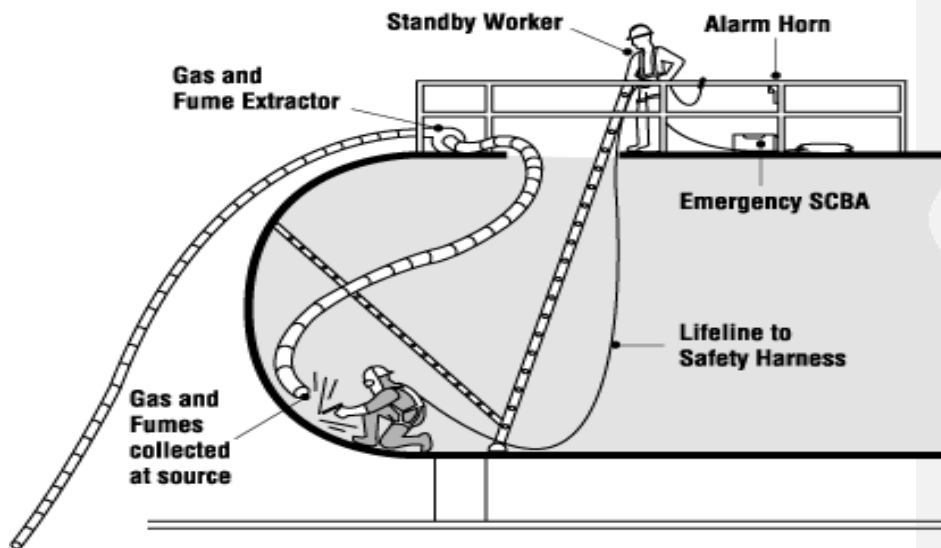
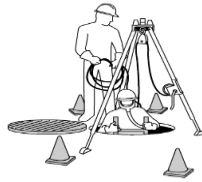
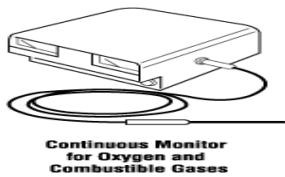


CONFINED SPACES PROGRAM

Hazard Assessments



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Assessment #1	Date: 04-08-34 2011-07-14	Location: A1-B5 Tunnels
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Description of Space: Tunnel
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _2_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: Hot pipes that are not completely insulated. Side tunnels and cluster of pipes. Difficult rescue. Escape bottles must be available for rescuers to provide to downed entrants (if an emergency happens). Entrants must be in good physical condition. Heat stress may be possible due to heat and humidity.

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is -required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE High Yes Medium <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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Assessment completed by: Rene Morais & Shawn Roy*(enter name and then sign)*

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

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Hazard Assessment – Confined Spaces

Assessment #2	Date: 04-08-312011- 07-11	Location: C6 Stack
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Description of Space: Stack

Configuration of Space: Horizontal cylinder shape

Space Evaluation

Can be bodily entered ☒ yes ☐ no
 Limited or restricted entry? ☒ yes ☐ no
 Not designed for continuous human occupancy? ☒ yes ☐ no
 Internal configuration hazard? ☒ yes ☐ no
 Other serious safety hazard? ☐ yes ☒ no

Number of entry points? 4
 Hazardous atmosphere? ☒ yes ☐ no
 Potential for entrapment? ☐ yes ☒ no

Drowning or engulfment hazard? ☐ yes ☒ no
 Comments: Sooty and dusty environment. Difficult rescue. Sulphur dioxide exposure a possibility. Full face respiratory protection required with combination cartridges.

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no
 Oxygen Enrichment ☐ yes ☒ no
 Airborne fungi ☒ yes ☐ no

Hydrogen Sulphide ☒ yes ☐ no
 Carbon Monoxide ☒ yes ☐ no
 Carbon Dioxide ☐ yes ☒ no
 Methane ☒ yes ☐ no

Sulphur Dioxide ☐ yes ☒ no
 Other ☒ yes ☐ no
 Specified: Metal dust and ashes

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☐ yes ☒ no
 Infectious disease ☐ yes ☒ no
 Fire main line ☐ yes ☒ no
 Insects and vermin ☐ yes ☒ no
 Dust, Vapor, Fume ☒ yes ☐ no
 Combustibility of gases or vapors ☐ yes ☒ no
 Asbestos Fibers ☐ yes ☒ no

Poor visibility ☒ yes ☐ no
 Flooding ☐ yes ☒ no
 Potable water line ☐ yes ☒ no
 Difficult entry/exit ☒ yes ☐ no
 Residual chemicals ☒ yes ☐ no
 Noise ☒ yes ☐ no
 Low ceiling ☒ yes ☐ no

Entrapment ☒ yes ☐ no
 High Pressure Steam ☐ yes ☒ no
 Sewage Line ☐ yes ☒ no
 Mechanical equipment ☐ yes ☒ no
 Working surfaces (slips) ☐ yes ☒ no
 Temperature (0-40°C) ☒ yes ☐ no

Isolation

Boiler must be completely isolated prior working in stack.

CONFINED SPACE High Medium Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:Suitable Work Clothes, i.e. disposable coverallsCSA approved head, foot, hearing, gloves and eye protectionMinimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)Confined Space Harness Group EGas monitor (oxygen, LEL, CO, H2S)**Pre-Entry Equipment Set-Up:**Pre use check of Rescue HarnessPre use calibration of monitoring equipmentAtmospheric testing and recording completePre use test of communication equipment or other methods of communicationSet up portable forced air ventilation, if necessaryEnsure all requirements of Confined Space Entry Permit are satisfied**Rescue Equipment Required:**Self Contained Breathing ApparatusTwo-way radio/communication equipment or other methods of communicationA rescue SKED would be essential in the event that extrication is required**Special Precautions and Procedures:**Ensure all mechanical and electrical lock-out procedures have been completed.**Remarks:**Workers should be trained on heat stress prevention.Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)**Hazard Assessment – Confined Spaces**

Assessment #3	Date: <u>2011-07-1104-</u> <u>00:01</u>	Location: B4 cells tunnel
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Description of Space: Crawl Space

Configuration of Space: Tunnel/Crawl Space – See tunnels drawing

Space EvaluationCan be bodily entered ☒ yes ☐ noLimited or restricted entry? ☒ yes ☐ noNot designed for continuous human occupancy? ☒ yes ☐ noInternal configuration hazard? ☒ yes ☐ noOther serious safety hazard? ☐ yes ☒ noNumber of entry points? 2Hazardous atmosphere? ☒ yes ☐ noPotential for entrapment? ☒ yes ☐ noDrowning or engulfment hazard? ☐ yes ☒ noComments: Falls are a possibility, as some areas are not fully guarded. Caution should be exercised.**Possible atmosphere hazards**Oxygen Deficiency ☒ yes ☐ noOxygen Enrichment ☐ yes ☒ noHydrogen Sulphide ☒ yes ☐ noCarbon Monoxide ☒ yes ☐ noSulphur Dioxide ☐ yes ☒ noOther ☒ yes ☐ no

Airborne fungi ☐ yes ☒ no Carbon Dioxide ☐ yes ☒ no Specified: _____
Methane ☒ yes ☐ no

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Although the risk for atmospheric hazards is quite low in this area, continuous monitoring is a good practice to ensure safety of workers. Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting.

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input checked="" type="checkbox"/> <input type="checkbox"/>
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Assessment completed by: Rene Morais & Shawn Roy (enter name and then sign)

This space is classified as a Restricted Area. The following procedures apply:

- Advise another employee of the location of this restricted area.
- Ensure radio communication is possible with this other employee. Maintain periodic communication during work.
- Advise this same employee of the type of work to be conducted
- Advise this same employee of the length of time expected to be in the space
- Give any other directions to this employee, under the circumstances, to ensure that the notified employee is able to provide assistance if needed
- Advise this employee when the work in the restricted area is complete
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Continuous air monitoring is recommended.

Hazard Assessment – Confined Spaces

Assessment #4	Date: 2011-07-1104- 2011-07-1104	Location: B4 to B6 Tunnel
Description of Space: Crawl Space		
Configuration of Space: Tunnel/Crawl Space – See tunnels drawing		

Space Evaluation			
Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _2_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	

Possible atmosphere hazards			
Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Specified:	_____
Note: Will the atmosphere in the space be continuously monitored? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no			
<i>Although the risk for atmospheric hazards is quite low in this area, continuous monitoring is a good practice to ensure safety of workers. Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.</i>			

Other potential hazards present?			
Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
		Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
		Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no

Isolation	
Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting.	

CONFINED SPACE	High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Low <input type="checkbox"/> No <input type="checkbox"/>	RESTRICTED AREA	<input checked="" type="checkbox"/> <input type="checkbox"/>
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Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

This space is classified as a Restricted Area. The following procedures apply:

- Advise another employee of the location of this restricted area.
- Ensure radio communication is possible with this other employee. Maintain periodic communication during work.
- Advise this same employee of the type of work to be conducted
- Advise this same employee of the length of time expected to be in the space
- Give any other directions to this employee, under the circumstances, to ensure that the notified employee is able to provide assistance if needed
- Advise this employee when the work in the restricted area is complete
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Continuous air monitoring is recommended.

Hazard Assessment – Confined Spaces

Assessment #5	Date: 2011-07-1104- 2011-07-1104-	Location: B6 X-Ray Room Tunnels
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Description of Space: Tunnel

Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Although the risk for atmospheric hazards is quite low in this area, continuous monitoring is a good practice to ensure safety of workers. Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input checked="" type="checkbox"/>
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Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

This space is classified as a Restricted Area. The following procedures apply:

- Advise another employee of the location of this restricted area.
- Ensure radio communication is possible with this other employee. Maintain periodic communication during work.
- Advise this same employee of the type of work to be conducted
- Advise this same employee of the length of time expected to be in the space
- Give any other directions to this employee, under the circumstances, to ensure that the notified employee is able to provide assistance if needed
- Advise this employee when the work in the restricted area is complete
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Continuous air monitoring is recommended.

Hazard Assessment – Confined Spaces

Assessment #6	Date: 2011-07-11 2011-07-1104-	Location: C4 Tunnel
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Description of Space: Service Tunnel

Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered ☒ yes ☐ no
 Limited or restricted entry? ☒ yes ☐ no
 Not designed for continuous human occupancy? ☒ yes ☐ no
 Internal configuration hazard? ☒ yes ☐ no
 Other serious safety hazard? ☒ yes ☐ no

Number of entry points? 4
 Hazardous atmosphere? ☒ yes ☐ no
 Potential for entrapment? ☐ yes ☒ no

Drowning or engulfment hazard? ☐ yes ☒ no
 Comments: structural hazard, materials could collapse onto workers, extreme caution must be taken in this area, rescue may be difficult, sled-type stretchers required.

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no
 Oxygen Enrichment ☐ yes ☒ no
 Airborne fungi ☒ yes ☐ no

Hydrogen Sulphide ☒ yes ☐ no
 Carbon Monoxide ☒ yes ☐ no
 Carbon Dioxide ☐ yes ☒ no
 Methane ☒ yes ☐ no

Sulphur Dioxide ☐ yes ☒ no
 Other ☐ yes ☒ no
 Specified: __asbestos fibers__

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☐ yes ☒ no
 Infectious disease ☒ yes ☐ no
 Fire main line ☒ yes ☐ no
 Insects and vermin ☒ yes ☐ no
 Dust, Vapor, Fume ☒ yes ☐ no
 Combustibility of gases or vapors ☒ yes ☐ no
 Asbestos Fibers ☒ yes ☐ no

Poor visibility ☒ yes ☐ no
 Flooding ☒ yes ☐ no
 Potable water line ☒ yes ☐ no
 Difficult entry/exit ☒ yes ☐ no
 Residual chemicals ☐ yes ☒ no
 Noise ☐ yes ☒ no
 Low ceiling ☒ yes ☐ no

Entrapment ☐ yes ☒ no
 High Pressure Steam ☐ yes ☒ no
 Sewage Line ☒ yes ☐ no
 Mechanical equipment ☐ yes ☒ no
 Working surfaces (slips) ☒ yes ☐ no
 Temperature (0-40°C) ☐ yes ☒ no

Isolation

Isolation may be required if working on steam, fire, water or sewage lines.

CONFINED SPACE ~~High~~ ~~Medium~~ Yes ☒ RESTRICTED AREA ☐

Assessment completed by: Rene Morais & Shawn Roy (enter name and then sign)

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Hazard Assessment – Confined Spaces

Assessment #7	Date: <u>2011-07-1104-</u> <u>00:04</u>	Location: C6 Ash Pits
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Description of Space: Underground pit
Configuration of Space: Pit – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? <u>2</u>
Limited or restricted entry?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hazardous atmosphere?
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard?
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: <u>Ash/dust</u>	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

~~Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live).~~

CONFINED SPACE <u>High</u> <input type="checkbox"/> <u>Medium</u> <input checked="" type="checkbox"/> <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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Assessment completed by: <u>Rene Morais & Shawn Roy</u> <small>(enter name and then sign)</small>

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

N-95 is recommended if stirring up dust

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Hazard Assessment – Confined Spaces

Assessment #8	Date: 2011-07-11 08-04-2011	Location: C6 Boiler 1
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Description of Space: Boiler
Configuration of Space: Boiler, horizontal cylinder

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _2_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live). All lines and power sources coming in and out of boiler must be isolated, locked and tagged out.

CONFINED SPACE <input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes	RESTRICTED AREA <input type="checkbox"/>
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Assessment completed by: Rene Morais & Shawn Roy*(enter name and then sign)*

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Minimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

See attached Material Safety Data Sheet.

A job hazard analysis should be completed for the annual boiler cleaning operation.

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Hazard Assessment – Confined Spaces

Assessment #9	Date: 2011-07-11 2011-07-1104- 08-04	Location: C6 Boiler 2
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Description of Space: Boiler

Configuration of Space: Boiler, horizontal cylinder

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _2_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live). All lines and power sources coming in and out of boiler must be isolated, locked and tagged out.

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Minimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #10	Date: 2011-07-11 2011-07-1104- 08-04	Location: C6 Condensate Tank
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Description of Space: Condensate tank

Configuration of Space: Tank, vertical cylinder

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	Very limited entry and egress

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines coming in and out of tank must be isolated, locked and tagged.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input type="checkbox"/> X	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Minimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #11	Date: 2011-07-1104- 2011-07-1104-	Location: C6 DA Tank
Description of Space: DA tank		
Configuration of Space: Tank, vertical cylinder		

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? <u>2</u>
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: Very limited entry and egress

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines coming in and out of tank must be isolated, locked and tagged out.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input type="checkbox"/> X	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:
Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, gloves and eye protection
Depending on air test results, airline respiratory may be required.
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #12	Date: 2011-07-1104- 2011-07-1104	Location: Outside of C6 Bunker C Tank (outdoors)
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Description of Space: Tank, vertical

Configuration of Space: Tank

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _6_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: (residual petroleum, must be purged prior to entry)

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _Diesel vapours, and fumes_	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines coming in and out of tank must be isolated, locked and tagged.

CONFINED SPACE	High <input checked="" type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> <input type="checkbox"/>	RESTRICTED AREA	<input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls
CSA approved head, foot, gloves and eye protection
Depending on air test, air line respirator may be required
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #13	Date: 2011-07-11 2011-07-1104- 00:04	Location: Outside of C6 Diesel Tank (outdoors)
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Description of Space: Tank, vertical

Configuration of Space: Tank

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_____
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: (residual petroleum, must be purged prior to entry)

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _Diesel vapours, and fumes____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines coming in and out of tank must be isolated, locked and tagged.

CONFINED SPACE	High High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	RESTRICTED AREA	<input type="checkbox"/>
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Assessment completed by: <u>Rene Morais & Shawn Roy</u> (enter name and then sign)
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test, SCBA or airline may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Purge space

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

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Hazard Assessment – Confined Spaces

Assessment #14	Date: 2011-07-11 04-08-2011	Location: C6 Package Boiler 1
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Description of Space: Package Boiler

Configuration of Space: Boiler, horizontal cylinder

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live). All lines and power sources coming in and out of tank must be isolated, locked and tagged

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Minimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy*(enter name and then sign)*

Hazard Assessment – Confined Spaces

Assessment #15	Date: 2011-07-11 2011-07-1104- 08-04	Location: C6 Package Boiler 2
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Description of Space: Package Boiler

Configuration of Space: Boiler, horizontal cylinder

Space Evaluation

Can be bodily entered ☒ yes ☐ no Number of entry points? _1_

Limited or restricted entry? ☒ yes ☐ no Hazardous atmosphere? ☒ yes ☐ no

Not designed for continuous human occupancy? ☒ yes ☐ no Potential for entrapment? ☐ yes ☒ no

Internal configuration hazard? ☒ yes ☐ no Drowning or engulfment hazard? ☐ yes ☒ no

Other serious safety hazard? ☐ yes ☒ no Comments:

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no Hydrogen Sulphide ☐ yes ☒ no Sulphur Dioxide ☐ yes ☒ no

Oxygen Enrichment ☐ yes ☒ no Carbon Monoxide ☒ yes ☐ no Other ☐ yes ☒ no

Airborne fungi ☐ yes ☒ no Carbon Dioxide ☐ yes ☒ no Specified: _____

Methane ☐ yes ☒ no

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☒ yes ☐ no Poor visibility ☒ yes ☐ no Entrapment ☐ yes ☒ no

Infectious disease ☐ yes ☒ no Flooding ☐ yes ☒ no High Pressure Steam ☒ yes ☐ no

Fire main line ☐ yes ☒ no Potable water line ☐ yes ☒ no Sewage Line ☐ yes ☒ no

Insects and vermin ☐ yes ☒ no Difficult entry/exit ☒ yes ☐ no Mechanical equipment ☐ yes ☒ no

Dust, Vapor, Fume ☒ yes ☐ no Residual chemicals ☒ yes ☐ no Working surfaces (slips) ☒ yes ☐ no

Combustibility of gases or vapors ☐ yes ☒ no Noise ☒ yes ☐ no Temperature (0-40°C) ☐ yes ☒ no

Asbestos Fibers ☐ yes ☒ no Low ceiling ☒ yes ☐ no

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live). All lines and power coming in and out of tank must be isolated, locked and tagged.

CONFINED SPACE ~~High~~ ☐ ~~Medium~~ ☒ Yes RESTRICTED AREA ☐

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Minimum, air purifying full face respirator (or SCBA is oxygen concentrations are below 19.5%)

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #16	Date: 2011-07-1104- 2011-07-1104-	Location: C7 Auxiliary Diesel Tank (indoors)
Description of Space: Tank, vertical		
Configuration of Space: Tank		

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: Sooty, and dusty (residual petroleum, must be purged prior to entry)

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _Diesel vapours, and fumes_	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines and power sources coming in and out of tank must be isolated, locked and tagged

CONFINED SPACE	<u>Yes</u> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/>	RESTRICTED AREA	<input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test results, SCBA or airline respiratory may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Purge space

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

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Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #178	Date: 2011-07-1104- 00:04	Location: C7 Diesel Tank (indoors)
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Description of Space: Tank, vertical
Configuration of Space: Tank

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_____
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: (residual petroleum, must be purged prior to entry)

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _Diesel vapours, and fumes____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Working surfaces (slips)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on feed lines (entry and exit). All lines and power sources coming in and out of tank must be isolated, locked and tagged.

CONFINED SPACE	<u>Yes</u> <input checked="" type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	RESTRICTED AREA	<input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test, SCBA or airline respirator may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #189	Date: 2011-07-1104- 2011	Location: D1 Main Gate Duct
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Description of Space: Tunnel
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)
CSA approved head, foot, hearing, gloves and eye protection
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment # <u>1920</u>	Date: <u>2011-07-11</u> 04	Location: D1 Tower to PIDS wall Duct
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Description of Space: Tunnel
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? <u>1</u>
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:
Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)
CSA approved head, foot, hearing, gloves and eye protection
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #201	Date: 2011-07-1104-	Location: D4 Tower #4 Duct
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Description of Space: Tunnel
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)
CSA approved head, foot, hearing, gloves and eye protection
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #212	Date: 2011-07-1104- 00:04	Location: E5 Emancipator Building
Description of Space: Pumphouse		
Configuration of Space: Small building		

Space Evaluation		
Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards					
Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _ _ _	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		
Note: Will the atmosphere in the space be continuously monitored? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no					
Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.					

Other potential hazards present?					
Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Mechanical equipment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation	
Isolation required if working on mechanical equipment. Isolation required if working on plumbing systems. Isolation required if working on fans, lighting or other electrical systems. Follow institutional lockout/tagout program.	

CONFINED SPACE	High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Low <input checked="" type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>	RESTRICTED AREA	<input checked="" type="checkbox"/> <input type="checkbox"/>
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This space is classified as a Restricted Area. The following procedures apply:

- Advise another employee of the location of this restricted area.
- Ensure radio communication is possible with this other employee. Maintain periodic communication during work.
- Advise this same employee of the type of work to be conducted
- Advise this same employee of the length of time expected to be in the space
- Give any other directions to this employee, under the circumstances, to ensure that the notified employee is able to provide assistance if needed
- Advise this employee when the work in the restricted area is complete
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Continuous air monitoring is recommended.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #223	Date: 2011-07-1104- 00-01	Location: K-1 Duct
Description of Space: Service Tunnel		
Configuration of Space: Tunnel – See tunnels drawing		

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _6_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: entry point near B8 Link Corridor has fall protection difficulties and difficult entry, difficult cluster of pipes in this area also where someone could become trapped in this area. Hot steam pipes present a potential for burning skin. Long service tunnel. Preparation for rescue at different entry points must be made (good communication and planning) mold growth on various surfaces, asbestos insulation in poor condition, see pictures. Some areas can be excessively warm and humid. Provisions for heat stress must be made.

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE	High <input type="checkbox"/> Medium <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA	<input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls
Protective gloves that provide suitable protection against burns is recommended (heat resistant)
CSA approved head, foot, hearing, gloves and eye protection
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: <u>Rene Morais & Shawn Roy</u> (enter name and then sign)
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Hazard Assessment – Confined Spaces

Assessment #234	Date: 2011-07-1104- 00:04	Location: K-2 Duct
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Description of Space: Service Tunnel/Area Under Boiler Room

Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered ☒ yes ☐ no
 Limited or restricted entry? ☐ yes ☒ no
 Not designed for continuous human occupancy? ☒ yes ☐ no
 Internal configuration hazard? ☒ yes ☐ no
 Other serious safety hazard? ☐ yes ☒ no

Number of entry points? _1_
 Hazardous atmosphere? ☒ yes ☐ no
 Potential for entrapment? ☐ yes ☒ no
 Drowning or engulfment hazard? ☒ yes ☐ no
 Comments: mold growth on various surfaces, asbestos insulation in poor condition ~~see pictures~~

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no
 Oxygen Enrichment ☐ yes ☒ no
 Airborne fungi ☒ yes ☐ no

Hydrogen Sulphide ☒ yes ☐ no
 Carbon Monoxide ☒ yes ☐ no
 Carbon Dioxide ☐ yes ☒ no
 Methane ☒ yes ☐ no

Sulphur Dioxide ☒ yes ☐ no
 Other ☒ yes ☐ no
 Specified: _Asbestos fibers_

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☒ yes ☐ no
 Infectious disease ☒ yes ☐ no
 Fire main line ☒ yes ☐ no
 Insects and vermin ☒ yes ☐ no
 Dust, Vapor, Fume ☒ yes ☐ no
 Combustibility of gases or vapors ☒ yes ☐ no
 Asbestos Fibers ☒ yes ☐ no

Poor visibility ☒ yes ☐ no
 Flooding ☒ yes ☐ no
 Potable water line ☒ yes ☐ no
 Difficult entry/exit ☒ yes ☐ no
 Residual chemicals ☒ yes ☐ no
 Noise ☐ yes ☒ no
 Low ceiling ☒ yes ☐ no

Entrapment ☐ yes ☒ no
 High Pressure Steam ☒ yes ☐ no
 Sewage Line ☒ yes ☐ no
 Mechanical equipment ☐ yes ☒ no
 Working surfaces (slips) ☒ yes ☐ no
 Temperature (0-40°C) ☐ yes ☒ no

Isolation

Isolation may be required if working on steam, fire, water or sewage lines. Isolation is required if working on electrical equipment, such as lighting. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE ~~High~~ ~~Medium~~ Yes ☒ RESTRICTED AREA ☐

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #245	Date: 2011-07-1104- 00:01	Location:K-3 Duct
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Description of Space: Service Tunnel

Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered ☒ yes ☐ no
 Limited or restricted entry? ☒ yes ☐ no
 Not designed for continuous human occupancy? ☒ yes ☐ no
 Internal configuration hazard? ☒ yes ☐ no
 Other serious safety hazard? ☐ yes ☒ no

Number of entry points? _2_
 Hazardous atmosphere? ☒ yes ☐ no
 Potential for entrapment? ☐ yes ☒ no

Drowning or engulfment hazard? ☐ yes ☒ no
 Comments: downward slope toward guard row, in some sections you must climb over pipes, entry from above, retrieval equipment needs to be set up at a strategic location, long tunnel, good communication must be established for rescue purposes. Escape packs should be considered if working deep into the tunnel.

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no
 Oxygen Enrichment ☐ yes ☒ no
 Airborne fungi ☒ yes ☐ no

Hydrogen Sulphide ☒ yes ☐ no
 Carbon Monoxide ☒ yes ☐ no
 Carbon Dioxide ☐ yes ☒ no
 Methane ☒ yes ☐ no

Sulphur Dioxide ☐ yes ☒ no
 Other ☐ yes ☒ no
 Specified: __asbestos fibers__

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☒ yes ☐ no
 Infectious disease ☒ yes ☐ no
 Fire main line ☒ yes ☐ no
 Insects and vermin ☒ yes ☐ no
 Dust, Vapor, Fume ☒ yes ☐ no
 Combustibility of gases or vapors ☒ yes ☐ no
 Asbestos Fibers ☒ yes ☐ no

Poor visibility ☒ yes ☐ no
 Flooding ☒ yes ☐ no
 Potable water line ☒ yes ☐ no
 Difficult entry/exit ☒ yes ☐ no
 Residual chemicals ☐ yes ☒ no
 Noise ☐ yes ☒ no
 Low ceiling ☒ yes ☐ no

Entrapment ☐ yes ☒ no
 High Pressure Steam ☐ yes ☒ no
 Sewage Line ☒ yes ☐ no
 Mechanical equipment ☐ yes ☒ no
 Working surfaces (slips) ☒ yes ☐ no
 Temperature (0-40°C) ☐ yes ☒ no

Isolation

Isolation may be required if working on fire, water or sewage lines. Isolation may be required if working on electrical equipment. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE	High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls
Protective gloves that provide suitable protection against burns is recommended (heat resistant)
CSA approved head, foot, hearing, gloves and eye protection
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: <u>Rene Morais & Shawn Roy</u> <small>(enter name and then sign)</small>

Hazard Assessment – Confined Spaces

Assessment #256	Date: 2011-07-11 04:00	Location: K-4 Crawl Space
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Description of Space: Crawl space
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? <u>2</u>	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: crawl space accessed from lower section of B6 or B4 restricted areas. Difficult rescue due to low ceiling. Sled-type stretcher required for rescue.	

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified:	_____
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Isolation may be required if working on steam, fire, water or sewage lines.

CONFINED SPACE <div> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes </div>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #267	Date: 2011-07-11 04:00 PM	Location: K-8 Duct
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Description of Space: Service Tunnel

Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered ☒ yes ☐ no
 Limited or restricted entry? ☐ yes ☒ no
 Not designed for continuous human occupancy? ☒ yes ☐ no
 Internal configuration hazard? ☒ yes ☐ no
 Other serious safety hazard? ☐ yes ☒ no

Number of entry points? 2
 Hazardous atmosphere? ☒ yes ☐ no
 Potential for entrapment? ☐ yes ☒ no

Drowning or engulfment hazard? ☐ yes ☒ no
 Comments: in some sections you must climb over pipes, difficult rescue, escape bottle may be required for rescue. ~~see pictures~~

Possible atmosphere hazards

Oxygen Deficiency ☒ yes ☐ no
 Oxygen Enrichment ☐ yes ☒ no
 Airborne fungi ☒ yes ☐ no

Hydrogen Sulphide ☒ yes ☐ no
 Carbon Monoxide ☒ yes ☐ no
 Carbon Dioxide ☐ yes ☒ no
 Methane ☒ yes ☐ no

Sulphur Dioxide ☐ yes ☒ no
 Other ☐ yes ☒ no
 Specified: _____

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock ☒ yes ☐ no
 Infectious disease ☒ yes ☐ no
 Fire main line ☒ yes ☐ no
 Insects and vermin ☒ yes ☐ no
 Dust, Vapor, Fume ☒ yes ☐ no
 Combustibility of gases or vapors ☒ yes ☐ no
 Asbestos Fibers ☒ yes ☐ no

Poor visibility ☒ yes ☐ no
 Flooding ☒ yes ☐ no
 Potable water line ☒ yes ☐ no
 Difficult entry/exit ☒ yes ☐ no
 Residual chemicals ☐ yes ☒ no
 Noise ☐ yes ☒ no
 Low ceiling ☒ yes ☐ no

Entrapment ☐ yes ☒ no
 High Pressure Steam ☐ yes ☒ no
 Sewage Line ☒ yes ☐ no
 Mechanical equipment ☐ yes ☒ no
 Working surfaces (slips) ☒ yes ☐ no
 Temperature (0-40°C) ☐ yes ☒ no

Isolation

Is there a potential for isolation to be required? (specify): Isolation may be required if working on fire, water or sewage lines. Isolation may be required if working on electrical equipment. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE ~~High~~ ~~Medium~~ Yes ☒ RESTRICTED AREA ☐

List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #278	Date: 2011-07-1104- 2011	Location: K-35 Duct
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Description of Space: Service Tunnel
Configuration of Space: Tunnel – See tunnels drawing

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _4_
Limited or restricted entry?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: Downward slope, in some sections you must climb over pipes, asbestos insulation, see pictures

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Low ceiling	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Isolation

Is there a potential for isolation to be required? (specify): Isolation may be required if working on fire, water or sewage lines. Isolation may be required if working on electrical equipment. Some electrical equipment's status is unknown (obsolete or live).

CONFINED SPACE High Medium <u>Yes</u> <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

Protective gloves that provide suitable protection against burns is recommended (heat resistant)

CSA approved head, foot, hearing, gloves and eye protection

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Remarks:

Workers should be trained on heat stress prevention.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #289	Date: 2011-07-1104- 00-04	Location: Water Tower
Description of Space: Water tower		
Configuration of Space: Large tank, vertical cylinder		

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _2_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: ____	
		Methane	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation, lockout and tagout required on feed lines (entry and exit).

CONFINED SPACE <u>High</u> <input type="checkbox"/> <u>Medium</u> <input checked="" type="checkbox"/> <u>Yes</u>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test, SCBA or airline respirator may be required
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment # 2930	Date: 2011-07-1104-	Location: Well (1) near water tower
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Description of Space: Water well

Configuration of Space: Rectangular well with hatch on top

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: May be cold in winter conditions, run off from manure or other substances nearby could contribute atmospheric or other health hazards.

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

~~Isolation may be required if working on water lines.~~

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls
CSA approved head, foot, gloves and eye protection
Depending on air test, SCBA or airline respirator may be required
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment # 301	Date: 2011-07-11 2011-07-1104-	Location: Well (2) near water tower
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Description of Space: Water well
Configuration of Space: Well enclosed by small building

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: May be cold in winter conditions, run off from manure or other substances nearby could contribute atmospheric or other health hazards.

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

~~Isolation may be required if working on water lines.~~

CONFINED SPACE	High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes	RESTRICTED AREA	<input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test, SCBA or airline respirator may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #312	Date: 2011-07-1104- 00 01	Location: Well (3) near water tower
Description of Space: Water well		
Configuration of Space: Well enclosed by medium sized building		

Space Evaluation			
Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _1_	
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: May be cold in winter conditions, run off from manure or other substances nearby could contribute atmospheric or other health hazards.	

Possible atmosphere hazards					
Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		
Note: Will the atmosphere in the space be continuously monitored? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no					
Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.					

Other potential hazards present?					
Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation			
Isolation may be required if working on water lines.			
CONFINED SPACE	High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA	<input type="checkbox"/>

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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection

Depending on air test, SCBA or airline respirator may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H₂S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: Rene Morais & Shawn Roy(enter name and then sign)

Hazard Assessment – Confined Spaces

Assessment #323	Date: 2011-07-1104- 00:04	Location: Manholes (sewer)
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Description of Space: Manholes

Configuration of Space: Manhole tunnels

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _varies_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: May be cold in winter conditions, sewer gases <u>can be</u> extremely hazardous.

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: _____	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation may be required if working on ~~water~~ lines.

CONFINED SPACE High <input checked="" type="checkbox"/> Medium <u>Yes</u> <input type="checkbox"/> Low	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, hearing, gloves and eye protection
SCBA or airline respirator (airline preferable for mobility reasons)
Confined Space Harness Group E
Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness
Pre use calibration of monitoring equipment
Atmospheric testing and recording complete
Pre use test of communication equipment or other methods of communication
Set up portable forced air ventilation, if necessary
Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Non entry rescue should be performed (entrant remains attached to lifeline at all times)
Airline respirator
Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: *(enter name and then sign)* Rene Morais & Shawn Roy

Hazard Assessment – Confined Spaces

Assessment # 334	Date: 2011-07-11	Location: Manholes (dry wells, valve pits, etc...)
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Description of Space: Manholes

Configuration of Space: Manhole tunnels

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points? _varies_
Limited or restricted entry?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hazardous atmosphere?
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?
Internal configuration hazard?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Drowning or engulfment hazard?
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments: May be cold in winter conditions

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified: __	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Poor visibility	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Entrapment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Fire main line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potable water line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Mechanical equipment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Boiler must be completely isolated prior working in stack. Isolation may be required if working on any lines.

CONFINED SPACE High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/>	RESTRICTED AREA <input type="checkbox"/>
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List of Equipment Required:

Personal Protective Equipment and Device Required:

Suitable Work Clothes, i.e. disposable coveralls

CSA approved head, foot, gloves and eye protection

Depending on air test, SCBA or airline respirator may be required

Confined Space Harness Group E

Gas monitor (oxygen, LEL, CO, H2S)

Pre-Entry Equipment Set-Up:

Pre use check of Rescue Harness

Pre use calibration of monitoring equipment

Atmospheric testing and recording complete

Pre use test of communication equipment or other methods of communication

Set up portable forced air ventilation, if necessary

Ensure all requirements of Confined Space Entry Permit are satisfied

Rescue Equipment Required:

Self Contained Breathing Apparatus

Non entry rescue should be performed (entrant remains attached to lifeline at all times)

Two-way radio/communication equipment or other methods of communication.

Special Precautions and Procedures:

Ensure all mechanical and electrical lock-out procedures have been completed.

Assessment completed by: *{enter name and then sign}* Rene Morais & Shawn Roy

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Hazard Assessment – Confined Spaces

Assessment #35	Date: 2011-07-11	Location: Windmill
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Description of Space: Windmill

Configuration of Space: Windmill

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points?	1
Limited or restricted entry?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hazardous atmosphere?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	Fall hazards. See fall protection program

Possible atmosphere hazards

Oxygen Deficiency	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hydrogen Sulphide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified:	
		Methane	<input type="checkbox"/> yes <input type="checkbox"/> no		

Note: Will the atmosphere in the space be continuously monitored? ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Flooding	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Insects and vermin	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Mechanical equipment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation required if working on mechanical equipment. Isolation required if working on fans, lighting or other electrical systems. Follow institutional lockout/tagout program.

CONFINED SPACE Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	RESTRICTED AREA <input checked="" type="checkbox"/>
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This space is classified as a Restricted Area. The following procedures apply:

- Entry into the windmill should always be done with a minimum of two people, one who is on the ground.
- The person on the ground should ensure radio communication is possible the outside of the windmill, in the event of an emergency.
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Follow all provisions of fall protection program
- Although, an atmospheric hazard is not expected, given the extreme fall hazards of working in this area, continuous air monitoring is recommended to ensure that air quality is not a contributing hazard.

Assessment completed by: *Rene Morais & Shawn Roy*

Hazard Assessment – Confined Spaces

Assessment #21	Date: 2011-07-11	Location: UV Building
Description of Space: UV Buildig		
Configuration of Space: Small wastewater treatment building		

Space Evaluation

Can be bodily entered	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Number of entry points?	1
Limited or restricted entry?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Hazardous atmosphere?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Not designed for continuous human occupancy?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Potential for entrapment?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Internal configuration hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Drowning or engulfment hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Other serious safety hazard?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Comments:	

Possible atmosphere hazards

Oxygen Deficiency	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Hydrogen Sulphide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Sulphur Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Oxygen Enrichment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Carbon Monoxide	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Other	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Airborne fungi	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Carbon Dioxide	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Specified:	
		Methane	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no		

Note: **Will the atmosphere in the space be continuously monitored?** ☒ yes ☐ no

Atmosphere changes may occur due to the work conducted or conditions present in the space. The atmosphere may be safe when you enter, but can change very quickly.

Other potential hazards present?

Electrical shock	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Poor visibility	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Entrapment	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Infectious disease	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Flooding	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	High Pressure Steam	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Fire main line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Potable water line	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Sewage Line	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Insects and vermin	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Difficult entry/exit	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Mechanical equipment	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Dust, Vapor, Fume	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Residual chemicals	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Working surfaces (slips)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Combustibility of gases or vapors	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Noise	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Temperature (0-40°C)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Asbestos Fibers	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Low ceiling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		

Isolation

Isolation required if working on mechanical equipment. Isolation required if working on plumbing systems. Isolation required if working on fans, lighting or other electrical systems. Follow institutional lockout/tagout program.

CONFINED SPACE	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	RESTRICTED AREA	<input checked="" type="checkbox"/>
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This space is classified as a Restricted Area. The following procedures apply:

- Advise another employee of the location of this restricted area.
- Ensure radio communication is possible with this other employee. Maintain periodic communication during work.
- Advise this same employee of the type of work to be conducted
- Advise this same employee of the length of time expected to be in the space
- Give any other directions to this employee, under the circumstances, to ensure that the notified employee is able to provide assistance if needed
- Advise this employee when the work in the restricted area is complete
- Under special circumstances, restricted areas may be considered confined spaces, e.g. during hot work. When this is the case, a hazard assessment is to be carried out and appropriate permits need to be filled out.
- Continuous air monitoring is recommended.

Assessment completed by: *Rene Morais & Shawn Roy*