

#### **Plant McManus**

Prepared by:



## Monthly Dewatering Results<sup>1</sup>

## May 2019

| Parameter              | Units |         | uent<br>ntration | Permit Limits |  |           |  |
|------------------------|-------|---------|------------------|---------------|--|-----------|--|
|                        |       | Minimum | Minimum Maximum  |               |  | Daily Max |  |
| Flow                   | MGD   | 0.0     | 0.0              | ***           |  | ***       |  |
| pH                     | SU    |         |                  | 6.0 - 9.0     |  |           |  |
| Total Suspended Solids | mg/L  |         |                  | 30.0          |  | 100.0     |  |
| Oil and Grease         | mg/L  |         |                  | 15.0          |  | 20.0      |  |

|                          | Units | Measured Effluent |              |              |              |              |  |  |  |  |
|--------------------------|-------|-------------------|--------------|--------------|--------------|--------------|--|--|--|--|
| Parameter                |       | Week 1            | Week 2       | Week 3       | Week 4       | Week 5       |  |  |  |  |
|                          |       | No Discharge      | No Discharge | No Discharge | No Discharge | No Discharge |  |  |  |  |
| Turbidity                | NTU   |                   |              |              |              |              |  |  |  |  |
| Total Dissolved Solids   | mg/L  |                   |              |              |              |              |  |  |  |  |
| Ammonia                  | mg/L  |                   |              |              |              |              |  |  |  |  |
| Total Kjeldahl Nitrogen  | mg/L  |                   |              |              |              |              |  |  |  |  |
| Nitrate-Nitrite          | mg/L  |                   |              |              |              |              |  |  |  |  |
| Organic Nitrogen         | mg/L  |                   |              |              |              |              |  |  |  |  |
| Phosphorus               | mg/L  |                   |              |              |              |              |  |  |  |  |
| Ortho-Phosphorus         | mg/L  |                   |              |              |              |              |  |  |  |  |
| Biological Oxygen Demand | mg/L  |                   |              |              |              |              |  |  |  |  |
| Hardness                 | mg/L  |                   |              |              |              |              |  |  |  |  |

| Parameter Units       |      | Effluent Concentration <sup>3</sup> |              |              |              |              | Calculated River Value <sup>3</sup> |              |              |              | Water        |                      |
|-----------------------|------|-------------------------------------|--------------|--------------|--------------|--------------|-------------------------------------|--------------|--------------|--------------|--------------|----------------------|
|                       |      | Week 1                              | Week 2       | Week 3       | Week 4       | Week 5       | Week 1                              | Week 2       | Week 3       | Week 4       | Week 5       | Quality<br>Standard⁴ |
|                       |      |                                     | No Discharge                        | No Discharge | No Discharge | No Discharge | No Discharge | No Discharge         |
| Arsenic               | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 69                   |
| Cadmium               | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 40                   |
| Chromium <sup>5</sup> | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 1100                 |
| Copper                | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 4.8                  |
| Lead                  | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 210                  |
| Nickel                | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 74                   |
| Selenium              | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 290                  |
| Zinc                  | μg/L |                                     |              |              |              |              |                                     |              |              |              |              | 90                   |
| Mercury               | ng/L |                                     |              |              |              |              |                                     |              |              |              |              | 1800                 |

- Tetra Tech verifies the correct laboratory analysis methods were used, any applicable permit limits have been met and other results are protective of Georgia EPD's water quality standards.
- Calculated River Value shows what the total effluent concentration looks like once it has fully mixed in the receiving waterbody. This value is calculated as a dissolved concentration for an appropriate comparison to the numeric water quality criteria, which are also in the dissolved form. Consistent with Georgia EPD, non-detectable effluent concentrations are not translated into calculated river values.
- Numeric Water Quality Criteria is the maximum concentration of a parameter established for the receving waterbody that will be protective of the designated use per Georgia EPD's rules and regulations. Calculated River Values less than these criteria are protective of the waterbody.

  Numeric water quality criterion shown is for Hexavalent Chromium.
- \*\*\* = Not Applicable

mg/L = milligrams per liter = parts per million;  $\mu g/L = micrograms$  per liter = parts per billion; ng/L = mingrams per liter = parts per trillion; SU = Standard Units; MGD = Million Gailons Day



## **Plant McManus**

Prepared by:



# Monthly Instream Results<sup>1</sup>

## May 2019

|                        | Units | Burnett Creek <sup>2</sup> |              |              |              |  |  |  |  |
|------------------------|-------|----------------------------|--------------|--------------|--------------|--|--|--|--|
| Parameter <sup>3</sup> |       | Sam                        |              | Sample 2     |              |  |  |  |  |
|                        |       | No Discharge               | No Discharge | No Discharge | No Discharge |  |  |  |  |
|                        |       | Upstream                   | Downstream   | Upstream     | Downstream   |  |  |  |  |
| рН                     | SU    |                            |              |              |              |  |  |  |  |
| TSS                    | mg/L  |                            |              |              |              |  |  |  |  |
| O&G                    | mg/L  |                            |              |              |              |  |  |  |  |
| Turbidity              | NTU   |                            |              |              |              |  |  |  |  |
| TDS                    | mg/L  |                            |              |              |              |  |  |  |  |
| BOD                    | mg/L  |                            |              |              |              |  |  |  |  |
| Arsenic                | μg/L  |                            |              |              |              |  |  |  |  |
| Cadmium                | μg/L  |                            |              |              |              |  |  |  |  |
| Chromium               | μg/L  |                            |              |              |              |  |  |  |  |
| Copper                 | μg/L  |                            |              |              |              |  |  |  |  |
| Lead                   | μg/L  |                            |              |              |              |  |  |  |  |
| Mercury                | ng/L  |                            |              |              |              |  |  |  |  |
| Nickel                 | μg/L  |                            |              |              |              |  |  |  |  |
| Selenium               | μg/L  |                            |              |              |              |  |  |  |  |
| Zinc                   | μg/L  |                            |              |              |              |  |  |  |  |
| Ammonia                | mg/L  |                            |              |              |              |  |  |  |  |
| TKN                    | mg/L  |                            |              |              |              |  |  |  |  |
| Nitrate-Nitrite        | mg/L  |                            |              |              |              |  |  |  |  |
| Organic Nitrogen       | mg/L  |                            |              |              |              |  |  |  |  |
| Phosphorus             | mg/L  |                            |              |              |              |  |  |  |  |
| Ortho-phosphorus       | mg/L  |                            |              |              |              |  |  |  |  |
| Hardness               | mg/L  |                            |              |              |              |  |  |  |  |

- 1 Tetra Tech verifies the correct laboratory analysis methods were used.
- 2 Burnett Creek measured 1000ft upstream and 1000ft downstream of the Final Outfall 02.
- 3 Metals results are total recoverable.
- 4 ND = Non-detect

mg/L = milligrams per liter = parts per million;  $\mu g/L$  = micrograms per liter = parts per billion;

ng/L = nanograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day