



#### **MEMORANDUM**

TO: Committee of the Whole

FROM: Erin Mahoney, Commissioner of Environmental Services

DATE: March 12, 2015

RE: Environmental Bill of Rights (EBR) Posting No. 012-1559:

Reducing Coal in Energy Intensive Industries (Waste

Management)

This memo provides a summary of Regional staff comments submitted to the Ministry of the Environment and Climate Change in accordance with the Environmental Registry deadline of February 2, 2015 for EBR Posting No. 012-1559 (see Attachment 1). As a direct result of the duration of the posting, there was insufficient time to bring this item forward to Regional Council for approval prior to the submission date. Staff requested that the Ministry of the Environment and Climate Change consider any additional comments from Council submitted after the 60-day public consultation period which ended February 2, 2015.

#### Province proposing to allow waste materials to be used as a replacement for coal in cement/lime and steel sectors

The Ministry of the Environment and Climate Change recently consulted on a proposed regulatory framework, which would allow energy intensive industries to use municipal residual waste as a replacement fuel for coal if it represents a net greenhouse gas reduction. This framework would be limited to the largest users of coal in Ontario, the cement, lime, iron, and steel sectors, which accounted for approximately 12 per cent of greenhouse gas emissions in 2012. Historically, one of the main barriers to use of residual waste as fuel was that a site needed to be registered as a waste disposal site in order to use these materials as fuel. Removing the waste disposal site restriction for these industries will ease adoption of municipal waste as an alternate fuel.

### Recommended the Province follow York Region Council leadership by adopting the Fourth R for waste management, Recovery

York Region Council has taken a leadership position in residual waste management by adopting a Fourth R in the waste management hierarchy, Recovery. The Province's proposal intrinsically recognizes that waste is a resource and that recovery of energy represents a beneficial use, which is a better option than landfill. York Region staff recommended the Province consider taking a similar leadership role by adopting the Fourth R to help further establish Ontario as a leader in waste diversion in North America.

#### Processing residual materials as a fuel should be recognized by Waste Diversion Ontario diversion calculations

The Province has recognized that residual waste has the potential to be a resource. Staff recommended that waste to be used as a fuel source be considered diversion under Waste Diversion Ontario's annual calculations, only if rigorous source separation and processing has been completed. Staff also recommended that residual materials from processing Blue Box and Source Separated Organics programs be considered diversion if used as fuel; York Region reprocesses its residual materials to extract maximum materials for recovery and diversion. As there is little opportunity to capture any additional divertable materials, extracting energy should be counted as diversion.

### Alternate fuels must represent a net benefit as compared to coal for greenhouse gas emissions and other air quality parameters

York Region staff advocate for strong environmental standards for air and water emissions from these sites. York Region and Durham Region Councils demonstrated environmental leadership by voluntarily agreeing to require the Durham-York Energy Centre to meet more stringent guidelines than required. For some stakeholders, there is a stigma associated with using residual waste as fuel. Robust and objective data will be required to demonstrate that alternative energy recovery from municipal waste represents a net benefit to the environment and the surrounding community when the full life-cycle impacts are considered. Staff also recommended the Province consider cumulative airshed impacts when determining the impact of these alternate fuels during the approvals process.

# Region staff supported the proposed regulatory changes in principle as a positive step forward for climate change and waste management in Ontario

York Region staff expressed support for the Province taking steps to establish regulations to make municipal residual waste more viable as a fuel source. Environmental Services staff will continue to monitor developments as these regulations move forward and will report back to Council as required.

Erin Mahoney, M. Eng Commissioner, Environmental Services

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Attachment: YORK #5848132 - York Region Response - Reducing Coal in Energy Intensive Industries

Copy to: Anna Trikoupis, Project Manager, Ministry of the Environment and Climate Change 5851671





February 2, 2015

Anna Trikoupis
Project Manager
Ministry of the Environment and Climate Change
Environmental Programs Division
Environmental Innovations Branch
40 St. Clair Ave., 14<sup>th</sup> Floor
Toronto, Ontario, M4V 1M2

Dear Ms. Trikoupis:

RE: York Region Comments – Reducing Coal Use in Energy Intensive Industries – EBR Number 012-1559 – February 2015

York Region staff commends the Ministry of the Environment and Climate Change (Ministry) for taking steps to meet the Province of Ontario's Climate Change Action Plan targets. It is an important step forward to consider waste as a resource through this initiative as York Region Council has long endorsed the "Fourth R – Energy Recovery". York Region staff support the proposed regulatory change in general and recommend the following revisions. Due to the duration of this posting, Regional Council endorsement was not possible prior to submission. Staff comments will be taken to York Region Council in March for consideration and further comment. It would be appreciated if the Province would consider the comments of Regional Council as a part of this public consultation.

### York Region has demonstrated leadership by adopting the Fourth R, Recovery for waste management

York Region Council has taken a leadership position in residual waste management by adopting the "Fourth R" in the waste management hierarchy, Recovery. In support of this policy, York Region has entered into a partnership with Durham Region to develop the Durham York Energy Centre, which will use residual waste to supply approximately 14 MW of net electricity generation to the Ontario Hydro grid. In addition, York Region has entered into contracts with Emerald Energy from Waste and Covanta, New York to generate energy from York Region waste materials. York Region actively supports initiatives such as the Ministry's proposal, which result in recovery of energy from waste as this represents a beneficial use for this material and is a preferred option over landfill. York Region recommends the Province consider taking a similar leadership role by adopting the Fourth R, with energy from waste diversion from landfill formally recognized as a diversion metric. This would help further establish Ontario as a leader in waste diversion in North America.

## Residual waste and processing residual materials used as fuel are a resource and should be recognized under Waste Diversion Ontario diversion calculations

York Region Council has endorsed the fourth R, "Recovery" as a use for residual waste materials which is not only a preferable alternative to landfill, but also represents a beneficial use. This proposed change in Provincial policy intrinsically recognizes that residual waste materials have the potential to be a resource. It is recommended that use of residual waste as a fuel source be considered diversion in Waste Diversion Ontario calculations, only if rigorous source separation and processing programs have been implemented including Blue Box, Source Separated Organics, Yard Waste, and other municipal diversion programs. This position is held by numerous groups in the waste management sector.

# Province must be cautious to ensure that using waste materials as alternate fuels does not impact municipal waste diversion programs

York Region staff thank the Ministry for acknowledging the Region's request to define what materials are considered to be recyclable and hazardous materials that are not eligible to be used as fuel under this proposal. York Region staff also request that the Province recognize other municipal diversion programs as well. Municipalities have invested significantly in diversion programs beyond Blue Box and Source Separated Organics such as yard waste and wood waste; it is recommended the Province consider full material life-cycle handling costs in the context of the Four Rs hierarchy when analyzing impacts of this proposal on broader waste management policies.

It is also recommended that the Province add a reporting mechanism to require users of waste as fuel to publically report the types and amounts of alternative fuels being used, similar to municipal requirements under the Waste Diversion Ontario datacall. Tracking use of different material types will provide valuable information on the uptake of different material types by these energy-intensive industries and ensure that the proposed regulatory change is not impacting existing municipal waste diversion programs.

#### Removing waste disposal site classifications for receivers will reduce barriers to adoption of alternate fuels

One of the largest barriers for using of waste as a fuel source has been the requirement that sites be classified as waste disposal sites. It is anticipated that removing this requirement will result in additional local markets for the beneficial use of residual waste. In addition to making Ontario's energy-intensive and trade-exposed manufacturing industries more competitive, it is anticipated that this will also make Ontario's waste sector more competitive.

## Alternate fuels must represent a net benefit as compared to coal for greenhouse gas emissions and other air quality parameters

York Region understands that facilities using alternate fuels will be required to meet Ontario's strict air emissions requirements, including values from Guideline A-7. York Region supports strong environmental standards for air and water emissions when using waste materials as fuel. York Region and Durham Region Councils demonstrated environmental leadership by voluntarily requiring the Durham-York Energy Centre to meet more stringent guidelines than Guideline A-7. While air emissions from both energy from waste facilities and cement/lime kilns fall under this guideline there are separate "in-stack concentration limits" proposed for cement/lime kilns.

A balance will need to be struck by the Province to ensure that the use of alternate fuels represents a net benefit to the environment as compared to coal for both greenhouse gas emissions and other air quality parameters along with a rationale for differences in emission requirements. For some stakeholders, there is a stigma associated with using residual waste as fuel. Robust and objective data will be required to demonstrate that this alternative energy recovery and waste management approach represents a net benefit to the environment and the surrounding community when the full life-cycle impacts are considered. It is recommended that the Province consider cumulative airshed impacts when determining the impact of these alternate fuels when issuing and monitoring compliance with approvals.

#### Additional flexibility may be required to effectively test demonstration projects

Demonstration projects are key to determine viability and ensure that plants designed to operate primarily on conventional fuels can successfully process residual waste as an alternative fuel source. York Region supports the Ministry's position of establishing a maximum timeframe for demonstration projects. However, staff have concerns that 30 days of consecutive operation and 90 total days of operation per year will be insufficient for these facilities to effectively assess long-term impacts of these fuel sources on equipment.

York Region staff support restricting pilot projects to 90 days within a 12-month period and limiting demonstration projects to three years. However, it is recommended that the Ministry remove the limit of 30-consecutive days to allow the site owner, in consultation with the District Office, the ability determine how best to test the materials in their infrastructure. This change would result in no additional impact to the environment and would increase the likelihood that waste materials will be used successfully as an alternate fuel. The Ministry may also want to give consideration to including mechanisms that will allow the site owner to continue to operate the facility on a demonstration scale with the alternate fuel until a decision can be made on an application for ongoing use. This provision will help provide economic and destination market stability for those interested in making the shift to alternate fuels on a permanent basis as significant changes and financial investment may be required to switch between fuel sources.

## Energy from waste reduces reliance on fossil fuels and should be eligible for long-term guaranteed rates similar to the Feed-In-Tariff program

York Region staff support energy from waste initiatives that represent a net environmental benefit and believe these types of projects would be more common if the Province were to design a program to effectively incentivize the marketplace. In partnership with Durham Region, York Region has constructed the Durham-York Energy Centre, the first energy from waste facility approved in Ontario in over 20 years at a total cost of approximately \$250 million. This facility uses proven technology to cleanly and efficiently generate enough energy to power 10,000 homes. Materials to be processed by this facility would normally be landfilled, emitting methane and other greenhouse gases to the atmosphere.

Processing materials through this facility results in a net environmental benefit and should be considered to be a renewable energy source as waste is continually created. In alignment with the Province's strategic economic goals, energy from waste provides a constant source of clean, renewable energy and helps reduce reliance on fossil fuels. Reducing reliance on fossil fuels ultimately assists the Province in meeting its targets under the Climate Change Action Plan. Based on these benefits, Region staff encourage the Province to provide clean-burning energy from waste technology applications with a long-term guaranteed rate similar in principle to the Feed-in Tariff program that has been used for small renewable energy projects.

# Region staff support proposed regulatory changes in principle as a positive step forward for climate change adaptation and waste management in Ontario

York Region staff are pleased to see the Province taking steps to establish regulations to make residual waste more viable as an alternate fuel source. This will help establish waste as a resource and has the potential to provide an overall environmental benefit. York Region staff request the Ministry consider comments expressed in this letter, especially with respect to ensuring a consistent regulatory environment between municipal and private facilities.

York Region staff would be happy to consult with the Province during further development of the proposal to ensure that the regulation can be effectively implemented. York Region also recommends that the Province consider taking this commitment a step further by adopting the Fourth R – Energy Recovery in the provincial waste management hierarchy and include energy recovery in Waste Diversion Ontario's diversion calculations. Using waste as fuel represents a better option than landfill and would help further establish Ontario as a leader in waste diversion in North America.

Region staff would like to thank the Ministry for engaging municipalities and other stakeholders on this important initiative and look forward to the opportunity for continued consultation with the Province moving forward. If you have any questions regarding this response, please contact Laura McDowell, Director of Environmental Promotion and Protection at <a href="mailto:laura.mcdowell@york.ca">laura.mcdowell@york.ca</a> or David Szeptycki, Head of Strategy, Liaison, and Policy implementation at <a href="mailto:david.szeptycki@york.ca">david.szeptycki@york.ca</a>

Yours truly,

Erin Mahoney

Commissioner, Environmental Services

Regional Municipality of York

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