Mayfield Concept Plan Approval

Quarterly Stormwater Monitoring Report

June 2023 to August 2023
Date of sampling: NA
Date Published: 16/10/2023

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. Please refer to 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

Analyte	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 is triggered by rainfall events of greater than 25mm rainfall in the preceding 24hr period. This is necessary to ensure there is sufficient volume of water continuing to flow into the drains to enable sample collection, given the open free-draining nature of the drains.

The June to July period experienced low rainfall with no 24 hour rainfall events exceeding the 25mm daily total necessary for sampling.

Table 2: Rainfall Summary

	Jun-23	Jul-23	Aug-23
Monthly Total (mm)	2.0	37.3	90.3
Highest 24 Hour Total (mm)	2.0	9.3	32.6

The largest daily total was 32.6mm on the 6th August, which fell from 9am Saturday to 9am Sunday. Environmental staff are not available to inspect and attempt sampling at this time. The drains were inspected the following day however were not conveying enough water for samples to be achieved.