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August 8, 2018 File: 160950528

Attention: Mr. Christian Shelepuk, Supervisor, Waste Management Services (Compliance) The Regional Municipality of Durham 1835 Energy Drive Clarington, ON L1E 2R2

Dear Mr. Shelepuk,

#### Reference: Q2 2018 Ambient Air Quality Monitoring Report for the Durham York Energy Centre

Please find attached with this letter the Q2 2018 quarterly report for the Durham York Energy Centre (DYEC).

The quarterly reports for the DYEC monitoring are prepared to present monitoring data to the Ontario Ministry of the Environment and Climate Change (MOECC). The MOECC requires that several statistics, including maximum levels, be presented in these reports, but does not require 98<sup>th</sup> percentile values to be included in quarterly reports. Regional Council has requested that 98<sup>th</sup> percentile PM<sub>2.5</sub> 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 PM<sub>2.5</sub> requires averaging the 98<sup>th</sup> percentile daily average levels in each of three consecutive years.

Explicit comparison to the 24-hour PM<sub>2.5</sub> CAAQS requires annual data based on calendar year. With the completion of monitoring in 2017, four calendar years of monitoring data are now available for the periods 2014-2016 and 2015-2017 and are presented in Table 1 for comparison to the 24-hour PM<sub>2.5</sub> CAAQS. For both these time periods, both ambient monitoring stations measured levels below the 24-hour PM<sub>2.5</sub> CAAQS of 28  $\mu$ g/m<sup>3</sup>.

Annual average  $PM_{2.5}$  concentrations are provided in Table 2. An explicit comparison to the annual  $PM_{2.5}$  CAAQS also requires annual data based on three consecutive calendar years, which are also now available for the 2014-2016 and 2015-2017 periods. Both ambient monitoring stations measured 3-year annual average concentrations below the annual  $PM_{2.5}$  CAAQS of 10 µg/m<sup>3</sup> for both time periods.

The 6-month average concentrations for the first two quarters of 2018 are also presented in Tables 1 and 2, however these quarterly values should not be explicitly compared to the CAAQS.



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# Table 1:Summary of the 98th Percentile Daily Average $PM_{2.5}$ Concentrations<br/>(µg/m³) to Date

Period	Courtice WPCP Station	Rundle Road Station
2014	22.3	21.1
2015	27.3	28.4
2016	21.6	32.9
2017	19.8	20.3
Three Year Average (2014 - 2016)	23.7	27.5
Three Year Average (2015 - 2017)	22.9	27.2
January - June 2018 <sup>1</sup>	18.5	19.7

Note:

1. As only 6 months of data are presented, this data is not comparable to the CAAQS

## Table 2: Summary of the Annual Average PM<sub>2.5</sub> Concentrations (µg/m<sup>3</sup>) to Date

Period	Courtice WPCP Station	Rundle Road Station
2014	8.6	8.5
2015	7.7	9.5
2016	6.8	9.6
2017	6.4	6.3
Three Year Average (2014 - 2016)	7.7	9.2
Three Year Average (2015 - 2017)	7.0	8.5
January - June 2018 <sup>1</sup>	6.5	6.3

Note:

1. As only 6 months of data are presented, this data is not comparable to the CAAQS



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We trust the above is in order. Please do not hesitate to contact the undersigned if you have any questions.

Regards,

### STANTEC CONSULTING LTD.

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