Patron: The Honourable Alex Chernov AC QC, Governor of Victoria

Operational Training and Volunteerism
8 Lakeside Drive, Burwood East VIC 3151

17 March 2014

Country Fire Authority
8 Lakeside Drive
Burwood East Vic 3151

Dear

Water Monitoring Results: Fiskville Batch 14-0888

The attached Central Highlands Water test results dated 20 February 2014 indicate the pH measured in water from the Red Pipe – PG Tank and the Beige Pipe – BU Tank reported 8.5 and 9.5 respectively. The pH value for the Beige Pipe – BU Tank is slightly over the water quality criterion range for pH (6.0 to 9.0), as stated in the Water Management Plan for Fiskville.

High pH levels in water at Fiskville have previously been linked with water supply from Lal Lal Reservoir, leaching of alkaline material from concrete lined pipes and low water use at CFA Fiskville Training Ground.

Criteria for pH are typically provided to minimise corrosion to infrastructure (low pH) and prevent scaly build up in pipes (high pH) or for aesthetic reasons (poor taste and odour). However, alkaline water with a pH greater than 10 may lead to gastrointestinal irritation in sensitive individuals and irritation of the eye, skin and mucous membranes at pH above 11. Therefore, the pH of 9.5 is not considered a human health problem.

The results have previously been reviewed by water quality and health specialists of Cardno Lane Piper and reported that these results do not indicate any water quality issues that would make the water from the Beige Pipe BU Tank unsuitable for use in fire fighting training. Additional monitoring of pH will be considered to ensure pH levels do not approach 10.

Yours sincerely

CENTRAL HIGHLANDS WATER - LABORATORY SERVICES

7 Learmonth Rd. Wendouree, PO Box 152, Ballarat 3353 ABN: 75 224 340 348
Chemistry: 03 53203195 Microbiology: 03 53 203193 Email: laboratory@chw.net.au

TEST REPORT

Laboratory Report No: 14/0888

Client: CFA Training College - Fiskeville
Ballan - Geelong Road
FISKEVILLE VIC 3342

Attention:

Date Received: 20/02/14

Job Description: CFA Training Centre Fiskville

LAB. No.	SAMPLE	SAMPLED
14/0888-1	Red Pipe - PG Tank	20/02/2014
14/0888-2	Beige Pipe - BU Tank	20/02/2014

Test Description	Method	Units	14/0888-1	14/0888-2
BOD_5	CHW - BOD	mg/L	5	<5
E. coli - Colilert	CHWM.08	MPN/100mL	0	0
Electrical Conductivity @ 25°C	CHW - EC	µS/cm	530	510
Oil & Grease at ALS		mg/L	<5	<5
pH	CHW - pH	Units	8.5	9.5
Phosphorus - Total (Low)	CHW - Tot P	mg/L	0.0050	0.11
Ps. aeruginosa	CHWM.07	cfu/100mL	0	0
Suspended Solids	CHW - SS	mg/L	<1	1
Total Kjeldahl Nitrogen (as N)	CHW - TKN2	mg/L	0.9	0.5
Total Oxidised Nitrogen (as N)	CHW - Ox.N	mg/L	0.28	0.52

Analytical methods for chemical analyses in accordance with Central Highlands Water Laboratory Chemistry Methods (2013).
Analytical methods for microbiological analyses in accordance with Central Highlands Water Microbiology Methods Manual (2013).
Volatile Acid analysis not covered by NATA Accreditation.

Comments
Samples as received.
Bacteriological analysis performed on day of receipt.
O&G analysis performed at ALS, Accreditation No. 992.
Refer ALS Report No. 419972.

Digitally signed by Geoffrey Cramer
DN: cn=Geoffrey Cramer, o=Central Highlands Water, ou=CHW Laboratory Services, emailaddress=gcramer@chw.net.au, c=AU
Date: 2014.02.28 11:30:48 +11'00'

Digitally signed by Michelle Murphy
DN: cn=Michelle Murphy, o=Central Highlands Water, ou=Laboratory, emailaddress=mmurphy@chw.net.au, c=AU
Date: 2014.02.27 11:24:07 +11'00'

Signed ....

Report Date: 27 February 2014

Name ....
Chemistry **Microbiology**

NATA
Accredited for compliance with ISO/IEC 17025
Accreditation No: 1935