

# Memorandum

DATE:

September 8, 2008

TO:

Bryan Blunt

Environmental Officer Manitoba Conservation Suite 160-123 Main Street

Winnipeg MB

FROM:

Gordon Hill

Impact Assessment

Archaeologist Historic Resources

Branch

Main Floor 213 Notre

Dame Avenue Winnipeg MB

R3B 1N3

PHONE NO:

(204) 945-7730

SUBJECT:

**ENVIRONMENT ACT PROPOSAL** 

YOUR FILE: 5353.00

ST. JOSEPH WIND ENERGY PROJECT

**RMs RHINELAND & MONTCALM** 

HRB FILE: E7.8.170

I have reviewed the above-noted application for an Environment Act License. The Historic Resources Branch has concerns with regard to this project's potential to impact heritage resources.

Section 5.12.2.1 of the document outlines proposed mitigation measures. It is recommended that an archaeological consultant be contracted to undertake an archaeological field survey, prior to construction, of WTG structures located within 1 km from a known heritage site. It should also be pointed out that the RCMP must be contacted in the event of the identification of human remains.

If at any time significant heritage resources are recorded in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the affects of development on the heritage resources.

C. Gordon Hill



DATE:

September 11, 2008

Memorandum

TO: Bryan Blunt

**Environment Officer** 

**Environmental Assessment and Licensing** 

Branch

Manitoba Conservation 123 Main Street, Suite 160 Winnipeg, Manitoba R3C 1A5

CC: Laureen Janusz Wendy Ralley Rob Matthews **Brad Allum** 

FROM:

William Weaver, M.Sc. **Environmental Review Officer** Planning and Coordination Branch Manitoba Water Stewardship 200 Saulteaux Crescent, Box 14 Winnipeg, Manitoba R3J 3W3

**TELEPHONE**: 945-6395 **FACSIMILE: 945-7419** 

SUBJECT: **ENVIRONMENT ACT PROPOSAL FILE: 5353.00** 

ST. JOESPH WIND ENERGY PROJECT

R. M. OF RHINELAND AND R. M. OF MONTCALM

Manitoba Water Stewardship has reviewed the referenced file, forwarded for comment on July 29, 2008. The Department has the following comments:

- The Water Rights Act indicates that no person shall control water or construct, establish or maintain any "water control works" unless he or she holds a valid licence to do so. "Water control works" are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If the proposal in question advocates any of these activities, application for a Water Rights Licence to Construct Water Control Works is required.
- The proponent needs to be informed that if proposal in question advocates any construction activities, erosion and sediment control measures should be implemented until all of the sites have stabilized.
- Some of Buffalo Channel, Buffalo Creek, Rempel Drain, Riviere Aux Marais, and tributaries to these surface waters as well as numerous agricultural drains are located within the proposed area. The proponent indicates the potential for 39 new water crossings and upgrades to existing crossings as well as electrical cable crossings. For the road crossings, the proponent is proposing standard pipe or box culverts and the electrical crossings may be installed under surface waters using directional drilling or hung overhead.
  - The majority of crossings appear to be on the agricultural drains. While the Department does not have fish inventories for a number of the drains they are proposing to cross, many of the drains lead directly to known fish bearing waters and ultimately to the Red River. For example, crossings CKC 001, 002 and 003 will be installed on a drain that empties into Buffalo Creek. In 1999, a site was sampled on Buffalo Creek in the vicinity of the drain and walleye larva and white sucker eggs were found indicating this creek provides at minimum seasonal fish habitat (spawning, nursery, feeding). At another site much further downstream at Altbergthal, young of the year northern pike and black bullheads as well as walleye and carp were captured.



Date: September 11, 2008

Subject: Environment Act Proposal File 5353.00
St. Joesph Wind Energy Project
R.M. of Rhineland and R.M. of Montcalm

- The proponent indicates that all crossings will be reviewed by the Department of Fisheries and Oceans Canada and Manitoba Water Stewardship's Fisheries Branch. As specific information for each water crossing has not yet been provided, the need to consult with the Department of Fisheries and Oceans Canada prior to installation should be a condition of their *Environment Act* Licence. Given the number of crossings it is important that ongoing sediment loading is minimized. Temporary and permanent erosion and sediment control measures need to be implemented before, during and after construction. Culverts need to be sized appropriately to ensure they will stay in place during major precipitation events and they need to be placed so as not to create barriers. There should also be a requirement of the proponent to monitor the watercourse crossings and provide annual reports documenting failure, corrective measures and timeframe. Unless the crossings are done in the dry, given the potential to provide or contribute to downstream spring spawning habitat the spring spawning window of April 1<sup>st</sup> to

  June 15<sup>th</sup> should be followed.
- o It is noted near the front of the proposal that there will be a 60 metre set back along water courses, water bodies, marshes and swamps yet further in the document it is stated that "..except crossings, construction activities will respect a 15 metre buffer from the top of the bank of drains." Please clarify which setback will be utilized.
- Also it should be noted that any fish/mussel/invertebrate collection or fish/mussel salvage activities require a permit issued through Fisheries Branch, Manitoba Water Stewardship.
- During the construction phase, the proponent must ensure that no silt, gravel, construction material or other material resulting from site preparation and stream crossings enters surface water.
  - While proponent states in Section 5.5.2.1 that the turbines will be located away from most surface water, consideration has not be given to sedimentation to municipal drainage ditches as a result of surface water runoff during the construction phase. Municipal drainage ditches include those along roadways. Most of the turbines are planned along roadways for easy accessibility.
  - A minimal removal of vegetation along watercourses is recommended. Disturbance and removal of permanent riparian vegetation should be kept to a minimum including along roadside ditches, and larger ordered drains.
- In addition to mitigating impacts to drainage courses (seeding, replanting vegetion, etc.), as outlined
  in Section 5.3.2, the proponent must prevent soil / silt from entering watercourses. Manitoba is
  committed to reducing nutrient input to surface water as part of the Lake Winnipeg Action Plan.
- Accidental spills of hazardous materials must be removed immediately and disposed to an approved facility.
- Construction de-watering requires an authorization under The Water Rights Act.

Date:

September 11, 2008

Subject: Environment Act Proposal File 5353.00

St. Joesph Wind Energy Project

R.M. of Rhineland and R.M. of Montcalm

- Section 6.2.4 Flooding of the proposal states "The eastern portion of the Project Area, nearest to the Red River, is located in the 1997 Red River Valley flooded area. (Manitoba Water Stewardship, 1997). Other flooding events may occur during the operation phase of the Project. If the transformers are to be located at the base of the towers instead of within the nacelle, specific measures to prevent any damage to transformers due to flooding events will be implemented."
  - A very significant portion of the Project Layout Area, as shown on Map 2.1 (found in *The Environment Act* Proposal) lies within the boundary of the Red River Valley Designated Flood Area. As such, many of the sites indicated on Map 2.1 are subject to flooding by the Red River. The severity of flooding at any given location is site specific.
  - The Department recommends that an Environment Act Licence include a requirement for the proponent to obtain a Designated Flood Area Permit, which will specify appropriate flood protection measures for each site, for each tower regardless of method of construction. The proponent is required to obtain a Designated Flood Area Permit under the Designated Flood Area Regulation of The Water Resources Administration Act.

William Weaver, M.Sc.

From: Streich, Laurie (CON)

Sent: Tuesday, September 09, 2008 3:12 PM

To: Blunt, Bryan (CON)

Cc: Rostkowski, Debbie (CON); Bezak, Dave (CON); Molod, Rommel (CON)

Subject: FW: St. Joseph Wind Energy Project (5353.00)

Bryan, please find comments from P2 branch on the proposal 5353.00.

Laurie Streich Director Pollution Prevention Branch Manitoba Conservation 160-123 Main Street Winnipeg MB R3C 1A5

Phone: (204) 945-7482 Fax: (204) 945-1211

Email: Laurie.Streich@gov.mb.ca



Before printing, think about the environment Avant d'imprimer, pensez à l'environnement

From: Bezak, Dave (CON)

Sent: Monday, September 08, 2008 3:26 PM

To: Streich, Laurie (CON) Cc: Molod, Rommel (CON)

Subject: FW: St. Joseph Wind Energy Project (5353.00)

Rommel's comments on the above Envt Act development proposal are attached – some potential issues with noise exposure are identified. Thanks. DB.

From: Molod, Rommel (CON)

Sent: Monday, September 08, 2008 3:12 PM

To: Bezak, Dave (CON)

Subject: St. Joseph Wind Energy Project (5353.00)

Hi Dave. These are my comments for the above proposal.

#### Comments

- With reference to the submitted Simulated Noise Isocontour map (Map 5.1), many dwellings are within a kilometer from a WTG or a cluster WTG. Similarly, it can be noted from same map that there are potential dwellings that may fall within the 40-45 dB (A) zones (one-storey dwelling @1.5 M height). In the absence of a criterion for WTG in the province of Manitoba, the proponent has been referring the Ontario MOE as reference criteria.
- With reference to "Wind Turbines and Sound: Review and Best Practice Guidelines" posted on the Canadian Wind Energy Association (CanWEA) website, a technical assessment of the sound impact of the project

- should be undertaken since there are potentially sensitive (residences) receptors within a kilometer (the setback adopted in this project is at least 550 meters). Although not included in the submission, there was a mention of a noise impact assessment in page 104 of the Report (Volume 1) which I think resulted to the isocontour map.
- Based on the submitted wind rose (Figure 3-1), the wind speed for most days is from 1 m/s to 11 m/s. However, there are instances of wind speed exceeding 11 m/s coming from the south, south-southeast, north, north-northeast, east-northeast and east. With reference to the Ontario MOE Criteria, there may be few incident(s) of exceedances depending on the background noise. Background noise is from agricultural activities and ambient noise induced by wind (on trees, etc.). It is worthy to note that, If most (if not all) of the dwellings mentioned above (falling within a kilometer from a WTG) are also owner of land where the WTG are located, they may have an economic gain on the proposal, hence may have a higher tolerance on the effects of noise.

Link to best practices document: <a href="http://www.canwea.ca/images/uploads/File/CanWEA\_Wind\_Turbine\_Sound\_Study\_-\_Final.pdf">http://www.canwea.ca/images/uploads/File/CanWEA\_Wind\_Turbine\_Sound\_Study\_-\_Final.pdf</a>

#### Recommendations

- Although seemingly the impact from noise will not be significant, it is suggested that noise measurement/management be included in the EA license conditions.
- o The noise study report is suggested to be included in the submission and not only the results.

Rommel Molod Air Quality Specialist Pollution Prevention Branch Manitoba Conservation Suite 160 123 Main Street Winnipeg MB R3C 1A5 T (204) 945-7047 F (204) 945-1211



# Memorandum

DATE:

September 15, 2008

TO:

Tracey Braun

Director

**Environmental Assessment and** 

Licensing Branch Manitoba Conservation 123 Main St., Suite 160 Winnipeg, MB R3C 1A5 FROM:

Joseph Romeo

Sr. Environment Engineer Manitoba Infrastructure and

Transportation

14<sup>th</sup> Floor – 215 Garry Street Winnipeg, MB R3C 3Z1

Fax:

945-0593

Phone:

945-2369

SUBJECT:

St. Joseph Wind Energy Project

Town of St. Joseph - RM of Rhineland and Montcalm

(Client File No. 5353.00)

We have reviewed this proposal as requested in your letter dated 29 July 2008 and we are submitting the following comments for your consideration.

The proposal is located in the vicinity of Provincial Trunk Highway (PTH) 75 and PTH 14 and Provincial Road (PR) 412 and PR 201.

PTH 75 and PTH 14 are Limited Access Highways under the jurisdiction of the Highway Traffic Board. Under The Highways Protection Act, any new, modified or relocated access to these highways or their service roads (including the change in use of an existing driveway) requires a permit from the Highway Traffic Board. A permit is also required from the Highway Traffic Board for any change in the use of the land or the buildings, or to place, construct or alter any structures within 76.2 m (250 ft) from the edge of the right- of- ways of the highways.

Any new modified or relocated access connection onto either PR 421 or PR 201 requires a permit from Manitoba Infrastructure and Transportation (MIT). A permit is also required for any construction above or below ground level within 38.1 m (125 ft) of these provincial roads.

In addition, a permit is required from Manitoba Infrastructure and Transportation for any planting placed within 15.2 m (50 ft) from the edge of the right-of-way of these highways.

It is expected that this development will not after the existing drainage patterns and flows along the existing provincial highway ditches. If this assumption is not correct, additional information will have to be submitted to us in order to identify alteration requirements.

If additional information or clarifications are required about the above –noted requirements, please ask the applicants to contact Mr. Richard Nichol, Senior Access Management Analyst at telephone number (204) 945-5658 or Prokopis Papadimitropoulos, Regional Technical Services Engineer at telephone number (204) 781-7586.

Thank you for giving us the opportunity to comment on this proposal.

Joseph Romeo, P. Eng. Sr. Environment Engineer

Cc:

Richard Nichol, Sr. Access Management Specialist Prokopis Papadimitropoulos, Technical Services Engineer Murray Donald, Regional Planning Technologist

From: Schindler, Dennis (MAFRI)

Sent: Wednesday, October 01, 2008 9:27 AM

To: Blunt, Bryan (CON)

Cc: Rahman, Ataur (MAFRI)

Subject: RE: File No. 5353.00 St. Joseph Wind Energy Project Env. Act Proposal

Thanks for the additional information and I apologize for the delay in response. Given the documentation provided there are no additional issues or concerns from an agricultural or agricultural land use

planning perspective. Again my apologies.

From: Jones, Chuck (STEM)

Sent: Tuesday, August 19, 2008 2:36 PM

To: Blunt, Bryan (CON)

Cc: Miskimmin, Barb (STEM)

Subject: St.Joseph Wind Energy Project-R.M. of Rhineland and Montcalm

Mines Branch has reviewed the above noted Environment Act proposal and has no concerns.

From:

McRobbie, Karen (CON)

Sent:

Monday, September 08, 2008 10:54 AM

To: Cc: Blunt, Bryan (CON) Barto, William (CON)

Subject:

EA Proposal: St. Joseph Wind Energy Project, RM's of Rhineland and Montcalm, File No.

5353.00

Bryan, The Sustainable Resource & Policy Management Branch has no comment regarding the above EA proposal.

Policy Analyst

Sustainable Resource & Policy Management Br.

Manitoba Conservation

Box 38, 200 Saulteaux Crescent

Karen McRobbie

Winnipeg MB R3J 3W3 Ph: (204) 945-5747

Fax: (204) 945-4552

Email: Karen.McRobbie@gov.mb.ca

From: Gilbertson, Mike (CON)

Sent: Monday, August 18, 2008 9:10 AM

To: Blunt, Bryan (CON)

Cc: Beck, Al (CON); Itzke, Marlene (CON)

Subject: EA Proposal: St. Joseph Wind Energy Project RMs of Rhineland & Montcalm

Environmental Services has reviewed the documentation provided and has identified no concerns.

#### Mike Gilbertson

Manager, Environment Section
Operations Division, Environmental Services
Manitoba Conservation
Box 46, 200 Saulteaux Crescent
Winnipeg, MB R3J 3W3
mike.gilbertson@gov.mb.ca

Phone: 204-945-7094 Fax: 204-948-2420

From: Froese, Julie (CON

Sent: Friday, September 12, 2008 2:55 PM

To: Blunt, Bryan (CON)
Cc: Ritchie, Glenn (CON)

Subject: St. Joseph Wind Energy Project RM's of Rhineland and Montcalm

The proposal for the wind energy project located at St. Joseph has been reviewed, and our office has no concerns with the proposal at it has been outlined.

### **Julie Froese**

Environment Officer Manitoba Conservation 555 Main St. Winkler, MB R6W 1C4 Phone: (204) 325-1755

From:

Hernandez, Helios (CON)

Sent:

Thursday, August 28, 2008 3:17 PM

To:

Blunt, Bryan (CON)

Subject:

St Joseph Wind Energy Project - File No. 5353.00

#### Bryan:

Parks and Natural Areas Branch has reviewed the St. Joseph Wind Energy Project proposal in the RMs of Rhineland and Montcalm. The applied-for project area does not contain any designated lands or sites administered by the Branch nor any sites identified to date as likely to be of interest to the Branch for future consideration as provincial parks or ecological reserves. Accordingly, the Branch has no specific comments to offer.

Helios

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Helios Hernandez

Parks and Natural Areas Branch Manitoba Conservation 200 Saulteaux Crescent Winnipeg, MB R3J 3W3 CANADA

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