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то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON OCTOBER 28, 2013
FROM:	JOHN BRAAM, P.ENG MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT	SELLING GREENHOUSE GAS EMISSION OFFSETS FROM W12A LANDFILL GAS FLARING SYSTEM

RECOMMENDATION

That, on the recommendation of the Managing Director - Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the sale of greenhouse gas emission offsets from the W12A Landfill Gas Flaring System:

- a) The Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with the offer from Dillon Consulting Limited (Dillon) to purchase at least 1,740 tonnes of verified greenhouse gas (GHG) emissions offsets from the Corporation of the City of London at \$10 per tonne;
- b) The attached proposed By-law (Appendix A) **BE INTRODUCED** at the Municipal Council Meeting of November 5, 2013 to approve the Confidentiality Agreement with NOVA Chemicals Corporation with respect to discussions on business opportunities in the area of landfill gas emissions management, including potential GHG emission offset or credit opportunities available to NOVA Chemicals Corporation, and to authorize the Mayor and City Clerk to execute the Agreement on the City's behalf; and
- c) The Civic Administration **BE AUTHORIZED** to explore additional opportunities, if needed, to sell the remaining verified GHG emissions offsets to other interested buyers.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (meetings) include:

• Feed-In-Tariff Contract for W12A Landfill Gas Power Plant (June 7, 2010 meeting of the Environment and Transportation Committee (ETC), Agenda Item #22)

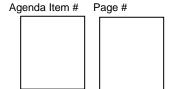
BACKGROUND

PURPOSE:

The purpose of this report is to seek authorization:

- to enter in to an agreement with Dillon Consulting for the sale of at least 1,740 tonnes of verified GHG emission offsets associated with the landfill gas collection and flaring system at the W12A Landfill,
- to sign a Confidentiality Agreement with NOVA Chemicals Corporation (NOVA) to have discussions for potential offset or credit opportunities with the W12A Landfill's remaining verified GHG emission offsets, and
- to explore, if needed, opportunities and enter in to agreements with other potential buyers should they arise.

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CONTEXT:

Since June 2004, a permanent landfill gas collection and flaring system has been in place at the W12A Landfill. This system was installed on a voluntary basis to destroy greenhouse gases (GHG) and assist in controlling landfill odours. Landfill gas collection is not a specific requirement of the landfill's current Certificate of Approval. The landfill gas collection and flaring system destroys methane along with other compounds, including those that cause odours.

In 2012, the current system prevented the release of around 2,700 tonnes of methane gas from the landfill, which is equivalent to preventing the release of around 57,000 tonnes per year of GHG (expressed in terms of equivalent carbon dioxide).

Between 2003 and 2007, revenue was earned from the Federal Government by selling verified GHG emissions offsets, at a price of \$2.96 per tonne, through the former Pilot Emission Removals, Reductions and Learnings (PERRL) program. Since that time, the Federal Government has stepped away from the use of a GHG emissions trading system as part of its climate change actions.

A Request for Proposals (RFP) was issued in December 2009 to private sector carbon brokerage services for 2008 vintage emission reduction credits. The RFP failed to generate any proposals. When contacted after the RFP process, a number of the brokerage services cited the significant uncertainty regarding future Canadian GHG emissions trading and offsetting systems.

In the absence of any federal or provincial GHG emissions trading system, a small number of Canadian corporations have chosen to voluntarily offset their greenhouse gas emissions. There is no formal "market" for the purchase and sale of these voluntary offsets in Canada or North America. There are sector-focused markets in Alberta (large emitters) and British Columbia (governments), but the City of London is not eligible to participate in these markets. Therefore, any transactions that have taken place have been one-on-one negotiations between willing sellers and buyers, sometimes facilitated by a broker acting as an intermediary.

DISCUSSION:

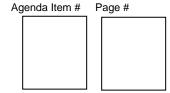
Sale of 2012 GHG Offsets to Dillon Consulting Limited

Dillon Consulting Limited is an engineering and technical services consulting firm with 600 employees in offices across Canada. Dillon has strong roots in London, having been founded in London in 1946.

As part of its commitment to sustainability, Dillon has sought out and achieved the goal to become carbon neutral in its operations, and is now "Carbon Neutral Certified". To achieve this, Dillon has voluntarily purchased GHG emission offsets to cover off those emissions remaining after other GHG reduction actions (e.g., energy conservation, etc.) have been taken. In previous years, Dillon has purchased these offsets from other providers. However, Dillon felt that it made more sense to purchase offsets from its hometown of London.

In late 2012, Dillon approached the City of London with an interest to purchase 2011 vintage GHG emission offsets associated with the landfill gas flaring system at the W12A Landfill. At that time, the City of London did not have the required GHG reduction verification documentation to support a transaction for 2011 vintage emissions. However, Dillon did agree to seek 2012 vintage emissions from London in 2013.

On May 30, 2013, Dillon provided the City of London with a Letter of Intent outlining its interest in the purchase of GHG offsets equivalent to at least 1,740 tonnes of equivalent carbon dioxide, at \$10 per tonne, exclusive of taxes, for a total value of at least \$17,400. Dillon requires that the GHG offsets have to be successfully verified by an Accredited Verification Body (AVB) to demonstrate that they are real and owned by the City. City staff engaged Comcor Environmental to prepare GHG offset project documentation covering both 2011 and 2012, and ICF Marbek to carry out the GHG offset verification work.



It must be noted that City staff believe that the \$10 per tonne fee is well above current "informal" market value rate. It also reflects an amount for a small volume purchase. This amount is very unlikely for higher volumes of GHG offsets.

Legal Services has reviewed the Emission Reductions Sales Agreement template provided by Dillon, and has no concerns regarding the agreement.

Potential for Selling Remaining 2011 and 2012 GHG Offsets

The cost to carry out the verification work will be covered by the revenue generated from the sale of GHG offsets to Dillon. Once this project documentation and verification work has been completed, the City of London would be in a position to sell the remaining offsets to other potential buyers.

It is expected that City of London will have 48,000 tonnes of GHG offsets for 2011 and around 53,000 to 55,000 tonnes of GHG offsets for 2012 remaining after the sale of offsets to Dillon.

It is important to note that the Canadian "market" for GHG offsets is a niche market with very few active participants. To assist us in exploring options, Dillon put City staff in contact with the Delphi Group, who has clients who may be interested in purchasing larger quantities. However, it is too early to say at this time whether additional GHG offsets can be sold.

NOVA Chemicals Corporation as a Potential Buyer

NOVA Chemicals Corporation (NOVA) is a Canadian petrochemical manufacturer, with headquarters in Calgary, Alberta and with ethylene, polyethylene, and co-product production facilities in the Sarnia region. NOVA participates in the Chemistry Industry Association of Canada's Responsible Care® program to ensure effective health, safety, security and environmental stewardship.

NOVA has expressed interest in the verified offsets from the W12A Landfill, and has asked that the Corporation of the City of London sign a Confidentiality Agreement to oversee any future negotiations about the vintage, quantity, and price for the verified offsets. Copies of the proposed By-law to approve the Confidentiality Agreement and the Confidentiality Agreement have been appended to this report (Appendix A and Appendix B respectively).

Legal Services has reviewed the Confidentiality Agreement provided by NOVA, and has no concerns with the content of the agreement.

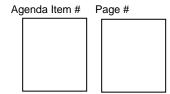
In preliminary discussions with NOVA, they have expressed interest in procuring a significant portion of the remaining verified offsets from the W12A Landfill. Given that the City of London will have around 100,000 tonnes of GHG offsets for 2011 and 2012, a sale of a significant portion of the remaining verified offsets would provide significant revenue for the City of London.

NOVA may also be interested in future verified offsets from the W12A Landfill, up until the point that the offsets would no longer be available due to regulatory requirements. It is estimated that the W12A landfill gas flaring system will generate approximately 100,000 tonnes of GHG offsets in 2013.

The Future for Emission Reduction Credits

The City has been trying to procure a Feed-In-Tariff (FIT) contract from the Ontario Power Authority for a landfill gas power plant at the landfill. With the province's current FIT program, as with previous provincial Standard Offer programs, the City of London would be required to surrender all environmental attributes associated with using landfill gas for renewable power generation, including GHG emission reductions associated with methane destruction, to the Ontario Power Authority once the power plant is operational. Whereas this was considered a negative to participation in the past, the delays to the City of London's participation in the FIT program means that GHG offsets from flaring landfill gas will still be available up until at least 2014 and likely in to 2015 as well.

Also, Ontario Regulation 232/98 ("O. Reg. 232/98") and Revised Regulations of Ontario 1990, Regulation 347 (General – Waste Management) ("Regulation 347") under the Environmental Protection Act (EPA) were amended in June 2008 and resulted in requirements for landfill gas collection and flaring (burning), for use, for new, expanding and operating landfills larger than 1.5 million cubic metres. Provisions have also been included in Regulation 347 concerning any



operating landfills that have taken voluntary early action to capture landfill gas that give them an additional 7 years (until June 30, 2016) before these systems need to be assessed for improvements. As a result, the W12A Landfill would no longer be eligible for emission offset credits after June 30, 2016. Therefore, the City will only be giving up about one to two years of emission reduction credits if it is successful in building a landfill gas power plant to sell power to the province.

ACKNOWLEDGEMENTS:

This report was prepared with assistance from Mike Losee, Manager – Solid Waste Engineering, and David Mounteer, Solicitor.

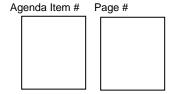
PREPARED BY:	PREPARED BY:
JAMIE SKIMMING P. ENG. MANAGER – AIR QUALITY ENVIRONMENTAL PROGRAMS	WESLEY ABBOTT, P. ENG. DIVISION MANAGER SOLID WASTE MANAGEMENT
PREPARED AND REVIEWED BY:	RECOMMENDED BY:
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE	JOHN BRAAM, P. ENG. MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

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Appendix A - Proposed By-Law to approve the Execution Of The Confidentiality Agreement With NOVA Chemicals Corporation For Open Discussions On Potential Offset Or Credit Opportunities

Appendix B - Draft Confidentiality Agreement With NOVA Chemicals Corporation

c: Martin Hayward City Treasurer, Chief Financial Officer



APPENDIX A

Bill No.

By-law No.

A by-law to approve and authorize the execution of a Confidentiality Agreement with respect to open discussions of business opportunities in the area of landfill gas emissions management, including potential greenhouse gas emission offset or credit opportunities between NOVA Chemicals Corporation. and The Corporation of the City of London.

WHEREAS section 5(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS it is deemed appropriate for The Corporation of the City of London (the "City") to enter into a Confidentiality Agreement with NOVA Chemicals Corporation with respect to open discussions of business opportunities in the area of landfill gas emissions management, including potential greenhouse gas emission offset or credit opportunities available to NOVA Chemicals Corporation;

AND WHEREAS it is appropriate to authorize the Mayor and City Clerk to execute the Agreement on behalf of the City;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

- The Confidentiality Agreement with NOVA Chemicals Corporation with respect to open discussions of business opportunities in the area of landfill gas emissions management, including potential offset or credit opportunities available to NOVA Chemicals Corporation, <u>attached</u> as Schedule A to this By-law, is hereby approved.
- 2. The Mayor and City Clerk are authorized to execute the Agreement approved under section 1 of this by-law.
- 3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council November 5, 2013

Joe Fontana Mayor

Catharine Saunders City Clerk

First reading – November 5, 2013 Second reading – November 5, 2013 Third reading – November 5, 2013

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APPENDIX B

CONFIDENTIALITY AGREEMENT

THIS AGREEMENT dated and effective the ____ day of November 2013, by and between NOVA Chemicals Corporation, a corporation incorporated under the laws of the Province of New Brunswick and having an office at 1000 - 7th Avenue SW, Calgary, Alberta, Canada, T2P 5L5 (hereinafter "NCC") and The Corporation of the City of London having an office at 300 Dufferin Avenue, PO Box 5035, London, Ontario, N6A 4L9 (hereinafter "City of London").

WHEREAS City of London has certain confidential information relating to environmental offset and credit components and suppliers and all information relating to this is proprietary and confidential to City of London (hereinafter "City of London Confidential Information";

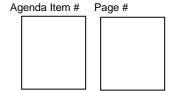
WHEREAS NCC is in the business of manufacturing and selling petrochemicals, related co-products and polyethylene and polystyrene resins and has certain confidential information relating to landfill gas emissions and all information relating to this is proprietary and confidential to NCC (hereinafter "NCC Confidential Information");

WHEREAS "City of London Confidential Information" and "NCC Confidential Information" are collectively and severally hereinafter referred to as "Confidential Information";

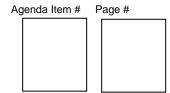
AND WHEREAS a party disclosing its Confidential Information (hereinafter "Disclosing Party") to the party receiving the Confidential Information (hereinafter "Receiving Party") and the representatives of the Receiving Party, desires that its Confidential Information will be used only for the purposes of open discussions of business opportunities in the area of landfill gas emissions management, including potential offset or credit opportunities available to NCC ("Purpose"), provided that the Disclosing Party is free to disclose its Confidential Information to any third party without the consent of the Receiving Party;

NOW THEREFORE, for and in consideration of the mutual promises set forth herein below, the parties hereto agree as follows:

- 1. Subject to all the terms and conditions of this Agreement, the Disclosing Party agrees to disclose Confidential Information to the Receiving Party and its representatives only for the Purpose, provided that the Disclosing Party is free to disclose its Confidential Information to any third party without the consent of the Receiving Party.
- 2. During the five (5) year period from the date of this Agreement (the "Disclosure Period") the Disclosing Party may disclose such Confidential Information as it, in its sole discretion deems relevant to the Purpose, to the Receiving Party.
- 3. Any information disclosed by the Disclosing Party to the Receiving Party pursuant to this Agreement whether visual, oral, written, or in the form of samples shall be deemed to be confidential and secret unless it is information which:
 - has been, or is currently part of the public domain, or becomes part of the public domain through no breach of this Agreement on the part of the Receiving Party; or



- (ii) prior to the date of this Agreement was in the possession of the Receiving Party as evidenced by written records then in the possession of the Receiving Party; or
- (iii) is disclosed to the Receiving Party without binder of secrecy by a third party having the legal right to make such disclosure and who did not acquire the information directly or indirectly from the Disclosing Party; or
- (iv) is independently developed by an employee of the Receiving Party or an Affiliate thereof who did not have access to Confidential Information.
- 4. The foregoing exceptions to the obligation of confidence shall not apply to specific information merely because it is embraced by more general information within such exceptions, nor shall it apply to a combination of features merely because the individual features are within such exceptions unless the combination itself or its nexus or principle of operation is within the exception.
- 5. In the event the Receiving Party is required (by oral questions, interrogatories, requests for information, or subpoena of documents, by civil, judicial or administrative investigative demand or similar process) to disclose any Confidential Information provided by the Disclosing Party pursuant to this Agreement, the Receiving Party will provide the Disclosing Party with prompt notice of such request so that the Disclosing Party may seek an appropriate protective order and/or waive the Receiving Party's compliance with the provisions of this Agreement. It is further agreed that if, in the absence of a protective order or the receipt of a waiver hereunder the Receiving Party is nonetheless in the opinion of its counsel compelled to disclose such Confidential Information to any tribunal or else stand liable for contempt or suffer other censure or penalty, the Receiving Party may disclose such Confidential Information to such tribunal without liability hereunder.
- 6. The Receiving Party shall treat the Disclosing Party's Confidential Information in the same manner as it treats its own confidential information and shall not, without the prior written consent of the Disclosing Party, use the Disclosing Party's Confidential Information for any purpose other than the Purpose. The Receiving Party shall only disclose Confidential Information to those of its officers, employees and agents who have a need to know it for the Purpose, who have been informed of the obligations of confidence and non-use under this Agreement, and who are bound to the Receiving Party by obligations of non-use and secrecy no less stringent than those contained in this Agreement.
- 7. Upon expiration of the five (5) year Disclosure Period pursuant to this Agreement, the Receiving Party shall at the Disclosing Party's direction either return to the Disclosing Party or destroy all Confidential Information in the Receiving Party's possession except for one copy which shall be retained in the Receiving Party's vault files for recording and dispute resolution purposes only.
- 8. The obligations of confidence and non-use shall expire five (5) years from the end of the Disclosure Period.
- 9. By this Agreement the Disclosing Party does not grant the Receiving Party any license, express or implied, or any right, title or interest in or to its Confidential Information or any other rights or assets of the Disclosing Party by furnishing Confidential Information to the Receiving Party hereunder, nor does the Receiving Party hereby acknowledge or admit the validity of any of the Disclosing Party's patents or other proprietary rights.



- 10. This Agreement may be assigned without the prior written consent of the other party to this Agreement only in the event of the sale or reorganization of the business of a party hereto to which this Agreement relates. In all other cases the prior written consent of the other party, which consent shall not be unreasonably withheld, shall be required before this Agreement can be assigned.
- 11. This Agreement shall be binding upon and enure to the benefit of the successors or the parties hereto.
- 12. This Agreement shall be governed and construed in accordance with the Laws of the Province of Alberta, Canada without regard to choice of law principles. For the purposes of this Agreement only, the Parties attorn to the jurisdiction of the courts of the Province of Alberta.
- 13. This Agreement does not and shall not create any duty or obligation upon either party to enter into any further agreements of any kind with the other party.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed by their duly authorized officers.

NOVA Chemicals Corporation

The Corporation of the City of London

Per: Name:	Name:	
Title:	Title:	
Per: Name: Title:	Name:	