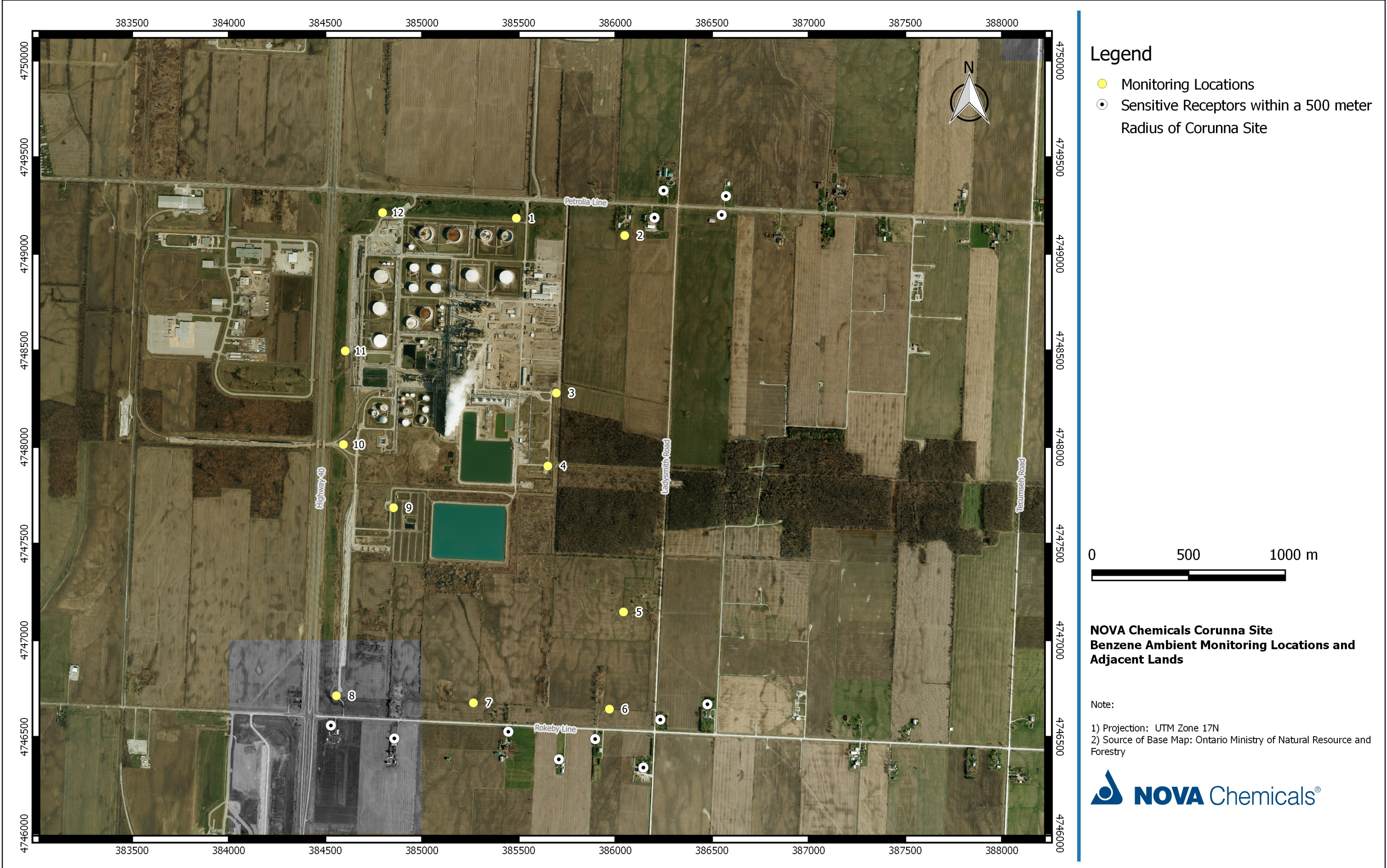




Legend

- Monitoring Locations
- Sensitive Receptors within a 500 meter Radius of Corunna Site



NOVA Chemicals Corunna Site  
Benzene Ambient Monitoring Locations and  
Adjacent Lands

Note:  
1) Projection: UTM Zone 17N  
2) Source of Base Map: Ontario Ministry of Natural Resource and Forestry



## NOVA Chemicals Corunna Site Benzene Ambient Monitoring Results - 2018

| Ambient Monitoring Location ID                                                                               |                                   | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Location<br>(UTM Coordinates)                                                                                | Easting (m) →                     | 385487  | 386047  | 385694  | 385650  | 386041  | 385968  | 385265  | 384556  | 384852  | 384592  | 384602  | 384795  |
|                                                                                                              | Northing (m) →                    | 4749184 | 4749094 | 4748280 | 4747902 | 4747146 | 4746643 | 4746676 | 4746713 | 4747686 | 4748013 | 4748497 | 4749212 |
| Two-Week Measured Benzene<br>Concentration (µg/m <sup>3</sup> )<br>2018 Monitoring<br>(MM/DD/YY to MM/DD/YY) | Date Range ↓                      |         |         |         |         |         |         |         |         |         |         |         |         |
|                                                                                                              | 12/27/17 to 01/10/18              | 4.03    | 2.04    | 3.74    | 2.54    | 1.60    | 0.89    | 0.83    | 0.67    | 0.87    | 0.89    | 1.17    | 3.60    |
|                                                                                                              | 01/10/18 to 01/24/18 <sup>1</sup> | 14.80   | 3.73    | 2.60    | 2.19    | 1.61    | 1.27    | 3.84    | 2.50    | 6.94    | 10.20   | 19.50   | 118.00  |
|                                                                                                              | 01/24/18 to 02/07/18              | 4.29    | 1.15    | 1.76    | 1.61    | 1.01    | 0.87    | 0.89    | 0.78    | 2.05    | 1.19    | 1.44    | 5.98    |
|                                                                                                              | 02/07/18 to 02/21/18              | 4.34    | 1.09    | 1.61    | 0.97    | 0.72    | 0.73    | 0.95    | 0.82    | 3.35    | 1.22    | 1.52    | 6.54    |
|                                                                                                              | 02/21/18 to 03/07/18              | 2.78    | 0.91    | 0.79    | 0.73    | 0.65    | 0.77    | 0.93    | 1.07    | 5.14    | 1.59    | 2.22    | 2.85    |
|                                                                                                              | 03/07/18 to 03/21/18              | 1.71    | 1.02    | 2.40    | 2.24    | 1.95    | 0.92    | 0.66    | 0.81    | 3.39    | 1.32    | 1.21    | 1.17    |
|                                                                                                              | 03/21/18 to 04/04/18              | 2.17    | 0.81    | 1.87    | 2.49    | 1.08    | 0.82    | 1.07    | 1.10    | 5.02    | 1.59    | 4.30    | 1.95    |
|                                                                                                              | 04/04/18 to 04/18/18              | 5.49    | 1.62    | 5.24    | 2.87    | 0.80    | 0.76    | 0.83    | 1.12    | 4.81    | 5.42    | 4.92    | 2.25    |
|                                                                                                              | 04/18/18 to 05/02/18              | 2.20    | 0.87    | 1.07    | 1.15    | 0.78    | 0.76    | 1.13    | 1.24    | 6.65    | 1.53    | 2.14    | 4.12    |
|                                                                                                              | 05/02/18 to 05/16/18              | 2.79    | 0.66    | 0.76    | 0.69    | 0.51    | 0.49    | 0.70    | 1.08    | 2.73    | 1.59    | 1.44    | 3.08    |
|                                                                                                              | 05/16/18 to 05/30/18              | 3.42    | 0.70    | 0.64    | 0.51    | 0.46    | 0.46    | 0.74    | 0.50    | 3.67    | 1.62    | 2.51    | 2.41    |
|                                                                                                              | 05/30/18 to 06/13/18              | 1.14    | 0.57    | 1.03    | 0.69    | 0.39    | 0.37    | 0.66    | 0.91    | 3.89    | 1.87    | 2.09    | 2.02    |
|                                                                                                              | 06/13/18 to 06/27/18              | 1.54    | 0.65    | 1.11    | 1.03    | 0.78    | 0.63    | 0.83    | 1.35    | 5.68    | 1.64    | 3.16    | 2.52    |
|                                                                                                              | 6/27/18 to 07/11/18               | 2.48    | 0.52    | 0.77    | 0.58    | 0.45    | 0.41    | 0.82    | 0.78    | 3.41    | 1.05    | 1.64    | 3.49    |
|                                                                                                              | 07/11/18 to 07/25/18              | 2.00    | 0.88    | 1.06    | 0.78    | 0.60    | 0.50    | 0.65    | 0.81    | 3.00    | 1.32    | 3.37    | 5.15    |
|                                                                                                              | 07/25/18 to 08/08/18              | 2.32    | 0.60    | 1.12    | 0.68    | 0.38    | 0.33    | 0.40    | 0.47    | 1.05    | 0.78    | 1.04    | 2.87    |
|                                                                                                              | 08/08/18 to 08/22/18              | 1.51    | 0.86    | 1.51    | 0.91    | 0.53    | 0.46    | 0.66    | 0.61    | 1.63    | 1.07    | 2.12    | 1.96    |
|                                                                                                              | 08/22/18 to 09/05/18              | 4.12    | 0.69    | 1.33    | 0.62    | 0.5     | 0.47    | 0.47    | 0.52    | 1.02    | 0.69    | 1.01    | 4.59    |
|                                                                                                              | 09/05/18 to 09/19/18              | 0.95    | 0.41    | 0.44    | 0.42    | 0.44    | 0.41    | 0.56    | 0.93    | 6.16    | 4.18    | 2.01    | 1.17    |
|                                                                                                              | 09/19/18 to 10/03/18              | 2.33    | 0.63    | 0.99    | 0.65    | 0.43    | 0.44    | 0.37    | 0.48    | 1.3     | 1.39    | 2.09    | 2.91    |
|                                                                                                              | 10/03/18 to 10/17/18              | 2.16    | 0.63    | 1.61    | 0.89    | 0.4     | 0.43    | 0.37    | 0.58    | 2.26    | 0.63    | 1.06    | 2.94    |
|                                                                                                              | 10/17/18 to 10/31/18              | 2.02    | 0.86    | 1.17    | 1.12    | 0.85    | 0.55    | 0.48    | 0.43    | 0.7     | 1.52    | 0.66    | 1.67    |
|                                                                                                              | 10/31/18 to 11/14/18              | 1.64    | 0.88    | 2.05    | 1.14    | 0.68    | 0.85    | 0.59    | 0.61    | 1.43    | 1.07    | 1.98    | 2.08    |
|                                                                                                              | 11/14/18 to 11/28/18              | 1.43    | 0.81    | 1.15    | 1.00    | 0.84    | 0.6     | 0.51    | 0.54    | 0.87    | 0.8     | 1.08    | 1.07    |
|                                                                                                              | 11/28/18 to 12/12/18              | 2.15    | 1.12    | 1.54    | 1.15    | 0.97    | 0.83    | 0.69    | 0.68    | 0.71    | 0.76    | 1.33    | 1.83    |
|                                                                                                              | 12/12/18 to 12/27/18              | 1.88    | 1.14    | 2.05    | 1.31    | 1.06    | 1.05    | 0.96    | 0.87    | 1.88    | 1.01    | 2.29    | 4.26    |
|                                                                                                              |                                   |         |         |         |         |         |         |         |         |         |         |         |         |
|                                                                                                              | 2018 Average                      | 2.99    | 0.99    | 1.59    | 1.19    | 0.79    | 0.66    | 0.83    | 0.86    | 3.06    | 1.84    | 2.67    | 7.40    |
|                                                                                                              |                                   |         |         |         |         |         |         |         |         |         |         |         |         |

<sup>1</sup> On January 11, 2018 a drain line froze and cracked due to extreme weather temperatures. The incident resulted in a release of benzene. Once identified, the release was immediately isolated. The incident was reported to the Ministry of Environment and Climate Change, St. Clair Township Fire Department, Aamjiwnaang First Nation Emergency Response and the CAER Information Line. The incident location was closest to monitor 12 and elevated the sample results for the two-week reporting period.

## NOVA Chemicals Corunna Site Benzene Ambient Monitoring Results - 2019

| Ambient Monitoring Location ID                                                                               |                                   | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Location<br>(UTM Coordinates)                                                                                | Easting (m) →                     | 385487  | 386047  | 385694  | 385650  | 386041  | 385968  | 385265  | 384556  | 384852  | 384592  | 384602  | 384795  |
|                                                                                                              | Northing (m) →                    | 4749184 | 4749094 | 4748280 | 4747902 | 4747146 | 4746643 | 4746676 | 4746713 | 4747686 | 4748013 | 4748497 | 4749212 |
| Two-Week Measured Benzene<br>Concentration (µg/m <sup>3</sup> )<br>2019 Monitoring<br>(MM/DD/YY to MM/DD/YY) | Date Range ↓                      |         |         |         |         |         |         |         |         |         |         |         |         |
|                                                                                                              | 12/27/18 to 01/09/19              | 3.04    | 1.03    | 1.44    | 1.21    | 1.17    | 0.83    | 0.97    | 0.68    | 1.64    | 0.93    | 3.30    | 6.66    |
|                                                                                                              | 01/09/19 to 01/23/19              | 1.25    | 1.03    | 1.40    | 1.25    | 1.68    | 1.25    | 1.02    | 0.85    | 1.78    | 1.93    | 1.47    | 2.08    |
|                                                                                                              | 01/23/19 to 02/06/19              | 3.89    | 1.69    | 1.71    | 1.20    | 0.97    | 0.88    | 0.89    | 0.67    | 1.11    | 1.05    | 1.37    | 2.28    |
|                                                                                                              | 02/06/19 to 02/20/19 <sup>2</sup> | 1.08    | 0.85    | 1.50    | 0.84    | 0.88    |         | 0.86    | 0.97    | 1.47    | 1.78    | 1.50    | 1.60    |
|                                                                                                              | 02/20/19 to 03/06/19              | 1.20    | 0.96    | 1.74    | 1.48    | 0.95    | 0.88    | 0.86    | 0.68    | 1.48    | 1.17    | 2.44    | 2.21    |
|                                                                                                              | 03/06/19 to 03/20/19              | 2.61    | 1.47    | 1.95    | 1.34    | 0.75    | 0.70    | 0.55    | 0.53    | 0.54    | 0.58    | 2.12    | 5.57    |
|                                                                                                              | 03/20/19 to 04/03/19              | 3.50    | 0.78    | 1.11    | 0.97    | 1.11    | 0.74    | 1.23    | 0.69    | 3.48    | 0.95    | 1.06    | 2.86    |
|                                                                                                              | 04/03/19 to 04/17/19              | 0.80    | 0.60    | 1.05    | 0.70    | 0.55    | 0.50    | 0.53    | 0.62    | 3.10    | 2.26    | 2.45    | 1.51    |
|                                                                                                              | 04/17/19 to 05/01/19              | 0.78    | 0.40    | 0.74    | 0.87    | 0.59    | 0.55    | 0.99    | 0.76    | 5.39    | 1.48    | 2.72    | 4.12    |
|                                                                                                              | 05/01/19 to 05/15/19              | 1.51    | 0.55    | 0.93    | 0.47    | 0.37    | 0.35    | 0.92    | 1.00    | 5.44    | 1.92    | 1.52    | 1.17    |
|                                                                                                              | 05/15/19 to 05/29/19              | 3.09    | 1.70    | 2.81    | 1.99    | 0.91    | 0.70    | 0.81    | 1.34    | 4.16    | 2.34    | 3.57    | 6.07    |
|                                                                                                              | 05/29/19 to 06/12/19              | 2.92    | 0.86    | 1.85    | 1.03    | 0.73    | 0.74    | 0.87    | 0.96    | 3.26    | 1.55    | 2.77    | 4.05    |
|                                                                                                              | 06/12/19 to 06/26/19              | 2.20    | 0.62    | 0.93    | 0.57    | 0.36    | 0.47    | 0.68    | 1.27    | 4.43    | 1.18    | 2.15    | 3.02    |
|                                                                                                              | 06/26/19 to 07/10/19              | 1.54    | 0.64    | 0.92    | 0.79    | 0.51    | 0.54    | 0.81    | 1.23    | 5.08    | 1.44    | 1.78    | 3.34    |
|                                                                                                              | 07/10/19 to 07/24/19              | 3.37    | 0.76    | 1.17    | 0.81    | 0.75    | 0.73    | 0.7     | 0.71    | 2.52    | 0.88    | 0.9     | 4.98    |
|                                                                                                              | 07/24/19 to 08/07/19              | 3.9     | 0.94    | 1.39    | 0.91    | 0.69    | 0.62    | 0.58    | 0.87    | 3.71    | 0.91    | 1.03    | 5.15    |
|                                                                                                              | 08/07/19 to 08/21/19              | 1.58    | 0.72    | 1.34    | 1.59    | 0.56    | 0.5     | 0.43    | 0.55    | 2.53    | 1.04    | 1.42    | 5.79    |
|                                                                                                              | 08/21/19 to 09/04/19              | 1.28    | 0.72    | 0.89    | 0.77    | 0.37    | 0.49    | 0.40    | 0.52    | 2.22    | 1.42    | 1.92    | 1.79    |
|                                                                                                              | 09/04/19 to 09/18/09              | 1.74    | 0.74    | 0.75    | 0.55    | 0.52    | 0.50    | 0.50    | 0.57    | 2.12    | 1.49    | 2.62    | 3.00    |
|                                                                                                              | 9/18/19 to 10/02/19               | 2.69    | 0.60    | 1.00    | 0.76    | 0.40    | 0.32    | 0.33    | 0.38    | 1.31    | 0.77    | 2.47    | 13.00   |
|                                                                                                              | 10/02/19 to 10/16/19              | 1.26    | 0.46    | 1.53    | 0.58    | <0.31   | <0.31   | <0.31   | 0.39    | 1.54    | 1.00    | 4.32    | 1.44    |
|                                                                                                              | 10/16/19 to 10/30/19              | 1.82    | 0.99    | 0.90    | 0.92    | 1.01    | 0.64    | 0.55    | 0.55    | 0.89    | 0.81    | 2.46    | 2.64    |
|                                                                                                              | 10/30/19 to 11/13/19              | 4.40    | 0.81    | 2.72    | 1.97    | 0.89    | 0.63    | 0.81    | 0.60    | 1.62    | 1.14    | 0.74    | 2.58    |
|                                                                                                              | 11/13/19 to 11/27/19              | 2.03    | 1.14    | 0.96    | 1.03    | 0.77    | 0.63    | 0.55    | 0.62    | 0.93    | 1.31    | 1.93    | 2.75    |
|                                                                                                              | 11/27/19 to 12/11/19              | 1.50    | 0.90    | 1.08    | 1.05    | 0.77    | 0.79    | 0.66    | 0.57    | 1.17    | 0.71    | 0.97    | 1.88    |
|                                                                                                              | 12/11/19 to 12/24/19              | 2.51    | 0.89    | 1.25    | 0.97    | 0.79    | 0.79    | 0.62    | 0.67    | 1.27    | 1.67    | 1.52    | 3.68    |
|                                                                                                              |                                   |         |         |         |         |         |         |         |         |         |         |         |         |
|                                                                                                              | 2019 Average                      | 2.21    | 0.88    | 1.35    | 1.02    | 0.76    | 0.66    | 0.72    | 0.74    | 2.47    | 1.30    | 2.02    | 3.66    |
|                                                                                                              |                                   |         |         |         |         |         |         |         |         |         |         |         |         |

<sup>2</sup> During the February 6-20, 2019 sampling period, there was no reportable data for Location 6 due to a technical issue with the laboratory analysis of the sample

### Summary of Annual Average Benzene Concentrations

| Ambient Monitoring Location ID                                                                                        |                | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      | 11      | 12      |
|-----------------------------------------------------------------------------------------------------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Location<br>(UTM Coordinates)                                                                                         | Easting (m) →  | 385487  | 386047  | 385694  | 385650  | 386041  | 385968  | 385265  | 384556  | 384852  | 384592  | 384602  | 384795  |
|                                                                                                                       | Northing (m) → | 4749184 | 4749094 | 4748280 | 4747902 | 4747146 | 4746643 | 4746676 | 4746713 | 4747686 | 4748013 | 4748497 | 4749212 |
| Annual Average Benzene<br>Concentration (µg/m3)                                                                       | 2018           | 2.99    | 0.99    | 1.59    | 1.19    | 0.79    | 0.66    | 0.83    | 0.86    | 3.06    | 1.84    | 2.67    | 7.40    |
|                                                                                                                       | 2019           | 2.21    | 0.88    | 1.35    | 1.02    | 0.76    | 0.66    | 0.72    | 0.74    | 2.47    | 1.30    | 2.02    | 3.66    |
| NOTE: No statistical analysis of the annual average results is possible until 2021, as a 3-year baseline is required. |                |         |         |         |         |         |         |         |         |         |         |         |         |