FIRE SAFETY TRAINING

Sedgwick CMS
on the behalf of the
OFFICE OF RISK MANAGEMENT

Revised 7/2015

COURSE OUTLINE

I. FIRE SCIENCE

II. FIRE SAFETY INSPECTIONS

III. EVACUATION PLAN

IV. FIRE EXTINGUISHERS

V. OTHER FEATURES OF FIRE PROTECTION

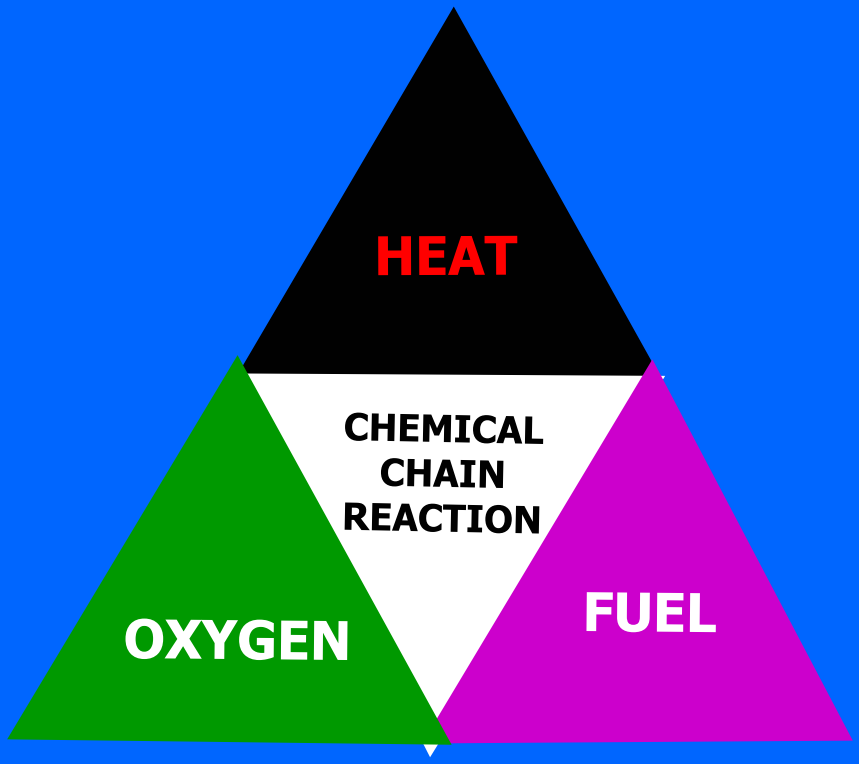
FIRE SCIENCE

FIRE SCIENCE

What elements are needed to start a fire?

FIRE SCIENCE

The Fire Tetrahedron

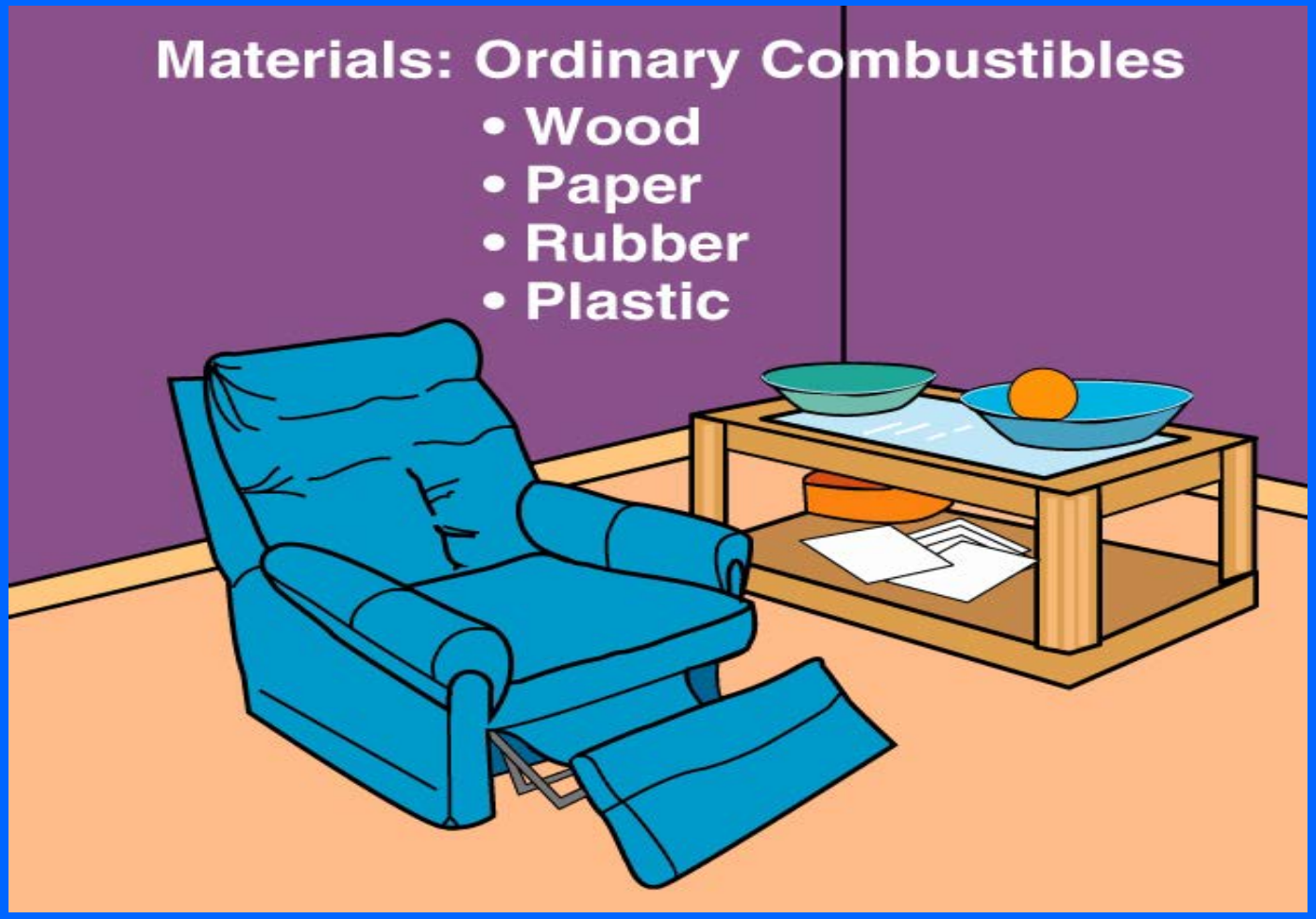


FIRE SCIENCE

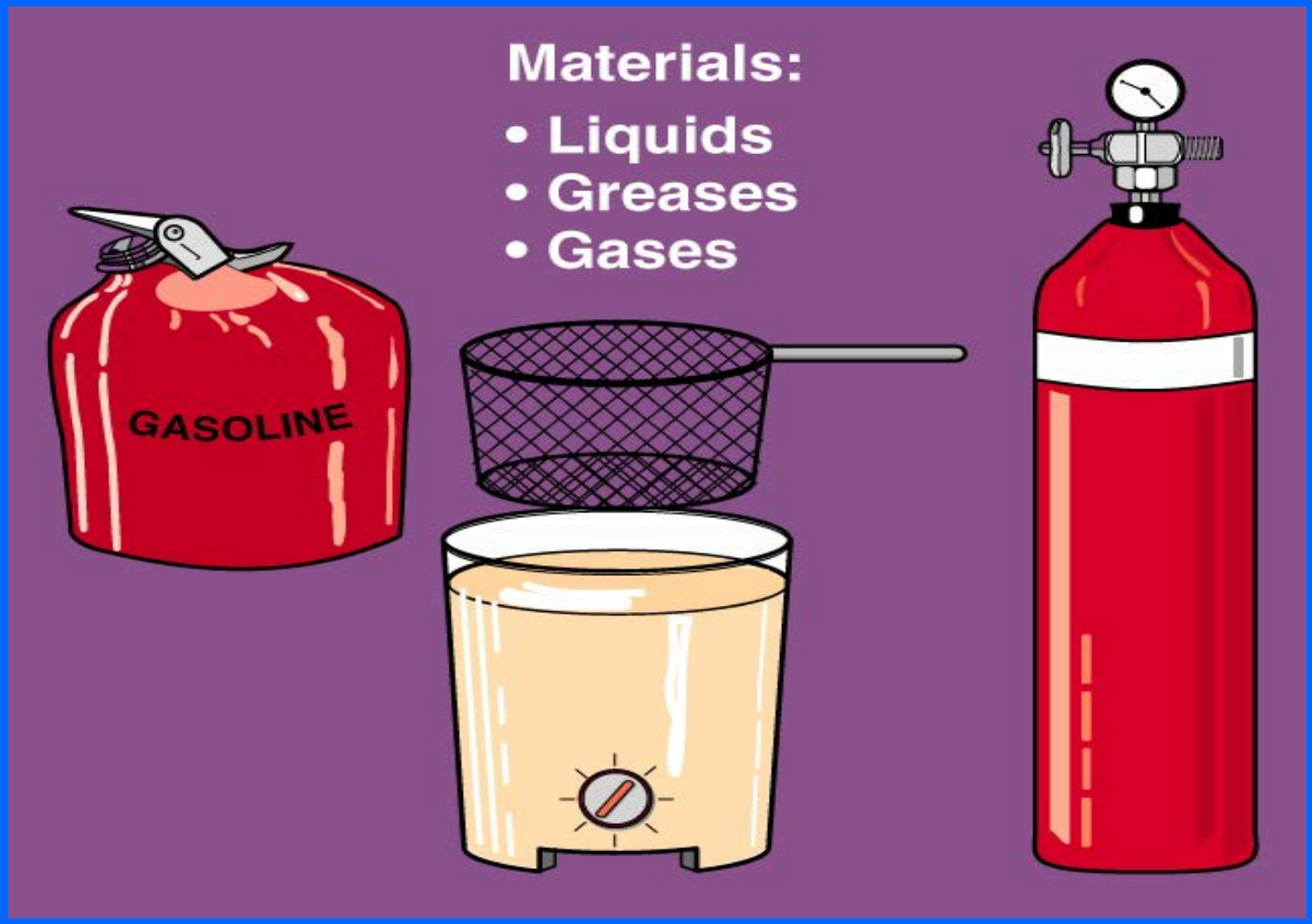
FUEL CAN BE

- **LIQUID:** Grease, Oil, Fuel;
- **SOLID:** Wood, Paper, Metal;
- **GAS:** Natural Gas, Propane, Acetylene.

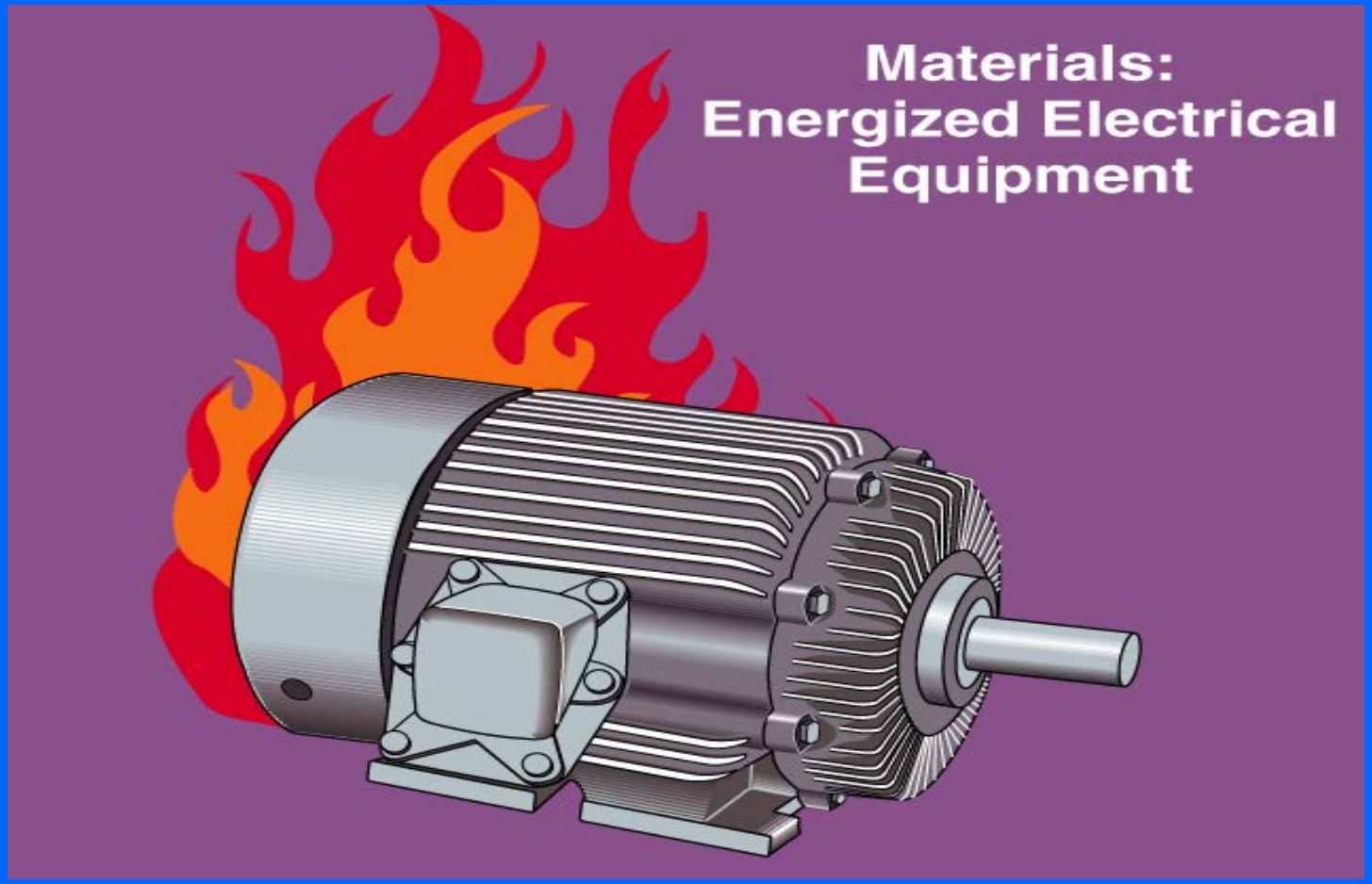
CLASS "A" FIRES **- *Ordinary combustibles such as wood, paper, cloth.***



CLASS "B" FIRES - Flammable liquids such as oil, grease



CLASS "C" FIRES - Energized electrical equipment



CLASS "D" FIRES - Flammable Metals

FIRE SCIENCE

What is smoke?

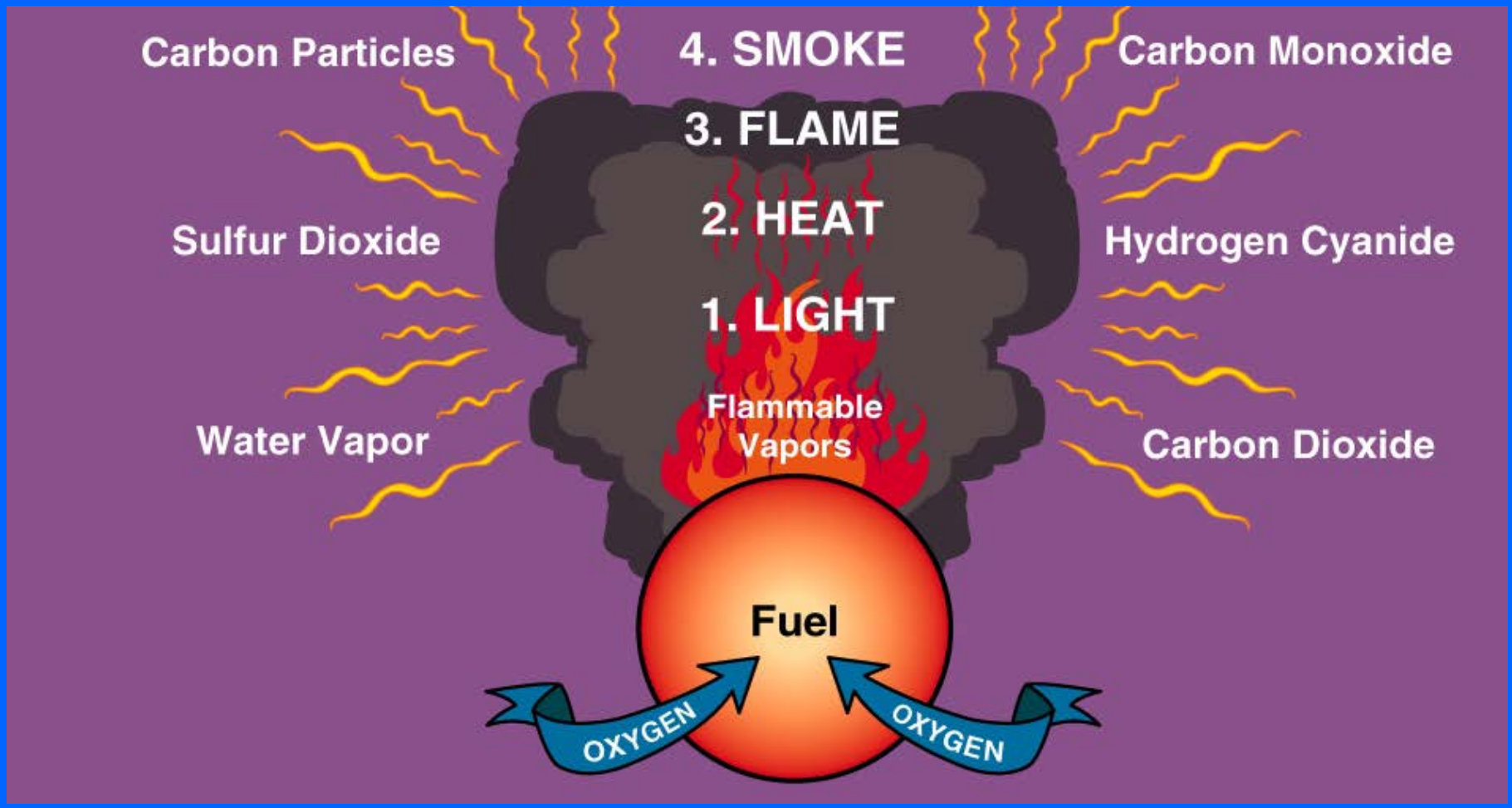
FIRE SCIENCE

WHAT IS THE DIFFERENCE BETWEEN *COMBUSTIBLE* AND *FLAMMABLE* MATERIAL?

***Combustible material* has a flashpoint of 100 F or above**

***Flammable material* has a flashpoint below 100 F [Ref. NFPA 96]**

FIRE SCIENCE



FIRE SCIENCE

REGARDING FIREFIGHTING, MSDSs TELL YOU IMPORTANT FACTS ABOUT THE CHEMICALS OR PRODUCTS YOU STORE!

FIRE SAFETY INSPECTIONS

Your Sedgwick CMS Risk Services Consultant Is Available To Assist You

FIRE SAFETY INSPECTIONS

SOME HAZARDS TO LOOK FOR IN YOUR WORKPLACE

EXAMPLES

- **Locked or blocked exits (common hazard)**
- **Trash or debris Electrical hazards Cooking hazards Chemical, Gas Cylinders/ System, and Labs**
- **Smoking Areas**
- **Exit Signs Blocked exits/isles/hallways**
- **Fire extinguisher hazards**
- **Emergency lighting hazards**
- **Emergency stairway doors blocked or propped open**

FIRE SAFETY INSPECTIONS

FIRE SAFETY INSPECTIONS

REMEMBER

The best way to fight fire is to prevent it

FIRE EVACUATION PLAN

EVACUATION PLAN

COMPONENTS OF AN EVACUATION PLAN

- **Emergency Control Committee - develops plan**
- **Emergency Crews - administer plan**
- **Escape routes - primary & secondary**
- **Maps - posted indicating escape routes, first aid kits and extinguishers**

FIRE EVACUATION PLAN

WHAT TO DO IN CASE OF FIRE

FOLLOW YOUR AGENCY'S FIRE EVACUATION PLAN

FIRE EVACUATION PLAN

WHAT TO DO IF YOU SHOULD BECOME TRAPPED IN A BUILDING

- **Don’t panic**
- **Try to find a secondary exit**
- **Feel doors for heat with your hand**
- **If the door is hot, don’t open it!**
- **If you can’t find another exit, stay where you are**

FIRE EVACUATION PLAN

- Seal doors and vents to prevent smoke penetration.
- If possible call “911” and report your exact location.
- Stay low to avoid smoke and heat.

EVACUATION PLAN

If assistance is needed with developing and/or reviewing your plan--- seek assistance from:

- **Fire officials (either State or Local officials)**
- **Agency's headquarter/safety coordinator that owns the building**
- **Sedgwick CMS Loss Prevention Officer**

EVACUATION PLAN

FIRE DRILLS…

…are conducted at least once each year, but some agencies may require them more frequently.

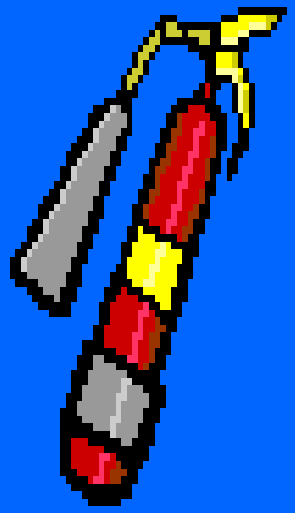
EVACUATION PLAN

FIRE DRILLS… cont.

Remember to <u>DOCUMENT</u>:

- **Date & time**
- **Employees & visitors present**
- **Outside meeting location**
- **Headcount**
- **Time of entire drill**

FIRE EXTINGUISHERS



FIRE EXTINGUISHERS

KNOW WHERE FIRE EXTINGUISHERS ARE LOCATED IN YOUR WORKPLACE

LEARN HOW TO USE THEM FFECTIVELY

NEVER LEAVE AN EXTINGUISHED FIRE UNATTENDED

FIRE EXTINGUISHERS

INSPECTIONS

- **The National Fire Protection Association (NFPA) defines an inspection as a "quick check" that the extinguisher is available and will function**

- **NFPA requires extinguishers be inspected monthly, or more frequently if circumstances require it**

FIRE EXTINGUISHERS

WHO CAN INSPECT A FIRE EXTINGUISHER

Anyone.

NFPA says *"minimal knowledge required"*

FIRE EXTINGUISHERS

INSPECTION PROCEDURES

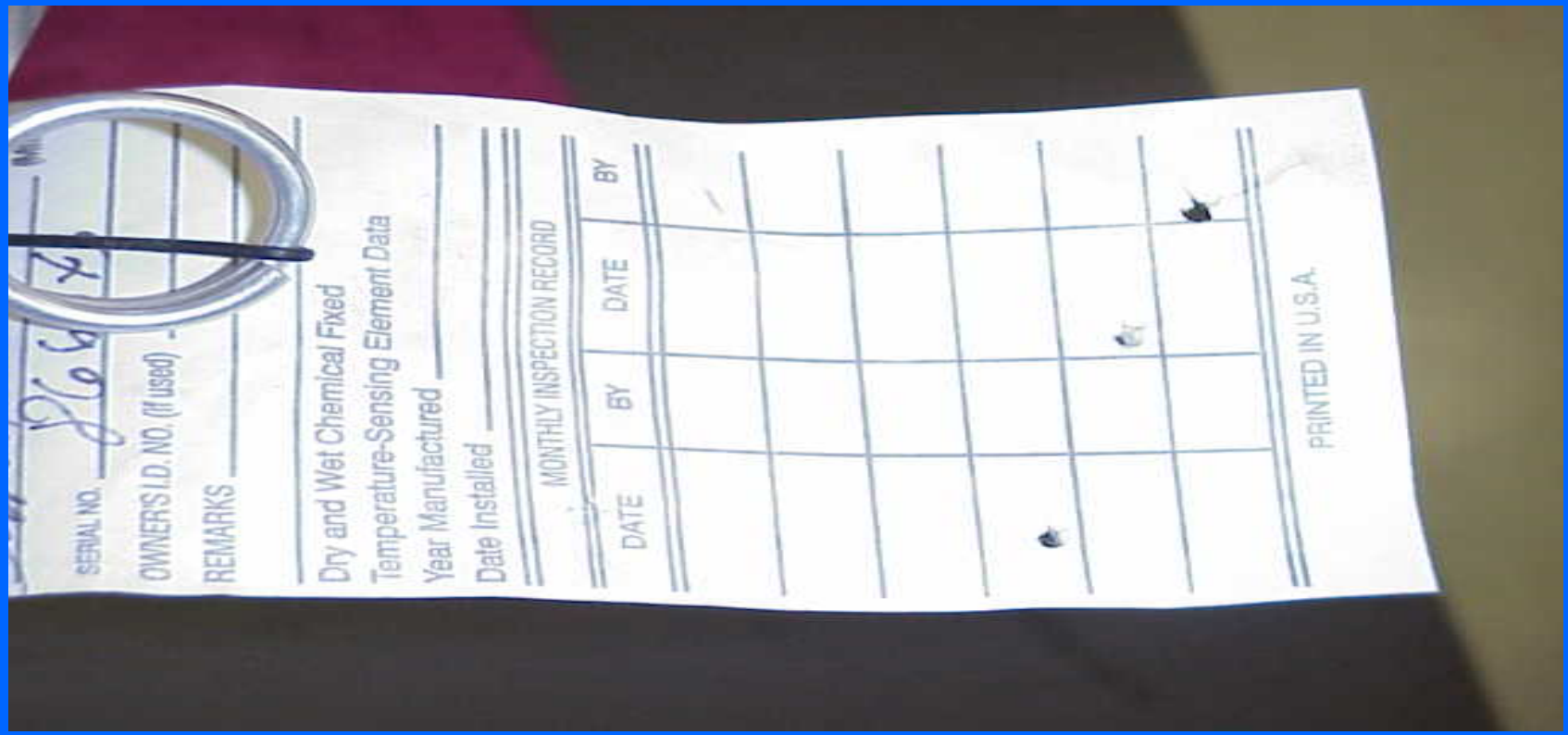
- **Extinguisher located in designated place?**
- **Obstructions to access or visibility?**
- **Operating Instructions on nameplate legible & facing outward?**
- **Seals & tamper indicators in place & intact?**

FIRE EXTINGUISHERS

- **Determine fullness by weight or by *"hefting."* Invert & shake it will help ensure *"caking"* or hardening of powder has not occurred.**
- **Visually examine for obvious physical damage, corrosion, leakage, or a clogged nozzle.**
- **Check to see if the pressure gauge is in operable range.**

FIRE EXTINGUISHERS

INSPECTION TAG:



FIRE EXTINGUISHERS

MAINTENANCE

NFPA defines maintenance as a *"thorough check"* of the extinguisher.

FIRE EXTINGUISHERS

FIRE EXTINGUISHER INSPECTOR CONTRACTOR

In Louisiana, must be licensed & certified by the Office of the State Fire Marshal (OSFM) to perform such work.

FIRE EXTINGUISHERS

HOW OFTEN SHOULD MAINTENANCE BE PERFORMED

The NFPA says that maintenance should be performed at least annually

FIRE EXTINGUISHERS

MAINTENANCE RECORDKEEPING

NFPA requires that a tag be attached to the extinguisher indicating:

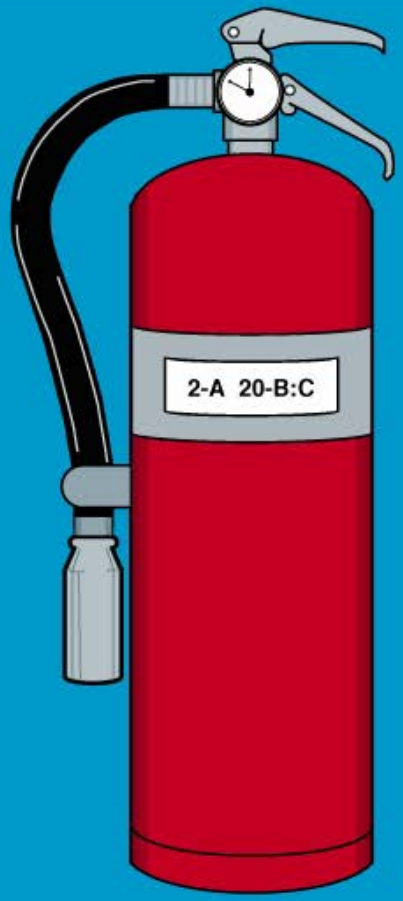
1. **The month & year the maintenance was performed, and**
2. **Identification of the person & the company performing the work.**

FIRE EXTINGUISHERS

MAINTENANCE TAGS

FIRE EXTINGUISHERS

Extinguisher Rating System



LETTERS indicate the fuel class on which the extinguisher will be effective.

A	B	C	D
Ordinary Combustibles	Flammable Liquids	Electrical Equipment	Combustible Metals

NUMBERS indicate the relative effectiveness of the extinguisher:

For example,

- A 2-A extinguisher extinguishes twice as much fuel as a 1-A extinguisher.
- A 20-B extinguisher extinguishes 20 times as much fuel as a 1-B extinguisher.

Numbers are used with letters on Class A and Class B extinguishers only.

FIRE EXTINGUISHERS

Extinguisher Rating System

CLASS K

FIRE EXTINGUISHERS

TYPES OF EXTINGUISHERS:

Carbon Dioxide
(CO_2)

FIRE EXTINGUISHERS

TYPES OF EXTINGUISHERS:

Stored pressure dry powder (ABC)

FIRE EXTINGUISHERS

TYPES OF EXTINGUISHERS:

Clean agent type extinguishers (Halon)

FIRE EXTINGUISHERS

SIZES:

Minimum size is 2A:10BC. The number indicates the number of square feet & the letter indicates the type of fire.

FIRE EXTINGUISHERS

IMPORTANT TO REMEMBER

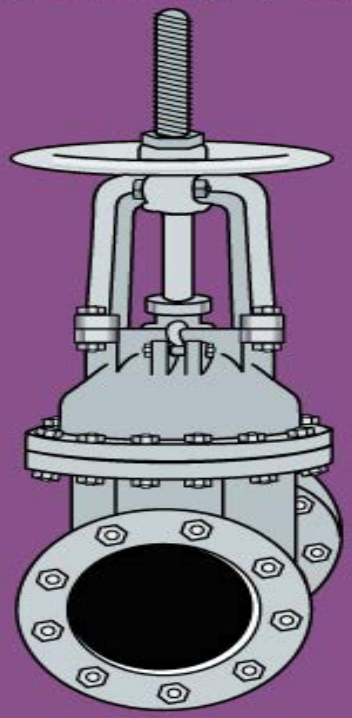
Ensure that each area has the proper type fire extinguisher!

OTHER FEATURES OF FIRE PROTECTION

SPRINKLERS

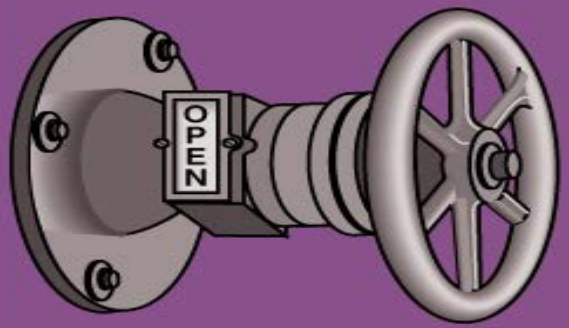
TYPES OF CONTROL VALVES

OS&Y (Outside Screw and Yoke)



PIV (Post Indicator Valve)

WPIV (Wall Post Indicator Valve)



OTHER FEATURES OF FIRE PROTECTION

ALARMS

OTHER FEATURES OF FIRE PROTECTION

DETECTORS & STOBES

OTHER FEATURES OF FIRE PROTECTION

FIRE DOORS

OTHER FEATURES OF FIRE PROTECTION

SUPPRESSION SYSTEMS