

# Safe Work Permits

# Safe Work Permits

## Why are we here?

The company requires evaluation of very hazardous, nonroutine jobs for which there are no Safe Job Procedures or approved Job Safety Plans.

Certain jobs always require that a Safe Work Permit be issued by a qualified individual.

# Safe Work Permits

## Goals and Objectives:

At the end of this session you will:

- be familiar with jobs requiring safe work permits.
- be generally familiar with the Safe Work Permit system.
- pass a quiz with a score of 100%.

# Safe Work Permits

## Cutting / Welding Permit

Location:

Date:

### Confined Space Entry Permit

Location:  
Reason for  
Permit iss  
Supervisor  
Attendant  
Permit iss  
% oxygen

#### Requirements

Emergency  
Continuou  
Barrier for  
Warning S

### Safe Work Permit

Type: (hot work, confined space, line break, etc.....)

Valid      /  /            to      /  /          
From: M D Y    time    to    M D Y    time

Work Description:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Atm    Combustible vapors or gases (<10%)    Oxygen Concentration (>19.5% & <21%)    Toxic Material Concentration  
Tests

**Precautions Always Required:**

Permit #

location:

Issued to:

\_\_\_\_\_  
Supervisor's Signature    Print name

Work Order No.

There are currently three documents which are called  
“safe work permits.”

# Safe Work Permits

## Cutting / Welding Permit

Location: Job No.

Date: Job No.

Location & Building: Floor

Nature of Job:

Welder's Name:

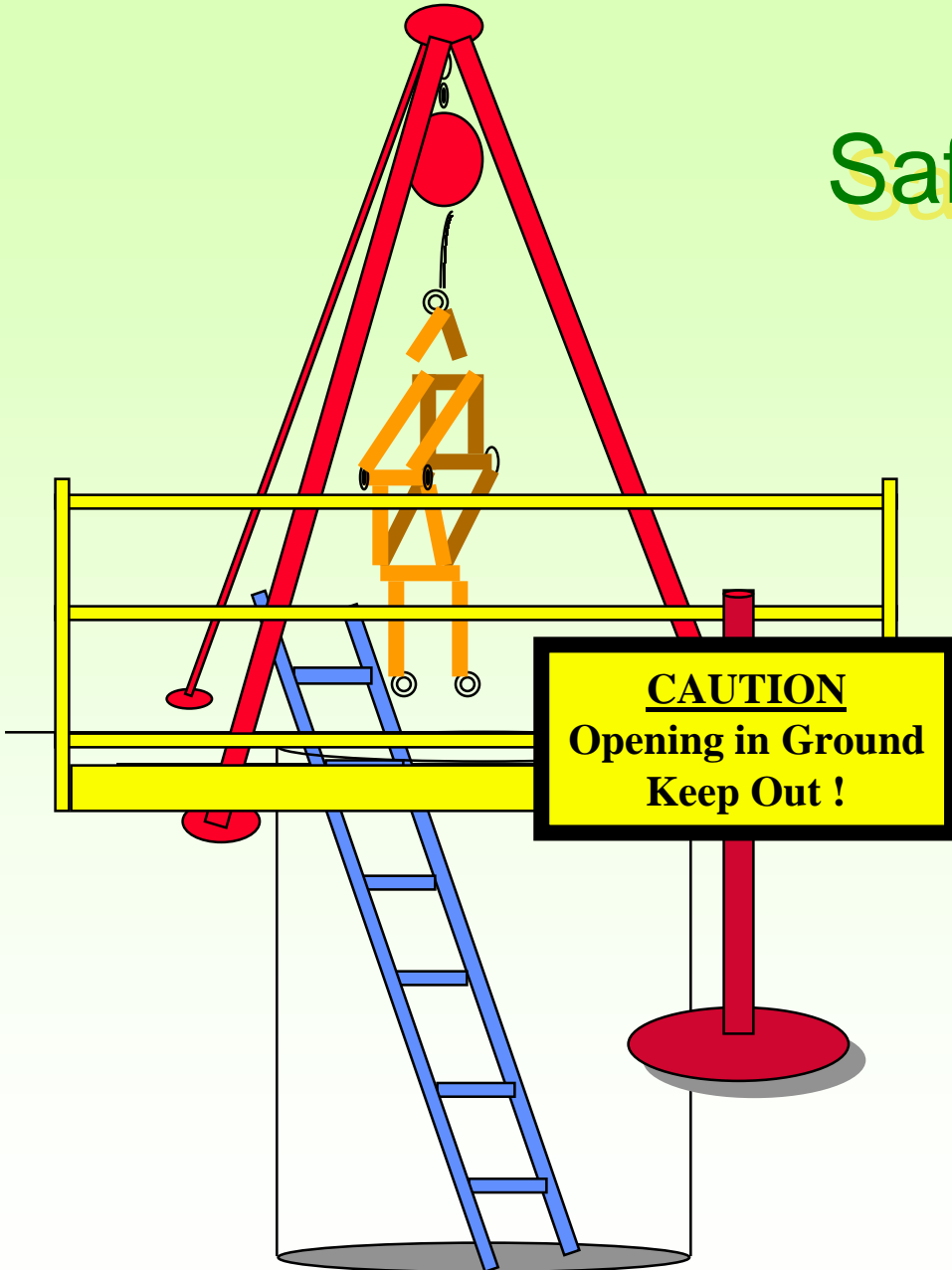
The above location has been examined. The precautions checked on the reverse of this card have been taken to prevent fire. Permission is granted for this work.

Permit Expires Date: Time: AM PM

The Hot Work Permit is a form of Safe Work Permit issued by the Fire Marshal or other person responsible for fire safety.

This permit is required for all situations which may result in fires or explosions.

# Safe Work Permits



## Confined Space Entry Permit

**Location and description of confined space:**

**Reason for entry:**

**Permit issued to:**

**Supervisor's Name:**

**Attendant's name:**

**Permit issuer's name:**

**% oxygen:**

**% lower explosive limit:**

**ppm CO:**

**H<sub>2</sub>S:**

### Requirements

Emergency Rescuer	yes	no
Continuous Gas Monitor	yes	no
Barrier for ground openings	yes	no
Warning Signs	yes	no
Safety Harness with life line	yes	no
Tripod / Hoist / Pulley	yes	no

The "Confined Space Entry Permit" is another form of safe work permit regulating entry into pits, tanks, and vessels.

# Safe Work Permits

## Cutting / Welding Permit

### Confined Space Entry Permit

Location:

Location and description of confined space:

Reason for entry:

Permit issued to:

Supervisor's Name:

Attendant's name:

Permit issuer's name:

Date:

% oxygen:	% lower explosive limit:	ppm CO:	H <sub>2</sub> S:
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#### Requirements

Emergency Rescuer	yes	no
Continuous Gas Monitor	yes	no
Barrier for ground openings	yes	no
Warning Signs	yes	no

Confined Space Entry Permits and Hot Work Permits will be discussed in detail in other training sessions.

# Safe Work Permits

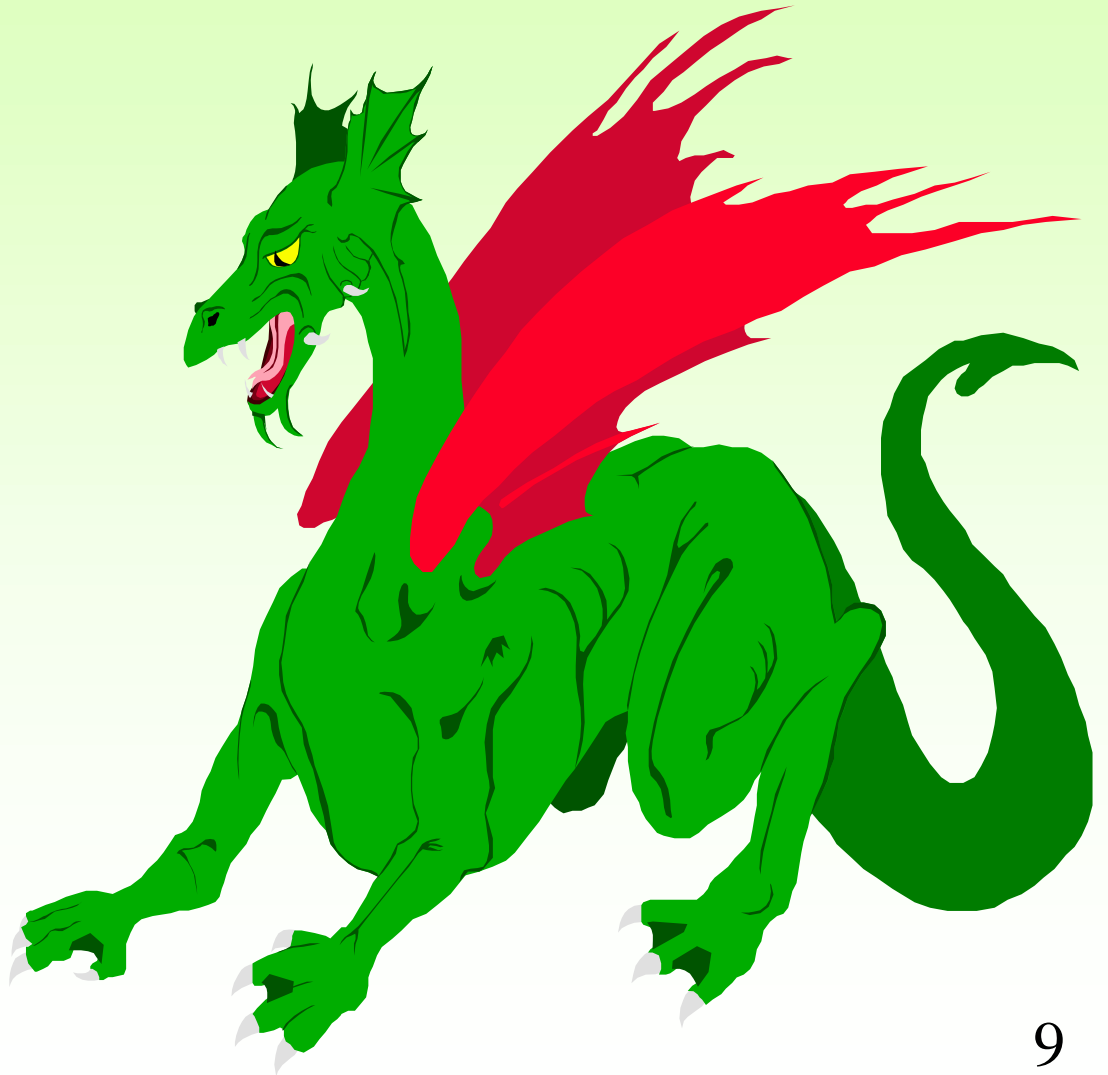
Safe Work Permit	
Type: (hot work, confined space, line break, etc....)	Permit #
Valid From: <u>  </u> / <u>  </u> / <u>  </u> <u>  </u> time to <u>  </u> / <u>  </u> / <u>  </u> <u>  </u> time	location:
Work Description: _____ _____ _____	Issued to:
Atm Combustible vapors or gases (<10%)    Oxygen Concentration (>19.5% & <21%)    Toxic Material Concentration Tests	_____ Supervisor's Signature                  Print name
<b>Precautions Always Required:</b>	Work Order No.

The objective of the Safe Work Permit system is to identify hazards associated with a nonroutine job, and to develop precautions required to control each hazard identified.



# Safe Work Permits

Let's begin with a look at the hazards associated with specific jobs, and examine how Safe Work Permits can help to prevent them from causing damage or injury.



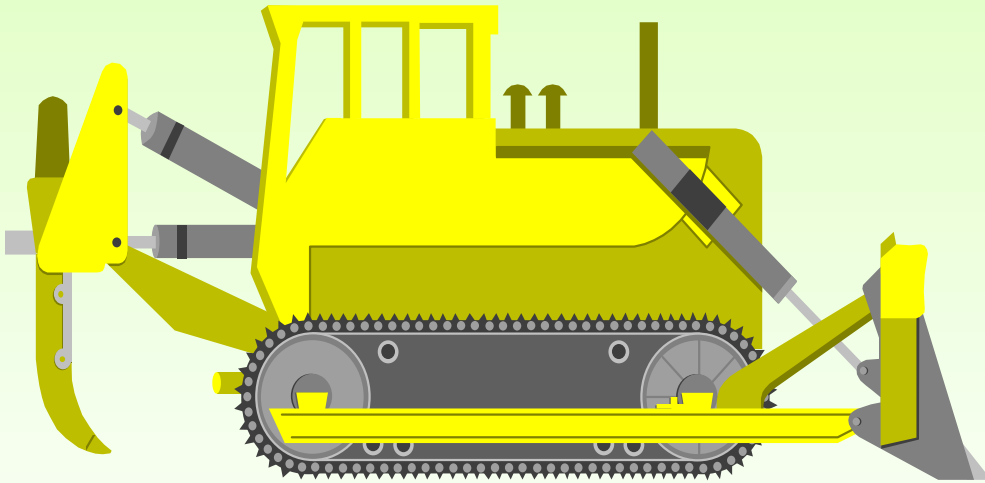
# Safe Work Permits

Examples of jobs requiring permits are:

1. Hot Work - the use of open flame, oxyacetylene burning, tar kettles, etc....., and the use of portable spark or heat producing equipment in flammable storage or handling areas.
2. Confined Space Entry
3. Excavations
4. Blasting
5. Whenever required by existing company or contractor procedures or required in the contractor's Project Safety Plan.
6. Use of internal combustion engines, or vehicles with internal combustion engines inside company buildings.
7. Use of company owned equipment, such as personnel lifts, fork trucks, vehicles, etc., by employees of a contractor

# Safe Work Permits

Excavations can result in:



head injuries from materials falling from overhead surfaces,

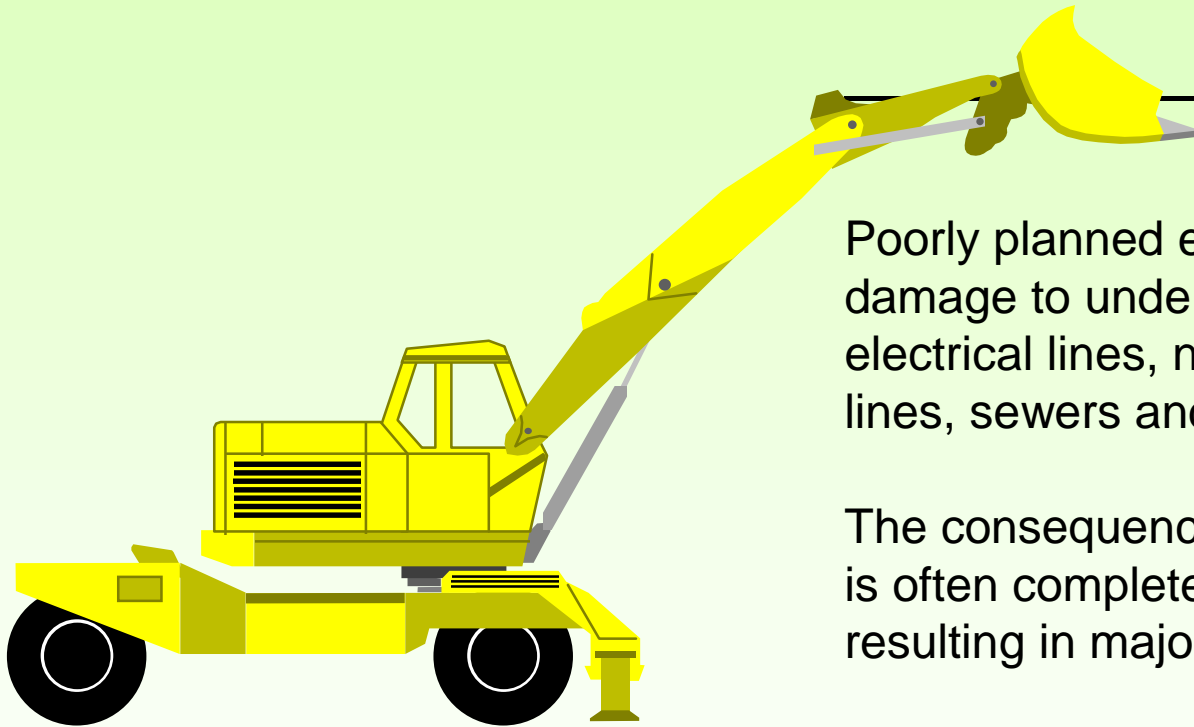
rupture of high pressure hydraulic lines used on backhoes, shovels, and drills.

excessive noise from concrete breaking and cutting equipment,

and collapse of excavation walls and piles due to poorly secured soil, sudden weather changes, or other factors.

Permits are written to ensure that necessary equipment is present and in good working order.

# Safe Work Permits



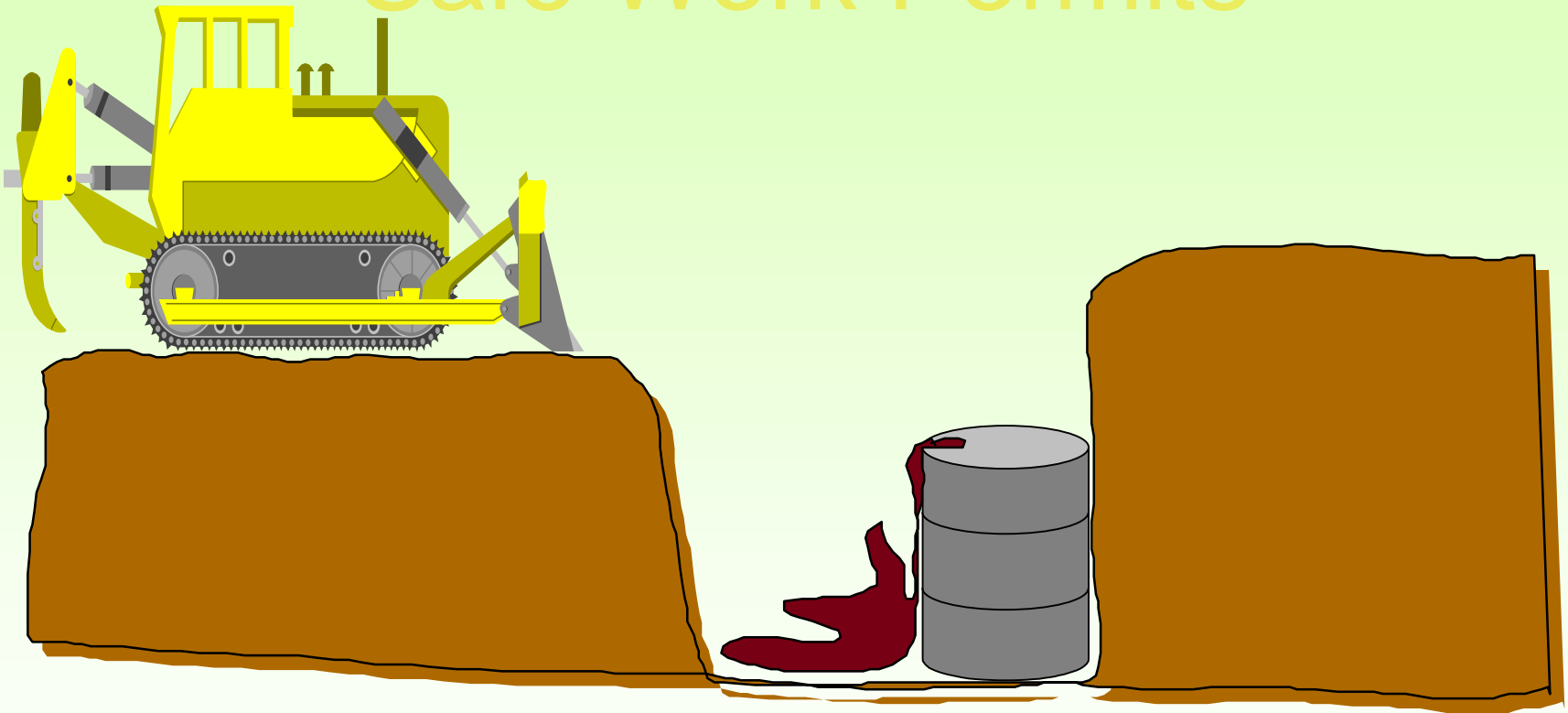
## Excavations :

Poorly planned excavations can result in damage to underground services, such as electrical lines, natural gas lines, water lines, sewers and drains.

The consequence of damaged service lines is often complete shutdown of operations resulting in major business losses.

Permits are written to prevent damage to underground equipment and services.

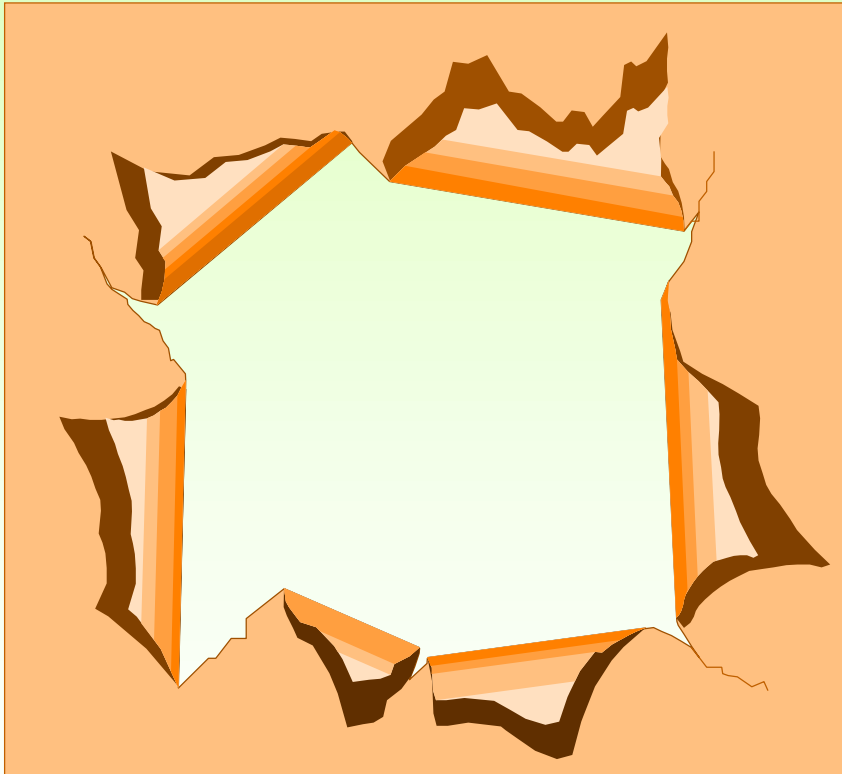
# Safe Work Permits



Excavations may expose hazardous materials, which have leaked and are contaminating the soil.

Permits ensure that procedures to protect workers from exposure to toxic substances have been identified.

# Safe Work Permits



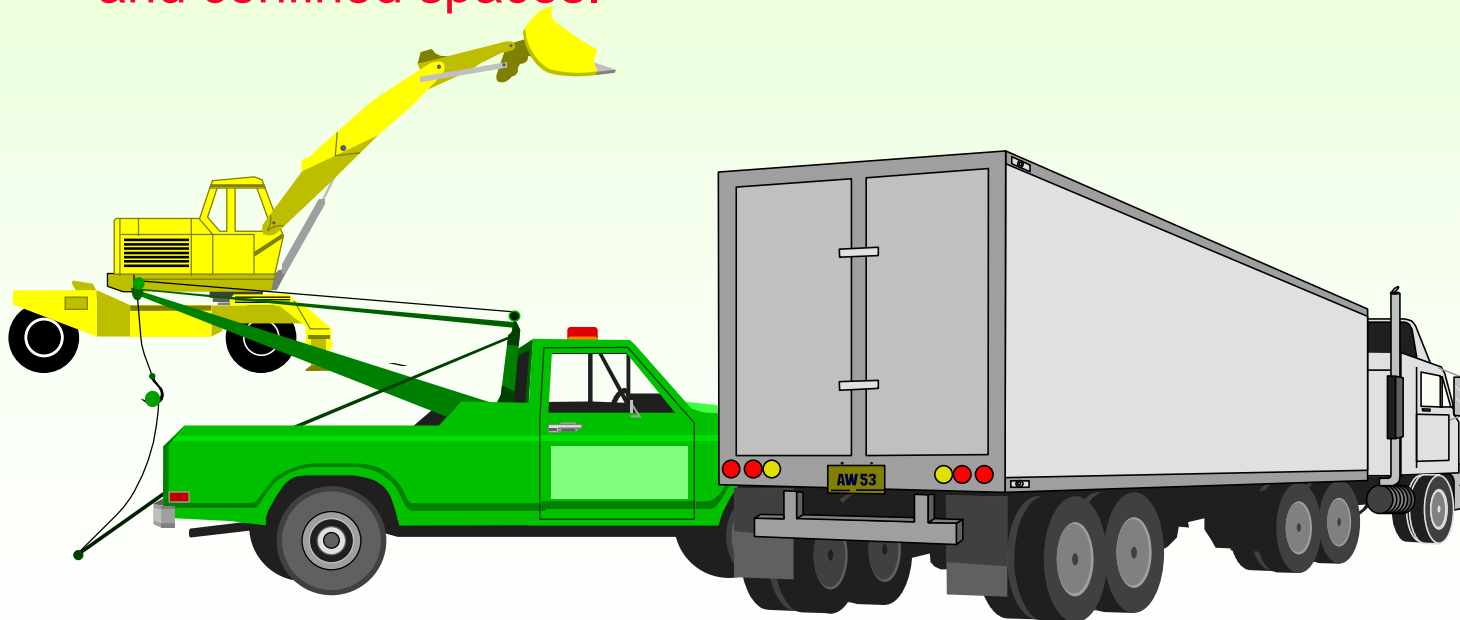
Blasting can cause damage to adjacent operations and personnel.

Permits are issued to ensure procedures are followed that prevent injury to neighboring facilities, equipment and employees.

# Safe Work Permits

Internal combustion engines produce poisonous gases such as carbon monoxide, and oxides of nitrogen.

Permits ensure that procedures are followed that will prevent equipment emissions from contaminating air inside buildings and confined spaces.



# Safe Work Permits



Unauthorized use of company equipment can result in lost production and injury to untrained operators.

Permits prevent company equipment from being taken by contractors without the permission of area management, and require verification of equipment operator training.



# Safe Work Permits

Work which ordinarily does not require safe work permits may be included at the discretion of the Safety Representative, the Contractor, or the Contract Administrator.

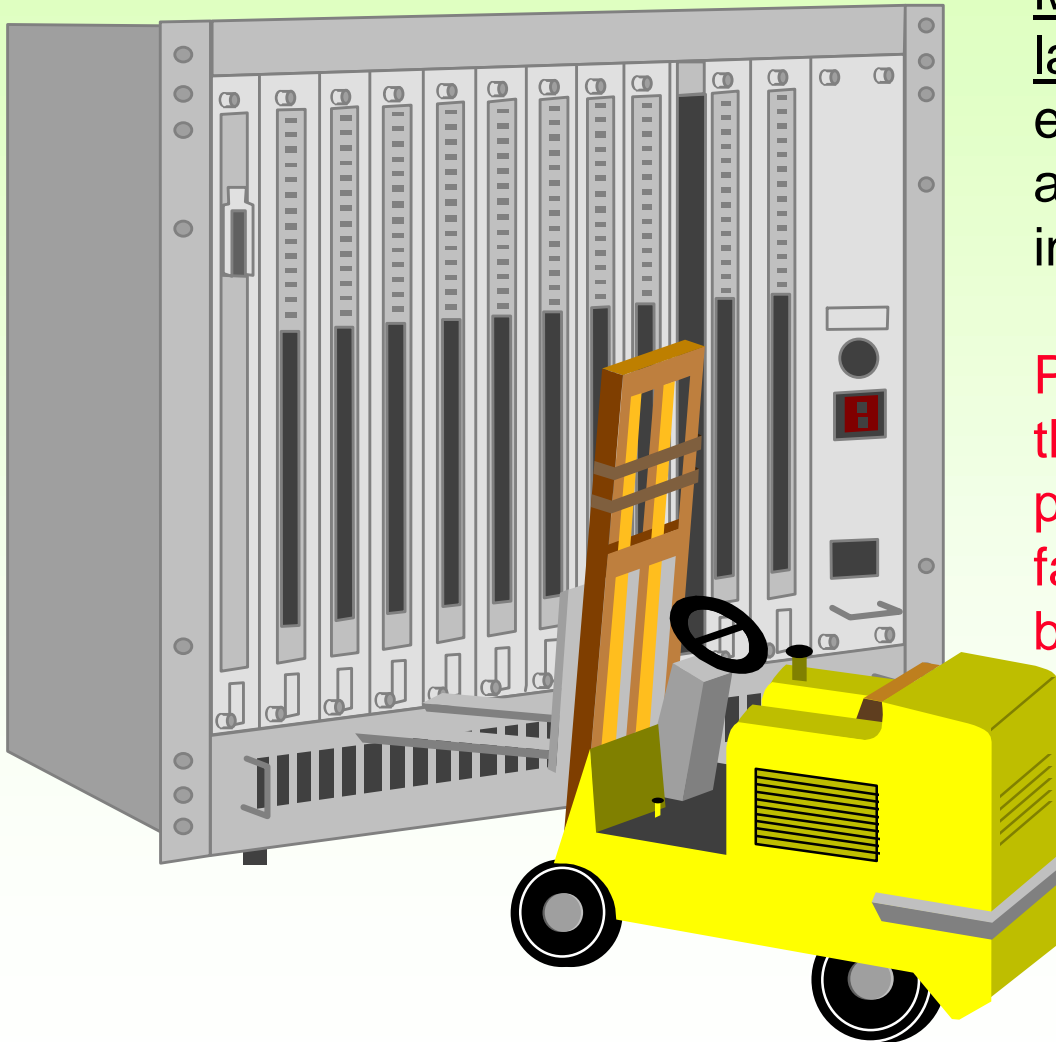


# Safe Work Permits

Following are examples of situations which may require discretionary safe work permits.

There could be many others:

# Safe Work Permits



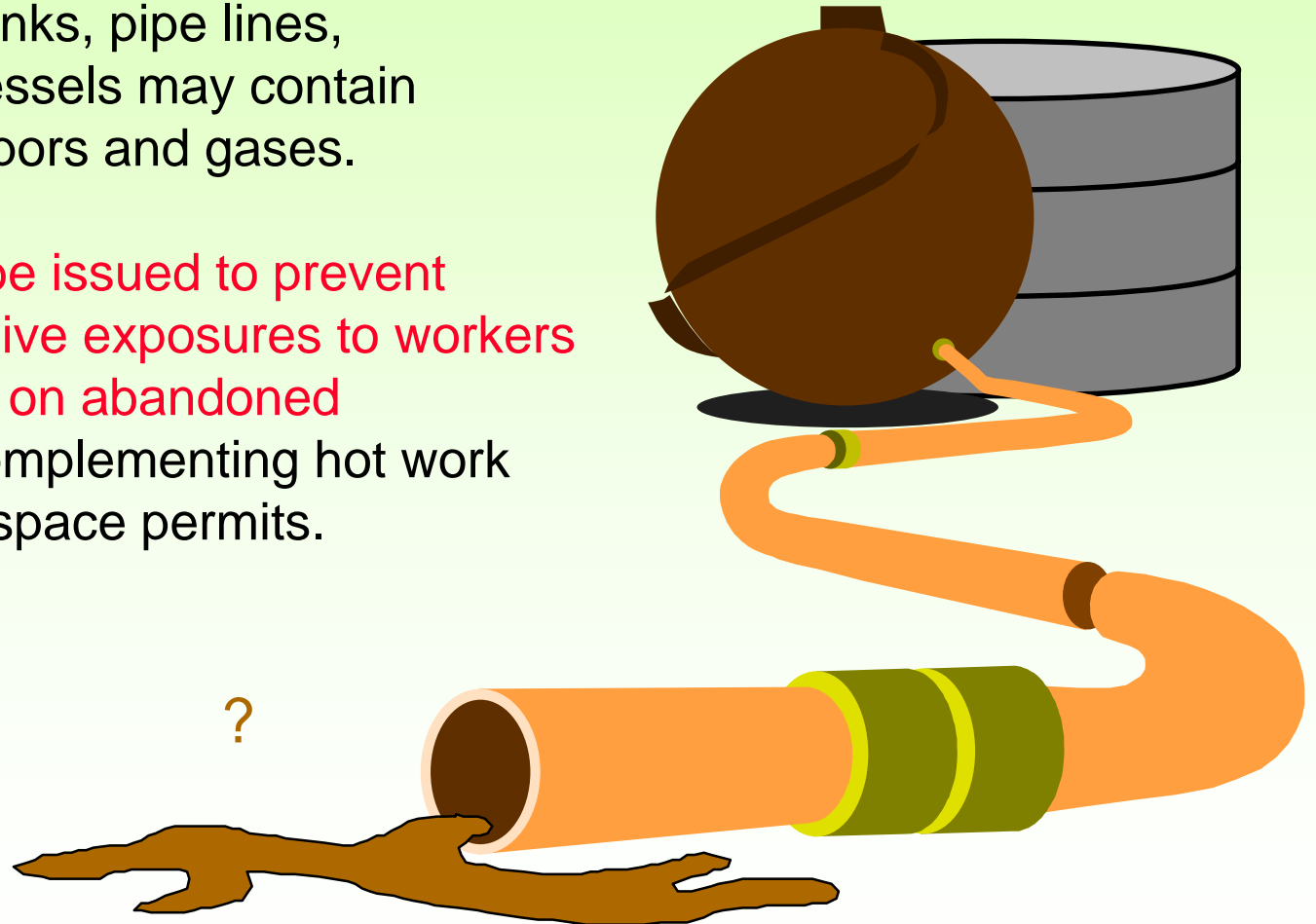
Movement of large pieces of equipment, especially while other personnel are working nearby, can result in employee injury.

Permits may be issued to ensure the use of procedures that will prevent employee injury from falling material, or being struck by rigging equipment.

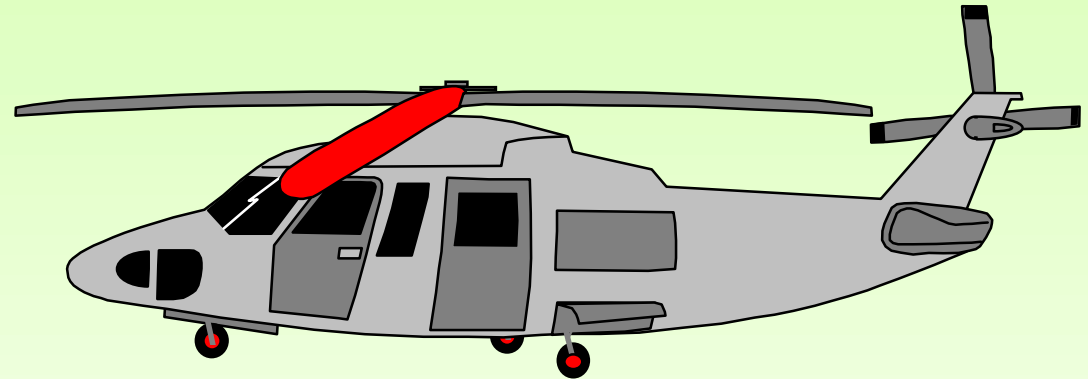
# Safe Work Permits

Abandoned tanks, pipe lines, drums, and vessels may contain hazardous vapors and gases.

Permits may be issued to prevent toxic or corrosive exposures to workers when working on abandoned equipment, complementing hot work and confined space permits.



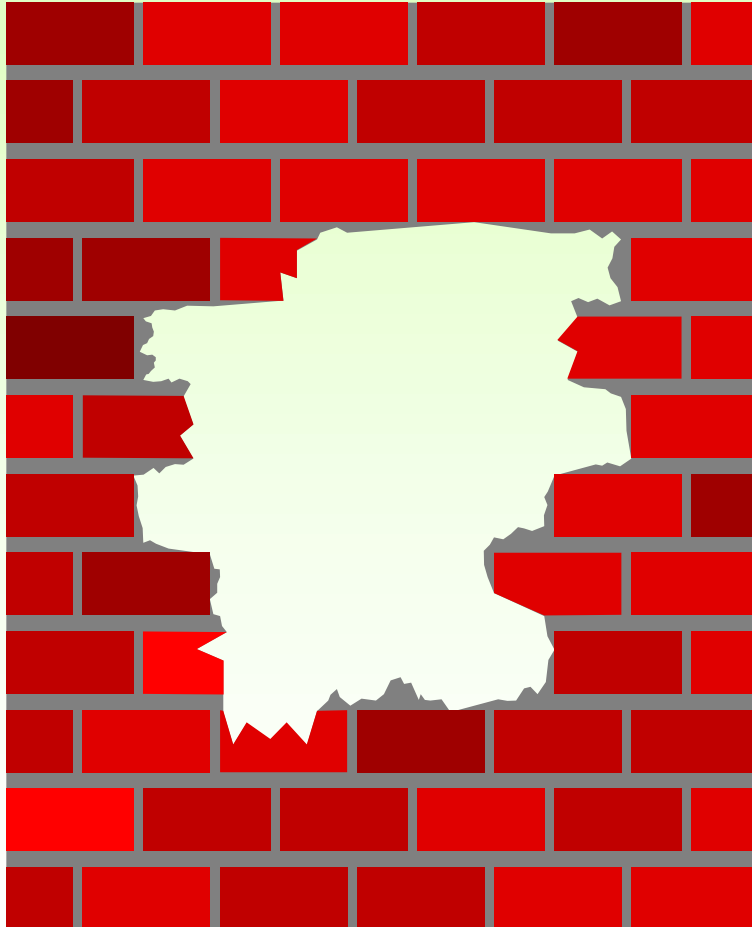
# Safe Work Permits



Many construction processes create noise levels high enough to cause hearing loss.

Permit requirements may be issued to reduce noise to acceptable limits, or to provide both construction and other employees with required hearing protection.

# Safe Work Permits



Boilers, high pressure vessels, tanks, and reactors can undergo sudden failure resulting in disastrous consequences.

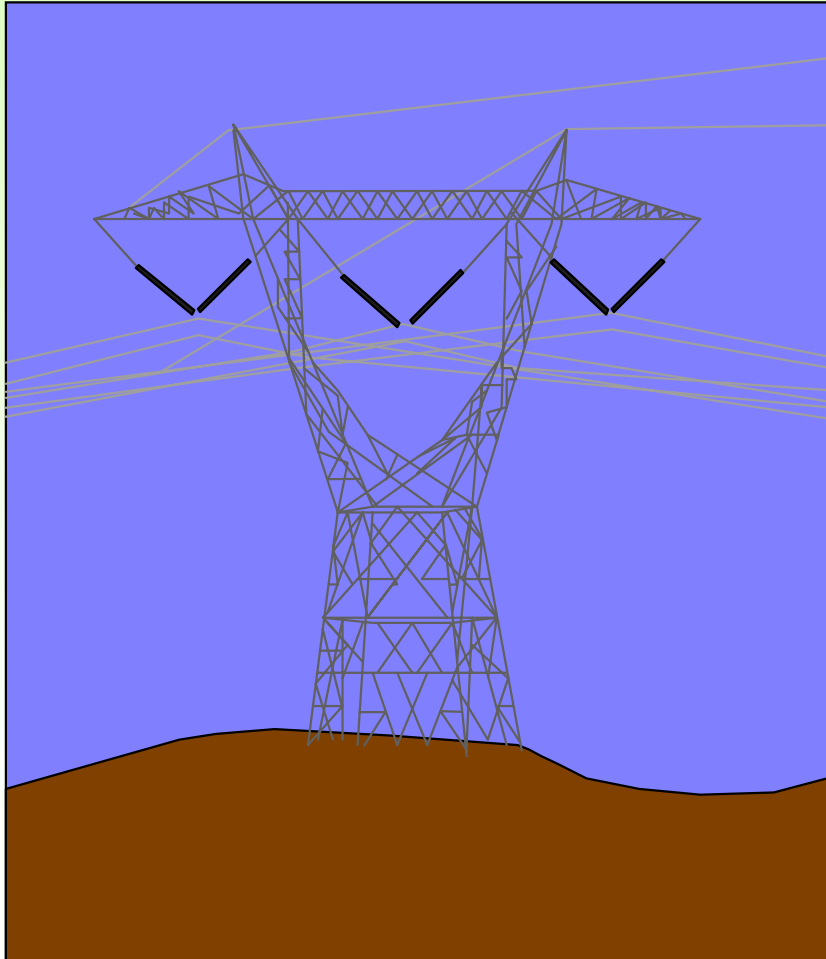
Permits may be issued requiring precautions and equipment to prevent system failures not covered by safe job procedures or project safety plans.

# Safe Work Permits

Permits may be required where the consequence of noncompliance with fall protection requirements is severe, or where dropped materials may endanger other workers below.



# Safe Work Permits



Permits are required before work begins near energized lines which cannot be shut off if there is danger of fire, shock or electrocution.



# Safe Work Permits

**CAUTION**

Hazardous Materials!

“Safe Work Permit Required!”

**Permits are mandatory where signs are posted which require them.**

# Safe Work Permits

<b>Safe Work Permit</b>	
Type: (hot work, confined space, line break, etc....)	Permit #
Valid From: <u>  </u> / <u>  </u> / <u>  </u> <u>  </u> time to <u>  </u> / <u>  </u> / <u>  </u> <u>  </u> time	location:
Work Description: _____ _____ _____	Issued to:  _____ Supervisor's Signature      Print name
	Work Order No.

Permits are issued:

- for a specific date and time range,
- for a specific job,
- and to specific individuals.

# Safe Work Permits

Safe Work Permit		Permit #					
Work Description: _____ _____ _____		Supervisor's Signature _____ Print name _____					
		Work Order No. _____					
Atm. Tests	Combustible Vapors or gases (<10%)	Oxygen Concentration (>19.5% & < 21%)	Toxic Material Concentration				
Permit Issued by: _____	/	/	/	Work Area Manager Approval _____	/	/	/

Permits must be reviewed and signed by:

- the safety representative issuing the permit,
- the workers' supervisor,
- affected workers,
- and the work area manager.

# Safe Work Permits

## Safe Work Permit

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### Precautions Always required:

- o Emergency procedures review by:
- o Emergency equipment & location review by:
- o Area inherent hazards review by:
- o Material Safety Data Sheet(s) review by:

Workers must be informed of required emergency procedures, location and operation of emergency equipment, and area inherent hazards.

Material Safety Data Sheets must be supplied and special precautions reviewed with workers and their supervision.

# Safe Work Permits

## Safe Work Permit

### Special Precautions Required:

- o Buddy System
- o Cleaning of \_\_\_\_\_
- o Remove materials from \_\_\_\_\_
- o Piping o Drain o Disconnect o Blank off / Capped
- o Clean o Ventilate
- o Remove combustibles from other side of wall.
- o Floor Swept Clean of Combustibles
- o Clean area within 35 feet. o Wet down floor.
- o Adjacent areas: \_\_\_\_\_
- o Cover floor with: \_\_\_\_\_
- o Non-combustible Tarpaulins or Metal Shields Over:
- o Electrical Switches or Valves off, locked-out, and Tagged:
- o Electrical Grounding of: \_\_\_\_\_
- o Atmosphere monitored during work for: \_\_\_\_\_  
periodically: \_\_\_\_\_ continuously: \_\_\_\_\_
- o Safety Monitor(s) present from \_\_\_\_\_ to \_\_\_\_\_
- o Fire Watch Present during work and for 30 minutes after...
- o Respirator to be worn \_\_\_\_\_ or be readily available \_\_\_\_\_

Required special precautions must be clearly indicated and communicated to workers, and their supervision.

**It is the safety representative's responsibility to determine if and when special measures are required.**

# Safe Work Permits

## Safe Work Permit

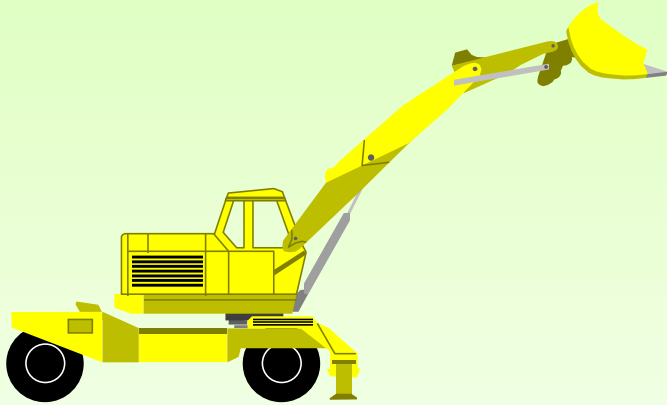
### Safety Equipment Required

- safety glasses
- hard hat
- face shield
- safety shoes
- fire extinguishers - type \_\_\_\_ #\_\_\_\_ size \_\_\_\_
- fire hose
- supplementary illumination
- warning signs
- barricades
- non-sparking tools
- explosion proof equipment
- safety harness
- life line
- tripod emergency escape unit
- 2-way radio or phone
- respirators
- impervious gloves
- protective clothing \_\_\_\_\_
- mechanical ventilation
- shower & eyewash
- self contained breathing apparatus
- ground fault circuit interrupter
- ladder / lift / scaffold
- other \_\_\_\_\_

Personal protective equipment and other safety equipment required is specified.

For each hazard present at the work site, the safety representative must specify a hazard control.

# Safe Work Permits



## Safe Work Permit

### EXCAVATION PRECAUTIONS REQUIRED:

- o Underground / Underfloor Utility Hazard Review
- o Soil Excavation Reviewed
- o Underground Utility Stakeout Performed
- o Excavation cut back 1/1, or walls reinforced
- o Means of exiting within 25 feet.

The safety representative must verify that all underground utilities have been located and staked out.

Provisions must be made to barricade the open trench, prevent collapse of trench walls, provide employees with a means of exit, reroute ground water, and all other requirements of excavating.

If soil is contaminated, the safety representative will ask for a written safety and health plan.

# Safe Work Permits - SUMMARY

- **Hot work, confined space entry, excavations, blasting, use of internal combustion engines inside of buildings, use of company owned or leased equipment, and areas where “Safe Work Permit Required” signs are posted always require a safe work permit.**
- **Other safe work permits may be required at the discretion of the Safety Representative, the Contract Administrator, or the Contractor.**
- **Permits will be issued by a qualified safety representative.**
- **Hot work permits are issued by the Fire Marshal.**
- **Permits are issued to specific persons for a specific time period and for a specific job.**
- **Permits must be signed at the time issued by the safety representative, job supervisor, affected workers, and the manager of the area in which work is being done.**



# Where to Get Help?

Your supervisor is responsible for providing equipment necessary to comply with Safe Work Permit requirements.

The safety representative is responsible for completing the job hazard analysis and issuing the permit.