

**Ministry  
of the Environment  
and Climate Change**  
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**Ministère  
de l'Environnement et de l'Action  
en matière de changement  
climatique**  
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January 23, 2017

The Corporation of the City of Orillia  
Orillia City Centre  
50 Andrew Street South, Suite 300  
Orillia, ON  
L3V 7T5

Attention: Andrew Schell, Director of Environmental Services and Operations

Dear Sir,

**Re: Amendment No. 5 - Consolidated Certificate of Property Use No. 7184-85KNQZ (CPU)  
255 West Street South, Orillia, ON (Property)**

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This letter is in response to the January 4, 2017 request by The Corporation of the City of Orillia (City) to the Ministry of the Environment and Climate Change (Ministry) for an amendment to the above noted CPU. Specifically, this request is to include an alternative option of utilizing a Geosynthetic Clay Liner (GCL) capping system for the Active Use Areas under Item 4.2.1.1 of the CPU; revising Figure 2 "On-Site Monitoring Wells" by Cambium dated November 15, 2015 of Schedule G of the CPU to provide the correct locations for the required surface water and sediment monitoring points; and to include a 2-m wide passive buffer area strip along the boundary of the Non-Sensitive Area of the Property to the north, east, south, and west as part of the proposed development.

In support of this request, the City provided additional information as follows:

- The letter report entitled "Request #5 for Amendment of Certificate of Property Use #7184-85KNQZ, Under Part 4: Director's Requirements, 255 West Street South, Orillia, Ontario" by Cambium dated January 4, 2017.
- The email dated January 10, 2017 from Mr. Greg Preston of the City to John Kaasalainen, P.Eng. of the Ministry's Barrie District Office outlining the City's reasons for requesting the proposed amendment.
- The email dated January 17, 2017 from Mr. Greg Preston of the City to John Kaasalainen, P.Eng. of the Ministry's Barrie District Office providing a revised Figure 2 "On-Site Monitoring Wells and Surface Water/Sediment Sampling Locations" by Cambium dated January 2017.

The reasons for this amendment are that the City is moving forward with the development of the Property as a multi-use recreational facility and is looking at a cost effective alternative for the

capping system that would provide an equivalent performance as the use of 300 mm of clay, would be easier to install during wet and winter conditions, and will be easier to source than a local supply of the needed clay soil materials. In addition, the amendment will clarify in the CPU the locations for the on-going surface water and sediment sampling programs and the use of a 2-m wide Passive Use Area buffer strip as part of the proposed development.

Based on the Ministry's review of the aforementioned request, and pursuant to my authority under subsection 168.6(3) of the Act, I hereby alter the CPU as set out below. The terms herein that are capitalized have the meanings described herein or in the CPU.

#### A. Capping of Outdoor Areas ("Cap/Capping/Capped")

Item 4.2.1.1 is hereby revoked and replaced by the following which adds the option of the use of a GCL:

- 4.2.1.1 Active Use Areas – are any areas that may be potentially used for recreational or leisure activities, including baseball diamonds and picnic areas and is covered with soil, grass, gravel, sand or any other soft surface.

In these areas, the Capping shall be either:

- 4.2.1.1.1 A minimum 900 mm composite layer of clean fill over a geotextile membrane shall be utilized in all areas that are not covered by a hard surface. A geotextile membrane shall be laid on top of the Impacted Soils. 300 mm of clay shall be placed over the geotextile and a 600 mm layer of clean compactable fill (sand or silty sand) shall be placed and compacted over the clay layer. Toppings such as crushed limestone screenings, granular "A" or "B", topsoil and sod may be included in the 600 mm clean fill as long as the overall minimum thickness is 900 mm over the geotextile; or
- 4.2.1.1.2 A minimum 900 mm composite layer of clean fill over a Geosynthetic Clay Liner ("GCL") shall be utilized in all areas that are not covered by a hard surface. A GCL shall be placed on a minimum 150 mm clean fill leveling course for uniformity, directly above the Impacted Soil. A minimum 900 mm layer of clean compactable fill (sand or silty sand) shall be placed and compacted over the GCL. Toppings such as crushed limestone screenings, granular "A" or "B", topsoil and sod may be included in the 900 mm clean fill as long as the overall minimum thickness is 900 mm over the GCL.

#### B. Schedules

Item 3.3 is amended by the following:

Schedule A:

The following figure is to be added to Schedule A of the CPU: Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects dated December 14, 2016.

Schedule G:

Figure 2 of Schedule G is hereby revoked and replaced by:

Schedule G – Figure 2 “On-Site Monitoring Wells and Surface Water/Sediment Sampling Locations” by Cambium dated January 2017.

#### C. Site Plan

Item 4.2.16 is hereby revoked and replaced by the following to reflect the addition of the 2-m wide Passive Use Area buffer strip:

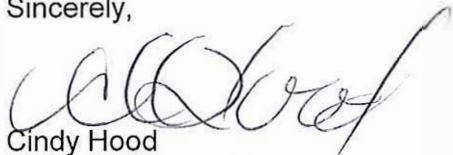
4.2.16 The Owner shall prepare a site plan prior to any development of the Property which shall describe the Property and placement of the Capping, as identified in Item 4.2.1 of this CPU. The site plan shall include plan and cross section drawings specifying the vertical and lateral extent of the Capping for the area(s) to be used or developed at the Property to prevent exposure to the COCs. The site plan shall also include the details concerning the 2-m wide Passive Use Area buffer strip along the boundary of the Non-Sensitive Area of the Property to the north, east, south, and west as identified on Drawing No. A013 “Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario” by MJMA Architects dated December 14, 2016. This site plan shall be submitted to the Director and the Owner shall retain one copy for inspection upon request by a Provincial Officer. The site plan shall be revised and resubmitted to the Director following the completion of any alteration to the extent of the Capping systems.

#### D. Consent Amendment and Disclosure Requirements

This letter is being issued following a discussion with representatives of the Owner and its consultants. It is understood and agreed that Part 6 of the CPU, Hearing before the Environmental Review Tribunal, applies if the Owner wishes to appeal any provision in this letter and the amended CPU. This letter is an amendment to the CPU and will need to be disclosed as per Item 4.8 of the CPU. The original issuance of the CPU was posted on the Environmental Bill of Rights, 1993 Environmental Registry as EBR Registry Number 011-2570. I have determined that there is no need to give notice of a proposal to amend the CPU as I consider that the potential effect of the amendment on the environment is insignificant.

If you have any further questions or require additional information/clarification please contact John Kaasalainen, P.Eng. of this office at (705) 739-6402 or by email at [john.kaasalainen@ontario.ca](mailto:john.kaasalainen@ontario.ca).

Sincerely,

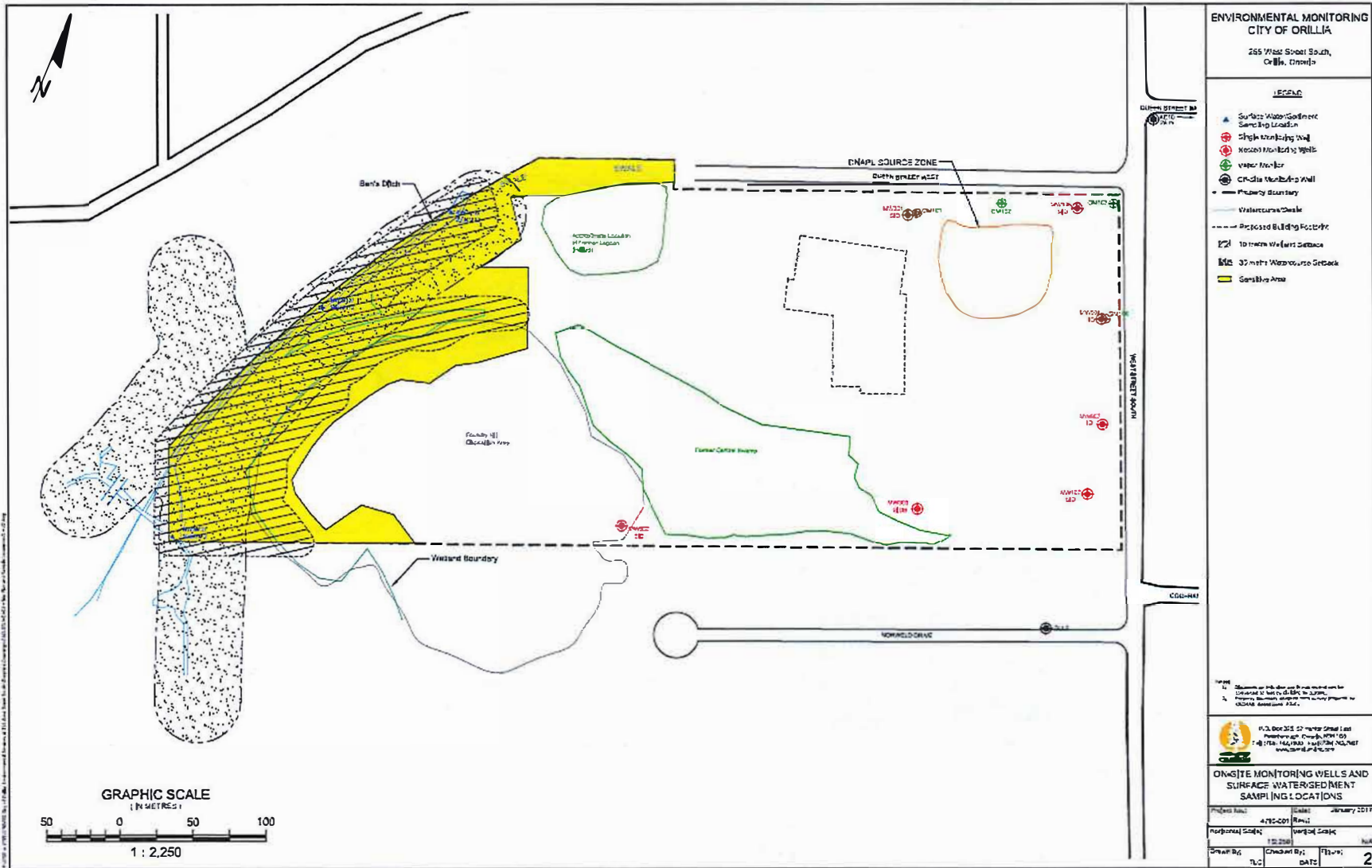


Cindy Hood  
Director, section 168.6 of the Act

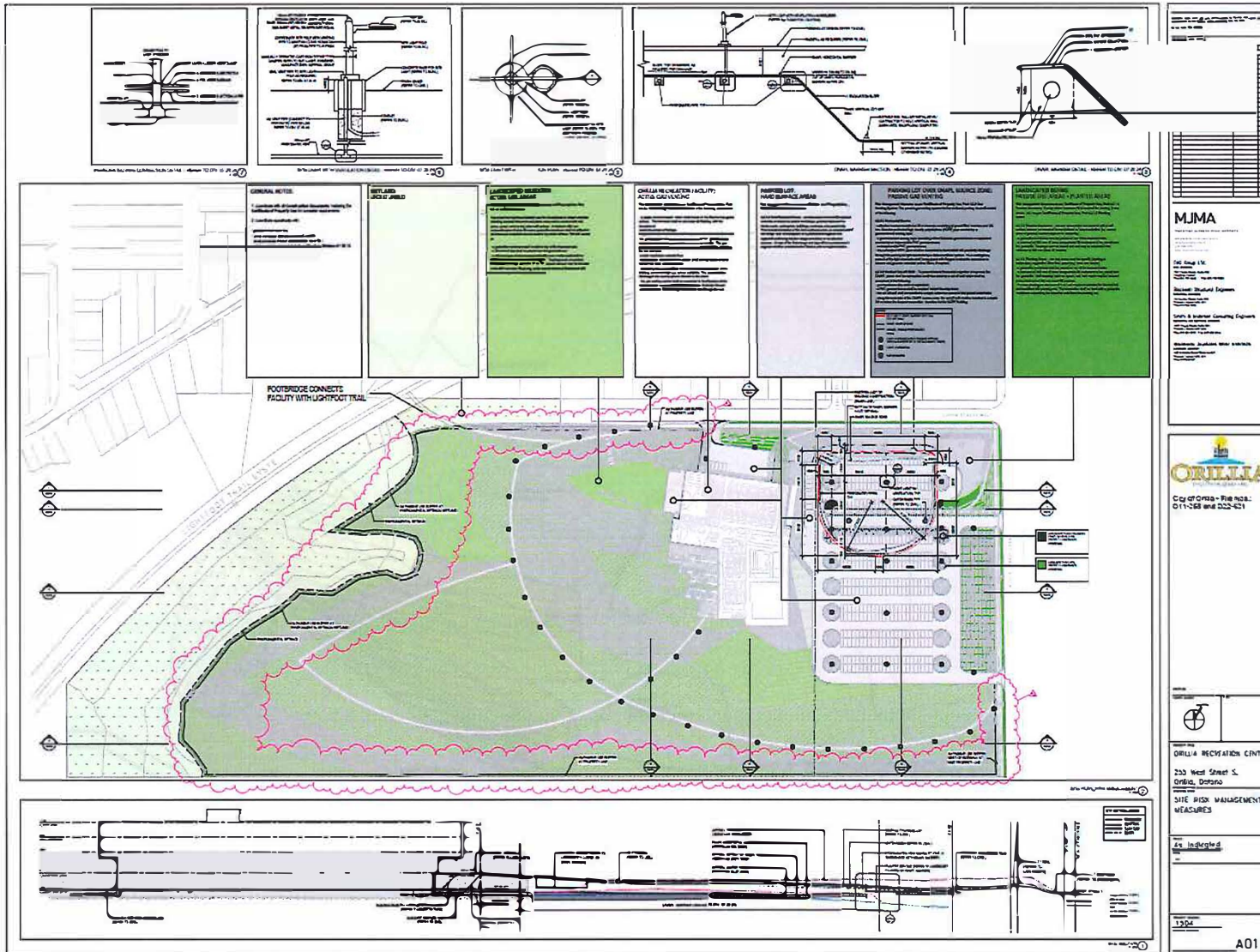
## Attachments

1. Annotated Figure 2 "On-Site Monitoring Wells and Surface Water/Sediment Sampling Locations" by Cambium dated January 2017.
  2. Annotated Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects dated December 14, 2016.
- cc. Brad Sawdon, Cambium ([brad.sawdon@cambium-inc.com](mailto:brad.sawdon@cambium-inc.com))  
Greg Preston, City of Orillia ([GPreston@orillia.ca](mailto:GPreston@orillia.ca))  
Kelly Smith, Chief Building Official – City of Orillia ([ksmith@city.orillia.on.ca](mailto:ksmith@city.orillia.on.ca))  
Gayle Jackson, City Clerk – City of Orillia ([clerks@city.orillia.on.ca](mailto:clerks@city.orillia.on.ca))  
Andrew Schell, City of Orillia ([ASchell@orillia.ca](mailto:ASchell@orillia.ca))

Figure 2 "On-Site Monitoring Wells and Surface Water/Sediment Sampling Locations" by Cambium dated January 2017



Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects dated December 14, 2016



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July 7, 2017

The Corporation of the City of Orillia  
Orillia City Centre  
50 Andrew Street South, Suite 300  
Orillia, ON  
L3V 7T5

Attention: Andrew Schell, Director of Environmental Services and Operations

Dear Sir,

**Re: Amendment No. 6 - Consolidated Certificate of Property Use No. 7184-85KNQZ (CPU)  
255 West Street South, Orillia, ON (Property)**

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This letter is in response to the June 29, 2017 request by The Corporation of the City of Orillia (City) to the Ministry of the Environment and Climate Change (Ministry) for an amendment to the above noted CPU. Specifically, this request is to amend the Capping layout of the outdoor areas by expanding the undisturbed wetland area, increasing the Passive Use Area, reducing the Active Use Area, and changing the location of the proposed footbridge as described under Item 4.2.1 "Capping of Outdoor Areas (Cap/Capping/Capped)" and identified on the updated Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects Revised June 26, 2017.

In support of this request, the City provided additional information as follows:

- The letter report entitled "Request for Amendment (#6) of Certificate of Property Use #7184-85KNQZ, Regarding Changes to Site Risk Management Measures, Drawing A013, Dated December 14, 2016, 255 West Street South, Orillia, Ontario" by Cambium dated June 27, 2017.
- The email dated July 4, 2017 from Mr. Greg Preston of the City to John Kaasalainen, P.Eng. of the Ministry's Barrie District Office outlining the City's reasons for requesting the proposed amendment.
- The email dated July 7, 2017 from Mr. Greg Preston of the City to John Kaasalainen, P.Eng. of the Ministry's Barrie District Office providing an updated Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects Revised June 26, 2017 accounting for the changes to the capping methods for the Active Use Areas as allowed for under Amendment No. 5.

The reasons for this amendment are to account for changes required for the capping/grading plan to allow for appropriate grading near the property lines and to ensure that these changes are reflected in the CPU.

Based on the Ministry's review of the aforementioned request, and pursuant to my authority under subsection 168.6(3) of the Act, I hereby alter the CPU as set out below. The terms herein that are capitalized have the meanings described herein or in the CPU.

#### A. Schedules

Item 3.3 is amended by the following:

##### Schedule A:

Schedule A is amended by revoking Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects dated December 14, 2016 and replacing it with the revised Drawing No. A013 dated June 26, 2017, as attached.

#### B. Site Plan

Item 4.2.16 is hereby amended by replacing the reference to Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects dated December 14, 2016 with the revised Drawing No. A013 dated June 26, 2017 as follows:

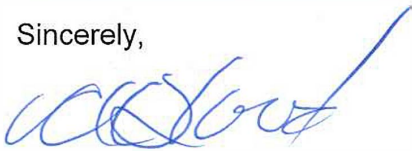
- 4.2.16 The Owner shall prepare a site plan prior to any development of the Property which shall describe the Property and placement of the Capping, as identified in Item 4.2.1 of this CPU. The site plan shall include plan and cross section drawings specifying the vertical and lateral extent of the Capping for the area(s) to be used or developed at the Property to prevent exposure to the COCs. The site plan shall also include the details concerning the 2-m wide Passive Use Area buffer strip along the boundary of the Non-Sensitive Area of the Property to the north, east, south, and west as identified on **Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects Revised June 26, 2017**. This site plan shall be submitted to the Director and the Owner shall retain one copy for inspection upon request by a Provincial Officer. The site plan shall be revised and resubmitted to the Director following the completion of any alteration to the extent of the Capping systems.

#### D. Consent Amendment and Disclosure Requirements

This letter is being issued following a discussion with representatives of the Owner and its consultants. It is understood and agreed that Part 6 of the CPU, Hearing before the Environmental Review Tribunal, applies if the Owner wishes to appeal any provision in this letter and the amended CPU. This letter is an amendment to the CPU and will need to be disclosed as per Item 4.8 of the CPU. The original issuance of the CPU was posted on the Environmental Bill of Rights, 1993 Environmental Registry as EBR Registry Number 011-2570. I have determined that there is no need to give notice of a proposal to amend the CPU as I consider that the potential effect of the amendment on the environment is insignificant.

If you have any further questions or require additional information/clarification please contact John Kaasalainen, P.Eng. of this office at (705) 739-6402 or by email at [john.kaasalainen@ontario.ca](mailto:john.kaasalainen@ontario.ca) .

Sincerely,



Cindy Hood  
Director, section 168.6 of the Act

Attachments

1. Annotated Drawing No. A013 "Site Risk Management Measures, Orillia Recreation Centre, 255 West Street S., Orillia, Ontario" by MJMA Architects Revised June 26, 2017.
- cc. Brad Sawdon, Cambium ([brad.sawdon@cambium-inc.com](mailto:brad.sawdon@cambium-inc.com))  
Greg Preston, City of Orillia ([GPreston@orillia.ca](mailto:GPreston@orillia.ca))  
Kelly Smith, Chief Building Official – City of Orillia ([ksmith@city.orillia.on.ca](mailto:ksmith@city.orillia.on.ca))  
Gayle Jackson, City Clerk – City of Orillia ([clerks@city.orillia.on.ca](mailto:clerks@city.orillia.on.ca))  
Andrew Schell, City of Orillia ([ASchell@orillia.ca](mailto:ASchell@orillia.ca))



Ministry of the Environment,  
Conservation and Parks

Ministère de l'Environnement, de  
la Protection de la nature et des Parcs

Barrie District

District de Barrie

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June 5, 2019

Andrew Schell, Director of Environmental Services and Operations  
The Corporation of the City of Orillia  
Orillia City Centre  
50 Andrew Street South, Suite 300  
Orillia, ON  
L3V 7T5  
Email: [Aschell@orillia.ca](mailto:Aschell@orillia.ca)

Dear Sir,

**Re: Amendment No. 7 - Consolidated Certificate of Property Use No. 7184-85KNQZ (CPU)  
255 West Street South, Orillia, ON (Property)**

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This letter is in response to the May 29, 2019 request by The Corporation of the City of Orillia (City) to the Ministry of the Environment, Conservation and Parks (Ministry) for an amendment to the above noted CPU. Specifically, this request is to allow for the use of an alternative air and vapour sampling methodology, in particular method TO-17 with the use of thermal desorption tubes, and to remove the parameter bis(2-ethylhexyl)phthalate from the required ground water monitoring programs.

In support of this request, the City provided additional information as follows:

- The letter report entitled "Request for Amendment (#7) of Certificate of Property Use #7184-85KNQZ at 255 West Street South, Orillia, Ontario, Revised Air Sampling Method and Removal of bis(2-ethylhexyl)phthalate from the Groundwater Monitoring Program" by Cambium dated May 28, 2019.

The reasons for this amendment are to:

- allow for the use of an alternative air/vapour sampling methodology, in particular methodology TO-17 and the use of thermal desorption (TD) tubes, as the use of TD tubes will reduce the amount of equipment required, reduces the potential number of false positives, and is less expensive;
- to remove the need to analyze ground water samples for the parameter bis(2-ethylhexyl)phthalate from the ground water monitoring program as this parameter has never been detected in the ground water since the monitoring program began in June 2016; and
- to ensure that these changes are reflected in the CPU.

Based on the Ministry's review of the aforementioned request, and pursuant to my authority under subsection 168.6(3) of the Act, I hereby alter the CPU as set out below. The terms herein that are capitalized have the meanings described herein or in the CPU.

#### A. Air/Vapour Sampling Method

In the four items listed below, the wording of the CPU is amended by adding the wording "... or TO-17..." and removing the wording "... (collection of gas into a prepared canister)..."

Item 4.2.5.1 is hereby amended as follows:

- 4.2.5.1 Indoor air samples and sub-slab vapour samples (i.e. beneath the floor slab of the building) shall be obtained utilizing TO-15 or TO-17 methodology or equivalent and analyzed for the COCs as outlined in Schedule D of this CPU. The sampling locations shall be as outlined in Drawing 7-5 "Proposed Long Term Monitoring Locations", Figure 11 "Sensor Locations - Basement Plan", and Figure 12 "Sensor Locations - Ground Floor Plan", all in Schedule A, as well as, being specified in Schedule C "Table 7-5: Monitoring Locations, Parameters, Frequency and Triggers".

Item 4.2.6.1 is hereby amended as follows:

- 4.2.6.1 Soil vapour samples shall be obtained utilizing TO-15 or TO-17 methodology or equivalent as outlined in Schedule C of this CPU. The sampling locations shall be as outlined in Schedule A Drawing 7-5 "Proposed Long Term Monitoring Locations" and as specified in Schedule C "Table 7-5: Monitoring Locations, Parameters, Frequency and Triggers".

Item 4.2.7.2 is hereby amended as follows:

- 4.2.7.2 Prior to and during construction of the building and the parking lot gas venting system, in addition to the requirements outlined in Item 4.2.7.1 above, ambient outdoor air samples shall be obtained utilizing TO-15 or TO-17 methodology or equivalent and shall be implemented as outlined in Schedule C of this CPU.

Item 4.2.7.3 is hereby amended as follows:

- 4.2.7.3 During facility operation, ambient outdoor air samples shall be obtained utilizing TO-15 or TO-17 methodology or equivalent as outlined in Schedule C of this CPU. The sampling program shall be conducted concurrently with the soil vapour and ground water monitoring programs as required under Items 4.2.6 and 4.2.8, respectively. As part of this on-going outdoor air monitoring program, at a minimum, two ambient air samples shall be obtained within the DNAPL Source Zone, with at least one sample near the DNAPL Source Zone soil vapour monitoring well and at least one sample downwind of the DNAPL Source Zone soil vapour monitoring well during each sampling round to ensure that the ambient outdoor air samples are representative of the downwind conditions.

B. Schedule C – Table 7-5

Schedule C is amended by replacing the references to “Method TO-15” with “Method TO-15 or TO-17 or equivalent”.

C. Ground Water Monitoring Program

Item 4.2.8 “Ground Water Monitoring” is amended by removing the analysis of the COC parameter bis(2-ethylhexyl)phthalate from the required ground water monitoring programs.

D. Consent Amendment and Disclosure Requirements

This letter is being issued following a discussion with representatives of the Owner and its consultants. It is understood and agreed that Part 6 of the CPU, Hearing before the Environmental Review Tribunal, applies if the Owner wishes to appeal any provision in this letter and the amended CPU. This letter is an amendment to the CPU and will need to be disclosed as per Item 4.8 of the CPU. The original issuance of the CPU was posted on the Environmental Bill of Rights, 1993 Environmental Registry as EBR Registry Number 011-2570. I have determined that there is no need to give notice of a proposal to amend the CPU as I consider that the potential effect of the amendment on the environment is insignificant.

If you have any further questions or require additional information/clarification please contact John Kaasalainen, P.Eng. of this office at (705) 309-4304 or by email at [john.kaasalainen@ontario.ca](mailto:john.kaasalainen@ontario.ca).

Sincerely,



Cindy Hood  
Director, section 168.6 of the Act

cc. Brad Sawdon, Cambium ([brad.sawdon@cambium-inc.com](mailto:brad.sawdon@cambium-inc.com))  
Greg Preston, City of Orillia ([GPreston@orillia.ca](mailto:GPreston@orillia.ca))  
Kelly Smith, Chief Building Official – City of Orillia ([ksmith@orillia.ca](mailto:ksmith@orillia.ca))  
Gayle Jackson, City Clerk – City of Orillia ([clerks@orillia.ca](mailto:clerks@orillia.ca))