

TREATMENT PLANT APPROVAL 21/2021
Plumbing and Drainage Act 2018

Approval

1. The **Graf EClean 1500 (10EP/1500L)** (“the system”) described in the Specifications and Drawings in the attached Schedule and manufactured by **Graf Australia Pty Ltd** (“the manufacturer”) (ABN 16 159 402 178) has been assessed in accordance with the Queensland Plumbing and Wastewater Code (QPW Code) dated 26 March 2019.
2. Approval is granted for the advanced secondary quality wastewater treatment system, subject to compliance by the manufacturer with the requirements of the *Plumbing and Drainage Regulation 2018*, and the conditions of approval detailed below.
3. This approval, the conditions of approval and the Schedule comprise the entire Treatment Plant Approval document.
4. Any modification by the manufacturer to the design, drawings or specifications scheduled to this approval must be approved by the Chief Executive.

Conditions of approval

5. The manufacture, installation, operation, service and maintenance of the systems must be in conformity with the conditions of this Treatment Plant Approval.
6. The system when tested by a certification accreditation body in accordance with AS1546.3:2017 was found to comply with the advanced secondary 10EP/1500L level with nutrient reduction of 84.89% in Nitrogen and 17.67% for Phosphorus and must continue to meet the following requirements:

TABLE 2.1 (AS1546.3:2017)
EFFLUENT COMPLIANCE CRITERIA
FOR AN STS WITH NO NUTRIENT
REDUCTION FACILITIES

Parameter	Secondary effluent		Advanced secondary effluent	
	90% of samples	Maximum	90% of samples	Maximum
BOD ₅	≤20 mg/L	30 mg/L	≤10 mg/L	20 mg/L
TSS	≤30 mg/L	45 mg/L	≤10 mg/L	20 mg/L
<i>E. coli</i> *	≤10 cfu/100 mL	30 cfu/100 mL	≤10 cfu/100 mL	30 cfu/100 mL
FAC	Minimum 0.5 mg/L†	N/A	Minimum 0.5 mg/L†	N/A
Turbidity	N/A	N/A	N/A	5 NTU

* Where disinfection is required.

† Minimum level, not 90% of samples.

7. Each system must be serviced in accordance with the accreditation certificate by Global Certification Pty Ltd on 08 April 2021, and details supplied in the owner's operation and maintenance manual.
8. Each system must be supplied with —
 - (a) a copy of this Treatment Plant Approval document;
 - (b) details of the system;
 - (c) instructions for authorised persons for its installation;
 - (d) a copy of the owner's manual to be given to the owner at the time of installation; and
 - (e) detailed instructions for authorised service personal for its operation and maintenance.
9. At each anniversary of the Treatment Plant Approval date, the supplier must submit to the Chief Executive a list of all systems installed in Queensland during the previous 12 months. Where the Chief Executive is notified of any system failures the Chief Executive may randomly select a number of installed systems for audit. The Chief Executive will notify the supplier's nominated NATA accredited laboratory which systems are to be audited for BOD⁵ and TSS. The sampling and testing of the selected systems, if required, is to be done at the supplier's expense. The following results must be reported to the Chief Executive;
 - (a) Address of premises;
 - (b) Date inspected and sampled;
 - (c) Sample identification number;
 - (d) BOD⁵ for influent and effluent; and
 - (e) TSS for influent and effluent.
10. The Chief Executive may, by written notice, cancel this approval if the manufacturer/supplier fails —
 - (a) to comply with one or more of the conditions of approval; or
 - (b) within 30 days, to remedy a breach, for which a written notice been given by the Chief Executive.
11. This approval may only be assigned with the prior written consent of the Chief Executive.
12. This approval expires on 29 April 2026 unless cancelled earlier in accordance with paragraph 10 above.

Stacey McInnes
A/Director
Plumbing, Drainage and Special Projects
Building Legislation and Policy
Date approved: 30 April 2021

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Treatment Plant Approval
Approved by: Stacey McInnes
Delegated Authority
Department of Energy & Public Works

TREATMENT PLANT APPROVAL No. 21/2021
Plumbing and Drainage Act 2018

SCHEDULE

Attachment 1

Drawings and Specifications for the

Graf EClean 1500

Treatment Plant Approval

Approved by: Stacey McInnes

Delegated Authority

Department of Energy & Public Works

PRODUCT CERTIFICATE OF REGISTRATION



Global Certification Pty Ltd

Number 651

Product Performance Testing

AS 1546.3:2017

to the advanced secondary treatment level

Issued to

Graf Australia Pty Ltd

27 Deakin St Brendale Qld 4500

Certification Date: - 01/03/2021

Expiry Date: - 01/03/2026

Product Certified:

Model Options	Disinfection	Nutrient Reduction	Average Results	Discharge	Disposal Options
Graf EClean 1500 Two tank option	Liquid Chlorine or solid chlorine	Nitrogen 81.02% Phosphorus 0.87%	BOD ₅ 1.20 mg/L TSS 2.09 mg/L Nitrogen 12.6 mg/L Phosphorus 10.3 mg/L FAC 2.9 mg/L E. coli 0.41CFU/100ml	Pumped via pump out Saphire tank with chlorine dispenser	Above ground sprinklers
					Sub strata irrigation drippers
					Sub surface irrigation drippers
					Flatbed Drains
					Graf Sicker Tunnel Leach drains
					Soak Wells
Graf EClean 1500 Single tank option	Liquid Chlorine or solid chlorine	Nitrogen 81.02% Phosphorus 0.87%	BOD ₅ 1.20 mg/L TSS 2.09 mg/L Nitrogen 12.6 mg/L Phosphorus 10.3 mg/L FAC 2.9 mg/L E. coli 0.41CFU/100ml	Pumped via pump chamber within the Carat tank with chlorine dispenser	Above ground sprinklers
					Sub strata irrigation drippers
					Sub surface irrigation drippers
					Flatbed Drains
					Graf Sicker Tunnel Leach drains
					Soak Wells

Note:- The system may only be installed in ground. Installation Instructions must be supplied and followed. The Power outage reset methods must also be supplied with the system to ensure the installer and service agent know how to reset the system after power interruptions. The system must be serviced at a 4 monthly interval and the sludge should be pumped out on the following schedule or sooner if required.

Flow per day (Litres)	400	600	800	1200	1500
Pump out period (years)	7.2	4.8	3.6	2.4	1.9

NACE CODES: 3700

This Certificate of Conformance to the Product Certificate Scheme remains the property of Global Certification Pty. Ltd. and is granted subject to the terms and conditions of the Contract Application, in respect of the Product certified on this page and the attached schedule to the Certification of Conformance, bearing the same number as this certificate.

Treatment Plant Approval

Approved by: Stacey McInnes
Delegated Authority
Department of Energy & Public Works



Stacey McInnes



Date of Issue: 8th April 2021

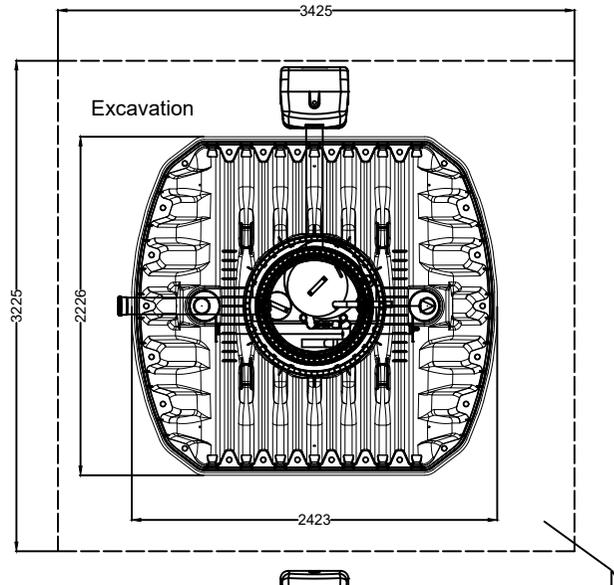
Bruce Smith Director

Signed for and on behalf of Global Certification Pty Ltd
PO Box 953 Belconnen ACT 2616

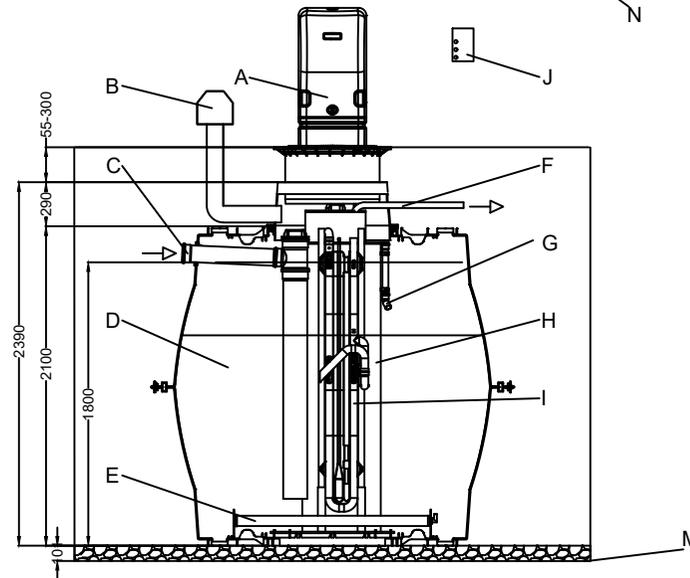
www.jas-anz.com.au/register

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TOP VIEW



SIDE VIEW



Components	
A	Outdoor cabinet
B	Ventilation
C	Inlet and desludging pipe
D	Biological reactor (Carat 6,500L)
E	Air diffuser
F	Outlet
G	High level float
H	Pump out chamber with irrigation pump and tablet feeder
I	Airlift
J	House alarm plate
M	Compacted base
N	8-16mm gravel backfill

Treatment Plant Approval
 Approved by: Stacey McInnes
 Delegated Authority
 Department of Energy & Public Works




GRAF EClean15 one tank system

Artikel-Nr.
product no.
article no.
articulo no.

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Graf Australia Pty Ltd

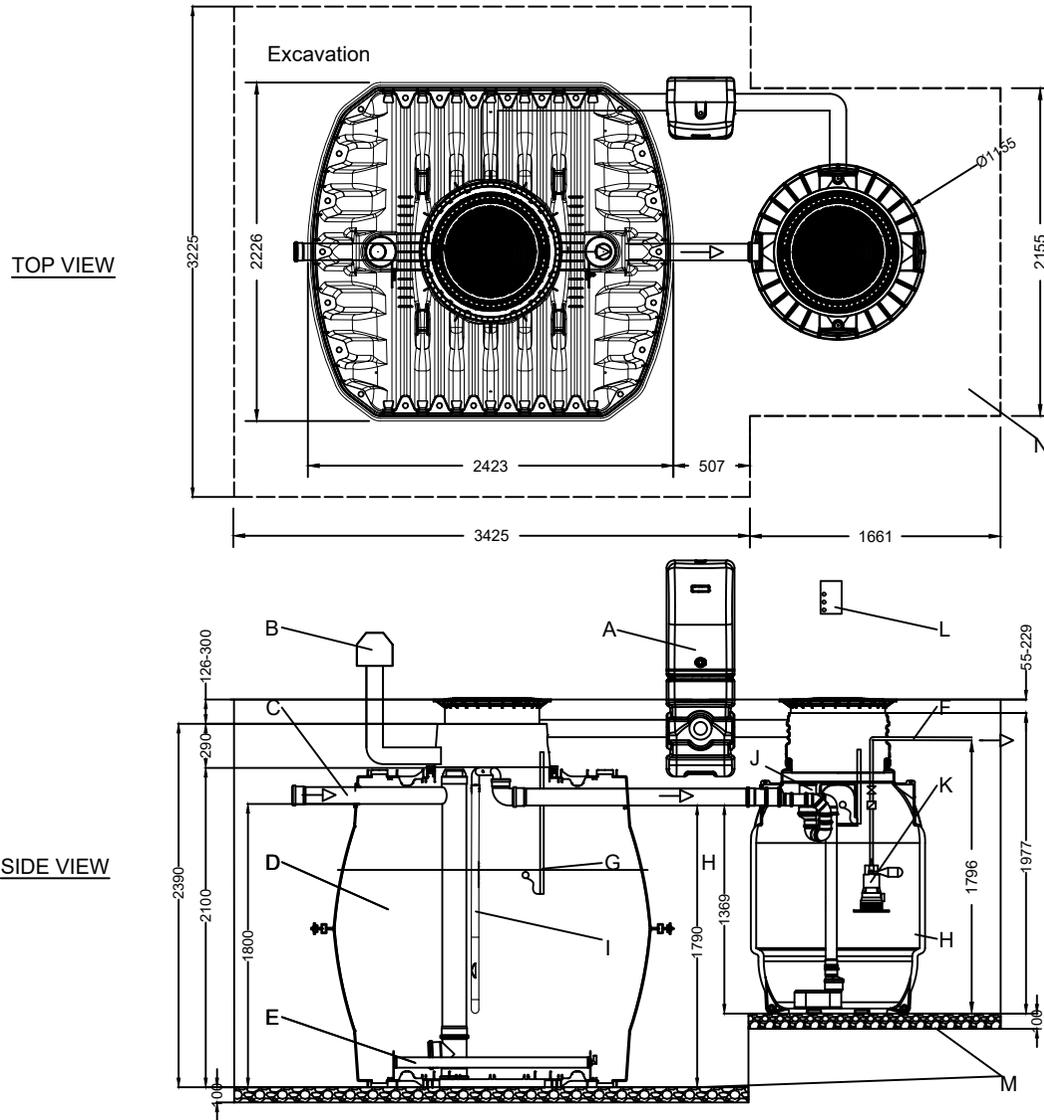
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gezeichnet, drawn	UKO/LB	Gewicht, weight	revision
Datum, date	2021.04.19	Toleranz, tolerance	Maßstab, scale

	M 1:50	Einheiten, units	mm [inch] gal. = US gal.
	+/- 3%		



Components	
A	Outdoor cabinet
B	Ventilation
C	Inlet and desludging pipe
D	Biological reactor (Carat 6,500L)
E	Air diffuser
F	Outlet
G	High level float
H	Pump out chamber (Saphir 1,200L)
I	Airlift
J	Chlorine Tablet Feeder
K	Pump
L	House alarm panel
M	Compacted base
N	8-16mm gravel backfill

Treatment Plant Approval
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 Delegated Authority
 Department of Energy & Public Works




GRAF EClean15 two tank version

Artikel-Nr.
product no.
article no.
articulo no.

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Graf Australia Pty Ltd

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