

MIRA 2023

Loss Prevention Controls

Risk Engineering Services
November 2023



Property protection and safety go hand in hand

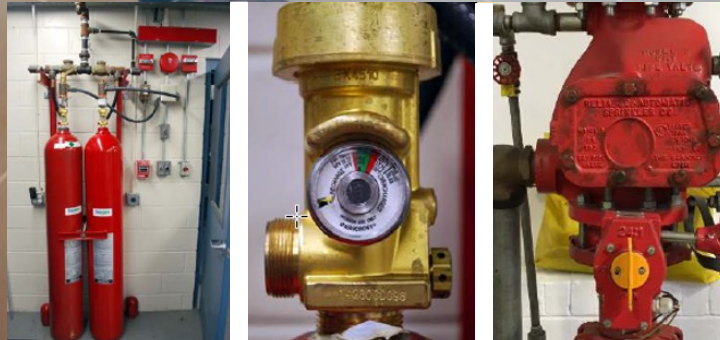
A property protection focus for each month

- Fire protection golden rules (3)
- Human element factors (6)
- Focus areas to keep the business running (3)



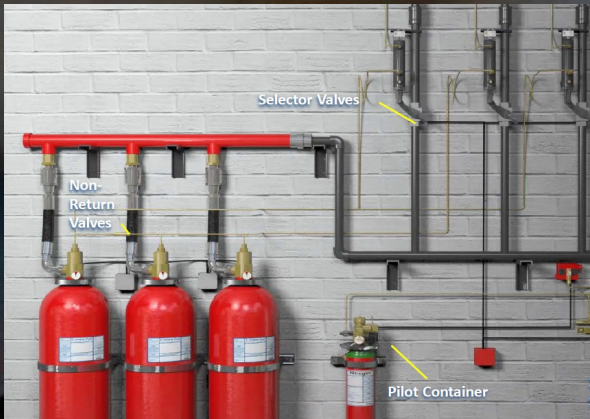
Golden rules of fire protection

Available



Valves open
Automatic mode
Powered
Not impaired

Adequate



Appropriate design code
Change management
Laboratory testing

Reliable



Pump tests
Valve inspections
System maintenance
Clearance of alarms

6 focus areas – Human element factors

1.

Hot Work

The image shows two overlapping forms. The top one is a red NFPA Property Loss Prevention Data Sheet (Form 10-3) with the title 'NFPA' in large white letters. Below it is a Swiss Re Corporate Solutions 'HOT WORK PERMIT' form. The permit form includes sections for 'Permit and location details', 'Hot work description', 'All required precautions', 'Work date and time', and 'Complete work and fire watch'. It features various checkboxes for safety protocols and signature lines for authorized personnel.

2.

Risk Management

-HS&E and property loss scenarios

3.

Housekeeping

-Flammables
-Spill control

6 focus areas – Human element factors

4.

Training

- On-going
- Key process risk
- Fire brigade
- Procedures

5.

Contractor management

- Familiarity and experience with site risks
- Vetted

6.

Management of change

- Established program

Keeping the business running

Inspection

Bottlenecks

Structural integrity

Frequency

Hard to get to areas

Maintenance

Reliability centered

Adapted to current operation conditions

CMMS embedded (structural integrity)

Business Continuity

Bottlenecks

Scenarios developed

Tested plan

Critical spares

Focus Areas

- | | |
|---------------|--|
| Fire | 1. Available
2. Reliable
3. Adequate |
| Human Element | 4. Hot work
5. Risk management
6. Housekeeping
7. Training
8. Contractor management
9. Management of change |
| Integrity | 10. Inspection
11. Maintenance
12. Business continuity |



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