



Stantec Consulting Ltd.
401 Wellington Street West, Suite 100
Toronto ON M5V 1E7
Tel: (416) 596-6686
Fax: (416) 596-6680

August 8, 2016
File: 160950528

Attention: Mr. Greg Borchuk, P.Eng.
Project Manager, EFW
Waste Management Services

The Regional Municipality of Durham
605 Rossland Rd.,
Whitby, ON L1N 6A3

Dear Mr. Borchuk,

Reference: Q2 2016 Ambient Air Quality Monitoring Report for the Durham York Energy Centre

Please find attached with this letter the Q2 2016 quarterly report for the Durham York Energy Centre (DYEC). Please note that the Ministry of Environment and Climate Change (MOECC) has requested that, starting for Q2 2016, the data presented in the appendices of the quarterly reports be presented in ppb (parts per billion) rather than $\mu\text{g}/\text{m}^3$ (micrograms per cubic metre).

The quarterly reports for the DYEC monitoring are prepared to present monitoring data to the MOECC. The MOECC requires that several statistics, including maximum levels, be presented in these reports, but does not require 98th percentile values to be included in quarterly reports. Regional Council has requested that 98th percentile $\text{PM}_{2.5}$ data also be provided along with the quarterly reports, which is provided in Table 1 below. A comparison to the Canadian Ambient Air Quality Standard (CAAQS) for $\text{PM}_{2.5}$ requires averaging the 98th percentile daily average levels in each of three consecutive years.

Please note that for explicit comparison to the CAAQS for $\text{PM}_{2.5}$, use of annual data based on calendar years is required. The annual periods based on the start of the monitoring presented in Table 1 are, however, a good indication of conformance to the CAAQS standard for $\text{PM}_{2.5}$. The 3-year average of the 98th percentile 24-hour average concentrations presented in Table 1 for the Courtice WPCP Station is $24.2 \mu\text{g}/\text{m}^3$ and for the Rundle Road Station is $25.8 \mu\text{g}/\text{m}^3$. The data in Table 1 should be considered preliminary and is included to provide an initial indication of ambient $\text{PM}_{2.5}$ level compliance with respect to the CAAQS. Based on this indication of conformance, both ambient monitoring stations demonstrate levels below the 24-hour $\text{PM}_{2.5}$ CAAQS of $28 \mu\text{g}/\text{m}^3$.

Annual average $\text{PM}_{2.5}$ concentrations are provided in Table 2. As with the 24-hour CAAQS for $\text{PM}_{2.5}$, an explicit comparison to the annual CAAQS for $\text{PM}_{2.5}$ requires annual data based on three consecutive calendar years. The annual periods based on the start of monitoring presented in Table 2 provide an initial indication of conformance to the annual $\text{PM}_{2.5}$ CAAQS. Based on this indication of conformance, both ambient monitoring stations demonstrate 3-year average levels below the annual $\text{PM}_{2.5}$ CAAQS of $10 \mu\text{g}/\text{m}^3$.



August 8, 2016
 Mr. Greg Borchuk, P.Eng.
 Project Manager, EFW
 Waste Management Services
 Page 2 of 2

Reference: Q2 2016 Ambient Air Quality Monitoring Report for the Durham York Energy Centre

Table 1 Summary of the 98th Percentile Daily Average PM_{2.5} Concentrations Measured to Date (µg/m³)

Period	Courtice Monitoring Station	Rundle Road Monitoring Station
June 2013 - June 2014 (Year 1)	22.6	23.5
July 2014 – June 2015 (Year 2)	23.4	26.6
July 2015 – June 2016 (Year 3)	26.5	27.3
Three Year Average	24.2	25.8

Table 2 Summary of the Annual Average PM_{2.5} Concentrations Measured to Date (µg/m³)

Period	Courtice Monitoring Station	Rundle Road Monitoring Station
June 2013 - June 2014 (Year 1)	9.1	8.7
July 2014 – June 2015 (Year 2)	7.5	9.0
July 2015 – June 2016 (Year 3)	8.1	8.7
Three Year Average	8.2	8.8

Regards,

STANTEC CONSULTING LTD.

Gregory Crooks, M.Eng., P.Eng.
 Principal, Environmental Services
 Phone: (416) 598-7687
 Fax: (416) 596-6680
 gregory.crooks@stantec.com

- c. Gio Anello, Region of Durham
- Lyndsay Waller, Region of Durham
- Luis Carvalho, Region of York
- Seth Dittman, Region of York
- C. Lim, T. Hung, Stantec

ht v:\01609\active\160950528\planning\report\final\2016\2016q2\q2_2016_cover_letter_borchuk_final.docx