

Mirvac Real Estate Pty Ltd

Confined Spaces Assessment

80 Pacific Highway, North Sydney NSW



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CONFINED SPACES ASSESSMENT

Prepared for Mirvac Real Estate Pty Ltd

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EXECUTIVE SUMMARY

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a confined spaces assessment at the office building, located at 80 Pacific Highway, North Sydney NSW. Ben McCann of Tetra Tech carried out the audit on 22nd July 2024. For the purpose of this audit, the principal definition of a confined space is that described in the *Work Health and Safety Regulation 2017 (NSW)*.

Identified confined spaces were not entered by personnel at the time of the assessment, therefore the risk assessments contained in this report are limited to general observations made. A more detailed task specific risk assessment is required prior to entering any confined spaces identified in this report.

Assessment Findings

The following findings are based on the site inspection, discussions with site personnel, and review of relevant documentation:

- A total of 11 confined spaces were identified at the site.
- All of the spaces were appropriately signposted.
- All confined spaces appeared to be appropriately secured from unauthorised access at the time of the assessment.
- The Mirvac Confined Space Entry Permit was made available for review. This included a requirement for the isolation of plant and services associated with confined spaces prior to any entry occurring.
- Tetra Tech was advised that no recent confined space entries have occurred at the site.

Note: Refer to **Appendix A** for the confined space register and **Appendix C** for photographs.

Recommended Actions

The following actions are recommended, based on the above findings:

- Ensure a task specific risk assessment is conducted prior to commencing any works within confined spaces.
- Ensure all staff and contractors working within areas containing confined spaces at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Although it was not possible to access the spaces at the time of the inspection, they have been
 deemed to be a confined space (in order to take a precautionary approach) and should continue to
 be treated as such until confirmed as otherwise.
- Avoid entering the confined spaces if possible e.g. conduct cleaning/maintenance activities from outside etc.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any
 persons entering the confined space.
- Ensure task specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- All works and access in relation to confined spaces must be undertaken in accordance with the Work Health and Safety Regulation 2017 (NSW), the Code of Practice: Confined Spaces (SafeWork NSW, 2019) and AS 2865:2009 Confined Spaces.
- Tetra Tech is able to assist the client to implement the above recommended actions.

1. INTRODUCTION

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a confined spaces assessment at the office building, located at 80 Pacific Highway, North Sydney NSW. Ben McCann of Tetra Tech carried out the audit on 22nd July 2024. For the purpose of this audit, the principal definition of a confined space is that described in the *Work Health and Safety Regulation 2017 (NSW)*.

Identified confined spaces were not entered by personnel at the time of the assessment, therefore the risk assessments contained in this report are limited to general observations made. A more detailed task specific risk assessment is required prior to entering any confined spaces identified in this report.

1.1 Site Description

The site consisted of a 19 level (approximately 13,000m²) office building. The building was occupied at the time of the assessment.

2. SCOPE

The objective of the Confined Spaces Assessment was to identify and assess confined spaces at the site, and manage the associated risks to the health and safety of site occupants (including workers, students, visitors and contractors). The assessment included a physical inspection of accessible areas of the site, as well as discussions with relevant site personnel, and a review of relevant systems/documentation.

2.1 Inaccessible Areas

The following areas were not accessible during the inspection:

- · Within confined spaces, voids and ceiling spaces.
- Within plant and machinery.
- · Lift shafts and pits.
- Below cars and stored items.
- · Occupied rooms and tenanted areas.
- Roof areas.

3. WHAT IS A CONFINED SPACE?

The Work Health & Safety Regulation 2017 (NSW) defines a confined space as an enclosed or partially enclosed space that:

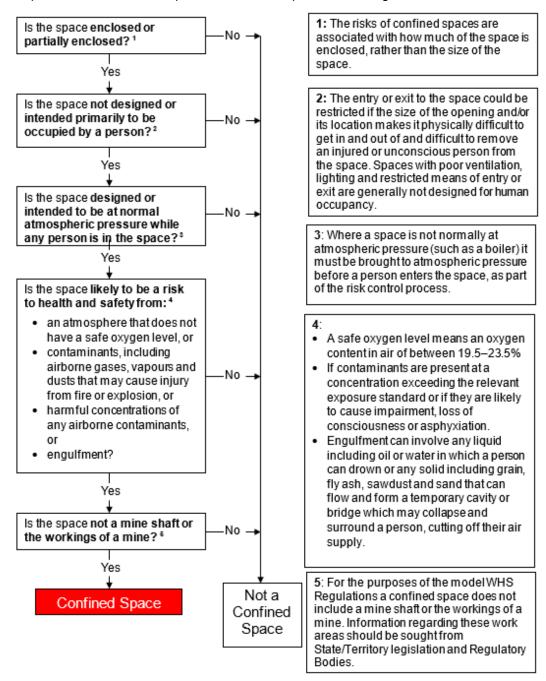
- a) is not designed or intended primarily to be occupied by a person; and
- is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space, and
- c) is or is likely to be a risk to health and safety from:
 - i. an atmosphere that does not have a safe oxygen level; or
 - ii. contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
 - iii. harmful concentrations of any airborne contaminants, or
 - iv. engulfment.

Note: The above definition does not include a mine shaft or the workings of a mine.

Section 66 (1) of the *Work Health and Safety Regulations 2017 (NSW)* states that 'a PCBU must manage risks to health and safety associated with a confined space at a workplace including risks associated with entering, working in, on or in the vicinity of the confined space (including a risk of a person inadvertently entering the confined space'.

Section 62 (2) of the Regulations also state that the requirements relating to confined spaces within the Regulations refer to confined spaces that are under the PCBUs management or control. For this reason, confined spaces that are identified on site but that fall under the management or control of another PCBU have not been included in this report. Examples of such confined spaces include storm water drains and sewer pits (managed by the local water authority), and underground electrical substations (managed by the local power authority).

Further explanation of a confined space definition is explained in the figure below:



Source: Compliance Code: Confined Spaces 2019

RISK ASSESSMENT

Risk assessments have been conducted for each confined space identified on site. The risk assessments considered the nature of the confined space, including its location, frequency of entry, work performed, the nature of the potential hazards present and the controls currently in place. Each identified potential hazard was risk assessed, based on the likelihood of an event occurring, and the consequence or outcome of that event in general terms. An overall risk rating of Low, Medium, High, Very High or Extreme was then assigned to each hazard using the provided risk assessment matrix (refer to Risk Matrix below). The assessment of the risk is a subjective assessment and is to be used for guidance purposes in relation to selecting and implementing corrective actions.

| Risk Matrix | | | | | | | | |
|---|---------------|---------------------|------------------------|--|---|--|--|--|
| | CONSEQUENCE | | | | | | | |
| LIKELIHOOD | Insignificant | Minor | Moderate | Major | Catastrophic | | | |
| LIKELIHOOD | (No injuries) | (First aid only) | (Medical treatment) | (Extensive injuries, loss of production) | (Fatality / permanent disability) | | | |
| Almost Certain | | | | | | | | |
| (Expected in most circumstances) | Medium | High | Very High | Extreme | Extreme | | | |
| Likely | | | | | | | | |
| (Will probably occur in most circumstances) | Medium | High | Very High | Extreme | Extreme | | | |
| Possible | | | | | | | | |
| (Might occur at some time) | Low | Medium | High | Very High | Extreme | | | |
| Unlikely | Low | Low | Medium | High | Very High | | | |
| (Not likely to occur) | LOW | LOW | Wediam | High | very migh | | | |
| Rare | | | | | | | | |
| (May occur only in exceptional circumstances) | Low | Low | Medium | High | High | | | |

Where the hazards associated with work in particular confined spaces are similar in nature, a group risk assessment has been prepared. Separate space specific risk assessments will be prepared for any confined spaces identified as having unique hazards or risks that are different to the group risk assessment.

Refer to **Appendix B** for confined space risk assessments.

FINDINGS

The following findings are based on the site inspection, discussions with site personnel, and review of relevant documentation:

- A total of 11 confined spaces were identified at the site.
- All of the spaces were appropriately signposted.
- All confined spaces appeared to be appropriately secured from unauthorised access at the time of the assessment.
- The Mirvac Confined Space Entry Permit was made available for review. This included a requirement for the isolation of plant and services associated with confined spaces prior to any entry occurring.
- Tetra Tech was advised that no recent confined space entries have occurred at the site.

Note: Refer to **Appendix A** for the confined space register and **Appendix C** for photographs.

RECOMMENDED ACTIONS

The following actions are recommended, based on the above findings:

- Ensure a task specific risk assessment is conducted prior to commencing any works within confined spaces.
- Ensure all staff and contractors working within areas containing confined spaces at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Although it was not possible to access the spaces at the time of the inspection, they have been
 deemed to be a confined space (in order to take a precautionary approach) and should continue to
 be treated as such until confirmed as otherwise.
- Avoid entering the confined spaces if possible e.g. conduct cleaning/maintenance activities from outside etc.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure task specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- All works and access in relation to confined spaces must be undertaken in accordance with the Work Health and Safety Regulation 2017 (NSW), the Code of Practice: Confined Spaces (SafeWork NSW, 2019) and AS 2865:2009 Confined Spaces.
- Tetra Tech is able to assist the client to implement the above recommended actions.

7. REFERENCES

- Work Health and Safety Act 2011 (NSW).
- Work Health and Safety Regulation 2017 (NSW).
- Code of Practice: Confined Spaces (SafeWork NSW, 2019).
- Australian Standard 2865:2009 Confined Spaces.

8. LIMITATIONS

This report and the associated services performed by Tetra Tech are in accordance with the scope of services set out in the contract between Tetra Tech and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to the site.

Tetra Tech derived the data in this report primarily from visual inspections, examination of available records, and interviews with individuals with relevant information about the site. In preparing this report, Tetra Tech has relied upon, and presumed accurate, certain information (or absence thereof) provided by government authorities, the Client and others identified herein. Except as otherwise stated in the report, Tetra Tech has not attempted to verify the accuracy or completeness of any such information.

No warranty, undertaking, or guarantee, whether expressed or implied, is made with respect to the data reported or to the findings, observations, and recommendations expressed in this report. Furthermore, such data, findings, observations, and recommendations are based solely upon existence at the time of the assessment. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc.) may require further investigation at the site with subsequent data analysis and re-evaluation of the findings, observations, and recommendations expressed in this report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between Tetra Tech and the Client. Tetra Tech accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties. It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

APPENDIX A: CONFINED SPACES REGISTER

Tetra Tech Coffey SYDEN364426 – 80 Pacific Highway, North Sydney 2 August 2024

Confined Spaces Assessment

| Confin | ned Spaces Register | | | | | | | |
|--------------|---------------------|-------|--|--------|---------|------------------|--------------------|-------|
| Space ID | Туре | Level | Location / Comments | Secure | Signage | Dimensions | Risk Assessment | Photo |
| 001 | Fuel Tank | B4 | Diesel Tank Room | Yes | Yes | 15m ³ | А | 01 |
| 002 | Sump Pump Pit | B4 | Fire Pump Room | Yes | Yes | Unknown | В | 02 |
| 003 | Void | B4 | Fire Pump Room, door labelled Sump Pump | Yes | Yes | Unknown | С | 03 |
| 004 | Unknown Pit | B4 | Car park, adjacent parking space 2 | Yes | Yes | Unknown | D | 04 |
| 005 | Unknown Pit | B4 | Car park, adjacent parking space 10 | Yes | Yes | Unknown | D | 05 |
| 006 | Void | B4 | Car park, adjacent to lift lobby | Yes | Yes | 25m ³ | С | 06 |
| 007 | Grease Trap | В3 | Grease Arrestor Room | Yes | Yes | 4m ³ | E | 07 |
| 800 | Unknown Pit | В3 | Corridor adjacent to Fan Room | Yes | Yes | Unknown | D | 08 |
| 009 - 010 | Water Tank x 2 | B1 | Adjacent to Lift Lobby | Yes | Yes | 50m ³ | F | 09 |
| 011 | Exhaust Fan Chamber | 15 | AHU Room | Yes | Yes | 8m ³ | G | 10 |

APPENDIX B: CONFINED SPACE RISK ASSESSMENTS

Tetra Tech Coffey SYDEN364426 – 80 Pacific Highway, North Sydney 2 August 2024

| Diek Assessment A. I | Tuel Ten | NL. | | | |
|---|--|---|-------|--|--|
| Risk Assessment A: F | | | VEO | | |
| - | - | ents of a Confined Space? e part of C is yes, then the space is a confined space | YES | | |
| and requires a risk assessm | | e part of C is yes, then the space is a confinied space | | | |
| A. Is the space designed of | r intended | d primarily not to be occupied by a person? | YES | | |
| B. Is the space designed or person is in the space? | r intended | d to be, at normal atmospheric pressure while any | YES | | |
| C. Is the space likely to be | a risk to h | nealth and safety from: | | | |
| an atmosphere that of | does not h | ave a safe oxygen level? | YES | | |
| from fire or explosion harmful concentration | ? | ne gases, vapours and dusts, that may cause injury airborne contaminants? | YES | | |
| engulfment? Works to be completed. | Claaning | and maintanance activities | YES | | |
| Works to be completed: Comments: | | g and maintenance activities. | | | |
| | | to space is restricted. No access gained during assess | ment. | | |
| Hazard Types | Risk Rating | Recommended Actions | | | |
| Restricted entry and egress in an emergency | VH | Wear a safety harness and remain connected to a lifeline at all times. Ensure the standby person remains in constant contact with person(s) entering the space. | | | |
| Oxygen deficiency whilst work in progress | E | Monitor the atmosphere within the space prior to entering. Only enter the space if oxygen levels are within the safe range (19.5% to 23.5%). Ventilate the space if required. Continually monitor the atmosphere within the space during entry. | | | |
| Build-up or excess of vapours such as hydrogen sulphide (H ₂ S) or carbon monoxide (CO) to concentrations above the workplace exposure standards (WES) | E | Monitor the atmosphere within the space prior to entering. Purge and ventilate the space if required. Continually monitor the atmosphere within the space during entry. | | | |
| Build-up of organic vapours to within explosive limits | Monitor the atmosphere within the space prior to entering. Purge and ventilate the space if required. Only enter the space if the concentration of any flammable vapours is less than 5% of its lower explosive limit. Continually monitor the atmosphere within the space during entry. Ensure no ignition sources are located within or introduced into the space. | | | | |
| Airborne dust concentrations above the WES | L | No action required. | | | |
| Radiation (non-ionising and ionising) | L | No action required. | | | |
| Noise generated at levels above 85 dB(A) | L | No action required. | | | |
| Uncontrolled introduction of substances (e.g. steam, water, gases etc.) | VH | Isolate all inflow pipes into the space. | | | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|---|
| Engulfment | VH | Isolate all inflow pipes into the space. Wear a safety harness and remain connected to a lifeline at all times. |
| Manual handling of covers, lowering equipment into pits | ب | No action required. |
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | ۔ | No action required. |
| Skin contact with hazardous substances and surface contaminants | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| Slips and trips | М | Wear slip resistant boots. |
| Falls from height | L | No action required. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | L | No action required. |
| Lack of lighting | Η | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | L | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure contractor safe work method statement (SWMS) addresses working at heights issues.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

| Dick Assassment B: 6 | Sump Di | umn Dit | | | |
|--|--|---|------------|--|--|
| Risk Assessment B: S | | • | VEC | | |
| - | - | ents of a Confined Space? | YES | | |
| and requires a risk assessm | | e part of C is yes, then the space is a confined space | | | |
| | | d primarily not to be occupied by a person? | YES | | |
| B. Is the space designed of person is in the space? | r intended | d to be, at normal atmospheric pressure while any | YES | | |
| C. Is the space likely to be | a risk to h | nealth and safety from: | | | |
| an atmosphere that of | does not h | ave a safe oxygen level? | YES | | |
| contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion? | | | | | |
| | ns of any a | airborne contaminants? | YES | | |
| engulfment?Works to be completed: | Mainton | ance and inspection activities | YES | | |
| Comments: | | ance and inspection activities. o space is restricted. No access gained during assess | mont | | |
| | | Recommended Actions | ment. | | |
| Hazard Types | Risk Rating | Recommended Actions | | | |
| Restricted entry and | Н | Wear a safety harness and remain connected to a life | eline at | | |
| egress in an emergency | | all times. Ensure the standby person remains in constant conta | act with | | |
| | | person(s) entering the space. | act with | | |
| Oxygen deficiency whilst | Monitor the atmosphere within the space prior to entering. | | | | |
| work in progress | | Only enter the space if oxygen levels are within the safe | | | |
| | | range (19.5% to 23.5%). | | | |
| | | Ventilate the space if required. | during | | |
| | | Continually monitor the atmosphere within the space entry. | during | | |
| Build-up or excess of | VH | Monitor the atmosphere within the space prior to enter | ering. | | |
| vapours such as | | Purge and ventilate the space if required. | | | |
| hydrogen sulphide (H ₂ S) or carbon monoxide (CO) | | Continually monitor the atmosphere within the space | during | | |
| to concentrations above | | entry. | | | |
| the workplace exposure | | | | | |
| standards (WES) | | | | | |
| Build-up of organic | Н | Monitor the atmosphere within the space prior to ento | ering. | | |
| vapours to within | | Purge and ventilate the space if required. | ma a la la | | |
| explosive limits | | Only enter the space if the concentration of any flam vapours is less than 5% of its lower explosive limit. | mable | | |
| | | Continually monitor the atmosphere within the space | during | | |
| | | entry. | J | | |
| | | Ensure no ignition sources are located within or intro into the space. | duced | | |
| Airborne dust | L | No action required. | | | |
| concentrations above the WES | | | | | |
| Radiation (non-ionising and ionising) | L | No action required. | | | |
| Noise generated at levels above 85 dB(A) | L | No action required. | | | |
| Uncontrolled introduction | VH | Isolate all services within the space. | | | |
| of substances (e.g. | | Ensure no vehicles operate in the vicinity of the entry | | | |
| steam, water, gases etc.) | | Ensure the standby person is monitoring external we | | | |
| | | conditions and any other factors that could impact the confined space. | е | | |
| | | oormitod opado. | | | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|---|
| Engulfment | I | Isolate all inflow pipes into the space. Wear a safety harness and remain connected to a lifeline at all times. |
| Manual handling of covers, lowering equipment into pits | M | Use a winch to lower equipment into the space. |
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | M | Isolate all plant within the space. |
| Skin contact with hazardous substances and surface contaminants | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| Slips and trips | Н | Wear slip resistant boots. |
| Falls from height | L | No action required. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). Wash hands and face after exiting the space. |
| Lack of lighting | M | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | Ĺ | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been deemed to be a confined space (in order to take a precautionary approach) and should continue to be treated as such until confirmed as otherwise.

| Pick Acceptant C. | /oid | | | | |
|--|-------------|--|----------|--|--|
| Risk Assessment C: \ | | ente of a Confined Press? | VEC | | |
| - | - | ents of a Confined Space? e part of C is yes, then the space is a confined space | YES | | |
| and requires a risk assessm | | s part of C is yes, then the space is a confined space | | | |
| | , | d primarily not to be occupied by a person? | YES | | |
| | | to be, at normal atmospheric pressure while any | YES | | |
| person is in the space? | | , | | | |
| C. Is the space likely to be | a risk to h | nealth and safety from: | | | |
| an atmosphere that of | does not h | ave a safe oxygen level? | YES | | |
| contaminants, including airborne gases, vapours and dusts, that may cause injury | | | | | |
| from fire or explosion? | | | | | |
| | ns of any a | airborne contaminants? | YES | | |
| engulfment?Works to be completed: | Mainten | ance and inspection activities. | NO | | |
| Comments: | | to space is restricted. No access gained during assess | ment. | | |
| Hazard Types | Risk | Recommended Actions | | | |
| | Rating | | | | |
| Restricted entry and | Н | Wear a safety harness and remain connected to a lif | eline at | | |
| egress in an emergency | | all times. Ensure the standby person remains in constant cont | act with | | |
| | | person(s) entering the space. | act with | | |
| Oxygen deficiency whilst | Н | Monitor the atmosphere within the space prior to ent | | | |
| work in progress | | Only enter the space if oxygen levels are within the space (10.5% to 23.5%) | safe | | |
| | | range (19.5% to 23.5%). Ventilate the space if required. | | | |
| | | Continually monitor the atmosphere within the space | during | | |
| | | entry. | | | |
| Build-up or excess of vapours such as | Н | Monitor the atmosphere within the space prior to ent Purge and ventilate the space if required. | ering. | | |
| hydrogen sulphide (H ₂ S) | | Continually monitor the atmosphere within the space | during | | |
| or carbon monoxide (CO) | | entry. | J | | |
| to concentrations above | | | | | |
| the workplace exposure standards (WES) | | | | | |
| Build-up of organic | L | No action required. | | | |
| vapours to within | | | | | |
| explosive limits Airborne dust | L | No action required. | | | |
| concentrations above the | | no action required. | | | |
| WES | | | | | |
| Radiation (non-ionising | L | No action required. | | | |
| and ionising) Noise generated at levels | L | No action required. | | | |
| above 85 dB(A) | _ | | | | |
| Uncontrolled introduction | Н | Isolate all services within the space. | | | |
| of substances (e.g. | | Ensure no vehicles operate in the vicinity of the entry Ensure the standby person is monitoring external we | | | |
| steam, water, gases etc.) | | conditions and any other factors that could impact th | | | |
| | | confined space. | | | |
| Engulfment | Τ | Isolate all inflow pipes into the space. | - 12 | | |
| | | Wear a safety harness and remain connected to a lif all times. | eline at | | |
| Manual handling of | L | No action required. | | | |
| covers, lowering | | · | | | |
| equipment into pits | | | | | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|---|
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | M | Isolate all plant within the space. |
| Skin contact with hazardous substances and surface contaminants | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| Slips and trips | Ι | Wear slip resistant boots. |
| Falls from height | Ш | No action required. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). Wash hands and face after exiting the space. |
| Lack of lighting | M | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | Ĺ | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

| Risk Assessment D: U | Inknow | n Pit | | | |
|---|----------------|--|------------|--|--|
| | | ents of a Confined Space? | YES | | |
| | t least one | e part of C is yes, then the space is a confined space | 120 | | |
| A. Is the space intended to | be, or is | likely to be, entered by any person? | YES | | |
| | | restricted means for entry or exit that makes it enter or exit the space? | YES | | |
| C. Is the space likely to be | a risk to l | nealth and safety from: | | | |
| an atmosphere that does not have a safe oxygen level? contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion? | | | | | |
| harmful concentrationengulfment? | ns of any | airborne contaminants? | YES YES | | |
| Works to be completed: | Unknow | n. Presumed maintenance and/or inspection activities. | | | |
| Comments: | | pose of the pit is unknown. Access within the space was at the time of assessment. | as not | | |
| Hazard Types | Risk Rating | Recommended Actions | | | |
| Restricted entry and egress in an emergency | VH | Wear a safety harness and remain connected to a lifeline at all times. Ensure the standby person remains in constant contact with person(s) entering the space. | | | |
| Oxygen deficiency whilst work in progress | E | Monitor the atmosphere within the space prior to entering. Only enter the space if oxygen levels are within the safe range (19.5% to 23.5%). Ventilate the space if required. Continually monitor the atmosphere within the space during | | | |
| Build-up or excess of vapours such as hydrogen sulphide (H ₂ S) or carbon monoxide (CO) to concentrations above the workplace exposure standards (WES) | Е | entry. Monitor the atmosphere within the space prior to entering. Purge and ventilate the space if required. Continually monitor the atmosphere within the space during entry. | | | |
| Build-up of organic vapours to within explosive limits | E | Monitor the atmosphere within the space prior to entering. Purge and ventilate the space if required. Only enter the space if the concentration of any flammable vapours is less than 5% of its lower explosive limit. Continually monitor the atmosphere within the space during entry. Ensure no ignition sources are located within or introduced into the space. | | | |
| Airborne dust concentrations above the WES | L | No action required. | | | |
| Radiation (non-ionising and ionising) | L | No action required. | | | |
| Noise generated at levels above 85 dB(A) | M | Isolate machinery. Wear appropriate PPE (e.g. heari protection). | ing | | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|--|
| Uncontrolled introduction of substances (e.g. steam, water, gases etc.) | E | Isolate all services within the space. Ensure the standby person is monitoring external weather conditions and any other factors that could impact the confined space. |
| Engulfment | ш | Isolate all inflow pipes into the space. Wear a safety harness and remain connected to a lifeline at all times. |
| Manual handling of covers, lowering equipment into pits | M | Ensure a two-person lift or lifting device is used when lifting or removing covers. Use a winch to lower equipment into the space. |
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | L | No action required. |
| Skin contact with hazardous substances and surface contaminants | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| Slips and trips | Н | Wear slip resistant boots. |
| Falls from height | Η | Wear a safety harness and remain connected to a lifeline at all times. |
| Electrical hazards | M | Isolate all power sources within the space. Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). Wash hands and face after exiting the space. |
| Lack of lighting | M | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | L | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure contractor safe work method statement (SWMS) addresses working at heights and traffic management issues.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

| Rick Accessment E. C | Proper I | Fron | |
|--|----------|---|-----------|
| Risk Assessment E: C | | <u> </u> | VEC |
| Does the space meet the requirements of a Confined Space? (If the appropriate A. B. and at least one part of C is used than the appropriate according to confined approximately according to the confined according to the co | | | |
| (If the answer to A, B and at least one part of C is yes, then the space is a confined space and requires a risk assessment). | | | |
| A. Is the space intended to be, or is likely to be, entered by any person? | | | YES |
| B. Does the space have a limited or restricted means for entry or exit that makes it physically difficult for a person to enter or exit the space? | | | YES |
| C. Is the space likely to be a risk to health and safety from: | | | \/=0 |
| an atmosphere that does not have a safe oxygen level? YES NO | | | YES NO |
| contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion? | | | 110 |
| - | | airborne contaminants? | YES |
| engulfment? | | | YES |
| Works to be completed: | - | g and maintenance activities. | |
| Comments: | Access | within the space was not available at the time of asses | sment. |
| Hazard Types | Risk | Recommended Actions | |
| Destruction | Rating | Managerata | -11 |
| Restricted entry and egress in an emergency | Н | Wear a safety harness and remain connected to a lif | eline at |
| egress in an emergency | | Ensure the standby person remains in constant conta | act with |
| | | person(s) entering the space. | |
| Oxygen deficiency whilst | VH | Monitor the atmosphere within the space prior to enter | |
| work in progress | | Only enter the space if oxygen levels are within the srange (19.5% to 23.5%). | sate |
| | | Ventilate the space if required. | |
| | | Continually monitor the atmosphere within the space | during |
| | | entry. | |
| Build-up or excess of | Н | Monitor the atmosphere within the space prior to enter | ering. |
| vapours such as hydrogen sulphide (H₂S) | | Purge and ventilate the space if required. Continually monitor the atmosphere within the space | during |
| or carbon monoxide (CO) | | entry. | admig |
| to concentrations above | | · | |
| the workplace exposure | | | |
| standards (WES) Build-up of organic | L | No action required. | |
| vapours to within | _ | No action required. | |
| explosive limits | | | |
| Airborne dust | L | No action required. | |
| concentrations above the WES | | | |
| Radiation (non-ionising | L | No action required. | |
| and ionising) | | | |
| Noise generated at levels above 85 dB(A) | L | No action required. | |
| Uncontrolled introduction | VH | Isolate all services within the space. | |
| of substances (e.g. | | | |
| steam, water, gases etc.) Engulfment | Н | Isolate all inflow pipes into the space. | |
| | | Wear a safety harness and remain connected to a lifall times. | eline at |
| Manual handling of | L | No action required. | |
| covers, lowering | | | |
| equipment into pits Mechanical hazards (e.g. | L | No action required. | |
| entanglement, crushing, | _ | 140 delion required. | |
| cutting, etc.) | | | |

| Hazard Types | Risk Rating | Recommended Actions |
|--|----------------|---|
| Skin contact with hazardous substances | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| and surface contaminants | | parits, boots and eye wear). |
| Slips and trips | Н | Wear slip resistant boots. |
| Falls from height | اــ | No action required. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and |
| E-coli) | | pants, boots and eye wear). |
| | | Wash hands and face after exiting the space. |
| Lack of lighting | M | Use appropriate and safe temporary lighting and/or torch |
| | | within the space. |
| Heat and cold stress | L | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

| Risk Assessment F: \ | Mator T | 'ank | |
|---|----------------|---|-------------|
| | | | YES |
| Does the space meet the requirements of a Confined Space? (If the answer to A, B and at least one part of C is yes, then the space is a confined space | | | TES |
| and requires a risk assessment). | | | |
| A. Is the space designed or intended primarily not to be occupied by a person? | | | YES |
| | | | YES |
| person is in the space? | | | |
| C. Is the space likely to be a risk to health and safety from: | | | |
| an atmosphere that does not have a safe oxygen level? YES | | | YES |
| | | | NO |
| from fire or explosion | | airborne contaminants? | NO |
| engulfment? | nio oi ariy | andome demarmiants. | YES |
| Works to be completed: | Cleanin | g and maintenance activities. | |
| Comments: | Access | to space is restricted. No access gained during assessr | ment. |
| Hazard Types | Risk Rating | Recommended Actions | |
| Restricted entry and | VH | Wear a safety harness and remain connected to a life | line at all |
| egress in an emergency | | times. Ensure the standby person remains in constant conta | ct with |
| | | person(s) entering the space. | Ot With |
| Oxygen deficiency whilst | Е | Monitor the atmosphere within the space prior to ente | |
| work in progress | | Only enter the space if oxygen levels are within the sa (19.5% to 23.5%). | ate range |
| | | Ventilate the space if required. | |
| | | Continually monitor the atmosphere within the space | during |
| Build-up or excess of | L | entry. No action required. | |
| vapours such as | | · | |
| hydrogen sulphide (H ₂ S) or carbon monoxide (CO) | | | |
| to concentrations above | | | |
| the workplace exposure | | | |
| standards (WES) Build-up of organic | 1 | No action required. | |
| vapours to within | _ | No action required. | |
| explosive limits | | | |
| Airborne dust concentrations above the | L | No action required. | |
| WES | | | |
| Radiation (non-ionising | L | No action required. | |
| and ionising) | | No action required | |
| Noise generated at levels above 85 dB(A) | L | No action required. | |
| Uncontrolled introduction | VH | Isolate all inflow pipes into the space. | |
| of substances (e.g. | | | |
| steam, water, gases etc.) Engulfment | Е | Isolate all inflow pipes into the space. | |
| 9 | | Wear a safety harness and remain connected to a life | line at all |
| | | times. | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|---|
| Manual handling of covers, lowering equipment into pits | M | Use a winch or rope pulley system to lower equipment into the tank. |
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | L | No action required. |
| Skin contact with hazardous substances and surface contaminants | _ا | No action required. |
| Slips and trips | M | Wear slip resistant boots. |
| Falls from height | VH | Wear a safety harness and remain connected to a lifeline at all times. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). Wash hands and face after exiting the space. |
| Lack of lighting | Н | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | L | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure contractor safe work method statement (SWMS) addresses working at heights issues.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

| Risk Assessment G: I | Evhauet | Ean Chambor | |
|---|--|--|-----------------|
| | | | YES |
| Does the space meet the requirements of a Confined Space? (If the answer to A, B and at least one part of C is yes, then the space is a confined space | | | TES |
| and requires a risk assessment). | | | |
| A. Is the space designed or intended primarily not to be occupied by a person? | | | YES |
| B. Is the space designed or intended to be, at normal atmospheric pressure while any person is in the space? | | | YES |
| C. Is the space likely to be | C. Is the space likely to be a risk to health and safety from: | | |
| an atmosphere that does not have a safe oxygen level? YES | | | YES |
| from fire or explosion? | | | YES YES |
| engulfment? | | | NO |
| Works to be completed: | Cleaning | and maintenance activities. | |
| Comments: | Access t | o space is restricted. No access gained during assess | ment. |
| Hazard Types | Risk Rating | Recommended Actions | |
| Restricted entry and egress in an emergency | VH | Wear a safety harness and remain connected to a lif all times. Ensure the standby person remains in constant cont person(s) entering the space. | act with |
| Oxygen deficiency whilst work in progress | VH | Monitor the atmosphere within the space prior to ent Only enter the space if oxygen levels are within the strange (19.5% to 23.5%). Ventilate the space if required. Continually monitor the atmosphere within the space entry. | safe during |
| Build-up or excess of vapours such as hydrogen sulphide (H ₂ S) or carbon monoxide (CO) to concentrations above the workplace exposure standards (WES) | VH | Monitor the atmosphere within the space prior to enti- Purge and ventilate the space if required. Continually monitor the atmosphere within the space entry. | _ |
| Build-up of organic vapours to within explosive limits | VH | Monitor the atmosphere within the space prior to ent Purge and ventilate the space if required. Only enter the space if the concentration of any flam vapours is less than 5% of its lower explosive limit. Continually monitor the atmosphere within the space entry. Ensure no ignition sources are located within or introinto the space. | mable during |
| Airborne dust concentrations above the | L | No action required. | |
| WES | | | |
| Radiation (non-ionising and ionising) | L | No action required. | |
| Noise generated at levels above 85 dB(A) | M | Wear appropriate PPE (e.g. hearing protection). | |
| Uncontrolled introduction of substances (e.g. steam, water, gases etc.) | VH | Isolate all inflow pipes/ducts into the space. | |

| Hazard Types | Risk Rating | Recommended Actions |
|---|----------------|---|
| Engulfment | L | No action required. |
| Manual handling of covers, lowering equipment into pits | ا ۔ | No action required. |
| Mechanical hazards (e.g. entanglement, crushing, cutting, etc.) | M | Isolate all plant within the space. |
| Skin contact with hazardous substances and surface contaminants | M | Wear appropriate PPE (e.g. gloves, long sleeve shirt and pants, boots and eye wear). |
| Slips and trips | M | Wear slip resistant boots. |
| Falls from height | L | No action required. |
| Electrical hazards | M | Portable electrical equipment should be protected through an RCD, located outside of the space. |
| Biological hazards (e.g. E-coli) | ٦ | No action required. |
| Lack of lighting | Η | Use appropriate and safe temporary lighting and/or torch within the space. |
| Heat and cold stress | Ĺ | No action required. |

- Avoid entering the confined space if possible e.g. conduct cleaning activities from outside etc.
- Ensure access to the confined space remains secure at all times.
- Only authorised personnel are to access the confined space.
- All works and access in relation to confined spaces must be undertaken in accordance with AS 2865-2009.
- Ensure that the person responsible for the confined space work issues an entry permit prior to any persons entering the confined space.
- Ensure contractors are appropriately trained to undertake confined space entry and standby duties.
- Ensure site specific emergency rescue procedures and equipment are available and readily accessible during any confined space work.
- Ensure suitable PPE is available and appropriately maintained.
- Ensure a task specific risk assessment is conducted within the space prior to commencing any works.
- Although it was not possible to access the space at the time of the assessment, it has been
 deemed to be a confined space (in order to take a precautionary approach) and should continue
 to be treated as such until confirmed as otherwise.

APPENDIX C: PHOTOGRAPHS





Photo 01. Diesel Tank Room – fuel tank.

Photo 02. Fire Pump Room – sump pump pit.

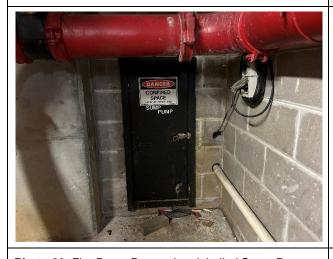


Photo 03. Fire Pump Room, door labelled Sump Pump – void.



Photo 04. Level B4, car park, adjacent to parking space 2 – unknown pit.



Photo 05. Level B4, car park, adjacent to parking space 10 – unknown pit.



Photo 06. Level B4, car park, adjacent to lift lobby – void.



Photo 07. Level B3, Grease Arrestor Room – grease trap.



Photo 08. Level B3, corridor adjacent to the Fan Room – unknown pit.



Photo 09. Level B1, adjacent to lift lobby – water tanks.



Photo 10. Level 15, AHU Room – exhaust fan chamber.

APPENDIX D: CONFINED SPACE SIGNAGE

Example A: Fixed confined space warning sign that can be established in a prominent position adjacent the confined space or on the access hatch.



Example B: Another fixed confined space warning sign that can be established in a prominent position adjacent the confined space or on the access hatch. The warning signage carries brief information that would need to be listed in the confined space entry permit.



Example C: Mobile confined space warning sign that can be established in a prominent position adjacent the confined space while works are in progress.

