Our ref: LTR/14642/1CL/9/AH

28 January 2015

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For the attention of Alex Ross

Ex-Serviceman's Club, North Street, Jarrow - Gas Addendum Report

Please find attached the completed gas monitoring results for the proposed development at the Ex-Serviceman's Club located on North Street, Jarrow.

It is recommended that this letter is read in conjunction with the Phase II Geo-Environmental Assessment Report completed for the site which was produced by 3e Consulting Engineers in November 2014, ref: 14642.

In total, the wells installed on this site were monitored for ground gas on 6 occasions between 4th November 2014 and 28th January 2015, utilising a portable infra-red gas detector. Monitoring was undertaken over periods of rising and falling pressure trends, with atmospheric pressures ranging between 993 and 1027mb.

During the monitoring period, a maximum Methane concentration of 0.4% v/v was recorded along with Carbon Dioxide which was recorded up to a maximum concentration of 3.3% v/v, with associated slightly depleted oxygen concentrations. No flow was also evident during the monitoring period (<0.1 l/hr), with groundwater typically ranging from depths of 0.23m to 3.25m below ground level. On two occasions, WS05 was noted to be flooded.

Based on the gas monitoring results, a Gas Screening Value (GSV) of <0.07l/hr has been calculated for this site, resulting in this site falling within a Characteristic Situation 1 (CS1) in accordance with CIRIA C665. Therefore, gas protective measures are not deemed necessary for this development.

Yours sincerely

Andrew Hampson

Associate

Enc: Gas Monitoring Results











Gas monitoring record

3e Consulting Engineers Ltd

1st Floor, Block C Holland Drive Holland Park

North Street, Jarrow 04-Nov-14

14642

Newcastle Upon Tyne

Date:

Job no:

Site:

NE2 4LD

Weather: Cloudy and dry

Pressure Trend: Rising

BH No	Methane (%v/v)	Carbon dioxide (%v/v)	Oxygen (%v/v)	Barometric Pressure (mb)	Flow (l/hr)	Water level (m bgl)	Remarks
WS03	0.1	3.3	17.5	995	<0.1	2.78	
WS04	0.1	0.1	19.6	995	<0.1	3.25	
WS05	0.4	2.0	16.9	995	<0.1	0.23	

Date: 21-Nov-14 Weather: Overcast and dry Pressure Trend: Falling

BH No	Methane (%v/v)	Carbon dioxide (%v/v)	Oxygen (%v/v)	Barometric Pressure (mb)	Flow (l/hr)	Water level (m bgl)	Remarks
WS03	0.1	1.0	19.9	1023	<0.1	0.88	
WS04	0.0	0.3	19.3	1023	<0.1	2.13	
WS05	0.1	0.8	18.6	1023	<0.1	1.82	

Date: 11-Dec-14 Weather: Windy and dry Pressure Trend: Rising

BH No	Methane	Carbon dioxide	Oxygen	Barometric Pressure	Flow	Water level	Remarks
	(%v/v)	(%v/v)	(%v/v)	(mb)	(l/hr)	(m bgl)	
WS03	0.1	2.1	18.4	998	<0.1	0.77	
WS04	0.1	0.2	20.2	998	<0.1	1.62	
WS05	nm	nm	nm	nm	nm	nm	Borehole flooded

nm - Not Monitored

18-Dec-14 Date: Weather: Overcast and dry Pressure Trend: Falling

BH No	Methane (%v/v)	Carbon dioxide (%v/v)	Oxygen (%v/v)	Barometric Pressure (mb)	Flow (l/hr)	Water level (m bgl)	Remarks
WS03	0.1	1.0	18.8	998	<0.1	0.73	
WS04	0.1	0.2	19.4	998	<0.1	1.45	
WS05	nm	nm	nm	nm	nm	nm	Borehole flooded - Purged.
WS05	0.1	0.6	19.5	997	<0.1	2.93	Monitored 7hours after purging.

nm - Not Monitored

Date: 05-Jan-15
Weather: Overcast and dry
Pressure Trend: Falling

BH No	Methane (%v/v)	Carbon dioxide (%v/v)	Oxygen (%v/v)	Barometric Pressure (mb)	Flow (I/hr)	Water level (m bgl)	Remarks
WS03	0.0	1.2	20.0	1027	<0.1	0.82	
WS04	0.0	0.1	20.2	1027	<0.1	1.02	
WS05	0.0	1.4	17.4	1027	<0.1	1.70	

Date: 28-Jan-15 Weather: Raining

Pressure Trend: Falling

BH No	Methane (%v/v)	Carbon dioxide (%v/v)	Oxygen (%v/v)	Barometric Pressure (mb)	Flow (I/hr)	Water level (m bgl)	Remarks
WS03	0.0	1.7	18.6	993	<0.1	0.78	
WS04	0.0	0.3	19.8	993	<0.1	1.00	
WS05	0.0	1.6	14.6	993	<0.1	0.96	