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Attention: Ms. Tara Wilcox

Supervisor, Waste Management Services (Compliance)

The Regional Municipality of Durham 1835 Energy Drive Clarington, ON L1E 2R2

Dear Ms. Wilcox,

Reference: Q1 2017 Ambient Air Quality Monitoring Report for the Durham York Energy Centre – Crago Road Station

Please find attached with this letter the Q1 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 January to March 2017 (calendar Quarter 1 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 3-months of 2017. An additional 9 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 98th Percentile Daily Average PM_{2.5} Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
2015	22.7
2016	22.6
January – March 2017 (3 months of data)	24.0 1

Note: 1 - As only 3 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_{2.5} Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
2015	7.3
2016	6.6
January – March 2017 (3 months of data)	7.21

Note: 1 - As only 3 months of data are presented, this data is not comparable to the CAAQs

Regards,

STANTEC CONSULTING LTD.

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