



**Stantec Consulting Ltd.**  
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July 27, 2015  
File: 160960709

**Attention: Mark Kozak, Project Manager, Renewable Energy**  
Suncor Energy Products Inc.

SENT VIA EMAIL: makozak@suncor.com

**Reference: Status of Immediate Remediation Measures Areas of Vegetation Removal at the Cedar Point Wind Farm**

In early 2015, a project-contracted arborist removed small exterior segments of vegetation in significant wetlands and woodlands during site preparation for the installation of the overhead transmission line in the Cedar Point Wind Farm (please see Figure 1, attached). This vegetation removal was not permitted as part of Suncor's Renewable Energy Approval (REA) or St. Clair Region Conservation Authority (SCRCA) permits. In response to a notice of "Violation of O.R. 171/06 - Condition of Permit - Suncor Cedar Point Wind Project" from SCRCA, Suncor Energy Inc. (Suncor) hired Stantec Consulting Ltd. (Stantec) to complete a review of the vegetation removal works, complete an impact assessment of the affected areas, and recommend remediation measures to restore the sites to original condition or better.

Stantec recommended some immediate remediation measures which were approved by SCRCA, and implemented in July 2015. The work was conducted by a forestry contractor under the day to day supervision of Ms. Ashley Kirchoefer of AMEC Foster Wheeler, with David Charlton of Stantec providing oversight and review on a regular basis.

The following is a status report on the immediate remediation measures.

**IMMEDIATE REMEDIATION MEASURES**

Immediate remediation measures as approved by SCRCA include:

1. Any tree trunks or limbs greater than 5 cm in diameter currently being stored on-site should be removed from the site and appropriately disposed of. These materials may be chipped and reapplied as mulch, so long as the depth of mulch across the disturbed areas does not exceed 5 cm (see recommendation number 2 below).
2. The mulch in the disturbed areas should be spread to a depth no greater 5 cm throughout the area of vegetation removal. This will allow appropriate amounts of sunlight and moisture to reach the soil and underlying seedbank while still providing protection from excess drying.
3. The silt fencing adjacent to these areas of vegetation removal should be keyed into the ground to prevent any silt transport from surrounding fields into the disturbed areas and the adjacent remaining significant features.



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4. Any remnant vegetation stumps or trunks with broken or shredded margins should be cleanly cut to enhance the possibility of re-sprouting (for species where this may occur) and to limit infection and rot.
5. Appropriate site controls should be implemented to prevent further disturbance to the areas of vegetation removal and the adjacent significant features. Controls should include monitoring and maintaining the silt fencing until all construction activity in the area is complete, and communicating with all construction crews that no one may enter these areas.
6. An environmental monitor should be on-site daily to monitor all construction activities in accordance with construction mitigation plans and these remedial measures.

Based on two site visits by the undersigned, and the day to day monitoring and inspection by Ms. Kirchoefer, as documented by email reports and multiple site photos, Stantec is satisfied that the recommended immediate remediation measures have been completed in a satisfactory manner given site and weather conditions that prevailed in July. Details are provided below.

1. The majority of tree trunks and limbs greater than 5 cm in diameter have been removed from the woodlands and stacked on site for appropriate disposal in accordance with landowner requests. Photo 1 shows an example of this measure.



**Photo 1: Trunk and limb removal.**



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2. Mulch in the disturbed areas has been redistributed to achieve a maximum depth of approximately 5 cm throughout the area of vegetation removal. Existing forest floor conditions, emerging vegetation and naturally occurring large woody litter and deadfall were taken into account in implementing the recommendation to achieve a mix of mulch depth and distribution that fairly represents the litter distribution in the adjacent woodlot. The objective of this recommendation has been achieved.



**Photo 2: Typical Mulch Distribution and Silt Fence**

3. The silt fencing adjacent to areas of vegetation removal has been keyed into the ground and maintained as need under the daily supervision of AMEC Foster Wheeler. Photos shows and example of how the fence has been keyed in. No serious sedimentation of woodland habitats was observed during Stantec site visits.
4. Remnant tree stumps or trunks with broken or shredded margins have been cleanly cut close to the ground and evidence of sprouting was observed. Please see Photo 3 as an example.



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**Photo 3: Example of flush cutting of stumps**

5. The silt fencing has been monitored and maintained to date and appears to part of the regular inspection routine. No further unauthorized access or damage to woodlots has been observed. It appears from site visits that construction crews have been advised of areas to avoid.
6. It is my understanding that Ms. Kirchhoefer of AMEC Foster Wheeler has been on-site daily as the environmental monitor. Stantec site visits (latest date July 14) provided no data or observations to suggest that any construction activities have occurred that were not in accordance with construction mitigation plans and the immediate remediation measures recommended by Stantec. Ms. Kirchoefer has provided regular reports, documented with site photos, to Stantec in regard to implementation of remediation measures.

Based on the observations above, it is my opinion that the Immediate remediation measures recommended by Stantec have been appropriately implemented at the site, and I would recommend that Suncor now turn its attention to the medium term measures that were



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recommended including preparation of a draft planting plan, discussions with SCRCA and implementation of the final planting in the fall of 2015.

Please do not hesitate to contact me if you have additional questions or concerns.

Regards,

**STANTEC CONSULTING LTD.**

**DRAFT**

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Attachment: Figure 1 – Tree Removal Area

c. Melissa Deisley (SCRCA)

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