

Mayfield Concept Plan Approval

Quarterly Stormwater Monitoring Report

December 2023 – February 2024

Date of sampling: 20/02/2024

Date Published: 1/11/2024

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)	ug/L	Quarterly	Grab sample during rainfall event

Oil and grease	mg/L	Quarterly	Grab sample during rainfall event
Phosphate	ug/L	Quarterly	Grab sample during rainfall event
BOD	mg/L	Quarterly	Grab sample during rainfall event
Dissolved oxygen	%	Quarterly	Grab sample during rainfall event
Heavy metals (comprehensive suite)	ug/L	Annually	Grab sample during rainfall event

Stormwater sampling was conducted between December 2023 and February 2024. This round included all of those analytes that are required to be monitored quarterly.

Results are presented in Table 2. Table 2 details results for those analytes to be monitored quarterly.

Table 2: Results for quarterly suite of analytes

	Units	ED1	ED2	ED3	WD1	WD2	WD3
pH	pH unit	7.17	7.13	7.15	NA	NA	NA
TSS	mg/L	23	21	20	NA	NA	NA
Dissolved Oxygen	%	44.3	44.5	42.9	NA	NA	NA
Total Nitrogen (calc)	µg/L	1300	1300	1300	NA	NA	NA
Oil and Grease	mg/L	<5	<5	<5	NA	NA	NA
Filterable Reactive Phosphate	µg/L	136	141	96	NA	NA	NA
Biological Oxygen Demand	mg/L	3	3	3	NA	NA	NA

No flowing water identified in Western drains during sampling period.