

Monthly Operating Reports

June 2019

The following June 2019 operating report was sent to the Ministry of Environment and Climate Change Strategy on August 7, 2019.



Unit 3

| Duration in Hours | Reason | Date |
|-------------------|--|------------|
| 0.40 | Visual inspection for broken grate bar | June 16 |
| 0.15 | Induced and forced draft fan trips | June 17 |
| 0.63 | Feeder plug | June 17 |
| 0.15 | Induced draft fan trip | June 18 |
| 0.77 | Induced draft fan trip | June 18 |
| 0.78 | BC Hydro incoming line trip | June 19 |
| 2.18 | BC Hydro outgoing line trip | June 19 |
| 28.69 | Grate bar repair | June 19-21 |
| 0.30 | Induced draft fan trip | June 21 |
| 0.60 | High pressure trip | June 22 |
| 0.12 | Induced draft fan trip | June 22 |
| 0.25 | Induced draft fan trip | June 27 |

5. Facility Bypass and Emergency/spill Event Report

| Date/Time | Cause | Duration |
|-----------|--------------|----------|
| | | |
| | Action Taken | |
| | | |

6. Other Data

| | | UNIT 1 | UNIT 2 | UNIT 3 |
|-------------------------|-----------------------|-------------------|--------|--------|
| Waste Received | tonnes/day | 19,889 | | |
| Waste Processed | tonnes/day | 242 | 242 | 236 |
| Maximum Waste Processed | tonnes/day | 255 | 250 | 256 |
| | | Units 1, 2, and 3 | | |
| Natural Gas Consumed | m ³ /day | 1,191 | | |
| | m ³ /month | 35,724 | | |
| Fly ash disposed | tonnes | 785 | | |
| Bottom ash disposed | tonnes | 3,562 | | |

7. Complaints and Responses

| Date/Time | Complaint | Action Taken |
|-----------|-----------|--------------|
| | | |

June 2019 - Monthly CEMS Data

| Date | Boiler #1 | | | | | | | | Boiler #2 | | | | | | | | Boiler #3 | | | | | | | |
|---------|------------|--------------------|--------------------------------------|--------------------------------------|-------------------------|--------------------------|-------------|--------------|------------|--------------------|--------------------------------------|--------------------------------------|-------------------------|--------------------------|-------------|--------------|------------|--------------------|--------------------------------------|--------------------------------------|-------------------------|--------------------------|-------------|--------------|
| | Stack Temp | O ₂ (%) | SO ₂ (mg/m ³) | NO _x (mg/m ³) | CO (mg/m ³) | THC (mg/m ³) | Opacity (%) | Furnace Temp | Stack Temp | O ₂ (%) | SO ₂ (mg/m ³) | NO _x (mg/m ³) | CO (mg/m ³) | THC (mg/m ³) | Opacity (%) | Furnace Temp | Stack Temp | O ₂ (%) | SO ₂ (mg/m ³) | NO _x (mg/m ³) | CO (mg/m ³) | THC (mg/m ³) | Opacity (%) | Furnace Temp |
| 6/1/19 | 153 | 10 | 68.5 | 129.8 | 27.8 | 0.37 | 0.66 | 939 | 154 | 8.6 | 68.2 | 132.1 | 30.1 | 0.07 | 1.97 | 920 | 147 | 9.1 | 66.7 | 137.6 | 40 | 0.27 | 0.84 | 931 |
| 6/2/19 | 152 | 10.1 | 63.9 | 127.6 | 20.6 | 0.28 | 0.66 | 943 | 155 | 8.8 | 68.8 | 129.4 | 26.7 | 0.09 | 2.03 | 913 | 146 | 9.2 | 61 | 133.8 | 39.3 | 0.29 | 0.80 | 915 |
| 6/3/19 | 153 | 10.4 | 57.5 | 128 | 24.2 | 0.33 | 0.67 | 925 | 153 | 9.1 | 57 | 129.4 | 28.2 | 0.05 | 2.14 | 956 | 144 | 9.1 | 49.4 | 131 | 37 | 0.27 | 0.82 | 922 |
| 6/4/19 | 152 | 9.9 | 59.1 | 126 | 23.7 | 0.29 | 0.68 | 946 | 154 | 8.9 | 58.4 | 127.7 | 25.4 | 0.04 | 0.93 | 975 | 147 | 9.1 | 55.1 | 132.7 | 34.7 | 0.24 | 0.93 | 932 |
| 6/5/19 | 151 | 9.9 | 76.2 | 127.5 | 26.6 | 0.27 | 0.71 | 949 | 155 | 10.2 | 96.1 | 126.1 | 28 | 0.20 | 0.14 | 940 | 146 | 8.8 | 73.3 | 131.3 | 40.6 | 0.28 | 0.91 | 932 |
| 6/6/19 | 152 | 9.8 | 65.1 | 126.8 | 29.7 | 0.24 | 0.71 | 945 | 154 | 11 | 58.1 | 127.9 | 24.5 | 0.03 | 0.16 | 937 | 148 | 9 | 56.2 | 132.9 | 42.7 | 0.25 | 0.97 | 931 |
| 6/7/19 | 153 | 9.7 | 66.7 | 129.9 | 26.1 | 0.28 | 0.74 | 949 | 154 | 9.1 | 77.2 | 129.5 | 24.2 | 0.12 | 0.18 | 942 | 147 | 9.2 | 59 | 133.6 | 37.7 | 0.22 | 1.01 | 915 |
| 6/8/19 | 154 | 9.9 | 58.6 | 128.9 | 23 | 0.28 | 0.71 | 942 | 155 | 9 | 73.6 | 128.1 | 19.2 | 0.03 | 0.12 | 941 | 148 | 9.4 | 57.2 | 132.7 | 30.7 | 0.25 | 0.92 | 938 |
| 6/9/19 | 155 | 9.9 | 53.9 | 128.5 | 20.5 | 0.22 | 0.70 | 949 | 155 | 8.8 | 56.9 | 127.9 | 18.8 | 0.04 | 0.11 | 954 | 147 | 9.3 | 46.6 | 131.5 | 30.3 | 0.23 | 0.86 | 937 |
| 6/10/19 | 153 | 9.7 | 66.4 | 126.1 | 28.6 | 0.25 | 0.70 | 943 | 156 | 8.9 | 86.6 | 129.4 | 24.3 | 0.09 | 0.06 | 952 | 147 | 9 | 58.4 | 132.7 | 38.4 | 0.25 | 0.81 | 934 |
| 6/11/19 | 154 | 9.9 | 54.5 | 127.2 | 28.8 | 0.27 | 0.64 | 919 | 155 | 8.9 | 58.9 | 126.4 | 19.4 | 0.06 | 0.07 | 959 | 147 | 9.2 | 55.6 | 131.1 | 43.1 | 0.30 | 0.69 | 899 |
| 6/12/19 | 151 | 9.8 | 86.7 | 126.3 | 23.3 | 0.28 | 0.64 | 913 | 155 | 9.1 | 68.7 | 128.4 | 32.1 | 0.05 | 0.37 | 920 | 145 | 9.2 | 49.2 | 131.6 | 45.2 | 0.38 | 0.58 | 879 |
| 6/13/19 | 153 | 9.6 | 66.4 | 128.2 | 15.3 | 0.28 | 0.63 | 928 | 156 | 9.1 | 68.6 | 127.8 | 22.8 | 0.02 | 1.37 | 934 | 147 | 9.4 | 53.8 | 130.8 | 43.1 | 0.82 | 0.68 | 902 |
| 6/14/19 | 153 | 9.9 | 72.3 | 127.2 | 23.7 | 0.28 | 0.67 | 941 | 157 | 9.3 | 96.3 | 128.5 | 23.1 | 0.10 | 1.98 | 959 | 148 | 9.2 | 77.3 | 132.4 | 36.6 | 1.06 | 0.86 | 919 |
| 6/15/19 | 155 | 9.9 | 65.7 | 129.2 | 21.6 | 0.29 | 0.68 | 932 | 158 | 9.4 | 82.6 | 130.4 | 15.6 | 0.03 | 1.88 | 956 | 149 | 9.6 | 62.6 | 131.5 | 32.1 | 0.65 | 0.81 | 932 |
| 6/16/19 | 154 | 9.9 | 64.2 | 127.5 | 16 | 0.24 | 0.63 | 925 | 157 | 9.7 | 77 | 130.1 | 17.5 | 0.02 | 1.82 | 938 | 148 | 9.6 | 74.5 | 131.8 | 35.6 | 0.56 | 0.81 | 917 |
| 6/17/19 | 153 | 9.8 | 46.3 | 127.9 | 32.4 | 0.26 | 0.66 | 930 | 156 | 9.6 | 51.9 | 128.1 | 26.5 | 0.06 | 1.17 | 941 | 146 | 9.7 | 35.4 | 131.7 | 42.4 | 0.59 | 0.79 | 902 |
| 6/18/19 | 154 | 10.2 | 48.6 | 125.4 | 23.5 | 0.24 | 0.62 | 932 | 153 | 9.6 | 45.1 | 126.2 | 24.3 | 0.05 | 0.23 | 942 | 146 | 9.5 | 42.8 | 129.8 | 34.6 | 0.51 | 0.73 | 896 |
| 6/19/19 | 152 | 9.9 | 45.9 | 127.9 | 25.3 | 0.23 | 0.66 | 939 | 153 | 9.1 | 68.9 | 128.3 | 18.8 | 0.21 | 0.35 | 970 | | | | | | | | |
| 6/20/19 | 155 | 9.6 | 60.5 | 126.7 | 21.2 | 0.24 | 0.55 | 954 | 156 | 8.7 | 67.1 | 129.5 | 25.5 | 0.13 | 0.50 | 968 | | | | | | | | |
| 6/21/19 | 155 | 10 | 77.6 | 127.3 | 25.1 | 0.31 | 0.40 | 948 | 155 | 8.8 | 81.1 | 128.1 | 21 | 0.05 | 0.38 | 970 | 147 | 9.1 | 68.7 | 133.7 | 38 | 0.35 | 0.86 | 923 |
| 6/22/19 | 155 | 9.6 | 68 | 124.5 | 28.8 | 0.26 | 0.38 | 973 | 155 | 8.5 | 79.8 | 127 | 23.3 | 0.04 | 0.42 | 978 | 147 | 9.1 | 70.3 | 132.4 | 29.9 | 0.26 | 0.90 | 929 |
| 6/23/19 | 156 | 10.1 | 79.7 | 125.5 | 29.9 | 0.30 | 0.38 | 937 | 155 | 9 | 78.3 | 128.1 | 32.6 | 0.16 | 0.50 | 938 | 146 | 8.9 | 73.8 | 133.1 | 33.1 | 0.25 | 0.90 | 960 |
| 6/24/19 | 154 | 9.8 | 52.8 | 125.1 | 33.1 | 0.23 | 0.40 | 940 | 155 | 9 | 55.3 | 128.6 | 24.3 | 0.06 | 0.46 | 928 | 147 | 8.9 | 52.6 | 132.1 | 27.1 | 0.26 | 0.94 | 953 |
| 6/25/19 | 153 | 9.7 | 59.9 | 126.2 | 23.7 | 0.20 | 0.42 | 942 | 156 | 8.9 | 78.3 | 128.9 | 24.4 | 0.05 | 0.33 | 932 | 148 | 8.9 | 67.8 | 132.2 | 28.7 | 0.29 | 0.85 | 958 |
| 6/26/19 | 154 | 9.6 | 52.5 | 125.5 | 23.3 | 0.20 | 0.38 | 951 | 154 | 8.9 | 72.7 | 127.2 | 30.1 | 0.13 | 0.20 | 930 | 148 | 9.1 | 64.5 | 131.4 | 30.8 | 0.36 | 0.81 | 943 |
| 6/27/19 | 153 | 9.9 | 55.9 | 124.5 | 23 | 0.23 | 0.41 | 937 | 153 | 8.7 | 66.9 | 128 | 28.4 | 0.05 | 0.28 | 942 | 149 | 9.3 | 62.1 | 132.9 | 28.5 | 0.34 | 0.94 | 934 |
| 6/28/19 | 151 | 10.3 | 59.4 | 121.1 | 34.5 | 0.31 | 0.45 | 914 | 154 | 9.2 | 78.8 | 127.1 | 31.6 | 0.11 | 0.35 | 911 | 148 | 9.2 | 60.1 | 131.3 | 30.1 | 0.40 | 0.86 | 934 |
| 6/29/19 | 152 | 10.2 | 73.7 | 125.7 | 21.8 | 0.27 | 0.43 | 931 | 155 | 9 | 87.9 | 129.5 | 21.2 | 0.10 | 0.25 | 936 | 150 | 9.3 | 81.1 | 131.6 | 26 | 0.34 | 0.85 | 955 |
| 6/30/19 | 152 | 10.1 | 68.2 | 124.9 | 24.3 | 0.33 | 0.41 | 921 | 156 | 9.1 | 99.3 | 128.3 | 20.5 | 0.04 | 0.24 | 922 | 149 | 8.9 | 73.9 | 129.7 | 26.2 | 0.43 | 0.78 | 952 |
| 5/31/19 | 154 | 10.1 | 65.7 | 125.8 | 33.3 | 0.29 | 0.69 | 919 | 155 | 8.5 | 66.6 | 128.4 | 31.2 | 0.05 | 1.90 | 917 | 147 | 8.9 | 61.1 | 131.8 | 38.1 | 0.30 | 0.80 | 941 |
| Average | 153.3 | 9.9 | 63.2 | 126.7 | 25.2 | 0.27 | 0.58 | 937.3 | 155.0 | 9.1 | 72.0 | 128.4 | 24.6 | 0.08 | 0.74 | 942.6 | 147.2 | 9.2 | 61.0 | 132.2 | 35.2 | 0.38 | 0.84 | 928.1 |
| Min | 151.0 | 9.6 | 45.9 | 121.1 | 15.3 | 0.20 | 0.38 | 913.0 | 153.0 | 8.5 | 45.1 | 126.1 | 15.6 | 0.02 | 0.06 | 911.0 | 144.0 | 8.8 | 35.4 | 129.7 | 26.0 | 0.22 | 0.58 | 879.0 |
| Max | 156.0 | 10.4 | 86.7 | 129.9 | 34.5 | 0.37 | 0.74 | 973.0 | 158.0 | 11.0 | 99.3 | 132.1 | 32.6 | 0.21 | 2.14 | 978.0 | 150.0 | 9.7 | 81.1 | 137.6 | 45.2 | 1.06 | 1.01 | 960.0 |
| St Dev | 1.32 | 0.21 | 9.76 | 1.81 | 4.66 | 0.04 | 0.13 | 13.10 | 1.22 | 0.50 | 13.37 | 1.27 | 4.57 | 0.05 | 0.73 | 18.47 | 1.26 | 0.23 | 10.82 | 1.46 | 5.64 | 0.19 | 0.09 | 19.66 |

Blank days have less than 18 hours of valid data due to unit shut downs. According to standard guidelines used by Metro Vancouver Air Quality Policy and Environment Division, a minimum of 18 hours of valid data is required to generate a valid 24hr average.