

DSEAR Risk Assessment Template

LPG storage facility / 1 Feb 2023	/ Dany S T	Complete
Score 0%	Flagged items	0 Actions 2
Site/Area/Zone		LPG storage facility
Conducted on		01.02.2023 13:47 PST
Prepared by		Dany S T
Location		Central Ave, Levenshulme, Manchester M19 2FF, UK (53.4477502, -2.1954767)

Actions

DSEAR Risk Assessment / Risk Assessment / Bulk storage of flammable liquids / Action Number : / Action Number : 1

Responsible person/s

Jon S

To Do | Priority High | Due 10.02.2023 13:52 PST | Created by SafetyCulture Staff

Electrical check

Hello Minni! We need Jon S to do an electrical check of our new storage room. I'm afraid that the new wiring may be a risk to the stored lpg containers. Thank you.

To Do | Priority Medium | Due 17.02.2023 13:51 PST | Created by SafetyCulture Staff

Electrical inspection needed

Electrical inspection needed for the newly renovated storage room. Please contact our trusted electrician, Jon S.

DSEAR Risk Assessment

Information

Substance Name:

Liquid petroleum gas (LPG)

Photo (optional)



Category (select all that apply)	Explosive Atmosphere	
	Explosive	
	Extremely Flammable	
Flash point	-104 Celsius	
Auto ignition temperature	410-580 Celsius	
Lower explosive limit	2.2%	
Usage		
Where is the substance used/generated?		
Newly opened bakery		
Amount used/generated (specify units of measurement)?	15 kg	
Amount stored (if applicable) - specify units	150 kg	
How is it stored?	New storage room	
Substance can be:	Neither eliminated nor substituted	
Measures currently in place		

Measures currently in place

Storage room is temperature-controlled and we have newly installed gas detectors

Photo of measures in place (optional)

2 actions



Photo 2

Photo 3

List potential ignition source/s (Examples could be an electrical spark caused by connection or disconnection of leads to a battery, naked flame e.g. pilot lights, smoking etc)

Possible electrical spark from exposed wire I found

Employees at risk

Bakers and employees on site

Relevant operator and/or supervisor training

All our employees are certified and trained to work at our facility.

Risk Assessment

In order to assess the risk, select the appropriate items below related to this assessment

Bulk storage of flammable liquids	
Bulk storage of flammable liquids?	Yes

2 actions

Existing control measures:

Temperature-controlled storage room and digital sensors

Severity	Major fire or plant wrecking explosion with significant injury potential
Likelihood	Unlikely - Good process control
Risk rating	Low
Actions	
Action Number :	2 actions
Action Number : 1	2 actions

Details of action

The storage room's temperature is maintained and we have new sensors installed but we need to recheck the electrical wiring. The site is newly renovated but I am not satisfied with the room.

Responsible person/s

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Flammable liquid storage in containers

Flammable liquid storage in containers?	Νο
Hand Painting with flammable liquids	
Hand Painting with flammable liquids?	Νο
Spraying with the flammable liquids	
Spraying with the flammable liquids?	Νο
Handling of flammable solids	
Handling of flammable solids?	No
Dust collection system	
Dust collection system?	Νο
Sources of ignition and hot work	
Sources of ignition and hot work?	Yes
Existing control measures?	
Smoke detectors	
Severity	Small localised fire, easily extinguished or contained in plant explosion causing no damage
Likelihood	Unlikely - Good process control
Risk rating	Low

Actions

Gas freeing and inerting

Gas freeing and inerting?	No
Storage and use of compressed flammable gases	
Storage and use of compressed flammable gases?	Yes
Existing control measures?	
Temperature-controlled kitchen with sensor and fire detectors	
Severity	Explosion of fire causing plant damage and requiring RIDDOR reporting
Likelihood	Unlikely - Good process control
Risk rating	Low

Actions

All cylinders are dangerous. The following should never occur:

- The use of gas cylinders as rollers to transport heavy sections.
- Never use direct flame for any heating to raise the pressure of the cylinder.
- Never subject any cylinder to a temperature over 45°C.
- Never recompress one cylinder from another.
- Never attempt to transfer gases from one cylinder to another.
- Never permit oil, grease or paint or similar substance to come into contact with oxygen cylinder valves.
- Never attempt to repair or modify cylinder valves or devices.
- Never allow electric arc welding tools to come near cylinders.
- Do not allow welding sparks and slag to make contact with cylinders.

- Never use anything but the recommended cylinder valve keys and never attempt to increase the leverage of keys.

- If you suspect that a cylinder valve is damaged, do not attempt to obtain gas from it.

USE OF LPG

The use of the LPG gas, once delivered for use in its gaseous as opposed to liquid form will need to be risk assessed but on the assumption that the delivery mains are to LPG ITA Standards the topic is best risk assessed according to the item of plant that the gaseous LPG is serving. This could be anything from profile cutting machines through to hot mill furnaces or simply space heating.

As with most fixed services it is probably the maintenance element where there will be greatest risk.

Dispensing petrol

Dispensing petrol?	Νο
Battery Charging	
Battery Charging?	Νο
Other Actions	
Permits to work acquired?	Yes
Is Zoning required	Yes

Completion

Recommendations

Risk discovered from possible source of electrical spark at the renovated storage room. I tasked Minni to contact electrician Jon S to check and ensure there is no risk.

Signature



Dany S T 01.02.2023 13:54 PST

Appendix



Photo 1



Photo 3



Photo 2