

Our Ref: RH/12032-P1Letter

Your Ref:

Contact: Ruth Howells

12<sup>th</sup> October 2020

Worcestershire Regulatory Services  
Wyre Forest House  
Finepoint Way  
Kidderminster  
Worcestershire  
DY11 7WF

For the attention of Lydia Burrows

Dear Lydia

**PLANNING REF: Discharge of Condition 10 (Decontamination Verification) 20/0636  
Phase 1 of Permission 13/1279. Land to the south of Glan Usk School, Herbert Road,  
Newport**

Your letter Ref:20/11368/PLAN, dated 5<sup>th</sup> October 2020 was forwarded on to myself.

I can confirm that the following documents are not relevant to the Phase 1 area of the development:

- Imported Fill Validation Report October 2016/2032/VR1 by Terra Firma
- Appendices to Geotechnical and Environmental Report Parts 1 to 4 by Terra Firma dated March 2013
- Preliminary Interim Earthworks dated June 2016 ref 12032/ER1
- Imported Fill Validation Report dated September 2016 ref 12032/VR1 by Terra Firma
- Earthworks Validation Report Phase 2 to 4 dated October 2017 by Terra Firma
- Settlement Report dated August 2018 ref: 12032/SR

These reports refer only to the majority of Phase 2 and Phase 3 (south of the drainage ree).

The Remediation Strategy Report produced in August 2015 was also not applicable to Phase 1.

As stated in your letter Terra Firma (Wales) Limited concluded that no remedial measures would be required upon development.

For this reason it was not deemed necessary to validate the presence or thickness of the capping layer. It was the Developer's choice to install a capping layer and not a human health protection requirement.

With regards to gas monitoring please find enclosed our gas monitoring letter issued following completion of all six scheduled gas monitoring rounds.

I trust that the above is to your satisfaction, however, if you have any queries or require any further information please do not hesitate to contact me.

Yours sincerely

**for: Terra Firma (Wales) Ltd**



**Mrs Ruth Howells**

**Enc.**

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Contact:

**Terra Firma (Wales) Ltd.**  
Consulting Geotechnical & Geo-Environmental Engineers  
Site Investigation Contractors

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23<sup>rd</sup> June 2017

Keepmoat  
Unit 7  
Oak Tree Court  
Mulberry Drive  
Cardiff Gate Business Park  
Cardiff  
CF23 8RS

For the attn. of Mr Dylan Hammett

Dear Dylan

### **GAS MONITORING RESULTS: PHASE 1, HERBERT ROAD, NEWPORT**

Further to our Geo-Technical and Geo-Environmental Report No.12032/P1 for the above site we confirm that all six in-situ gas monitoring visits have now been completed. The results are enclosed.

Methane was found to be undetectable.

Carbon dioxide levels varied between 0.1% to 7.4% V/V.

Oxygen concentrations varied between 9.6% and 20.9% V/V.

The gas flow rate from the boreholes was also assessed. No flow was recorded.

Based on the gas monitor flow rate detection limit of 0.1l/hr and the highest recorded carbon dioxide concentration of 7.4%, a gas screening value of 0.0074l/hr is calculated, as follows:  
 $7.4/100) \times 0.1 = 0.0074l/hr$

When this result is compared with Table 8.5 of CIRIA report C665, the site is classified as 'gas characteristic situation 1'.

For sites classed as Gas Characteristic 1, no special gas precautions are required to be installed into new development.

However, given that the maximum carbon dioxide level exceeds 5% it is considered that gas protection should be incorporated into the development in accordance with '**gas characteristic situation 2**'.

Table 8.6 of the above publication confirms that for 'gas characteristic 2' sites, the following precautions are required:

- A 1200 gauge DPM should be used with a reinforced concrete cast in-situ floor slab (suspended, non-suspended)
- A 2000 gauge DPM/reinforced gas membrane should be used with a beam and block or precast concrete floor slab with underfloor venting
- All joints should be taped and sealed

We trust that the above is to your satisfaction, however, should you have any queries or require any further information please do not hesitate to contact us.

Yours sincerely

**For: Terra Firma (Wales) Limited**



**Mrs Ruth Howells**

**Enc.**

					BH1	BH2	BH4
Round	1			% CH <sub>4</sub>	0	0	0
Date	21.02.2017			% CH <sub>4</sub> Peak	0	0	0
Weather	Overcast with drizzle			% LEL	0	0	0
Barometric pressure	1017	mb		% CO <sub>2</sub>	6.7	2.6	0.4
				% O <sub>2</sub>	9.6	12.2	19.9
				CO (ppm)	0	0	0
				H <sub>2</sub> S (ppm)	0	0	0
				Flow (l/hr)	0	0	0

					BH1	BH2	BH4
Round	2			% CH <sub>4</sub>	0	0	0
Date	10.03.2017			% CH <sub>4</sub> Peak	0	0	0
Weather	Overcast			% LEL	0	0	0
Barometric pressure	1023	mb		% CO <sub>2</sub>	6.7	4.6	0.1
				% O <sub>2</sub>	10.8	10.6	20.9
				CO (ppm)	0	0	0
				H <sub>2</sub> S (ppm)	0	0	0
				Flow (l/hr)	0	0	0

					BH1	BH2	BH4
Round	3			% CH <sub>4</sub>	0	0	0
Date	27.03.2017			% CH <sub>4</sub> Peak	0	0	0
Weather				% LEL	0	0	0
Barometric pressure		mb		% CO <sub>2</sub>	6.2	5.2	0.1
				% O <sub>2</sub>	11.2	10.3	20.5
				CO (ppm)	0	0	0
				H <sub>2</sub> S (ppm)	0	0	0
				Flow (l/hr)	0	0	0

					<b>BH1</b>	<b>BH2</b>
<b>Round</b>	4			% CH <sub>4</sub>	0	0
<b>Date</b>	12.04.2017			% CH <sub>4</sub> Peak	0	0
<b>Weather</b>	Cloudy			% LEL	0	0
<b>Barometric pressure</b>	1018	mb		% CO <sub>2</sub>	5.5	4.4
				% O <sub>2</sub>	9.9	11.8
				CO (ppm)	0	0
				H <sub>2</sub> S (ppm)	0	0
				Flow (l/hr)	0	0

					<b>BH1</b>	<b>BH2</b>
<b>Round</b>	5			% CH <sub>4</sub>	0	0
<b>Date</b>	10.05.2017			% CH <sub>4</sub> Peak	0	0
<b>Weather</b>	Overcast			% LEL	0	0
<b>Barometric pressure</b>	1009	mb		% CO <sub>2</sub>	6.9	5.2
				% O <sub>2</sub>	10.8	11.1
				CO (ppm)	0	0
				H <sub>2</sub> S (ppm)	0	0
				Flow (l/hr)	0	0

					<b>BH1</b>	<b>BH2</b>
<b>Round</b>	6			% CH <sub>4</sub>	0	0
<b>Date</b>	16.06.2017			% CH <sub>4</sub> Peak	0	0
<b>Weather</b>	Sunny			% LEL	0	0
<b>Barometric pressure</b>	1025	mb		% CO <sub>2</sub>	6.5	7.4
				% O <sub>2</sub>	11.1	10.7
				CO (ppm)	0	0
				H <sub>2</sub> S (ppm)	0	0
				Flow (l/hr)	0	0



<b>BH4</b>
0
0
0
0.3
20.1
0
0
0

<b>BH4</b>
0
0
0
0.4
19.8
0
0
0

<b>BH4</b>
0
0
0
0.4
20.2
0
0
0