Mayfield Concept Plan Approval

Quarterly Stormwater Monitoring Report

September to November 2019
Date of sampling: 18 September 2019
Date Published: 27 January 2022

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 Figure1 below:

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	mg/L	Quarterly	Grab sample during rainfall event
Heavy metals (comprehensive suite)	ug/L	Annually	Grab sample during rainfall event

The last round of stormwater sampling was conducted in September 2019. This round included all of those analytes that are required to be monitored quarterly.

The comprehensive suites of metals that are required to be monitored annually were also conducted in September 2019.

Results for those analytes to be monitored quarterly are presented Table 2 below:

Table 2: Results for quarterly suite of analytes

Collection Date	**18.09.2019**						
	Units	**ED1**	**ED2**	**ED3**	**WD1***	**WD2***	**WD3***
pH	pH unit	6.58	6.53	6.51	6.54	6.64	6.70
TSS	mg/L	14	16	9	13	22	21
Dissolved Oxygen	%	69	56	56	90	51	57
Total Nitrogen (calc)	µg/L	1200	1000	400	1000	1000	1700
Oil and Grease	mg/L	9	23	<5	<5	<5	6
Filterable Reactive Phosphate	µg/L	50	<50	50	<50	<50	<50
Biological Oxygen Demand	mg/L	2	<2	<2	3	2	3