

7 October, 2016

South Kings Properties Pty Ltd on behalf of Precinct 15 Landowners
Suite 650, 1 Queens Road
Melbourne Vic 3004

Email: jadams@cvcventures.com.au

Dear Jonathan,

RE: Precinct 15 Rezoning – Environmental

Following on from the recent questionnaire process and subsequent meeting held at the offices of the Victorian Planning Authority, Environmental Assessment Services Pty Ltd (EAS) provides the following information.

As a result of discussions held between the Victorian Planning Authority, Environmental Assessment Services Pty Ltd, Hobsons Bay Council and Senversa, additional information was required regarding landfill gases and/or volatile contaminant vapours, to supplement the completed questionnaires.

It was agreed that a list of outstanding issues relating to landfill gases and/or volatile contaminant vapours would be provided by Senversa, which would be forwarded to all members of the Project Control Group.

The following issues were raised by Senversa:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ways in this can be managed to minimise ongoing liability and cost to Council.

As previously noted, the Project Control Group (representing 82% of Precinct 15) includes the following properties:

- Catalfamo (40 Kyle Road, Altona North)
- Rosen (8 – 38 Kyle Road, Altona North)
- Secon (278-288 Blackshaws Road, Altona North)
- George Weston / Don (248-258 Blackshaws Road, Altona North)
- TIC 1 (232-246 Blackshaws Road, Altona North)
- TIC 2 (200-214 Blackshaws Road, Altona North)
- Harbolt / Mirvac (188-198 Blackshaws Road, Altona North)
- 22 Spot 1 (48 New Street & 2 - 22 New Street, South Kingsville)

The outstanding issues were provided to the relevant environmental consultants responsible for the site assessment works relating to the above properties. The responses relating to each of the outstanding issues are presented in Attachment I.

A summary of the responses, relating to the above outstanding issues is presented below:

Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?

Most sites within the precinct have recognised that gases and/or vapours are potential contaminants of concern.

The main potential sources are associated with the storage and supply of hydrocarbons at most sites.

The other recognised sources are associated with potential impacts from former landfilling activities at the two former quarry sites.

If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?

In most cases, assessment works to appropriately determine the nature and extent of impacts are underway and are most commonly associated with potential impacts from groundwater contamination (and not necessarily associated with landfill gas).

Of the two quarry sites, the Catalfamo site has commenced landfill gas assessment works through the installation of 9 soil gas bores. One round of landfill gas monitoring has recently been completed, with one further round to be carried out in the coming weeks. A landfill gas report will be prepared following the second round.

It is noted that discussions with Jackie Wright of Environmental Risk Sciences Pty Ltd following the first round of landfill gas monitoring verified that there were no readings which would prevent the proposed land uses for public open space and medium – high density residential development.

The second quarry site (22 Spot) has yet to conduct landfill gas monitoring. If required, this would be carried out once an Environmental Auditor (Contaminated Land) is appointed and more is known about the current chemical condition of the site.

It is noted however, that 3 landfill gas bores have been positioned on the western edge of the former landfill (Inside the Catalfamo site), which recently returned no landfill gas readings during the first round of monitoring.

Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?

This is considered unlikely in most cases.

At the George Western site, as site remediation and assessment works are still being carried out, this may still be an outcome.

At the two former quarry sites, as landfill gas reports are still pending, the possibility of vapour / ground gas management systems cannot yet be ruled out.

If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?

The George Western site identified that if a vapour barrier was necessary, an area of approximately 150 m² may be affected. The location and extent is yet to be established.

Based on the presence of near-surface basalt in areas surrounding both quarries, the areas most likely to be affected would be inside the former quarries. The Catalfamo quarry is positioned inside proposed public open space and is not expected to impact any building forms.

The anticipated final condition of the public areas that will be vested to Council;

The final condition of public areas vested to council are anticipated to be capped with clean, chemically test fill material. The design of the completed rehabilitated land has not been finalised and will require consultation between land owners, auditors and council.

Associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);

With regard to the rehabilitation of the two quarry sites, an agreed depth of the clean capping layer will be reached between land owners, auditors and council during the design phase of the capping layer. This will take into consideration geotechnical, chemical and aesthetic issues which ensures the land is suitable for the proposed use / built form.

Given that capping material will be clean fill, there will be little (if any) opportunity for future works to come into contact with contaminated soils.

Again, during the design phase of the capping layers, the discussions held between the relevant parties will be able to demonstrate where residual contamination may remain and at what depth (which is likely to be near the base of the quarries at depths >5.0 metres).

Ways in this can be managed to minimise ongoing liability and cost to Council.

A Soil Management Plan would be the tool utilised by future land users, which identifies the location and depth of any residual contamination. The plan would provide clear concise soil management procedures to minimise any potential risks to future land uses and maintenance workers.

It is noted however that well before the land is rehabilitated, discussions would be held between the relevant parties which would aim to negate any liability and cost to council.

Should you have any queries regarding information presented in this correspondence, please do not hesitate to contact me.

Yours faithfully



Tony Connolly
Environmental Consultant

Attachments:

Attachment I Responses from Land Owners to Landfill Gases and/or Volatile Contaminant Vapour Issues

Attachment I

**Responses from Land Owners to Landfill Gases and/or
Volatile Contaminant Vapour Issues**

Tony Connolly

To: Tony Connolly
Subject: FW: 40 Kyle Rd, Altona North - Soil Gas / Vapour

From: Kristi Hanson [<mailto:Kristi.Hanson@senversa.com.au>]
Sent: Monday, 3 October 2016 1:35 PM
To: Tony Connolly <tony@enviroassess.com.au>
Cc: Jonathan <jadams@cvventures.com.au>; Matthew Hogg <mhogg@amg.com.au>; 'Bruce Hunter' <Bruce.Hunter@vpa.vic.gov.au>; 'Steve Dunn' <Steve.Dunn@vpa.vic.gov.au>; 'Zoe Dillon' <Zoe.Dillon@vpa.vic.gov.au>; 'Grace Fuller' <Grace.Fuller@vpa.vic.gov.au>; Karmen Markis <kmarkis@hobsonsabay.vic.gov.au>; Kathleen McClusky <KMcClusky@hobsonsabay.vic.gov.au>
Subject: RE: Precinct 15

Hi Tony,
Further to our meeting this morning, it would be helpful if you could:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
Yes due to the former storage and supply of hydrocarbons at the site and the use of the former quarry as a solid inert landfill. The underground storage tanks have been removed and successfully validated.
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
Yes through pit validation and associated VOC sampling. 9 landfill gas bores have been installed inside and adjacent to the former quarry. One round of landfill gas monitoring has been carried out by Environmental Risk Sciences Pty Ltd. A second round is to be carried out in the coming weeks with a landfill gas report to be prepared by Jackie Wright.
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
Not with regard to former underground storage tanks. We await the pending report from Jackie Wright regarding any potential barriers and/or venting layers associated with the former quarry. It is noted however that discussions with Jackie following the first round of landfill gas monitoring that there were no readings which would prevent the proposed land uses for public open space and medium – high density residential development.
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
Based on the current findings, no building forms would be affected.
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ways in this can be managed to minimise ongoing liability and cost to Council.

Feel free to contact me if you have any questions.

Kind regards,

Kristi Hanson
Principal Risk Assessor, Environmental Auditor (Vic)

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Thursday, 6 October 2016 3:10 PM
To: tony@enviroassess.com.au
Subject: FW: 8-38 Kyle Road Further Env. Information Requested (P 15)
Attachments: image001.jpg

Dear Tony,

Please find the response (below) to the environmental RFI for 8-38 Kyle Road.

Kind Regards,

Jonathan

From: Clint Jellis [<mailto:clint.jellis@charterkc.com.au>]
Sent: Thursday, 6 October 2016 3:00 PM
To: Jonathan (jadams@cvcventures.com.au)
Subject: FW: 8-38 Kyle Road Further Env. Information Requested (P 15)

Clint Jellis
National Executive Director



Level 19/8 Exhibition Street, Melbourne 3000
D +61 (0) 3 8102 8837 M 0412 221 762 T +61 (0) 3 8102 8888



charterkc.com.au
ADVISORY. RESEARCH. VALUATIONS. PROJECTS.

Note: The information contained in this communication is confidential and subject to the following [disclaimer](#).

From: Peter King [<mailto:pking@esplabs.com.au>]
Sent: Tuesday, 4 October 2016 4:37 PM
To: Clint Jellis
Cc: brendon@secon.com.au; Paul Hudson; Jack Rosen
Subject: 8-38 Kyle Road Further Env. Information Requested (P 15)

Hi Clint,

Please find below the ESP response to the additional queries from HBCC/Senversa for the **8-38 Kyle Road, Altona North Site**:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - ESP: No landfill gas investigation works have been undertaken at the site by ESP however a later investigation undertaken by Senversa for both the site and the neighbouring property (278-288 Blackshaws Road) did not identify potential risks from landfill gases from the landfill to the north of the two properties.
 - ESP: Volatile organic compounds (VOCs) were identified in groundwater at one localised area in the southwest of the site (offsite source). Further trace concentrations of VOCs were identified in groundwater elsewhere on site.
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - ESP: Further investigation is proposed to delineate the extent of the VOCs in groundwater originating from offsite.
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - ESP: While further investigation is required to confirm the extent of the vapour risk, it is considered unlikely that barriers/venting layers would be required.
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
 - ESP: NA
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - ESP: No Public Open Space or Community Facility proposed for this site.
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ESP: It is considered unlikely that ongoing management of site soils will be required at the completion of the site assessment/remediation.
 - ways in this can be managed to minimise ongoing liability and cost to Council.
 - ESP: NA

Feel free to call me to discuss the above comments,

Regards,

Peter King | Senior Environmental Consultant

ESP – Environmental & Safety Professionals



Unit 2, 2B Parker Street | Footscray | Vic 3011
Phone: 03 9688 8000 | Mobile: 0417 330 473
Email: pking@esplabs.com.au
Web: environet.com.au

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Wednesday, 5 October 2016 12:41 PM
To: tony@enviroassess.com.au
Subject: FW: 278-288 Blackshaws Road Further Env. Information Requested (P 15)
Attachments: image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg

Dear Tony,

Please find the response (below) to the environmental RFI for 278-288 Blackshaws Road.

Kind Regards,

Jonathan

From: Clint Jellis [<mailto:clint.jellis@charterkc.com.au>]
Sent: Tuesday, 4 October 2016 7:38 PM
To: Jonathan Adams
Subject: Fwd: 278-288 Blackshaws Road Further Env. Information Requested (P 15)

Please see below

Sent from my iPhone

Clint Jellis
National Executive Director



Level 19/8 Exhibition Street, Melbourne 3000
D +61 (0) 3 8102 8837 M 0412 221 762 T +61 (0) 3 8102 8888



charterkc.com.au
ADVISORY. RESEARCH. VALUATIONS. PROJECTS.

Note: The information contained in this communication is confidential and subject to the following [disclaimer](#).

Begin forwarded message:

From: Peter King <pking@esplabs.com.au>
Date: 4 October 2016 at 4:51:38 pm AEDT
To: Clint Jellis <clint.jellis@charterkc.com.au>
Cc: "brendon@secon.com.au" <brendon@secon.com.au>, Paul Hudson

<paul.hudson@secon.com.au>, Jack Rosen <arosen@bigpond.net.au>

Subject: 278-288 Blackshaws Road Further Env. Information Requested (P 15)

Hi Clint,

Please find below the ESP response to the additional queries from HBCC/Senversa for the **278-288 Blackshaws Road, Altona North Site**:

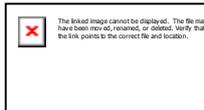
- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - **ESP: The preliminary landfill gas investigation undertaken at the site by Senversa did not identify potential risks from landfill gases from the landfill to the north of the site.**
 - **ESP: Trace volatile organic compounds (VOCs) were identified in groundwater at one localised area at the north of the site, but notably below the vapour intrusion criteria.**
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - **ESP: Given the low concentrations reported for identified VOCs, further investigation/delineation is unlikely.**
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - **ESP: Highly unlikely.**
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
 - **ESP: NA**
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - **ESP: No contamination issues were identified at the portion of the site proposed for Public Open Space.**
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - **ESP: It is considered unlikely that ongoing management of site soils will be required at the completion of the site assessment/remediation.**
 - ways in this can be managed to minimise ongoing liability and cost to Council.
 - **ESP: NA**

Feel free to call me to discuss the above comments,

Regards,

Peter King | Senior Environmental Consultant

ESP – Environmental & Safety Professionals



Unit 2, 2B Parker Street | Footscray | Vic 3011
Phone: 03 9688 8000 | Mobile: 0417 330 473
Email: pking@esplabs.com.au
Web: environet.com.au

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Wednesday, 5 October 2016 2:30 PM
To: tony@enviroassess.com.au
Subject: FW: Urgent - Further Environmental Information Requested - Precinct 15

Dear Tony,

Please find the response (below) to the environmental RFI for **248 Blackshaws Road (George Western)**.

Kind Regards,

Jonathan

From: Phil Gleeson [<mailto:pgleeson@urbis.com.au>]
Sent: Wednesday, 5 October 2016 1:12 PM
To: Jonathan (jadams@cvcventures.com.au)
Subject: RE: Urgent - Further Environmental Information Requested - Precinct 15

Hi Jonathan,

Further to your email, please see below a response to the additional questions regarding site contamination.

Any questions / issues, please do not hesitate to contact me.

Regards

PHIL GLEESON
ASSOCIATE DIRECTOR

T +61 3 8663 4888
D +61 3 8663 4949
M +61 410 599 902
E pgleeson@urbis.com.au

**SHAPING
CITIES AND
COMMUNITIES**



LEVEL 12, 120 COLLINS STREET
MELBOURNE, VIC 3000, AUSTRALIA

Urbis recognises the traditional owners of the land on which we work.
Learn more about our [Reconciliation Action Plan](#).

This email and any files transmitted are for the intended recipient's use only. It contains information which may be confidential and/or protected by copyright. Any personal information in this email must be handled in accordance with the *Privacy Act 1988 (Cth)*. If you have received this email by mistake, please notify the sender and permanently delete the email. Any confidentiality or copyright is not waived or lost because this email has been sent to you by mistake.

-
- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)? *An area of volatile chlorinated hydrocarbon contamination has been identified.*
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed? *Yes.*
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development? *Assessment and remediation is still being undertaken. Until complete this remains a possibility but may be eliminated through development design.*
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected? *If required, we estimate that an area of around 150m² may be affected.*
 - Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council; *The condition of any land vested to Council will be confirmed by the Environmental Auditor for the site to be suitable for the proposed use.*
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works); *At this stage we would not expect management requirements on this land.*
 - ways in this can be managed to minimise ongoing liability and cost to Council. *At this stage we would not expect management requirements on this land.*

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Thursday, 6 October 2016 2:45 PM
To: tony@enviroassess.com.au
Subject: FW: 232-246 Blackshaws Road Further Env. Information Requested (P 15)
Attachments: image004.jpg

Dear Tony,

Please find the response (below) to the environmental RFI for 232-246 Blackshaws Road.

Kind Regards,

Jonathan

From: Peter King <pking@esplabs.com.au>
Date: Tuesday, 4 October 2016 at 3:30 PM
To: Mark Gandur <mgandur@ticgroup.com.au>
Cc: Alan Miller <amiller.amcm@gmail.com>, David Harris <drharris@ticgroup.com.au>
Subject: 232-246 Blackshaws Road Further Env. Information Requested (P 15)

Hi Mark,

Based on the findings of the previous assessment works at the **232-246 Blackshaws Road Site**, ESP can provide the following information:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - ESP: The preliminary landfill gas investigation did not identify potential risks from landfill gases from the landfill/s to the north of the site.
 - ESP: Trace volatile organic compounds (VOCs) were identified in groundwater at one localised area of the site, but notably below the vapour intrusion criteria.
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - ESP: Further groundwater assessment to be undertaken. Given the low concentrations reported for identified VOCs, further investigation/delineation is unlikely.
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - ESP: It is not considered likely that barriers/venting layers would be required.
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
 - ESP: NA
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - ESP: No Public Open Space or Community Facility proposed for this site.
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ESP: It is considered unlikely that ongoing management of site soils will be required at the completion of the site assessment/remediation.
 - ways in this can be managed to minimise ongoing liability and cost to Council.
 - ESP: NA

Feel free to call me to discuss the above comments,

Regards,

Peter King | Senior Environmental Consultant

ESP – Environmental & Safety Professionals



Unit 2, 2B Parker Street | Footscray | Vic 3011
Phone: 03 9688 8000 | Mobile: 0417 330 473
Email: pking@esplabs.com.au
Web: environet.com.au

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Thursday, 6 October 2016 2:47 PM
To: tony@enviroassess.com.au
Subject: FW: 200-214 Blackshaws Road Further Env. Information Requested
Attachments: image004.jpg

Dear Tony,

Please find the response (below) to the environmental RFI for 200-214 Blackshaws Road.

Kind Regards,

Jonathan

From: Peter King <pking@esplabs.com.au>
Date: Tuesday, 4 October 2016 at 3:29 PM
To: Mark Gandur <mgandur@ticgroup.com.au>
Cc: Alan Miller <amiller.amcm@gmail.com>, David Harris <drharris@ticgroup.com.au>
Subject: 200-214 Blackshaws Road Further Env. Information Requested (P 15)

Hi Mark,

Based on the findings of the previous assessment works at the **200-214 Blackshaws Road Site**, ESP can provide the following information:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - ESP: The preliminary landfill gas investigation did not identify potential risks from landfill gases from the landfill/s to the north of the site.
 - ESP: Volatile organic compounds (VOCs) were identified in groundwater to exceed the vapour intrusion criteria at one localised area of the site (leakage from a UST).
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - ESP: Further investigation is proposed to delineate the extent of the VOCs exceedance of the vapour intrusion criteria in groundwater. Additionally, soil vapour assessment is proposed.
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - ESP: While further investigation is required to confirm if vapour risk is present, it is considered unlikely that barriers/venting layers would be required.
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
 - ESP: NA
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - ESP: No contamination issues were identified at the northern portion of the site (proposed Public Open Space and Community Facility).
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ESP: It is considered unlikely that ongoing management of site soils will be required at the completion of the site assessment/remediation.
 - ways in this can be managed to minimise ongoing liability and cost to Council.
 - ESP: NA

Feel free to call me to discuss the above comments,

Regards,

Peter King | Senior Environmental Consultant

ESP – Environmental & Safety Professionals



Unit 2, 2B Parker Street | Footscray | Vic 3011
Phone: 03 9688 8000 | Mobile: 0417 330 473
Email: pking@esplabs.com.au
Web: environet.com.au

Jonathan

From: Jonathan <jadams@cvcventures.com.au>
Sent: Thursday, 6 October 2016 2:38 PM
To: tony@enviroassess.com.au
Subject: FW: 188 - 198 Blackshaws Rd - Further Env. Information Requested

Dear Tony,

Please find the response (below) to the environmental RFI for 188 - 198 Blackshaws Rd.

Kind Regards,

Jonathan

From: Toby Lyng [<mailto:toby.lyng@mirvac.com>]
Sent: Thursday, 6 October 2016 12:40 PM
To: Jonathan Adams (jadams@cvcventures.com.au)
Subject: FW: 188 - 198 Blackshaws Rd

Hi Jono, response below.

Toby

From: Luke Richards [<mailto:lrichards@esplabs.com.au>]
Sent: Wednesday, 5 October 2016 6:12 PM
To: Toby Lyng <toby.lyng@mirvac.com>
Cc: Greg Holt <greg@pggcapital.com.au>
Subject: RE: 188 - 198 Blackshaws Rd

Hi Toby/Greg,

Please find below the ESP response to the additional queries for **188-198 Blackshaws Road, Altona North:**

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?
 - ESP: Landfill gas screening of soils did not identify potential risks from landfill gases from the landfill/s to the north of the site.
 - ESP: Volatile organic compounds (VOCs) were identified in groundwater in select well locations across site but notably below the NEPM vapour intrusion criteria, where applicable.
 - If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?
 - ESP: Further investigation is proposed to delineate the extent of the VOCs in groundwater following additional sampling confirmation. Additionally, a landfill gas assessment is proposed.
 - Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?
 - ESP: While further investigation is required to confirm VOCs in groundwater, it is considered unlikely that barriers/venting layers would be required. Detailed landfill gas assessment works have not been performed but it is considered unlikely that barriers/venting layers would be required.
 - If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?
 - ESP: NA
- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;

- ESP: No contamination issues were identified in the proposed Public Open Space areas, however the north western park has not been assessed in great detail to date.
- associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ESP: It is considered unlikely that ongoing management of site soils will be required at the completion of the site assessment/remediation.
- ways in this can be managed to minimise ongoing liability and cost to Council.
 - ESP: NA

Feel free to call me to discuss the above comments.

Regards

Luke Richards | Environmental Manager

ESP – Environmental & Safety Professionals



Unit 2, 2B Parker Street | Footscray | Vic 3011
Phone: 03 9688 8000 | Mobile: 0422 255 195
Email: lrichards@esplabs.com.au
Web: www.environet.com.au

Tony Connolly

To: Tony Connolly
Subject: 22 Spot (48 New Street & 2 - 22 New Street, South Kingsville)

From: Kristi Hanson [<mailto:Kristi.Hanson@senversa.com.au>]
Sent: Monday, 3 October 2016 1:35 PM
To: Tony Connolly <tony@enviroassess.com.au>
Cc: Jonathan <jadams@cvcventures.com.au>; Matthew Hogg <mhogg@amg.com.au>; 'Bruce Hunter' <Bruce.Hunter@vpa.vic.gov.au>; 'Steve Dunn' <Steve.Dunn@vpa.vic.gov.au>; 'Zoe Dillon' <Zoe.Dillon@vpa.vic.gov.au>; 'Grace Fuller' <Grace.Fuller@vpa.vic.gov.au>; Karmen Markis <kmarkis@hobsonsabay.vic.gov.au>; Kathleen McClusky <KMcClusky@hobsonsabay.vic.gov.au>
Subject: RE: Precinct 15

Hi Tony,
Further to our meeting this morning, it would be helpful if you could:

- Seek further information from the landowners regarding the potential presence of landfill gases and/or volatile contaminant vapours, in particular explicit discussion of:
 - Are gases and/or vapours potential contaminants of concern (due to either on-site or off-site sources)?

Yes due to the former storage and supply of hydrocarbons at the site the former quarry located at 2-22 New Street. The underground storage tanks were removed and successfully validated at 48 New St. It is understood two USTs have been removed from 2-22 New Street with one tank still remaining.

48 New Street has been issued with a Statement of Environmental Audit dated 9 July 2015. The audit report states "No soil vapour sampling and analysis has been conducted and the Auditor considers this to be appropriate based upon the findings of the soil and groundwater investigations. No results have exceeded the above mentioned criteria. As such, the Auditor considers that vapour intrusion risks posed by contaminated soil are acceptable for the proposed land use".

Detailed soil and groundwater investigations carried out at 2-22 New to date have not identified significant / widespread impacts. An Environmental Auditor (Contaminated Land) is yet to be appointed for the site. Once appointed (along with a site assessor), the contamination status of the site can be updated to reflect the current chemical condition of the site. It is noted however, that 3 landfill gas bores have been positioned on the western edge of the former landfill (Inside the Catalfamo site), which returned no landfill gas readings during the first round of monitoring. A second round is to be scheduled in the coming weeks.

- If so, has the nature and extent of impacts and potential risk been assessed or is this yet to be performed?

Not applicable for 48 New Street based on the findings of the completed Section 53X audit.

Until an auditor is appointed for 2-22 New Street and more current data can be collated, the need for vapour or ground gas management systems cannot yet be verified.

- Is there a possibility that vapour or ground gas management systems (e.g. barriers and/or venting layers) will be required for some parts of the development?

Not applicable based for 48 New Street on the findings of the completed Section 53X audit.

- If so, over what area(s) and what type(s) of properties (e.g. built form type) may be affected?

Not applicable based for 48 New Street on the findings of the completed Section 53X audit.

To be confirmed for 2-22 New Street following commencement of Section 53X Audit.

- Provide some additional detail/discussion in your covering summary letter regarding:
 - the anticipated final condition of the public areas that will be vested to Council;
 - associated likelihood that residual contamination may require management in the future (e.g. disposal of contaminated soil for future intrusive works);
 - ways in this can be managed to minimise ongoing liability and cost to Council.

Feel free to contact me if you have any questions.

Kind regards,

Kristi Hanson

Principal Risk Assessor, Environmental Auditor (Vic)



Senversa Pty Ltd

Level 6, 15 William Street, Melbourne VIC 3000

Please note our new office address

m: +61 411 438 477 | e: kristi.hanson@senversa.com.au

t: +61 3 9606 0070 | w: www.senversa.com.au

note: this email and any attachments are for the intended recipient(s) only and may be confidential and/or privileged. any opinions are those of the sender and not necessarily senversa. if this email has been received in error, please delete all copies and contact the sender. senversa accepts no liability for any consequences arising from the recipient's use of this email and/or the information contained in and/or attached.

Please consider the environment before printing this email. Senversa is a carbon neutral company.

From: Tony Connolly [<mailto:tony@enviroassess.com.au>]

Sent: Thursday, 29 September 2016 5:17 PM

To: Kristi Hanson <Kristi.Hanson@senversa.com.au>

Cc: Jonathan <jadams@cvcventures.com.au>; Matthew Hogg <mhogg@amg.com.au>; 'Bruce Hunter' <Bruce.Hunter@vpa.vic.gov.au>; 'Steve Dunn' <Steve.Dunn@vpa.vic.gov.au>; 'Zoe Dillon' <Zoe.Dillon@vpa.vic.gov.au>; 'Grace Fuller' <Grace.Fuller@vpa.vic.gov.au>

Subject: Precinct 15

Hi Kristi,

Please find attached the completed questionnaires along with the covering summary letter.

Will see you at the meeting on Monday.

Have a good weekend.

Please let me know if you have any queries at all.

Regards,

Tony Connolly



**4 Allee Street
Brighton Vic 3186**

Ph: (03) 9503 0107