

**APPENDIX E**  
Monthly Air Monitoring Reports

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## Plexus Scientific Corporation

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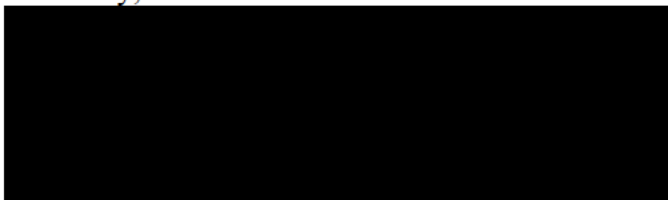
### Monthly Air Monitoring Report, TLVP Soil Remediation Project – June 2019

This report summarizes June 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for June<sup>1,2,3</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	Monthly Average > Air Limit ?
RSP (mg/m3)	Work Area	0.010	0.046	-	3.0	No
TSP (mg/m3)	Work Area	0.016	0.072	-	1.0	No
TSP (mg/m3)	Perimeter	0.013	0.084	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	-1.90E-15	1.77E-13	5.71E-14	6E-12	No
	Perimeter	-2.35E-14	9.33E-14		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	2.27E-12	6.39E-12	1.60E-13	NA	-
	Perimeter	7.06E-13	2.14E-12		NA	-

Monthly average and maximum RSP/TSP results were below the air limits presented in the above table. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/mL. Detail presentations of air monitoring results are presented in the weekly air monitoring reports for the month of June.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending June 14, 2019.

<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending June 21, 2019.

<sup>3</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending June 28, 2019.



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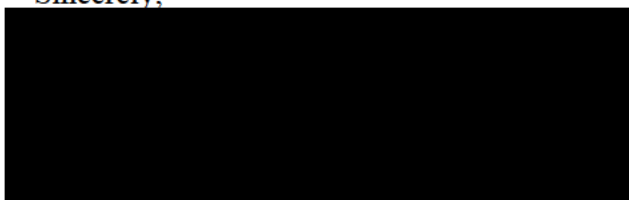
### Monthly Air Monitoring Report, TLVP Soil Remediation Project – July 2019

This report summarizes July 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for July<sup>1,2,3,4,5</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	> Air Limit ?
RSP (mg/m3)	Work Area	0.018	0.132	-	3.0	No
TSP (mg/m3)	Work Area	0.028	0.362	-	1.0	No
TSP (mg/m3)	Perimeter	0.021	0.533	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	-2.1-14	1.6E-13	5.71E-14	6E-12	No
	Perimeter	-9.4E-15	9.1E-14		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	1.2E-12	3.9E-12	1.60E-13	NA	-
	Perimeter	3.6E-12	9.4E-12		NA	-

Monthly average and maximum RSP/TSP results were below the air limits presented in the above table. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/ml. Detail presentations of air monitoring results are presented in the weekly air monitoring reports for the month of July.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending July 5, 2019.  
<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending July 12, 2019.  
<sup>3</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending July 19, 2019.  
<sup>4</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending July 26, 2019.  
<sup>5</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending August 2, 2019.



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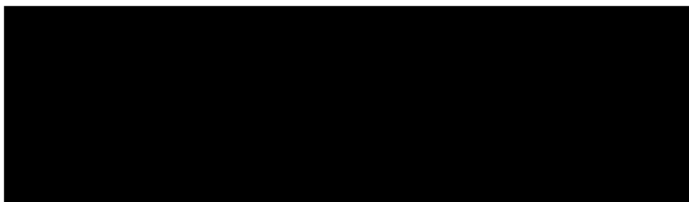
### Monthly Air Monitoring Report, TLVP Soil Remediation Project – September 2019

This report summarizes September 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for September <sup>1,2,3,4</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	> Air Limit ?
RSP (mg/m3)	Work Area	0.019	0.106	-	3.0	No
TSP (mg/m3)	Work Area	0.030	0.236	-	1.0	No
TSP (mg/m3)	Perimeter	0.013	0.497	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	1.0E-14	1.6E-13	5.71E-14	6E-12	No
	Perimeter	-1.9E-14	1.3E-13		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	1.5E-12	2.9E-12	1.60E-13	NA	-
	Perimeter	5.7E-13	9.8E-13		NA	-

Monthly average and maximum RSP/TSP results were below the air limits presented in the above table. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/ml. Detail presentations of air monitoring results are presented in the weekly air monitoring reports for the month of September.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending September 13, 2019.

<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending September 20, 2019.

<sup>3</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending September 27, 2019.

<sup>4</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending October 4, 2019.



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### Monthly Air Monitoring Report, TLVP Soil Remediation Project – October 2019

This report summarizes October 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for October <sup>1,2,3,4,5</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	Monthly Average > Limit ?
RSP (mg/m3)	Work Area	0.043	28	-	3.0	No
TSP (mg/m3)	Work Area	0.051	28	-	1.0	No
TSP (mg/m3)	Perimeter	0.014	0.904	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	-3.74E-14	3.37E-14	5.71E-14	6E-12	No
	Perimeter	-5.16E-14	5.68E-14		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	1.58E-12	2.93E-12	1.60E-13	NA	-
	Perimeter	5.70E-13	1.22E-12		NA	-

All RSP/TSP monthly average results were below the air limits presented in the above table. RSP and TSP maximum values measured in close proximity to the work area exceeded the applicable air limits for a single 15-minute average due to mixing of dry agent with wet soil. Correction actions were implemented which eliminated the issue. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/ml. Detail presentation of air monitoring results are presented in the weekly air monitoring reports for the month of October.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending October 4, 2019.

<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending October 11, 2019.

<sup>3</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending October 18, 2019.

<sup>4</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending October 25, 2019.

<sup>5</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending November 1, 2019.



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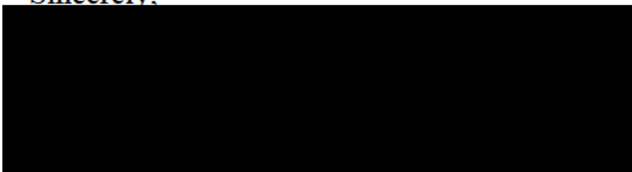
### Monthly Air Monitoring Report, TLVP Soil Remediation Project – November 2019

This report summarizes November 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for November <sup>1,2,3,4,5</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	Monthly Average > Limit ?
RSP (mg/m3)	Work Area	0.027	0.199	-	3.0	No
TSP (mg/m3)	Work Area	0.029	0.210	-	1.0	No
TSP (mg/m3)	Perimeter	0.022	0.393	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	-4.82E-14	3.49E-14	5.71E-14	6E-12	No
	Perimeter	-5.33E-14	3.01E-14		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	1.96E-12	3.27E-12	1.60E-13	NA	-
	Perimeter	8.70E-13	1.61E-12		NA	-

Monthly average and maximum RSP/TSP results were below the air limits presented in the above table. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/ml. Detail presentations of air monitoring results are presented in the weekly air monitoring reports for the month of November.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending November 8, 2019.

<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending November 15, 2019.

<sup>3</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending November 22, 2019.

<sup>4</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending November 26, 2019.

<sup>5</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending December 6, 2019.





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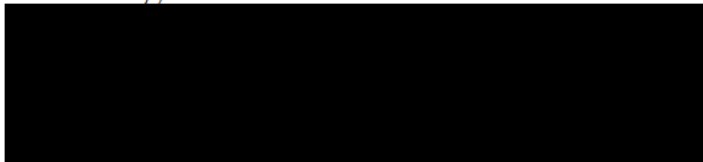
### Monthly Air Monitoring Report, TLVP Soil Remediation Project – December 2019

This report summarizes December 2019 air monitoring results for Tonawanda Landfill Vicinity Property (TLVP) soil remediation project based on daily monitoring results presented in the weekly *Air Monitoring Reports* for December<sup>1,2</sup>. Monitoring results highlighted in this monthly report include maximum and average values for suspended particulate and total suspended particulate (RSP/TSP) and gross alpha and beta activity concentrations. Perimeter and work area air sampling locations are presented in the weekly reports for the month.

Contaminant of Concern	Location	Average	Maximum	Baseline Radioactivity	Air Limit	Monthly Average > Limit ?
RSP (mg/m <sup>3</sup> )	Work Area	0.003	0.007	-	3.0	No
TSP (mg/m <sup>3</sup> )	Work Area	0.003	0.008	-	1.0	No
TSP (mg/m <sup>3</sup> )	Perimeter	0.018	0.095	-	1.0	No
Gross Alpha Radioactivity (μCi/mL)	Work Area	-4.0E-14	-4.0E-14	5.71E-14	6E-12	No
	Perimeter	-5.2E-14	-2.1E-14		1.5E-12	No
Gross Beta Radioactivity (μCi/mL)	Work Area	7.1E-13	8.3E-13	1.60E-13	NA	-
	Perimeter	-5.6E-14	5.1E-13		NA	-

Monthly average and maximum RSP/TSP results were below the air limits presented in the above table. Monthly average and maximum alpha concentrations were below the air limit and the average and maximum beta concentrations were indistinguishable from baseline (natural background) levels that ranged between <MDC and  $8.3 \times 10^{-12}$  μCi/ml. Detail presentations of air monitoring results are presented in the weekly air monitoring reports for the month of December.

Sincerely,



Attachments

<sup>1</sup> TLVP Soil Remediation: Air Monitoring Report – Week Ending December 6, 2019.

<sup>2</sup> TLVP Soil Remediation: Air Monitoring Report – Weeks Ending December 13 and 20, 2019.