

# Mayfield Concept Plan Approval

## Quarterly Stormwater Monitoring Report

December 2025 – February 2026

Date of sampling: 09/03/2026

Date Published: 28/04/2026

In accordance with Schedule 3 Condition 2.21 (d) of the Mayfield Concept Approval, PON has developed a Stormwater Management Strategy for the site.

To support the strategy PON conducts an ongoing site wide monitoring program to confirm that the site continues to meet the commitments and requirements of the Concept Plan Approval. Sampling is undertaken on a quarterly basis at the downstream extent of the site drainage infrastructure prior to discharge into the Eastern and Western drains. There are a total of six sampling locations, see Figure 1 below.

**Figure 1: Mayfield Site Water Quality Monitoring Locations**



Analytes that are to be monitored at each sample location are detailed in Table 1 below:

**Table 1: Analytes for Stormwater**

| Pollutant                             | Unit of Measure | Frequency | Sampling Method                   |
|---------------------------------------|-----------------|-----------|-----------------------------------|
| Total suspended solids                | mg/L            | Quarterly | Grab sample during rainfall event |
| pH                                    | pH units        | Quarterly | Grab sample during rainfall event |
| Nitrogen (total)                      | µg/L            | Quarterly | Grab sample during rainfall event |
| Oil and grease                        | mg/L            | Quarterly | Grab sample during rainfall event |
| Phosphate                             | µg/L            | Quarterly | Grab sample during rainfall event |
| BOD                                   | mg/L            | Quarterly | Grab sample during rainfall event |
| Dissolved oxygen                      | mg/L            | Quarterly | Grab sample during rainfall event |
| Heavy metals<br>(comprehensive suite) | µg/L            | Annually  | Grab sample during rainfall event |

Stormwater sampling was conducted in March for the December 2025 to February 2026 period. Due to limited rainfall, sampling was delayed until early March when there was sufficient flow from the drains to acquire adequate samples. This round included all of those analytes that are required to be monitored quarterly and annually.

Table 2 details results for those analytes to be monitored quarterly. Table 3 details results from the heavy metals suite required to be monitored annually.

**Table 2: Results for quarterly suite of analytes**

| Analyte                       | Units   | ED1  | ED2  | ED3  | WD1  | WD2  | WD3  |
|-------------------------------|---------|------|------|------|------|------|------|
| pH                            | pH unit | 6.82 | 6.86 | 6.93 | 7.01 | 7.07 | 7.04 |
| TSS                           | mg/L    | 6    | 13   | 35   | <5   | <5   | <5   |
| Dissolved Oxygen              | mg/L    | 8.25 | 8.40 | 8.13 | 7.74 | 8.27 | 7.98 |
| Total Nitrogen (calc)         | µg/L    | 400  | 400  | 500  | 700  | 600  | 1100 |
| Oil and Grease                | mg/L    | <5   | <5   | <5   | <5   | <5   | <5   |
| Filterable Reactive Phosphate | µg/L    | 190  | 370  | 290  | 230  | 220  | 340  |
| Biological Oxygen Demand      | mg/L    | 3    | 2    | 2    | 3    | 2    | 3    |

Table 3: Results of annual suite of heavy metals analytes

| Analyte                      | Units | ED1  | ED2  | ED3  | WD1  | WD2  | WD3  |
|------------------------------|-------|------|------|------|------|------|------|
| Arsenic                      | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Barium                       | µg/L  | 3    | 5    | 7    | 5    | 5    | 3    |
| Beryllium                    | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Boron                        | µg/L  | <50  | <50  | <50  | <50  | <50  | <50  |
| Cadmium                      | µg/L  | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Chromium                     | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Cobalt                       | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Copper                       | µg/L  | 3    | 2    | 3    | 2    | 2    | 2    |
| Lead                         | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Manganese                    | µg/L  | 6    | 11   | 19   | 3    | 3    | 5    |
| Mercury                      | µg/L  | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Nickel                       | µg/L  | <1   | <1   | <1   | <1   | <1   | <1   |
| Nitrite + Nitrate as N       | µg/L  | 30   | 40   | 40   | <10  | <10  | <10  |
| Selenium                     | µg/L  | <10  | <10  | <10  | <10  | <10  | <10  |
| Total Kjeldahl Nitrogen as N | µg/L  | 400  | 400  | 500  | 700  | 600  | 1000 |
| Vanadium                     | µg/L  | <10  | <10  | <10  | <10  | <10  | <10  |
| Zinc                         | µg/L  | 12   | 6    | 6    | 7    | <5   | 78   |