TfA Ref: 25119

25 June 2025

Stormwater & Oily Water Management Statement

#### Proposed 24 hour Unmanned Truck Refuelling Facility at 10 Industrial Close, Yass NSW 2582

This Stormwater & Oily Water Management statement has been prepared with respect to the proposed unmanned truck refuelling facility located at the abovementioned location formally described as Lot 5 DP1278625 and aims to summarise the proposed stormwater and oily water management strategy.

All areas of the facility where transfer of hydrocarbons occur (unloading/refuelling) and/or potential spills may occur will be managed as follows:

- Dispensing of fuel for the trucks will occur in concrete bunded areas. Stormwater runoff and any spillage that may occur during the dispensing of fuel will be captured by grated gully pits located at the centre of the bunded areas and directed to an Enviro OE30 full retention oily water separator via underground pipe network for hydrocarbon removal. This unit is compliant with the requirements of EN-858-1 "Class 1" oil/water separators. Treated water from the Enviro OE30 unit will be then discharged to the site's stormwater network.
- The Enviro OE30 device is a fully integrated in-line device capable of removing pollutants including oils from • run-off. The device does not require any power, utilising the energy of the water flow to separate and contain pollutants for periodical removal by evacuation equipment. The internal surface can be inspected and washed as required, whilst screens can be removed and cleaned if and as required.
- The device has a design service life of 100 years for fixed parts and 25 years for replacement parts. The Enviro • OE30 unit claims a performance which can reach reductions of 95% for Gross Pollutants (GP), a 90% of Suspended Solids (TSS), a 97% of Total Phosphorous (TP), a 85% of total Nitrogen (TN), a 99.95% of total Hydrocarbons and 8,000 litres of Oil containment capacity. Hydrocarbon retention occurs in a separate chamber which operates as a best practice oil and grease arrestor.
- The OE30 will be fitted with an oil alert probe for oil spill detection and maintenance monitoring which • includes an alarm panel for remote mounting. The alarm is triggered when hydrocarbon build-up accumulates, allowing the removal by a licensed contractor when required.
- Under normal operation, the Enviro OE30 unit will discharge treated stormwater with a total petroleum hydrocarbons (TPH) content below 5ppm (mg/L).

Stormwater runoff from the remaining low-risk areas of the site will be directed and discharged into the site's internal stormwater network, which comprise a swale, pits and associated pipework.

Runoff from the driveway areas surrounding the bunded (high risk) zones will flow across the surface and be drained by pits located adjacent to the southeast boundary. The remaining low risk areas will direct runoff to a swale along the northwest boundary, which discharges into a pit located in the northern corner of the site. This pit will convey site's runoff to an external pit (the proposed lawful point of discharge) which forms part of the council's drainage network located within the Industrial Close Road Reserve.

We believe that the proposed oily water and stormwater treatment systems will ensure the highest level of protection against fuel spills and incorporate water sensitive urban design (WSUD) measures to significantly improve the quality of stormwater discharged from the site. For further clarification on the operation of the proposed system, refer to Appendix A for the conceptual stormwater and oily water management plan and to Appendix B for the Enviro OE30 unit details.



BRISBANE (HEAD OFFICE) 166 Knapp Street Fortitude Valley QLD 4006

H/O Phone: +61 7 3854 2900 NSW Phone: +61 2 8814 5219

SYDNEY Suite 706 247 Coward Street Mascot NSW 2020

Australia Wide: 1300 794 300

MELBOURNE Suite 125 757 Bourke Street Docklands VIC 3008

VIC Phone: +61 3 9640 0206 Website: www.tfa.com.au

PERTH Level 7 200 Adelaide Terrace East Perth WA 6004

WA Phone: +61 8 6165 8855 ABN: 34 612 132 233

Should you require any clarification regarding the information provided please do not hesitate to contact the undersigned.

Kind regards,

Juan D. Avella Director – Civil/ Structural Engineering BEng MBA MIEAust CPEng NER For and on behalf of TfA Project Group.

Appendices A- Conceptual Stormwater & Oily Water Management Plan B- Enviro OE30 information



2

## **APPENDIX A**



3



	DATE 23.06.2025	DRAW		REV F			
_	E 1:250	A3 SC	ALE	1:500	SHEET		
1							

## **APPENDIX B**



25119 – 10 Industrial Close, Yass Stormwater & Oily Water Management System | Revision A

4



The Enviro OE-SERIES range which is recommended for high impact catchments where pollutant load is very high which includes emulsified oils, bulk spill, more suitable for fuel, mining and energy sectors. The Emergency bulk spill holding capacity ranges between 8,000 to 19,000 Litres. The benefits of Enviro Systems are :-

- 1. Australia Designed and Manufactured Device
- 2. Complies with all relevant codes including AS3600:2009
- 3. Installed in-line within new or existing drainage pipes and can be adapted to open channel
- 5. Serviced by Local Licensed Waste Management Contractor
- 6. No consumables
- 7. No confined space entry required
- 8. Manufactured from sustainable materials such as 'green concrete' and stainless steel
- 9. Low carbon footprint, service life exceeds 100 years
- 10. Hydraulic Impedence k= 0.425
- 11. Built-in 25mm in/out flow differential
- 12. Storage capacity in accordance with ARQ Section 3.7 provides 12 month service interval
- 13. Treated flow based in 1 year 5 min. IFD, national average
- 14.90% removal of particles > 100microns

OE-SERIES	NOMINAL PIPE SIZE	TREATED FLOW @ 1% PIPE GRADIENT (L/SEC)	COVER CLASS	TOTAL MASS (TONNES)	MIN.DPETH TO INVERT (A)	MIN.OVER ALL HEIGHT (B)	CHAMBER DIAMETER (C)	BULK OIL SPILL CAPACITY	TOTAL EXCAVATION VOLUME (D) (M^3)
OE30.8	Ø160	22	"D" CLASS	7.000	550	2,720	Ø2,440	8,000	37.00
OE30.10	Ø160	22	"D" CLASS	9.000	550	2,700	Ø2,870	10,000	45.00
OE45.8	Ø225	66	"D" CLASS	7.200	580	2,720	Ø2,440	8,000	37.00
OE45.10	Ø225	66	"D" CLASS	9.200	580	2,700	Ø2,870	10,000	45.00
OE60.10	Ø315	142	"D" CLASS	9.400	680	2,700	Ø2,870	10,000	45.00
OE30.20	Ø160	22	"D" CLASS	12.800	550	3,000	Ø3,450	19,100	67.00
OE45.20	Ø225	66	"D" CLASS	13.100	580	3,000	Ø3,450	18,900	67.00
OE60.20	Ø315	142	"D" CLASS	13.400	680	3,000	Ø3,450	18,000	67.00

POLLUTANTS	MINIMUM REDUCTION REQUIRED	TEST REDUCTION ACHIEVED
Total Suspended Solids	80%	90%
Total phosphorus	60%	97%
Total Nitrogen	45%	85%
Gross Pollutants	90%	95%
Total Hydrocarbons	99.95%	99.95%

- T

- Toto





TOTAL EXCAVATION VOLUME - "D" m^3

4. Does not require any power, the unique hydraulic separation utilises the energy in the water flow







Design service life of **100 years** for fixed parts + 25 years for servicable parts

Made using 'green concrete' **reducing carbon emission by more than 80%** when compared to other materials

Internal components manufactured from **high grade stainless steel**, complying with International Corrosion Standards. No welding necessary



The safest solution with **no confined space entry** required

Installation is simple and prompt without the need for site closure + with minimal disruption



Enviro systems are self ballasting + are fully structural

### Speak to one of Enviro's friendly Engineers today



(⊠)

 $(\mathbf{Q})$ 

Shone +61 427 648 489 Digin +61 419 785 289

info@enviroaustralis.com.au

PO BOX 34, Angaston, South Australia 5353



# **ENVIRO** OE SERIES

"Enviro systems ensure the highest compliance at the lowest cost."

Enviro systems are:

45% lower cost to install

87% lower cost to maintain

77% lower cost to own over 25 years

compared to alternative systems.

Performance testing verifies pollutant removal rates:

Pollutants Reduction Claim	% Reduction (minimum requirement)	% Reduction (as tested)
Total Suspended Solids (TSS)	85%	94%
Total Phosphorous (TP)	60%	97%
「otal Nitrogen (TN)	45%	85%
Free Oils Removal	99.95%	99.95%
Gross Pollutants	90%	100%
Total Suspended Solids (TSS) Total Phosphorous (TP) Total Nitrogen (TN) Free Oils Removal Gross Pollutants	85% 60% 45% 99.95% 90%	94% 97% 85% 99.95% 100%

Hydraulic Resistance K Factor = 0.425 Inlet to outlet differential = 25mm

BP independently collected samples from the BP Morkooka site after 3 months of operation. The sample was collected from the processing insert (unique to Enviro) with obvious 1-2mm hydrocarbon sheen on the influent with lots of solids present. The sample was tested by ALS with results in the table to the right. **The Enviro OE systems effectively removes 100% of all pollutants.** 



Processing insert, Moorooka Station BP

Speak to one of Enviro's friendly Engineers today

## $\bigcirc$





The OE Series enhances the accredited oil/water separation capabilities of the H Series by incorporating a secondary chamber capable of containing emergency oil spills, with a capacity of up to 10,000 litres.

Engineered for high-risk environments, such as airports, marinas, oil storage facilities, and petrol stations, it provides a robust solution for mitigating the risk of large-scale oil spills.

Enviro's 'green concrete' chambers, reduce carbon emissions by **more than 80%** when compared to other materials.

During recent years Enviro has reduced CO2 emissions by an estimated **300 tonnes** and removed over 10 tonnes of plastic from the waste stream.



## Samples collected by BP, analised by ALS (Australian Laboratory Services) results:

Pollutant	UOM	Acceptable	LOR	Effluent	Reduction
TPH, C10 - C36	µg/L	5,000	50	50	100%
C6 - C9 Fraction	µg/L	5,000	20	20	100%
C10 - C14 Fraction	µg/L	5,000	50	50	100%
C15 - C28 Fraction	µg/L	5,000	100	100	100%
C29 - C36 Fraction	µg/L	5,000	50	50	100%
Suspended Solids	mg/L	25	5	5	100%
Nitrogen as TKN	mg/L	0.5	0.1	0.1	100%
Total Phosphorous (TP)	mg/L	0.05	0.01	0.01	100%

info@enviroaustralis.com.au