



# SAFETY FACT SHEETS

## Hazardous Areas Safety Non Negotiable

G-HS-ST-00742 Hazardous Areas



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## Safety Non-Negotiables (SNN)

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Zinfra Group is committed to providing a safe workplace in line with our number one company value – Health, Safety and the Environment. To bring this value to life, our strategy is to directly manage critical hazards through Safety Non-Negotiables (SNN's) and systematically manage other safety risks.

All employees and vendors (whether suppliers, subcontractors or consultants) need to consistently apply the relevant controls stipulated on these SNN's across all Zinfra Group controlled sites. Any deviation from these SNN's will require a documented risk assessment with approval of the direct manager and HSEQ manager.



## Definition – Hazardous Areas

An area where an explosive gas atmosphere is (or may be) present – in quantities that require special precautions for the construction, installation and use of equipment.





## Hazardous Areas - examples

Work that may involve working in or near a hazardous area may include:

- Working in or around a gas transfer facility
- Working near a flammable storage facility





# SNN Requirements

## Item 1: Must have and follow the Safe Work Method Statement

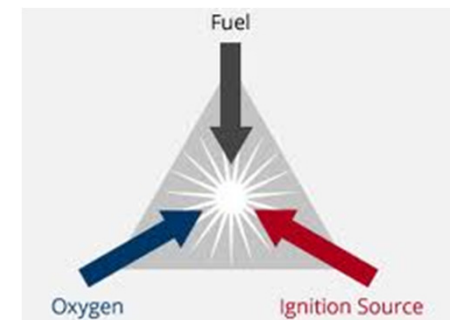
### ***Do you understand the hazards and risks with the work?***

The most significant risk of working in or near a hazardous area is a Fatality.

This may occur by:

- Explosion
- Fire

Before a fire or explosion you need a fuel (i.e. combustible gas), oxygen (air) and an ignition source, such as a spark or flame. The ratio of fuel and oxygen that is required varies with each combustible gas or vapour.



### ***What Safe Work Method Statements (SWMS) are relevant?***

### ***Are all the controls in the SWMS in place?***

### ***Is there anything unsafe that should be raised with your supervisor?***



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## SNN Requirements

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### **Item 2: Follow all asset owner permits and requirements**

Each asset owner may have varied requirements regarding access and permit conditions. These conditions must be identified and all permit conditions followed.

Introducing any source of ignition into a hazardous area can only be conducted under a Hot Work Permit.

The Hot Work Permit must be approved by an authorised person.

Typically Zinfra Group will follow client or asset owner permit systems, however where the client or asset owner does not provide a permit system, Zinfra Group must administer its own internal Permit system.



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## SNN Requirements

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### **Item 3: Identify exclusion areas and set up barriers and warning signs**

Explosive gas atmosphere exclusion zones:

- Zone 0 - Means an area in which an explosive gas atmosphere is present continuously or is present for long periods.
- Zone 1 - Means an area in which an explosive gas atmosphere is likely to occur in normal operation occasionally
- Zone 2 – Means an area in which an explosive gas atmosphere is not likely to occur in normal operation and if it does occur it will exist for a short period only.

Once the Exclusion areas are identified, suitable protective barriers and warning signage can be installed to prevent introducing ignition sources.



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## SNN Requirements

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### **Item 4: Only enter the hazardous area when qualified, licensed and authorised, or accompanied by an authorised person**

All workers must be suitably trained and authorised to conduct work in the hazardous area.

Persons entering the hazardous area who do not have this training and authorisation must be accompanied by an authorised person at all times.

The training requirements will vary depending on the state legislative and/or client requirements and must be identified and adhered to by the business unit.





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## SNN Requirements

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### **Item 5: Wear approved hazardous area Personal Protective Equipment (PPE)**

All personnel must wear approved hazardous area clothing.

All Flame Resistant Clothing must be the outer-most garments except when other personal protective clothing is required (e.g. Chemical resistant suits, welder's leather, personal flotation devices, increased visibility vests).

Do not wear synthetic blends such as nylon, polyester, rayon, polyethylene, etc. under the protective clothing.

Only natural fibre such as cottons or wools are recommended due to the potential for build-up and discharge of static electricity as a potential ignition source



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# SNN Requirements

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## **Item 6: Use tested and certified safety equipment**

All equipment used within a hazardous area must be consistent with the zone assigned to the area.

i.e., zone 1 rated equipment used within a zone 1 hazardous area.



## SNN Requirements

**Item 7: Remove all ignition sources in the hazardous area, unless authorised under a permit**

No ignition sources must be present in the hazardous area, unless under a permit condition e.g. hot work or access permit.

