevard trees of November 13, 2019. A copy of the report is attached to the minutes for reference.

Cassandra advised that she sent the EAC comments back to staff and to the Director of Public Works. She assured the committee that their comments would be considered and that the revised draft RFP will be circulated to the committee for review. Cassandra commented that timing is flexible.

Mark advised that Planning staff confirmed there is software to survey the tree canopy for the entire city, and Mark suggested this be added to the budget for this project. Committee members agreed this should be included in the RFP and agreed with planting native trees. Portal Village could be referenced as an example, as the trees there are well suited to the boulevard. Cassandra will note these suggestions to staff and will include the EAC Report of November 13, 2019 that went before Council, and Council's resolution.

12. Other Business

George advised that the Gathering Place will hold a virtual Earth Day meeting on April 22nd.

13. Next Meeting /Adjournment

With no further business to discuss, the meeting was adjourned at 7:45 p.m. CARRIED.

The next EAC meeting will be on Wednesday June 8th at 6 p.m.

Why we need a climate change statement on Port Colborne infrastructure within Port Colborne's Strategic Policy.

Jessica Blythe, Environment Sustainability Research Centre, Brock University, provided EAC with a link to an Environment Canada website displaying projections of past and future trends for temperature and precipitation from 1950 through 2021 and beyond assuming a maximum greenhouse gas emissions scenario. This data underlined the work Brock University undertook recently with citizens in participating municipalities within Niagara Region.

Port Colborne did not participate in this effort.

"For the 1951 – 1980 period, the annual average temperature was 8.4degrees C; for the 1981 – 2010 it was 9 degrees C. Under a high emissions scenario, annual average temperatures are projected to be **10.9 degrees C** for the 2021 – 2050 period, **12.9 degrees C** for the 2051 -2080 period and **14.3 degrees C** for the last 30 years of this century.

"Average annual precipitation for the 1951 – 1980 period was 874 mm. Under a high emissions scenario, this is projected to be **6% higher** for the 2021 – 2050 period, **10% higher** for the 2051 – 2080 period and **14% higher** for the last 30 years of this century."

The International Panel on Climate Change reports in its 6th Assessment Report Summary for Policy Makers "human induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since Assessment Report 5."²

Using the Environment Canada, here is another way of visualizing what that means to Port Colborne. On page 18 of the Summary for Policy Makers, the authors visualize what incremental increases in temperature: 1 degree C; 1.5 degrees C; 2 degrees C; and 4 degrees C mean for 10 year hot temperature and precipitation events using the period of 1850 to 1900 data as benchmarks.

If an extreme temperature and a heavy precipitation events occurred once every 10 years, with a 1 degree C temperature increase, extreme temperature and heavy precipitation events occurred 2.8 times and 1.3 times more frequently. With a 1.5 degree C increase extreme temperature and heavy precipitation events occurred 4.3 and 1.5 times more frequently. With a 2 degree C increase, extreme temperature and heavy precipitation events occurred 5.6 and 1.7 times more frequently. With a 4 degree C increase, extreme temperature and heavy precipitation events occurred 9.4 and 2.7 times more frequently.³

Port Colborne Environmental Advisory Committee, April 2022, GHM

¹ https://climatedata.ca/explore/location/?loc=FCHYP&location-select-temperature=tx_max&location-select-precipitation=r1mm&location-select-other=frost days

² Page 8, Intergovernmental Panel on Climate Change, Climate Change 2021, The Physical Science Basis, Summary for Policymakers, 2021

³ Ibid, page 18, International Panel on Climate Change, 2021

We were not able to find and summarize information on extreme wind events and Lake Erie water levels except to say anecdotally we expect there will be changes as time unfolds.

In order to organize EAC's thoughts about these changes, we spoke to and entertained presentations from the Niagara Coastal collaborative and the Niagara Peninsula Conservation Authority⁴. Here are reasons and infrastructure components into which further examination of the effects of a warming climate are needed in Port Colborne and which we recommend be considered be provided for in Port Colborne's Strategic Plan:

- There should be an assessment and consideration of potentials for extreme events involving: winds; lake water levels; and excessive rainfall events.
- There should be assessment and consideration of storm sewer outfalls which may be below water levels and sewer surcharging of affected storm and combined sanitary sewers where these exist in Port Colborne.
- In low lying areas north of the Lake Erie shoreline are potentially below high Lake Erie lake levels. This is especially the case in areas close to Wignell and Eagle Marsh municipal drains and their outfall controls along Lake Erie. How effective are the control devices during events in which extreme wind, high lake levels and extreme precipitation events occur at the same time?
- The former cement quarry water level controls and drainage are managed by the Niagara Peninsula Conservation Authority in order to ensure elevations do not exceed residential basement floor elevations. Is this system put at risk in the future where extreme wind, high lake levels and extreme precipitation events occur and under conditions in which the Eagle Marsh Drain outlet has to be closed during lengthy periods of time due to high Lake water levels?
- What might be the fishery and water quality impacts associated with lengthier periods of time the Wignell and Eagle Marsh outlet controls need to be closed during spawning periods and other times during the years?
- Shoreline erosion and sedimentation pattern are changing as a result of high lake levels
 and changing precipitation and wind events. These changes require regular removal of
 sand from the mouth of the Eagle Marsh Drain and municipal storm outfalls into Lake
 Erie, particularly where the outlets are at times below the water levels. These should be
 addressed.

⁴ We spoke to Gregory Ford (Niagara Coastal Collaborative) and Kerry Royer and Steve Miller (Niagara Peninsula Conservation Authority). We appreciate their frank presentations. The analysis contained in this report is that of the Port Colborne Environmental Advisory Committee. Any errors or omissions are our responsibility.

- Shoreline morphology needs to be examined and efforts made to estimate what
 measures are needed to address shoreline erosion, morphology and planting for
 sustainability.
- The Region of Niagara's draft official plan provides for aggregate extraction within the aquifer north of the shoreline and across the entire municipality. Potentially this may result in a future in which the municipality has a band of abandoned and rehabilitated lakes where extraction took place below the water table. What kind of a future does that pose during high Lake water levels and extreme precipitation and wind events?

These are the reasons for and the considerations we recommend be addressed in the Port Colborne Strategic Plan.

Port Colborne Quarries JART Committee Update

Introduction: Port Colborne's Environmental Advisory Committee has been reviewing documentation produced by consultants for Port Colborne Quarry's (PCQ) pit expansion applications and the review being conducted by the Region's Joint Agency Review Team (JART). Aggregate applications involve many complex studies, policies, approvals and municipal and agency reviews. Joint Agency Review Teams are used to simplify and coordinate municipal and agency review.

What does a JART do? This JART conducts peer reviews of all the technical documentation undertaken by PCQ consultants and offers technical comments on the veracity and appropriateness of that work. Both Regional and City staff are involved in this review. JART reports to Regional Council and the results will be made available to Port Colborne Council. JART comments will assess whether amendments to the Regional and City official plans and the City zoning bylaw are appropriate and if so under what conditions and agreements.

Port Colborne's Environmental Advisory Committee has submitted two sets of comments: an OPPI Fly Rock Advisory; and a December 9, 2021 report on land use compatibility. JART comments on the first submission of technical documents were provided to PCQ in 2021. PCQ's planner and engineers have reviewed those comments and submitted responses. This report examines selected responses including the planning responses (planning, land use compatibility and social impact assessment updates) and those of the hydrogeologist and air and noise engineers.

We are providing comments on the planning, land use compatibility, social impact, and the water and wetland updates. Here is a list of the reports we have reviewed:

- Final Planning Justification Report, Port Colborne Quarries Inc., Pit 3 Extension (Revised January 28, 2022)
- Final Financial Impact Assessment and Economic Benefits, Port Colborne Quarries Inc.,
 Pit 3 Extension (Revised Report), October 20, 2021
- Final Land Use Compatibility/Sensitive Land Use Study, Port Colborne Quarries Inc., Pit 3
 Extension (revised December 15, 2021)
- Technical Memorandum, Addendum to the Noise Impact Assessment Report, Port Colborne Quarries Inc., Pit 3 Extension, January 21, 2022
- Technical memorandum, Response to the joint Agency Review Team Letter, Air Quality Impact Assessment – Port Colborne Quarries Inc., Pit 3 Extension, December 10, 2021

In addition to reviewing Ministry of the Environment, Conservation and Parks technical guidance and legislation, the following two documents were referred to:

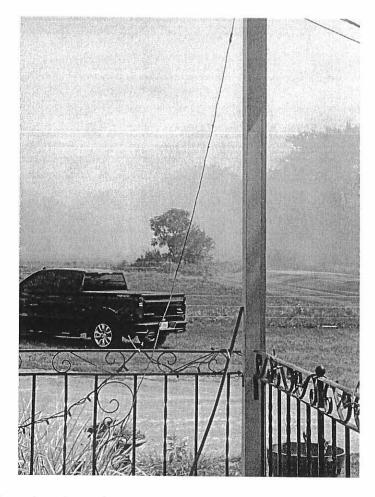
- Guideline for the Implementation of Air Standards in Ontario, Ontario Ministry of the Environment and Climate Change, February 2017
- Procedure for Preparing an ESDM Report, Ontario Ministry of the Environment and Climate Change, March 2018

The first three topics are addressed in this report while water and wetland comments are addressed separately.

Analysis: Air, Noise and Land Use Compatibility: Here is a summary of the main points made previously by Port Colborne's EAC:

- 1. PCQ air, noise and planning consultants use adjoining property not owned by PCQ to buffer the proposed extraction operations from sensitive land uses.
- The air, noise and planning consultants assume adjoining sensitive residential and other uses will not change over the close to 50 years of extraction these applications provide for.
- The planning report, and by extension the air and noise analyses do not consider other
 permitted uses on adjoining lands provided for in the zoning bylaw such as accessory
 dwellings and home occupations or the relocation of sensitive uses and activities on
 each lot.
- 4. If blasting results in fly rock on adjoining properties, the Environmental Protection Act is contravened. There are no Provincial fly rock guidelines presently. MNDMNRF staff are developing blasting guidelines for application but these guidelines are unavailable to date to our knowledge.

Concerns about air, noise and land use compatibility are genuine.



This photo was taken along Second Concession Road following a blast on August 27 2021.

Here are our observations and findings from our review of the documentation made available to the public:

Air analysis:

- 1. Reference is made to the air analysis as "conservative". The analyses undertaken by Golder's air analysts are required by Ontario Regulation 419 and the MECP Guidance on the preparation of ESDM reports. All facilities which have air emissions are required to do these analyses. These analyses help implement the Province's air standards.
- 2. Figure 1: The Ministry's Framework to Manage Risks under the Regulation (OR 419), on page 7 of Guideline for the Implementation of Air Standards in Ontario sets out the framework. Where Golder's analysis "exceeds the air standard but is no greater than the upper risk threshold... the facility must do an assessment and action may be required to reduce exposures." MECP "may request a site specific or technical standard compliance approach."

- Air standards are set at levels where trivial or no environmental and public health risks
 are expected to occur. Where these standards are exceeded, especially to the degree in
 which Golder's air analysts project, a discussion of the risks involved is needed.
- 4. For those air standards Golder's air analysts focus on, substantial exceedances exist for the existing operations and are projected to occur in each of the four phases of the Pit 3 expansion. Many air criteria are exceeded some by more than 300%.
- These exceedances are also at sensitive receptors (residences) located on adjoining lands for each of the four phases of the Pit 3 expansion. These exceedances are not trivial.
- 6. Golder's amended air analysis confirms our previous finding that PCQ is using lands beyond the Pit 3 expansion to buffer the extraction from sensitive uses. Further, the amended air analysis confirms there is insufficient lands between the PCQ property boundary and many sensitive residences on adjoining lands for an adequate separation between extraction and many existing sensitive uses to ensure residents are not exposed to air criteria exceedances.
- 7. Where exceedances such as these occur, the environmental and public health standards for the air criteria standard need to be identified. Further an analysis of the population and uses exposed to the exceedances is needed to clarify who and which uses may be at risk, what that risk level is and what actions may be required to reduce exposures if that risk level is unacceptable. No such analysis exists in the revised planning, land use compatibility, social impact assessment or air analyses.
- 8. Notwithstanding the Pit 3 expansion is proposed to occur over a period of time of up to 50 years, the exceedances that occur as a result of the existing operations are projected to occur for each of the four phases of the Pit 3 expansion.
- 9. Where sensitive uses exist, the analysis assume no changes to the existing uses and no provision is made for other uses permitted in the zoning bylaw.
- 10. Standards have changed as health science knowledge improves. It is reasonable to expect air standards will change over the 50 years it may take for extraction in Pit 3 expansion to be complete. Golders air analysts do not make provision for these changes.

Noise analysis:

- 1. The amended noise analysis shows many sensitive uses around the Pit 3 expansion will be exposed to noise levels at the limits of those required by NPC 300.
- 2. The assumptions used in this analysis assumes existing sensitive uses will remain exactly as constructed and used as built for close to 50 years. No provisions in the noise

analysis is made for structural changes to these uses or to the introduction of other uses permitted in the zoning bylaw.

The Planning, Land Use Compatibility and Social Impact Analyses:

- 1. Pit 3 extension involves extraction planned to occur up to 50 years from now if one includes extraction currently taking place in areas licensed currently. The planning analysis does not address changes in existing permitted uses or the introduction of other uses permitted in the zoning bylaw. It also doesn't make provision for changes that may be made by the Province to legally increase densities through legislation amending the Planning Act to where single family residential zoning exists.
- 2. It is unreasonable to assume static land uses over that period of time. Further it is defective planning to also impose separation distances onto lands not owned by PCQ under these circumstances.
- 3. The planning, land use compatibility and social impact assessments do not address the environmental or public health rationales for the air standards which are exceeded. Further theses analyses do not identify who lives adjacent to the Pit 3 extension and more particularly what risks those residents and uses are proposed in these reports to be exposed to and which among the residents may be most vulnerable to.
- 4. MECP Environmental Protection Act approvals and compliance policy rely on land use compatibility where Planning Act approvals are made.
- 5. If the Pit 3 extension zoning bylaw amendment applications are approved as submitted, land use incompatibility will result. This land use incompatibility will compromise air and noise compliance efforts and may result in MECP amending its compliance policies by excluding complaints resulting from land use incompatibility from its compliance efforts. This will mean residents living adjacent to the proposed expansion and the City of Port Colborne will not be able to rely on MECP to enforce its air and noise standards. Rather the City of Port Colborne will need to enact regulations under the Municipal Act to address air and noise nuisances and adverse effects.

Recommendations:

- 1. Redesign of the extraction program is needed so air and noise standards are met at the property boundary.
- 2. No Planning Act rezoning approvals should be made for the Pit 3 extension unless it can be demonstrated that air and noise standards are and will be met at the PCQ property boundary during the entire length of the proposed extraction.

Submission 2 of documents filed for the Port Colborne Quarries (PCQ) rezoning and OP amendment application to the City of Port Colborne and the Quarry License Application include hydrology and drainage responses. The Technical Memorandum (TM) is the response to JART Hydrology PEER Review Comments. There are concerns with the observations and conclusions with both the content and the missing information in the TM. For simplicity a copy of the TM is provided separately.

- OBSERVATION: The City of Port Colborne does not need a different alignment of the north reach of the East Branch of the Wignell drain for road drainage purposes.
- What is stated numerous times in the TM is that the City is undertaking the
 review of the realignment of the north extent of the East Branch of the Wignell
 Drain under the Municipal Drainage Act. What is not provided is that the
 undertaking was requested by PCQ to facilitate access to a small "finger" of the
 property to the east of the wetland and woodlands along Second Concession
 Road at Carl Road.
- It is stated in the TM that the review, and the subsequent realignment, is being conducted under the Drainage Act. Since the review is specifically for the benefit of PCQ, the cost of the review, and the cost of any construction to facilitate future PCQ operations, should under the Drainage Act be entirely the responsibility of PCQ.
- Has the City of Port Colborne consulted with NPCA on the water balance impact on the wetland as a result of the contemplated realignment of the north reach of the East Branch of the Wignell Drain?
- The TM describes the intent to redirect surface drainage of 156 9 = 147 Ha of the upstream woodland swamp catchment area to around the wetland. Currently the 147 Ha north of Second Concession Road that is tributary to the upper reach of the East Branch of the Wignell drain crosses from the north side to the south side of Second Concession Road at Carl Road. The drainage continues in open channel from the north boundary of the wetland to the south of the wetland and then easterly to the rear of the lots along Miller Road. The described intent is to direct the flow from north of Second Concession Road easterly along the north roadside ditch and cross Second Concession Road to the south side at the eastern extent of the wetland and woodland. This realignment would result in starving the wetland surface, topsoil, and subsoil, and consequently all the vegetation from the cyclic replenishing of moisture at each rainfall event. This is not addressed in any water balance by PCQ, as it assigns the realignment to the City.
- The TM constantly suggests the realignment WILL be constructed. This is an assumption that cannot be made, and is not ecologically nor hydrologically supported.

- During rainfall events the wetland provides several functions for upstream contributions. The precipitation and runoff is firstly attenuated, and secondly, it is filtered and naturally treated. This can be augmented with plantings of appropriate native species.
- The northerly most realignment will allow access to a finger of the proposed license area identified as Phase 3. Phase 1A and 2 will create a second face along the south of the wetland. The existing License 4444 has created a face along the west of the wetland. Phase 3 as proposed would create a third face along the east of the wetland and woodland, resulting in the wetland becoming a peninsula. The realignment of the drain would direct the upstream tributary area away from the wetland. Retaining the existing upstream drain location will maintain the natural drainage and existing water balance in the wetland, less the below grade seepage to the open faces.
- The JART and Matrix Peer Review comments and questions were not adequately answered in the TM to satisfy the wetland protection concerns.





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April 1, 2022

Environmental Advisory Committee

Re: Multi Municipal Wind Turbine Working Group – Ontario's Energy Plan and Wind Turbines

Please be advised that, at its meeting of March 22, 2022 the Council of The Corporation of the City of Port Colborne resolved as follows:

That correspondence from the Multi Municipal Turbine Working Group regarding Ontario's Energy Plan and Wind Turbines, be referred to the City of Port Colborne's Environmental Advisory Committee to investigate and bring an update forward at a future council meeting.

A copy of the above noted correspondence is enclosed for your reference.

Sincerely,

Nicole Rubli Acting City Clerk From: Julie Reid <deputyclerk@arran-elderslie.ca>

Sent: March 2, 2022 5:39 PM

To: City Clerk < cityclerk@portcolborne.ca>

Cc: JBurch-CO@ndp.on.ca; minister.mecp@ontario.ca

Subject: Letter re: Ontario's Energy Plan and Wind Turbines on behalf of te MMWTWG

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

March 2, 2022

City of Port Colborne cityclerk@portcolborne.ca

RE: Ontario's Energy Plan and Wind Turbines

Dear Mayor and Council:

I am writing to share information compiled by the Multi-Municipal Wind Turbine Group (MMWTWG) on recent plans announced by the Ontario government to expand electricity generation capacity. We are providing this update to you because your municipality endorsed a 2017 resolution indicating that you were an "Unwilling Host" for wind turbine projects. While the threat of new wind turbine projects disappeared while Ontario had a surplus of generation capacity for electricity, the recent announcements suggest a potential for new wind projects.

The MMWTWG was initially created in 2009 by municipalities in Bruce, Grey and Huron Counties to share information on wind turbine projects being proposed or operating in our municipalities. The organization is a joint committee with elected and citizen representatives from the member municipalities. Since its formation, we have been monitoring the operation of wind turbines and advocating on behalf of our residents adversely affected by the wind turbines.

I wanted to ensure that your municipality is aware of the Ontario government's recently announced plans that have potential to lead to new wind turbine installations in rural Ontario. This plan is included among the energy program that was announced at the Rural Ontario Municipal Association meeting and in a speech that Todd Smith, as Minister of Energy, gave to the Empire Club. The program includes a pilot SMR pilot nuclear facility at Darlington, expanded hydroelectric generation capacity, new RFPs for medium term and long term

generation capacity and a program to certify renewable energy generation capacity.

We are specifically concerned about the certification program. While limited details are available for this program, we are concerned that wind turbines are included among the renewable energy generation facilities that can be certified under the program used to allow the installation of larger turbines within existing project sites. The wind companies are certainly listening as leasing activity in support of a project has already been reported in southwestern Ontario.

While changes introduced by the government allow municipalities to regulate the creation of <u>new</u> wind turbine facilities within their communities through zoning by-laws, other regulatory changes by the government exempts existing wind projects from these municipal by-laws, even when the project operator is replacing the existing wind turbines with larger, more powerful equipment. On this basis, the project repowering included in the recent Ministerial Directive would not require any municipal input or approval due to this regulation.

Many municipalities that have started the process of drafting by-laws relative to wind turbines find that they need direction on appropriate setbacks that would be included in a municipal zoning by-law. They know that the existing setbacks in Regulation 359/09 are not sufficient to protect residents and they are looking to the provincial government for revised setbacks reflecting the learning from the existing projects and the lived experiences in other jurisdictions. If the province is reviving wind power development, it needs to take a leadership role by updating these regulations immediately.

We are also concerned about the government's failure to address the problems created by the existing wind turbine projects. These projects operate under Renewable Energy Approvals or REAs that set out very strict operating requirements. First, project operators are required to prove that the project is operating within the 40 dBA audible noise limit by filing noise audit reports prove compliance. Many projects were provided with specific deadlines for the submission of these reports. The attached appendix shows the status of these audits based on public information. Only 45% of projects have reached some form of closure with the other continuing to operate (three continuing even though they have been found to be non-compliant) despite concrete timelines for action in their REAs.

The failure of the government to enforce the requirements of the REAs for wind turbine project operators to investigate and resolve complaints about project operations is another concern. More than 5,800 Incident Reports have been created as a result of complaints about noise emissions from wind turbine projects and based on feedback from the residents in our communities there has been little or no action by the project operators on these matters. Frankly, the government has shown no interest in working on behalf of rural residents. This is an additional concern as 39% of the Incident Reports, prepared and signed by Provincial Officers, include references to adverse health effects.

If you have not already made adjustments to your zoning by-laws, I hope that this reminder will prompt your Council to review their contents in the context of the government's apparent plans to start construction of more wind turbines despite the past failings of this technology.

Our view is that the provincial government needs to:

- Update the direction provided in terms of setbacks between wind turbines and other activities,
- The government needs to take more aggressive action in enforcing the terms of the approvals for existing wind turbines before authorizing the construction of any new turbines, and,
- Bar operators of projects with these compliance failures from participating in any of the contract extensions or opportunities to bid on capacity expansions that are envisioned in the recent Ministerial Directive.

If you agree, we ask that you communicate your concern to Minister David Piccini, Ontario Minister of Environment, Conservation and Parks as well as your local MPP(s).

If your municipality is interested in joining the Multi-Municipal Wind Turbine Group to receive updates on these matters please contact the Deputy-Clerk for information on the fee structure. The group meets every second month and Zoom facilitates the participation of members beyond easy driving distance of the normal meeting site in Chesley.

Yours truly,

Tom Allwood,

Chair, Multi-Municipal Wind Turbine Working Group Councillor, Municipality of Grey Highlands

c. Honourable David Piccini, Minister of Environment, Conservation and Parks, minister.mecp@ontario.ca

Jeff Burch, Niagara Centre, JBurch-CO@ndp.on.ca

Appendix 1: Status of Compliance Noise Audits

This table is based on information originally released in August 2019 by the MECP in response to a Freedom of Information request. It has been updated with information on more recent compliance testing from project websites. As the Protocol requires that project operators post these audit reports on their websites within 10 business days of their submission to the MECP, this should be an accurate source of status information.

	Project Name	Commercial Operation Date ¹	I-Audit Submitted to MECP ²	Updates to February 1, 2022 ³	MECP Review Completed ⁴	Time Since Start of Operation ⁵
		•				
	Demonstrated Compliance	Share - 43% - Averag	e time under review –	3.8 years		
1.	Adelaide (Suncor) Wind	January 28, 2015	October 29, 2015		March 9, 2020	5.1 years
2.	Armow Wind Project	December 7, 2015	February 24, 2017		November 6, 2020	4.8 years
3.	Belle River Wind	September 1, 2017	August 6, 2020		August 20,2020	2.6 years
4.	Bluewater Wind	July 19, 2014	June 12, 2015		June 25, 2019	4.9 years
5.	Bow Lake	August 10, 2015	August 9, 2017		March 21, 2019	3.6 years
6.	Dufferin Wind	December 1, 2014	September 1, 2015		September 26, 2018	3.8 years
7.	East Lake St Clair	May 22, 2013	April 20, 2016 ⁶		April 20, 2016	2.9 years
8.	Ernestown Wind	September 30, 2014	June 29, 2015		April 30, 2018	3.6 years
9.	Grand Bend Wind	April 19, 2016	March 21, 2017		December 4, 2018	2.6 years
10.	Grand Renewable Energy	December 9, 2014	December 21, 2015		November 4, 2019	4.9 years
11.	HAF Wind	June 14, 2014	March 14, 2015		December 17, 2018	4.5 years
12.	Grey Highland Clean Energy	September 21, 2016	July 11, 2017		August 30, 2019	2.9 years
13.	Grey Highlands ZEP	February 26, 2016	July 31, 2018		August 30, 2019	3.6 years
14.	MacLean's Mountain Wind	May 1, 2014	February 27, 2015		March 20, 2019	4.9 years
15.	Moorefield Wind	May 16, 2017	December 17, 2018		March 25, 2019	1.9 years
16.	Oxley Wind	February 8, 2014	September 27, 2017		April 25, 2019	5.2 years
17.	Napier Wind	December 3, 2015	March 3, 2017		January 22,2021	5.1 years
18.	Quixote One	August 14, 2015	September 1, 2017		April 15, 2019	3.7 years
19.	St Columban Wind	July 16, 2015	June 22, 2016		October 2, 2018	3.2 years
20.	Settler's Landing	April 5, 2017	August 22, 2018		May 10, 2019 ⁷	2.1 years

	Demonstrated Non-Con	pliance- REA Amended	Share - 2%			
1.	North Kent 1 Wind	February 22, 2018	June 30, 2019	November 1, 2021	November 1, 2021 ⁸	3.7 years

	Demonstrated Non-Compliance - No Resolution		Share – 7% - Average time under review - 6.8 years			
1.	K2 Wind ⁹	May 29, 2015	November 25, 2016	December 12, 2019		6.8 years
2.	Unifor/CAW ¹⁰	October 24, 2013	June 28, 2018	No Updates	Not Provided	8.3 years
3.	Niagara Region Wind	November 2, 2016	July 20, 2018	February 3, 2021		5.3 years

	Deemed Incomplete	Share - 17% - Average time under review – 7.1 years					
1.	Cedar Point Wind	October 7, 2015	September 21, 2016	June 24, 2019	6.3 years		
2.	East Durham Wind	August 15, 2015	August 17, 2016	July 2, 2019	6.5 years		
3.	Goshen Wind	January 28, 2015	January 28, 2016	November 7, 2017	7.1 years		
4.	Grand Valley Wind Phase 3	December 3, 2015	November 30, 2016	March 1, 2021	6.2 years		
5.	Pt. Dover/Nanticoke Wind	November 8, 2013	August 6, 2014	December 16,2020	8.3 years		
6.	South Branch Wind	March 4, 2014	May 28, 2015	March 3, 2016	7.9 years		
7.	Springwood Wind	November 21, 2014	May 31, 2016	No Updates ¹¹	7.2 years		
8.	Whittington Wind	November 21, 2014	April 1, 2016	No Updates ¹¹	7.2 years		

	Under Review	Share — 30% - Average time under review — 6.0 years					
1.	Adelaide (NextEra) Wind	August 22, 2014	August 10, 2015	June 26, 2020	7.3 years		
2.	Amherst Island Wind	June 15, 2018	June 14, 2019	May 14, 2020	3.6 years		
3.	Bornish Wind	August 15, 2014	August 7, 2015	July 2, 2020	7.3 years		
4.	Conestogo Wind	December 20, 2012	December 20, 2013	April 5, 2019	9.1 years		
5.	Gunn's Hill Wind	November 14, 2016	October 16, 2018	No Information	5.1 years		
6.	Port Ryerse Wind	December 9, 2016	July 17, 2018	No Updates	5.1 years		
7.	Romney Wind	December 31, 2019	Not Yet Due	June 29, 2021	1.8 year		
8.	Snowy Ridge	October 5, 2016	September 20, 2017	No Updates ¹¹	5.3 years		
9.	South Kent Wind	March 28, 2014	January 30, 2015	August 14, 2020	7.9 years		
10.	Sumac Ridge Wind	November 17, 2017	September 27, 2018	No Information	4.1 years		
11.	Summerhaven Wind	August 6, 2013	February 10, 2014	May 1, 2020	8.5 years		
12.	Underwood ¹²	February 9, 2009	Not Provided	No Updates	13.0 years		

13.	Wainfleet Wind	September 17, 2014	May 15, 2015	No Information	6.4 years
14.	ZEP Ganaraska Wind	May 6, 2016	September 14, 2018	No Information	4.7 years

	Submission Due				
1.	Henvey Inlet	October 19, 2019	Due – October 2020	No Information	2.3 years
	Not Yet Due				

¹ IESO Active Contract List as at September 30, 2021

² Data Provided by MECP as at July 30, 2019

³ Based on a review of project websites – "No Updates" = No change in information; "No information" = audit no information posted on website

⁴ Dates provided by MECP.

 $^{^{\}rm 5}$ Elapsed time calculated either to the date compliance was confirmed or to the current date.

⁶ Identical dates for submission and review completion provided by MECP

⁷ Approval date posted by operator conflicts with status provided by MECP 2 months after "approval"

⁸ REA amended to reduce night time noise levels at 2 wind turbines to bring noise levels within noise guidelines.

⁹ In May 2019, the Ministry found the K2 project was out of compliance and ordered the operator to develop and implement a Noise Abatement Action Plan.

¹⁰ Turbine determined to be non-compliant on March 8, 2018, Noise Abatement Action Plan implemented. Problem not resolved.

¹¹ Capstone Renewable Project, limited project documentation posted on project websites.

¹² i-Audit report submitted in January 30, 2018 accepted and then rejected by MECP. More noise testing is currently underway.

Report on Boulevard Trees to EAC Meeting, November 13, 2019

Recommendation: That Port Colborne Environmental Advisory Committee (EAC) recommends to Council that staff be directed to review previous decisions on boulevard tree planting (Tree Installation Policy, October 2007 and Bylaw No. 6175/01/15, dated 12th January 2015) taking into regard the reasons provided in this report and report back to Council following this review.

Introduction: Port Colborne's Environmental Advisory Committee (EAC) has been considering policy adopted by the City of Port Colborne on the planting and management of boulevard trees in Port Colborne. This policy is set out in a Tree Installation Policy which appears to have been adopted in the fall of 2007 and updated by Bylaw No. 6175/01/15 dated 12th January 2015.

The Bylaw and Tree Installation Policy provide for, among other things, the removal of trees from street boulevards, replanting a replacement tree if the adjoining landowner wishes, regulation of which trees can be planted with 4.5 m from City property and a strict prohibition on planting any tree within 1.5 m from City property including any replacement tree for one removed from the boulevard. No provision appears to be made for tree planting within streets owned by the City. Over time, this policy will result in the removal of trees from City streets in Port Colborne's urban area.

EAC believes that a review of this policy and it's further development to address the considerations listed below would benefit Port Colborne at this time for the following reasons:

- 1. Boulevard trees are important contributors to the quality of residential and commercial neighbourhoods and strategically planted can improve the environmental quality of the City as well as provide many other benefits described below. There is a substantial disparity in the distribution of boulevard trees throughout Port Colborne's urban area.
- 2. Public health research supports the importance of urban forestry and treed streetscapes. For example, American researchers have found the demise of ash trees due to the ash borer from the forest canopy correlates with increases in mortality where heart and lower respiratory diseases are concerned. More recently, Danish researchers have found that youth growing up in neighbourhoods with sufficient green space experience lower incidences of psychiatric disorders in later life. While the sciences doesn't establish causality where these correlations are concerned, sufficient evidence exists to warrant treed streetscapes, where possible.
- 3. Neighbourhood quality, including forested boulevards, is an important criteria where companies make decisions to develop and relocate manufacturing and industrial operations. The availability of quality walkable and green neighbourhoods for employees is an important consideration when relocation and development decisions are made.
- 4. Boulevard trees help improve air quality throughout the City. This is important where particulate matter is concerned. During extreme heat events, boulevard trees also help

- cool neighbourhoods by providing shade. In addition, they calm traffic by encouraging slower vehicular speeds.
- 5. With the extreme wind events, we experienced in 2019, particularly October 31st and November 1st, Port Colborne may become geographically at risk to more severe and extreme wind events as a result of climate warming. More attention should be placed on reducing our vulnerability where larger tree species are concerned, particularly where hydroelectric facilities, building stock and streets are concerned. Attention is warranted to clarifying which species should be listed and regulated where bylaw 6175/01/15 are concerned. The list of prohibited trees and the possible addition of smaller tree species should be considered. This clarification should also be made available publicly so landowners can use these recommendations where replanting is undertaken, particularly where replacement of ash canopy is considered.
- 6. It may also be warranted to include this recommended re-consideration of Bylaw 6175/01/15 with work ongoing in the City on the topic of greenhouse gas mitigation strategies are concerned. Recent research on municipal climate change planning suggests that more emphasis needs to be placed on adaptation. Adaptation of Bylaw 6175/01/15 to extreme wind related events is warranted.

Further, in conducting this review, EAC recommends that the following matters be considered:

- 1. The use of smaller tree species to be determined as species recommended for application.
- 2. It is recommended that City staff work with municipal horticulturalists and landscape architects on staff and in other municipalities to identify and benefit for other municipal experience where comparable issues are concerned.
- 3. Where possible this work should be coordinated with the climate warming mitigation work underway presently in the City.
- 4. There is substantial variety in the dimensions and designs of the streetscapes in Port Colborne beyond the obvious variations that apply to commercial and industrial/manufacturing uses and residential neighbourhoods. If possible, can there be some adaptation of the boulevard tree policy to reflect these differences?

Recommendation: That Port Colborne Environmental Advisory Committee (EAC) recommends to Council that staff be directed to review previous decisions on boulevard tree planting (Tree Installation Policy, October 2007 and Bylaw No. 6175/01/15, dated 12th January 2015) taking into regard the reasons provided in this report and report back to Council following this review.