

[REDACTED]

From: [REDACTED]
Sent: Monday, 10 January 2022 1:11 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

CAUTION External Communication: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thank you [REDACTED] and [REDACTED] for looking over this.

[REDACTED]
 [REDACTED]
Black Mountain Energy
 Level 14, 225 St Georges Terrace, Perth, WA 6000 AUS



BLACK MOUNTAIN

I am currently out of the country and only contactable by email / teleconference. If anything is urgent please call [REDACTED]

From: [REDACTED]
Sent: Monday, 10 January 2022 4:43 AM
To: [REDACTED]@health.wa.gov.au; [REDACTED]
 [REDACTED]@blackmountainenergy.com>
Cc: [REDACTED]
Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

Agreed as per Point 2.

[REDACTED]

[REDACTED]
 [REDACTED]
 Compliance & Enforcement

Department of Water and Environmental Regulation
 Prime House, 8 Davidson Terrace JOONDALUP WA 6027
 Locked Bag 10 Joondalup DC, WA 6919
 T: [REDACTED]
 E: [REDACTED] www.dwer.wa.gov.au
 Twitter: @DWER_WA

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From: [REDACTED]@health.wa.gov.au>

Sent: Monday, 10 January 2022 11:32 AM

To: [REDACTED]@blackmountainenergy.com>

Cc: [REDACTED]@dwer.wa.gov.au>; [REDACTED]

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

H [REDACTED]

I agree with your conclusions and that no further HHRA is required.

Please note: - I have removed [REDACTED] as she has no involvement in this work and wishes to be removed from all further correspondence.

Chrs
[REDACTED]

[REDACTED]
[REDACTED]
Environmental Health Directorate | Public and Aboriginal Health Division

Level 3, A Block, 189 Royal Street, EAST PERTH WA 6004

PO Box 8172, PERTH BUSINESS CENTRE WA 6849

e✉: [REDACTED]

PO Box 8172 Perth Business Centre WA 6849

☎ ([REDACTED])

Working Days – Mon, Tue, Wed

From: [REDACTED]

Sent: Monday, 3 January 2022 3:44 PM

To: [REDACTED]@health.wa.gov.au>

Cc: [REDACTED]@dwer.wa.gov.au)

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

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Thank you very much! Please find attached the HHRA.

After discussion with [REDACTED] and [REDACTED] (cc'd), the HHRA must have one of two outcomes:

1. identifies health risks, receptors etc and their mitigation; or
2. identifies there are no health risks/receptors etc.

Based upon that advice and using the DoH risk matrix, we determined that all risk levels are 'very low' and thus no further health risk management was necessary.

Regards,

[REDACTED]
[REDACTED]
Black Mountain Energy

Level 14, 225 St Georges Terrace, Perth, WA 6000 AUS



BLACK MOUNTAIN

I am currently out of the country and only contactable by email / teleconference. If anything is urgent please call [REDACTED]

From: [REDACTED]@health.wa.gov.au>

Sent: Monday, 3 January 2022 3:20 AM

To: [REDACTED]@blackmountainenergy.com>; [REDACTED]@dwer.wa.gov.au)

Subject: Re: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

Hi [REDACTED]

I'm surprised that you did a HHRA when its out of scope in my opinion as previously explained. I'm happy to look at what you have but only because I'm curious as to why it was done. I have copied EPA to try to get some clarity.

chrs and HNY22

Get [Outlook for iOS](#)

From: [REDACTED]

Sent: Monday, January 3, 2022 6:11:32 AM

To: [REDACTED]@health.wa.gov.au>

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

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I hope you had a wonderful Christmas.

We are planning to submit to the EPA at the end of this week our internally prepared HHRA. We have prepared this in the form of a scoping assessment, based upon the DoH 2010 Health Risk Assessment Scoping guidelines.

We did also reach out to [REDACTED] and [REDACTED] specifically but he will unfortunately not have time to review it this week. We have struggled to get some consultants to conduct a peer review on time.

I was wondering if you would be interested in running your eyes over it (~20 pages everything included)?

Kind regards, and best wishes for this new year,

[REDACTED]
[REDACTED]
Black Mountain Energy

Level 14, 225 St Georges Terrace, Perth, WA 6000 AUS



BLACK MOUNTAIN

I am currently out of the country and only contactable by email / teleconference. If anything is urgent please call [REDACTED]

From: [REDACTED] <[REDACTED]@health.wa.gov.au>

Sent: Wednesday, 20 October 2021 8:37 AM

To: [REDACTED] <[REDACTED]@blackmountainenergy.com>; [REDACTED] <[REDACTED]@dwer.wa.gov.au>

Cc: [REDACTED]
[REDACTED]

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

Hi [REDACTED]

I thought this might be the case. The separation distances and the remoteness from sensitive receptors as described would place this project out of scope for a HHRA. However, as you correctly identified there are other aspects of groundwater and air emissions that will need to be addressed to the satisfaction of the EPA/DMIR, as the case may be, as per the code of practice.

Chrs
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
Environmental Health Directorate | Public and Aboriginal Health Division

Level 3, A Block, 189 Royal Street, EAST PERTH WA 6004

PO Box 8172, PERTH BUSINESS CENTRE WA 6849

e✉: [REDACTED]

PO Box 8172 Perth Business Centre WA 6849

☎ [REDACTED]

From: [REDACTED]

Sent: Wednesday, 20 October 2021 1:37 PM

To: [REDACTED] <[REDACTED]@health.wa.gov.au>; [REDACTED] <[REDACTED]@dwer.wa.gov.au>

Cc: [REDACTED]
[REDACTED]

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd
Importance: High

CAUTION External Communication: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thanks for your email.

We can confirm that our Proposal's Development Envelope is located 51 km from a PDWSA and the closest inhabited community and potable water sources located ~16 km from the proposed well sites. Consistent with your advice, we do not believe that a HHRA is required to be completed. This is also consistent with our position for the past 18 months and the recommendations that arose from the HFS Scientific Inquiry. We will ensure that this is documented within the ERD to address this item of the ESD.

Further to this, we have reviewed the advice from the Department of Health to the EPA during the ESD development and can confirm that the ERD will describe the surface and groundwater use within proximity of the proposed well locations. This will ensure that all the required exposure pathways are considered.

We have included [REDACTED], our case officer from the EPA into this correspondence for completeness. [REDACTED], if you have any concerns with this position, or wish to discuss further, please do not hesitate to let me know.

Kind regards,

[REDACTED]
[REDACTED]
Black Mountain Energy
Level 9, 40 The Esplanade, Perth, WA 6000
[REDACTED]



BLACK MOUNTAIN

From: [REDACTED]@health.wa.gov.au>

Sent: Tuesday, 19 October 2021 12:17 PM

To: [REDACTED]@blackmountainenergy.com>

Subject: RE: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd

Hi [REDACTED]

Apologies for missing your call. I thought I would send you this information then if you would still like to talk I'm around rest of today and tomorrow but not Thursday and Friday, then again next week Mon-Wed.

First - if the proposal is NOT within 2km (end of lateral extent in all directions) of a potable water source or sensitive receptor then a HHRA is NOT needed. This is not always made clear to proponents.

If you've determined that you need a HHRA then the key framework for undertaking a HHRA is attached. Page 9 shows the flow diagram, this is relatively easy for someone experienced in HHRA to undertake. I have attached an example of a good HHRA that is publicly available, unfortunately this consultancy is no longer in business due to the principle retiring but the partner is now with [REDACTED] and might be available. Note that the example is for a complex HHRA and yours may not need this level of complexity.

There are several consultancies that are experienced in HHRA and not known to price gouge – [REDACTED]
[REDACTED]), [REDACTED]), [REDACTED] –
rates will vary.

Once you've selected a consultancy and a scope of work is developed I would be happy to assist review the scope.

Chrs
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
Environmental Health Directorate | Public and Aboriginal Health Division
Level 3, A Block, 189 Royal Street, EAST PERTH WA 6004
PO Box 8172, PERTH BUSINESS CENTRE WA 6849
e✉: [REDACTED]
PO Box 8172 Perth Business Centre WA 6849
☎ [REDACTED]

From: [REDACTED]
Sent: Tuesday, 19 October 2021 10:45 AM
To: [REDACTED]@health.wa.gov.au>
Subject: Human Health Risk Assessment for Hydraulic Fracture Stimulation project - Bennett Resources Pty Ltd
Importance: High

CAUTION External Communication: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

I called DoH earlier this morning who forwarded my call to your office number – I left you a voice message but also wished to get in touch by email.

I am working on the Valhalla Gas Exploration and Appraisal Program, proposed to be undertaken up in the Canning Basin in the Kimberley. Given the nature of the proposed program (hydraulic fracturing), it is currently undergoing referral and assessment with the EPA. One of our requirements is to undertake a Human Health Risk Assessment (HHRA):

Provide a peer-reviewed, site-specific human health risk assessment, addressing potential short and long-term health impacts of the proposal that addresses health risks from:

- a. Airborne chemicals;
- b. chemicals proposed to be used in drilling and hydraulic fracture stimulation;
- c. fluids and those expected to be present in produced or flowback water;
- d. storage and handling of drilling and hydraulic fracture fluids; and
- e. storage and disposal of drilling and hydraulic fracturing flowback fluids (including wastewater).

Note: peer-reviewed, site-specific human health risk assessments will be provided to the Department of Health for comment.

We have been liaising with the EPA (specifically [REDACTED] and [REDACTED]) who have recommended I discuss this further with you as I believe you were involved in the Scientific Enquiry implementation plan and the position paper on HHRA for HFS projects. We have been trying to engage consultants for the development of the HHRA, however proposed costs have been difficult for them to determine with certainty as they are unsure of the methodology to follow.

We are keen to discuss with DoH the expectations for this HHRA and thus be able to provide a clearer scope to the consultants.

We would welcome the opportunity to have a short 30-minute Teams meeting if possible to introduce ourselves and the project, and discuss this further.

Please advise if you are the most suitable contact regarding this query.

Kind regards, and thanks in advance,

[REDACTED]
[REDACTED]
Black Mountain Energy – Bennett resources Pty Ltd
Level 9, 40 The Esplanade, Perth, WA 6000
[REDACTED]



BLACK MOUNTAIN

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