

Risk Assessment Form for Confined Spaces 密閉空間危險評估表格

Location of work

工作場地：

Description of work

工作內容：

Main Contractor / Proprietor

總承建商/東主：

Subcontractor (if applicable)

分判商（如適用）：

Name of Competent Person

合資格人士姓名：

Certificate No

持有證件編號：

Validity Period

證件有效期限：

(Year)

年

(Month)

月

(Day)

日

Add a ✓ to appropriate boxes

請在適當的 □ 內加上 ✓

1.	Contents of Risk Assessment 危險評估內容
1.1	<p><input type="checkbox"/> This work falls under the provisions of section 3 of the Factories and Industrial Undertakings (Confined Spaces) Regulation, as it involves work performed within a confined space or in close proximity to a confined space, and is related to work conducted within a confined space. 本工作屬於《工廠及工業經營(密閉空間)規例》第3條所述的在密閉空間內或在緊接密閉空間的附近地方進行，並與在密閉空間內進行的工作有關連工作。</p> <p>Work methods to be adopted in the confined space works¹ 本密閉空間工作中採用的工作方法¹：</p> <p>Plant to be used in the confined space works¹ 本密閉空間工作中採用的工業裝置¹：</p> <p>Materials to be used in the confined space works¹ 本密閉空間工作中採用的物料¹：</p> <p>(If the work does not involve any worker entering the confined space¹, the following measures shall be taken to ensure that no workers enter the confined space 若工作不涉及工人進入密閉空間內工作¹，須採取以下措施以確保工人不會進入密閉空間內：</p> <p>_____)</p>

	Assessment Items 評估事項	Result(s) 評估結果	Safety Precautions Required 所需採取的安全預防措施
1.2	Is the confined space works an <u>underground pipework</u> as described in section 9(b) of the Factories and Industrial Undertakings (Confined Spaces) Regulation? 本密閉空間工作是否屬於《工廠及工業經營(密閉空間)規例》第 9(b) 條所述的 <u>地底喉管工作</u> ？	<input type="checkbox"/> Yes 是	<input type="checkbox"/> Ensure that any person entering or remaining in that particular confined space is properly (i) wearing a suitable approved breathing apparatus; and (ii) wearing a suitable safety harness connected to a lifeline. 須確保任何進入該密閉空間或在其內逗留的人已妥當地 (i) 配戴適當的認可呼吸器具；及 (ii) 配戴適當並與救生繩連接的安全吊帶。 <input type="checkbox"/> Monitor the air in the confined space continuously until everyone has left the confined space. 須對密閉空間內的空氣作連續性的監測，直到所有人離開該密閉空間為止。
		<input type="checkbox"/> No 否 (Reasons provided as follows 須詳述原因如下： _____ _____ _____)	_____ _____ _____
1.3	Is there any <u>hazardous</u> gas, vapour, dust or fume, or <u>deficiency of oxygen</u> present in the confined space? 本密閉空間內是否有具 危害性 的氣體、蒸氣、塵埃或煙氣存在或有 貧氧 情況？	<input type="checkbox"/> Yes 是	<input type="checkbox"/> Ensure that any person entering or remaining in that particular confined space is properly (i) wearing a suitable approved breathing apparatus; and (ii) wearing a suitable safety harness connected to a lifeline. 須確保任何進入該密閉空間或在其內逗留的人已妥當地 (i) 配戴適當的認可呼吸器具；及 (ii) 配戴適當並與救生繩連接的安全吊帶。 <input type="checkbox"/> Monitor the air in the confined space continuously until everyone has left the confined space. 須對密閉空間內的空氣作連續性的監測，直到所有人離開該密閉空間為止。
		<input type="checkbox"/> No 否 (Reasons provided as follows 須詳述原因如下： _____ _____ _____)	_____ _____ _____

	Assessment Items 評估事項	Consequence ² 後果嚴重性 ²	Likelihood ² 事故發生可能性 ²	Risk ² 危險評級 ²	Safety Precautions Required 所需採取的安全預防措施
1.4	<p>Ingress of hazardous gas, vapour, dust or fume to the confined space 密閉空間內具危害性的氣體、蒸氣、塵埃或煙氣的<u>進入</u></p>	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<div> <input type="checkbox"/> High risk 高危險性 (>=6) </div> <div> <input type="checkbox"/> Moderate risk 中危險性 (3-4) </div> <div> <input type="checkbox"/> Low risk 低危險性 (<=2) </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.5	<p>Are there any sludge or other deposits being present that are liable to give off hazardous gas, vapour, dust or fume in the confined space? 密閉空間內是否有可<u>散發具危害性的氣體、蒸氣、塵埃或煙氣的淤泥或其他沉積物</u>存在？</p>			<input type="checkbox"/> High risk 高危險性 (>=6)	<input type="checkbox"/> Ensure that any person entering or remaining in that particular confined space is properly (i) wearing a suitable approved breathing apparatus; and (ii) wearing a suitable safety harness connected to a lifeline. 須確保任何進入該密閉空間或在其內逗留的人已妥當地 (i) 配戴適當的認可呼吸器具；及 (ii) 配戴適當並與救生繩連接的安全吊帶。 <input type="checkbox"/> Monitor the air in the confined space continuously until everyone has left the confined space. 須對密閉空間內的空氣作連續性的監測，直到所有人離開該密閉空間為止。 <hr/> <hr/> <hr/>
	<input type="checkbox"/> Yes, sludge or other deposits are present in the confined space. 是，密閉空間內有 <u>淤泥或其他沉積物</u> 存在。 <i>Unless the sludge and other deposits are completely removed and purged, otherwise if there are sludge or other deposits present, it is generally very likely for the trapped or dissolved gases such as hydrogen sulphide to be released in confined space work, in particular drainage works.</i> 除非已確定在密閉空間內的淤泥及其他沉積物已完全被清除及清洗，否則密閉空間內若有淤泥或其他沉積物存在，一般是很可能在密閉空間工作，特別渠務工程過程中把積藏或已溶解的硫化氫等氣體釋放出來。	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<div> <input type="checkbox"/> Moderate risk 中危險性 (3-4) </div> <div> <input type="checkbox"/> Low risk 低危險性 (<=2) </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
	<input type="checkbox"/> No, sludge or other deposits are not present in the confined space. 否，密閉空間內並不 <u>存在淤泥或其他沉積物</u> 。	(Reasons provided as follows 須詳述原因如下： <hr/> <hr/>)			<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

	Assessment Items 評估事項	Consequence ² 後果嚴重性 ²	Likelihood ² 事故發生可能性 ²	Risk ² 危險評級 ²	Safety Precautions Required 所需採取的安全預防措施
1.6	<u>In-rush</u> into the confined space of free flowing solid or liquid 密閉空間內有自由流動的固體或液體的 <u>湧入</u>	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<input type="checkbox"/> High risk 高危險性 (>=6) <input type="checkbox"/> Moderate risk 中危險性 (3-4) <input type="checkbox"/> Low risk 低危險性 (<=2)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.7	<u>A fire or explosion</u> in the confined space 密閉空間內發生 <u>火警或爆炸</u>	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<input type="checkbox"/> High risk 高危險性 (>=6) <input type="checkbox"/> Moderate risk 中危險性 (3-4) <input type="checkbox"/> Low risk 低危險性 (<=2)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.8	The <u>ambient temperature</u> in the confined space that may lead to loss of consciousness of a certified worker arising from an increase in body temperature 密閉空間內存在可引致核准工人因體溫上升而喪失知覺的 <u>環境溫度</u>	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<input type="checkbox"/> High risk 高危險性 (>=6) <input type="checkbox"/> Moderate risk 中危險性 (3-4) <input type="checkbox"/> Low risk 低危險性 (<=2)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.9	<u>Change in the environment</u> leading to an increased risk of the above hazards during the course of the work in the confined space 在密閉空間內進行工作的過程中，出現 <u>環境改變</u> 增加上述危害的危險性	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<input type="checkbox"/> High risk 高危險性 (>=6) <input type="checkbox"/> Moderate risk 中危險性 (3-4) <input type="checkbox"/> Low risk 低危險性 (<=2)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
1.10	<u>Risk of worker falling from height</u> during the course of the work in the confined space or its proximity 在密閉空間內或其附近進行工作的過程中，發生工人從 <u>高處墮下</u> 的危險性	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<input type="checkbox"/> High risk 高危險性 (>=6) <input type="checkbox"/> Moderate risk 中危險性 (3-4) <input type="checkbox"/> Low risk 低危險性 (<=2)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

	Assessment Items 評估事項	Consequence ² 後果嚴重性 ²	Likelihood ² 事故發生可能性 ²	Risk ² 危險評級 ²	Safety Precautions Required 所需採取的安全預防措施
1.11	Others 其他 (please specify 請詳細列出： _____ _____))	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<div> <input type="checkbox"/> High risk 高危險性 (>=6) </div> <div> <input type="checkbox"/> Moderate risk 中危險性 (3-4) </div> <div> <input type="checkbox"/> Low risk 低危險性 (<=2) </div>	<div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div>
1.12	Others 其他 (please specify 請詳細列出： _____ _____))	<input type="checkbox"/> Very Serious 非常嚴重 (3) <input type="checkbox"/> Serious 嚴重 (2) <input type="checkbox"/> Mild 輕微 (1)	<input type="checkbox"/> Very likely 非常可能 (3) <input type="checkbox"/> Possible 可能 (2) <input type="checkbox"/> Unlikely 不太可能 (1)	<div> <input type="checkbox"/> High risk 高危險性 (>=6) </div> <div> <input type="checkbox"/> Moderate risk 中危險性 (3-4) </div> <div> <input type="checkbox"/> Low risk 低危險性 (<=2) </div>	<div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div>
1.13	Period during which certified workers may remain safely in the confined space: _____ hour(s) 核准工人可在本密閉空間內安全地逗留的時限 _____ 小時				

¹ The Competent Person should obtain information of work methods, plant and materials to be used for the particular confined space works from the Main Contractor / Subcontractor / Proprietor in order to complete the risk assessment. The Main Contractor / Subcontractor / Proprietor shall ensure the risk assessment report is displayed in a conspicuous place at the entrance of the confined space.

合資格人士須向總承建商 / 分判商 / 東主索取在密閉空間工作中會採用的工作方法、工業裝置及物料的資料，以協助完成危險評估。總承建商 / 分判商 / 東主須確保危險評估報告展示在該密閉空間的入口的顯眼地方。

² Regarding the definitions of 'severity of consequences', 'likelihood of occurrence' and 'risk rating' please refer to the Risk Assessment Table in the final section of this assessment form.

有關「後果嚴重性」、「事故發生可能性」及「危險評級」等定義，可參考本評估表最後部分的危險評級表。

2.	<p>Safety precautions must be taken when entering and working into the confined space 進入密閉空間內工作必須採取以下所有的安全預防措施</p> <p>— Apart from the aforementioned safety precautions required with respect to the risk assessment, the proprietor or contractor must ensure that all the following safety precautions are taken before allowing certified workers to work in confined spaces: 除上述因應危險評估而須要採取的安全預防措施外，東主或承建商必須確保採取以下所有的安全預防措施才可以容許核准工人進入密閉空間內工作：</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Every piece of mechanical equipment in the confined space, which is liable to cause danger, has been disconnected from its power source, with warning notice displayed and its power source locked out; 須確保在密閉空間內可造成危險的每項機械設備已被截斷電源，而其電源電掣亦已掛上警告告示及被鎖好； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Every pipe or supply line whose contents are liable to create a hazard has been properly blanked off; 須確保在密閉空間內有可造成具危害性的事物的內含物的每一喉管或供應管已妥為封閉； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> The confined space has been tested to ensure the absence of any hazardous gas and no deficiency of oxygen; 須確保已對該密閉空間進行空氣測試以確保沒有任何具危害性的氣體存在以及並無空氣貧氧情況； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> The confined space has been adequately purged and sufficiently cooled and ventilated, having regard to the circumstances of the particular confined space, to ensure that it is a safe workplace; 須確保在經顧及該密閉空間的情況後，該密閉空間已得到足夠的清洗以及充分的散熱和通風，是一個安全的工作場所； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> An adequate supply of respirable air and an effective forced ventilation have been provided inside the confined space; 須確保已在該密閉空間內提供足夠的可供呼吸的空氣及有效的強制通風； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Effective steps have been taken to prevent - (i) an ingress to the confined space of hazardous gas, vapour, dust or fume; and (ii) an in-rush into the confined space of free flowing solid or liquid; 須確保已採取有效的步驟以防止 — (i) 具危害性的氣體、蒸氣、塵埃或煙氣進入該密閉空間；及 (ii) 自由流動的固體或液體湧入該密閉空間； </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <input type="checkbox"/> Before entering and working in the confined space, the following air testing of the confined space has been conducted with appropriate air monitoring equipment of explosion-proof design: 須在進入密閉空間內工作前，使用合適的空氣監測設備(防爆式設計)，對密閉空間內的空氣進行以下測試： <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Oxygen 氧氣 <input type="checkbox"/> LEL 爆炸下限 <input type="checkbox"/> Hydrogen sulphide 硫化氫 </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Carbon monoxide 一氧化碳 <input type="checkbox"/> Others 其他：_____ </div> <input type="checkbox"/> Continuous air monitoring has to be conducted until everyone has left the confined space 並進行連續性的空氣監測，直到所有人離開該密閉空間為止； </div> <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Formulated appropriate emergency procedures to deal with any serious and imminent danger to workers inside the confined space, including the provision of a sufficient supply of the following items in a satisfactory condition (and keeping them readily available) 須已制訂適當的緊急程序，以處理密閉空間內可危及工人的任何嚴重和逼切的危險，及必須提供足夠而狀況令人滿意的以下器具（並須保持該等器具隨時可供取用）： <div style="margin-top: 5px;"> (a) approved breathing apparatus; 認可呼吸器具； </div> <div style="margin-top: 5px;"> (b) suitable apparatus for reviving an unconscious worker; 使失去知覺的工人復甦的適當器具； </div> <div style="margin-top: 5px;"> (c) vessels containing oxygen or air; 貯存氧氣或空氣的容器； </div> <div style="margin-top: 5px;"> (d) safety harnesses and ropes; and 安全吊帶及繩索；及 </div> <div style="margin-top: 5px;"> (e) an audio and visual alarm by which the workers inside the confined space can alert those outside; 使密閉空間內的工人能向身在密閉空間外的人示警的聽覺與視覺警報器； </div> </div>
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	<p><input type="checkbox"/> The emergency rescue team is composed of a sufficient number of trained personnel who are ready to carry out emergency procedures in case of accident. All members of the emergency rescue team have been properly and adequately trained in the related emergency rescue procedures, including the details of the emergency rescue plan and full knowledge on how to properly use all the rescue equipment;</p> <p>須確保有充足數目並已受訓練的人員組成之緊急救援隊，應隨時準備就緒在意外發生時負責實施緊急程序。所有緊急救援隊員應已接受正確而合適之有關緊急救援程序的訓練，其訓練包括緊急救援計劃的詳細資料及如何正確操作該些救援裝備的所有知識；</p>
	<p><input type="checkbox"/> Instructions, training and advice are provided to all workers within a confined space or assisting with such work from immediately outside the confined space to ensure the safety and health of all workers, including posting up or displaying a clearly visible warning sign in a conspicuous place at the entrance to the confined space, indicating the specified hazards and safety precautions taken in the confined space;</p> <p>須向所有在密閉空間內工作或在緊接密閉空間的外面協助進行該工作的工人，提供為確保在密閉空間內工作的所有工人的安全及健康而需要的指導、訓練及意見，包括在密閉空間入口當眼處張貼或展示清晰可見的警告告示，指出在密閉空間內存在的指明危險及所須採取的安全預防措施；</p>
	<p><input type="checkbox"/> All necessary equipment is provided to ensure the safety and health of workers in the confined space, including the provision of suitable air monitoring equipment of explosion-proof design for continuous air monitoring if necessary;</p> <p>須提供一切所需設備以確保密閉空間內的工人的安全及健康，包括在有需要時提供合適的空氣監測設備(防爆式設計)作連續性的空氣監測；</p>
	<p><input type="checkbox"/> Only certified workers are allowed to enter or work in the confined space;</p> <p>須確保只有核准工人才可進入密閉空間或在其內工作；</p>
	<p><input type="checkbox"/> At least one “Standby Person” is stationed outside the confined space to maintain communication with the workers inside the confined space;</p> <p>須確保委派最少一名「候命人員」駐於該密閉空間外，以便可與密閉空間內的工人保持聯絡；</p>
	<p><input type="checkbox"/> The risk assessment report and the Permit-to-work Certificate shall be displayed in a conspicuous place at the entrance of the confined space; and</p> <p>須在該密閉空間的入口的顯眼地方展示危險評估報告及許可工作證明書；及</p>
	<p><input type="checkbox"/> The safety precautions listed above are effective continuously while the workers remain in the confined space.</p> <p>當有工人仍逗留在密閉空間內，須確保上述的安全預防措施持續有效。</p>
	<p><input type="checkbox"/> Other safety precautions 其他安全預防措施：</p> <hr/>

I confirmed that I have at least one year of relevant experience, after obtaining registration as Safety Officer or the certificate as Competent Person, in assessing risk to the safety and health of workers working in confined spaces, and have been appointed by the above-mentioned Main Contractor / Subcontractor / Proprietor to be the competent person to carry out an assessment in the aforesaid confined space works in accordance with section 5(1) of the Factories and Industrial Undertakings (Confined Spaces) Regulation.

本人確認在取得安全主任註冊或合資格人士證明書後，就對工人於密閉空間工作時的安全及健康作出危險評估方面有至少一年的相關經驗，並被上述 總承建商 / 分判商 / 東主根據《工廠及工業經營（密閉空間）規例》第 5(1) 條委任為合資格人士，對上述密閉空間工作進行危險評估。

I confirmed that, the true to the best of my knowledge and belief, the risk of the working condition in the confined space was assessed according to the requirements of section 5(6) of the Factories and Industrial Undertakings (Confined Spaces) Regulation, and recommendations of control measures were made under the section with respect to the safety and health of workers working in the confined space.

此外，本人確認上述評估報告內容是根據《工廠及工業經營（密閉空間）規例》第 5(6) 條的規定對上述密閉空間的工作環境進行評估，並根據該條規定就工人在該密閉空間內工作時的安全及健康方面的措施作出建議，是本人所知事實的全部。

Signature of the Competent Person conducted the above risk assessment

進行上述評估的合資格人士簽署：

Name

姓名：

Date and time

日期及時間：

Receipt of the risk assessment report
簽收危險評估報告

Recipient signature

簽收危險評估報告人士簽署：

Name

姓名：

Post

職位：

Date and time

日期及時間：

Risk Assessment Table
危險評級表

<div>Likelihood 事故發生可能性</div> <div>Consequence 後果嚴重性</div>	Unlikely 不太可能 (1) (Rather remote, though conceivable 雖可想像到，但可能性極微)	Possible 可能 (2) (Event to be expected 預計有機會發生的事故)	Very likely 非常可能 (3) (Occurs repeatedly 重複發生的事故)
	Very serious 非常嚴重 (3) Accident causing immediate danger to life or serious bodily injury (Example: gas poisoning, hypoxia, drowning) 意外引致即時生命危險或嚴重身體受傷害 (例如：氣體中毒、缺氧、遇溺)	Moderate Risk 中危險性 (4)	High Risk 高危險性 (6)
Serious 嚴重 (2) Accident causing moderate bodily injury (Example: fracture, skin ulcer, etc.) 意外可導致身體受中等程度傷害 (例如：骨折、皮膚潰瘍等)	Low Risk 低危險性 (1)	Moderate Risk 中危險性 (4)	High Risk 高危險性 (6)
Mild 輕微 (1) Accident resulting in mild bodily injury (Example: eye irritation from dust, cough) 意外引致身體輕微傷害 (例如：塵埃引致眼睛刺痛、咳嗽等)	Low Risk 低危險性 (1)	Low Risk 低危險性 (1)	Moderate Risk 中危險性 (4)

High Risk	高危險性
Moderate Risk	中危險性
Low Risk	低危險性