

## Stantec Consulting Ltd.

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December 12, 2017 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: Q3 2017 Ambient Air Quality Monitoring Report for the Durham York Energy Centre – Crago Road Station

Please find attached with this letter the Q3 2017 quarterly report for the Durham York Energy Centre (DYEC) Crago Road Station. This quarterly report provides a summary of the measurements collected at this station during July to September 2017 (calendar Quarter 3 of 2017).

Regional Council has requested that  $98^{th}$  percentile  $PM_{2.5}$  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  $PM_{2.5}$  requires averaging the  $98^{th}$  percentile daily average levels in each of three consecutive calendar years. The values presented in Table 1 corresponds to the  $98^{th}$  percentile for 2015 and 2016, and the first 9-months of 2017. An additional 3 months of data will be required to provide an explicit comparison to the current CAAQS criteria of  $28 \, \mu g/m^3$ . To be statistically significant, a minimum of 2-years of data is required for an initial comparison, with 3-years of data required for explicit comparison. The first two calendar years of data presented in Table 1 are, however, a good initial indication of conformance to the CAAQS standard for  $PM_{2.5}$ . The data in Table 1 should be considered preliminary and is included to provide an initial indication of ambient  $PM_{2.5}$  level compliance with respect to the CAAQS until 3-calendar years of data have been collected.

Annual average  $PM_{2.5}$  concentrations are provided in Table 2. As with the 24-hour CAAQS for  $PM_{2.5}$ , an explicit comparison to the annual CAAQS for  $PM_{2.5}$  requires annual data based on three consecutive calendar years (with a minimum of 2-years of data required for an initial comparison and 3-years of data required for explicit comparison). The annual periods for 2015 and 2016 presented in Table 2 provide an initial indication of conformance to the annual  $PM_{2.5}$  CAAQS of  $10 \, \mu g/m^3$  (until 3-calendar years of data have been collected).

Table 1 Summary of the 98<sup>th</sup> Percentile Daily Average PM<sub>2.5</sub> Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
2015	22.7
2016	22.6
January – September 2017 (9 months of data)	16.41

Note: 1 - As only 9 months of data are presented, this data is not comparable to the CAAQS



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Station

## Table 2 Summary of the Annual Average PM<sub>2.5</sub> Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
2015	7.3
2016	6.6
January – September 2017 (9 months of data)	5.9 1

Note: 1 - As only 9 months of data are presented, this data is not comparable to the CAAQS

Regards,

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