

FIRE FACTS

Lesson 3: Equipment Fires



Pre-lesson Questions

How long can an ignition source lay dormant before starting a fire?

Are equipment fires preventable?

What can a fire extinguisher do?

When do fires start in the field?

When should you call for help when a fire starts?



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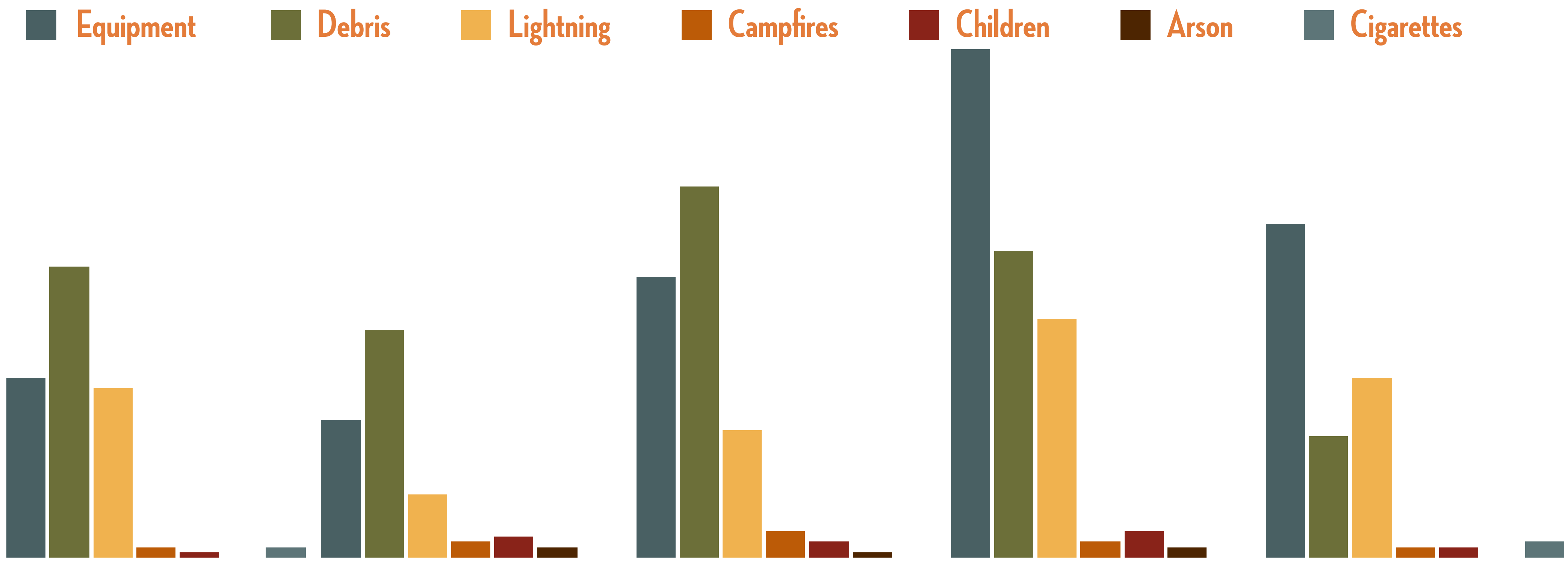


National
Fire Start Statistics



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Your Local Fire Starts



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Four ignition sources that originate from mechanical equipment

Friction - Sparks/Slag



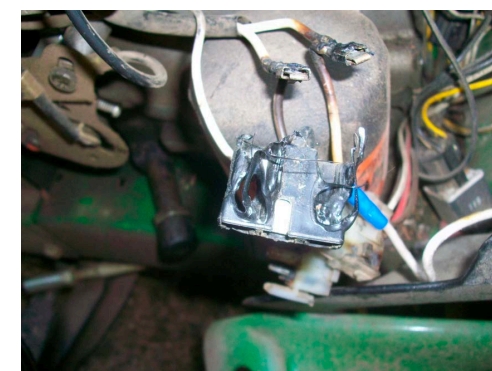
Conduction - Heat transfer



Combustion - Flame



Electrical - Wiring shorts



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Understanding equipment operations prevents fire from starting

Understanding possible ignition sources

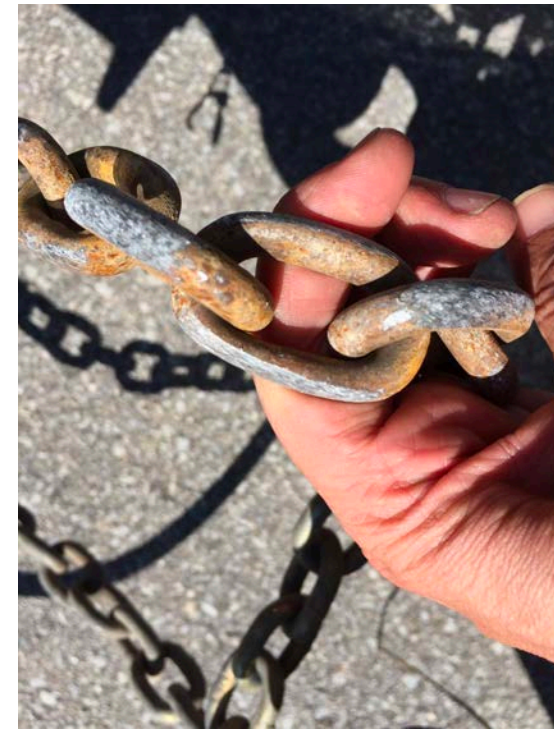
Routine & proper maintenance

Identifying hot operating surfaces

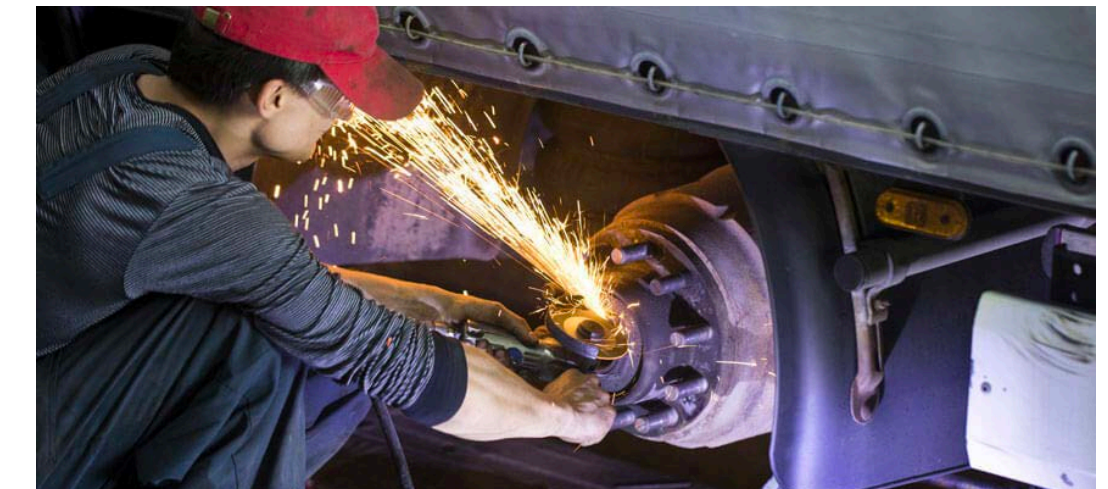
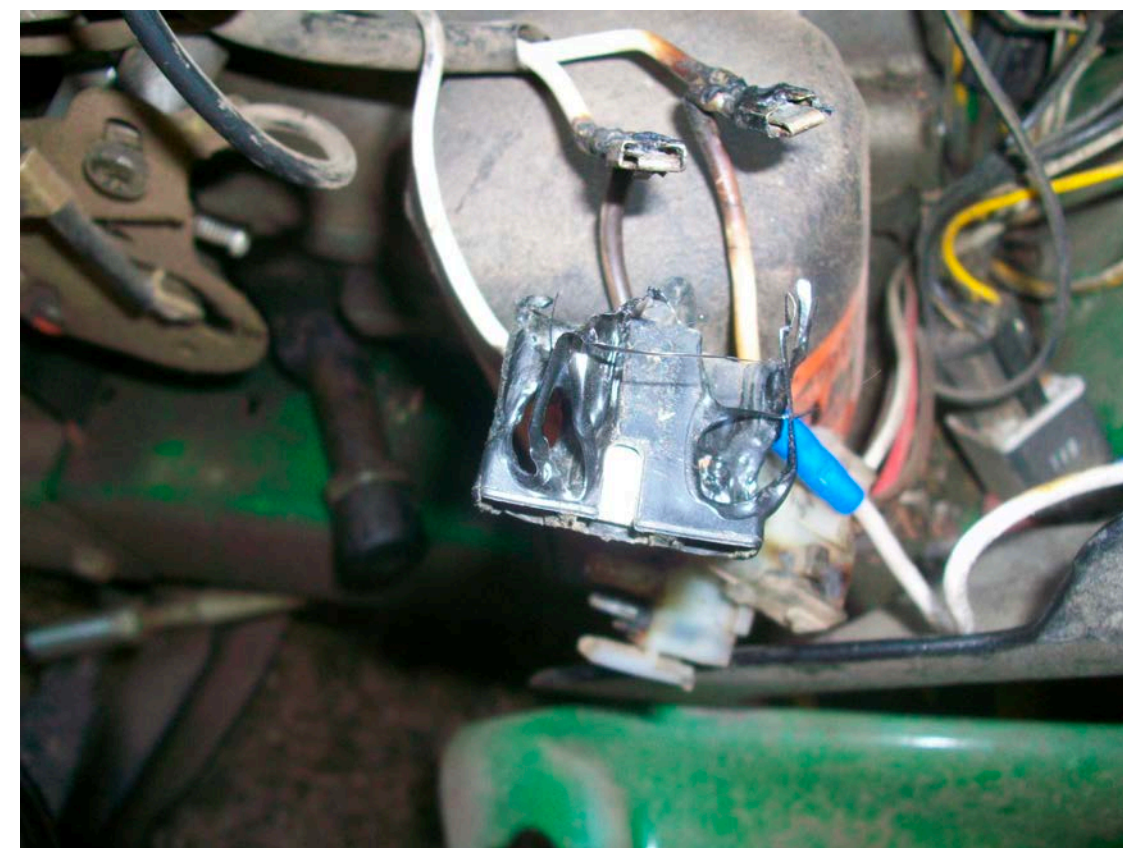
Example images for each point

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Examples of ignitions sources



Chaff Pic



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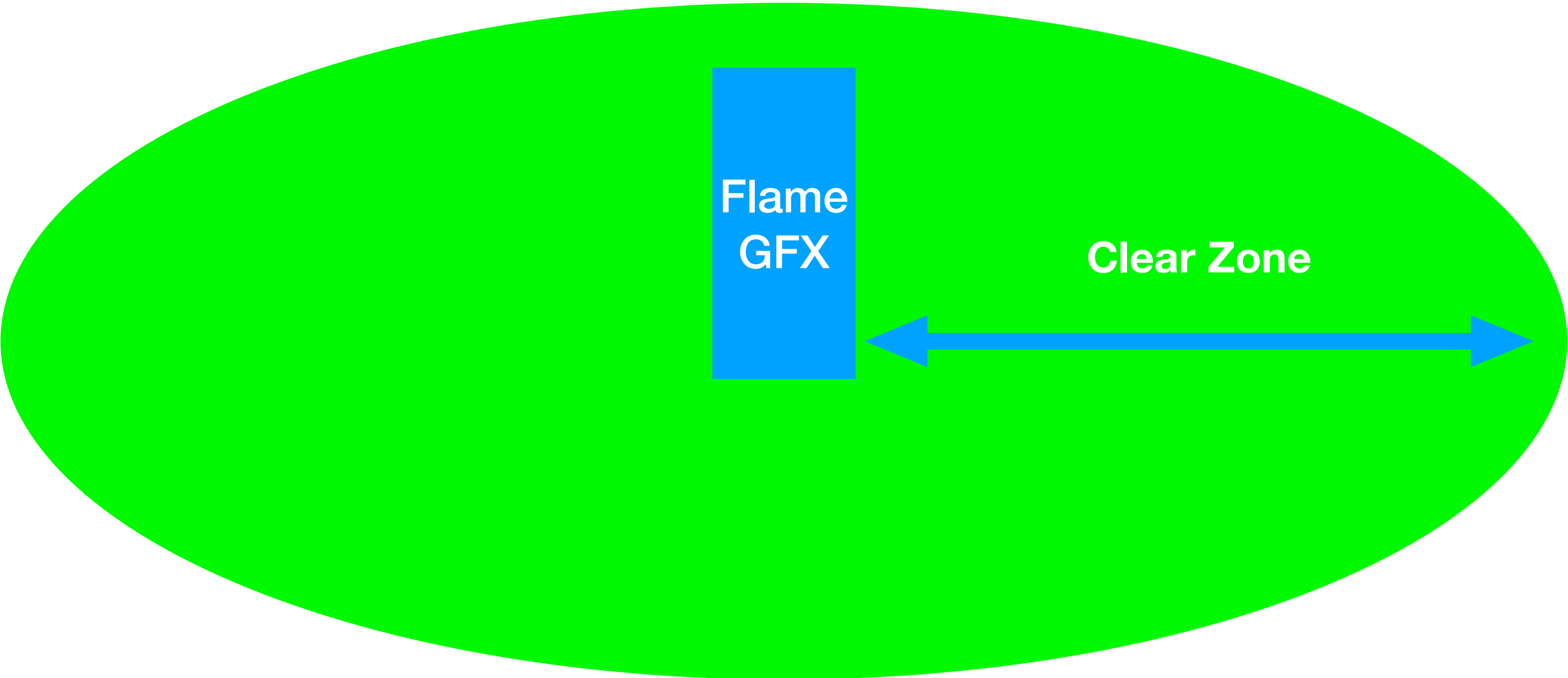
How long can an ignition source lay dormant

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How Do fire start in the field

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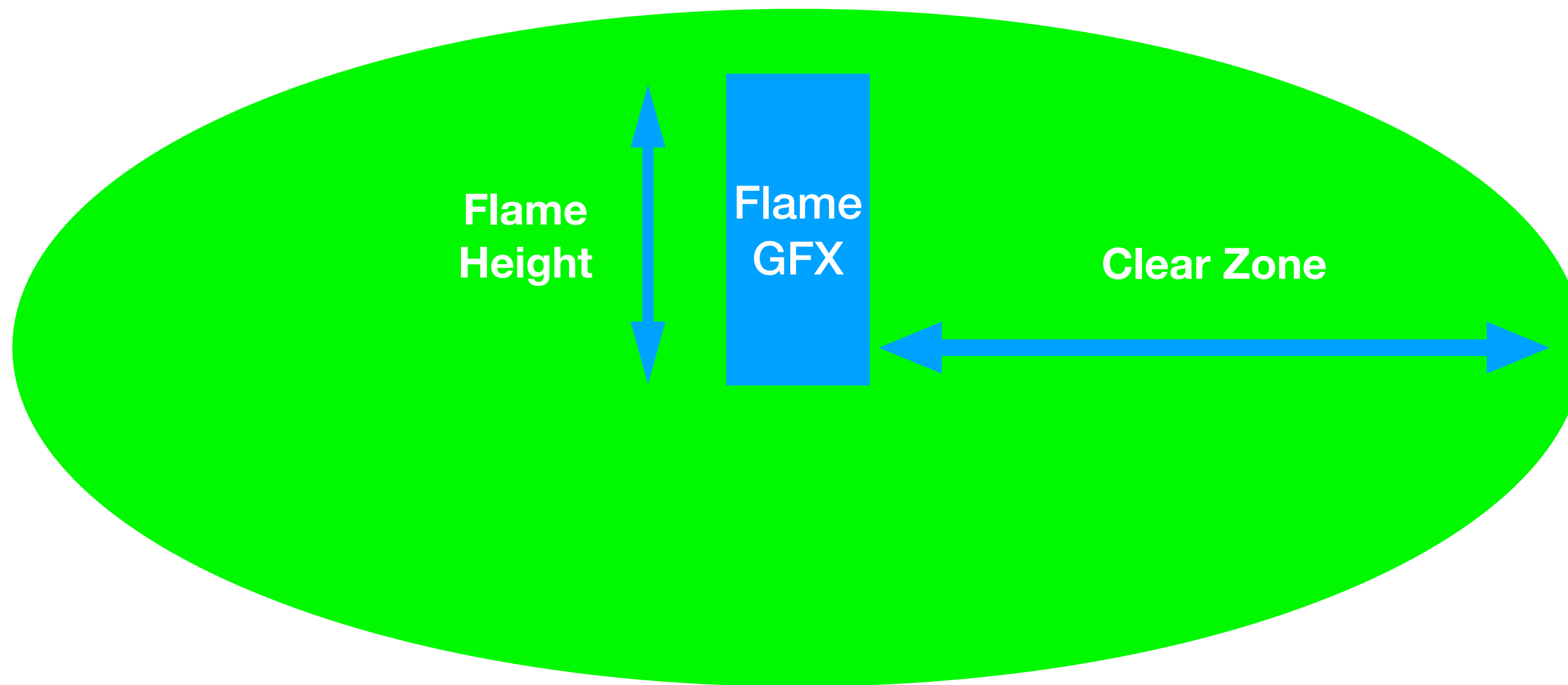
What is a clear zone?



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Determine the size of a clear zone

Ignition Source Height x 4 = Clear Zone Diameter



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Calculate the probability of ignition

TBD

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Determining equipment fire risk

Identify the potential ignition sources

Calculate probability of ignition

Determine ignition sources' exposure to fuel

Example images for each point

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Prevent equipment caused fires

Equipment knowledge

Work schedule planning

Maintenance

Example images for each point

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Proper maintenance prevents fires from starting

Prevents friction

Prevents residue fires

Prevents leaking of flammable liquids

Prevents in field repairs

Example images for each point

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3 items you need in a fire plan

First actions

Who to call

What to communicate

Example images for each point

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First actions

One attempt at putting out fire if you are present when it starts and it is practical to do so

Call for help

Move people and equipment to minimize damage if safe and practical

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Who to call

Fire Department

Those in potential danger

People in your plan



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What to Communicate

Fire size

Fire location & directions to fire

Potential hazards

Fire direction and path

