



"Guard the sparks, stand your ground,  
 Ember Wraith lurks all around.  
 30 minutes, heroes stay,  
 Keep the villains far away."

## MONTHLY REFRESHER TRAINING

### FIRE SAFETY – FIRE WATCH

October Week 2

#### Identify Alternatives to Hot Work

Ways to Minimize Hot Work Hazards

Hot work doesn't always have to happen. Sometimes the safest move is to avoid sparks altogether:

- Screwed, flanged, or clamped pipe connections
- Manual hydraulic shears
- Mechanical bolting or pipe cutting
- Compressed air-actuated fasteners

But let's be real — those options don't always get the job done. And when they don't, we move forward with hot work.

That's why we've already taken the time to **Recognize, Evaluate, and Control the hazards** — clearing combustibles, staging shields, checking ventilation, and setting the stage for safety.

Still, there's a missing piece. Not an eye in the sky... but an eye right here in the area. The one presence who makes sure Spark Slinger's sparks and Ember Wraith's smolders never get the upper hand. *Drum roll...* Enter the Fire Watch — the unsung hero who closes the villains' last open door.

#### The Unsung Hero

They don't make the headlines. They don't get medals. But every time hot work ends without disaster, there's a good chance a Fire Watch was the reason. Like Spider-Man, they're always there in the shadows — protecting, stopping villains before anyone else even notices.

Think about it: how many fires never happened because a Fire Watch caught a smolder, pulled a pan of sparks, or grabbed an extinguisher before the blaze took off? We'll never know. Their saves don't show up in the news. They aren't tracked in the data. But when they're missing, the headlines are real — and they're tragic.

**Fire Watch's power is vigilance. Without it, the villains win.**

Fire Watch Powers (Duties in Action)

#### Before Hot Work — The Setup

- Patrol the area: above, below, behind barriers.
- Confirm combustibles are gone or shielded.
- Inspect fire blankets for holes or gaps.
- Stage extinguishers — charged, tagged, and correct type.
- Verify ventilation indoors/confined.
- Check permit accuracy and signatures.
- Assign opposite-side watch where heat can be transmitted.

You can weld and grind all you want... I'll be waiting in your rags, your dust, your cardboard. You don't see me until it's too late — and then I burn your world from the shadows.



#### Case Study – Evergreen Packaging Paper Mill Fire (2020)

On September 21, 2020, at the Evergreen Packaging mill in Canton, North Carolina, contractors were performing shutdown work inside connected process vessels. One task used a heat gun to cure a resin inside the tower. That resin ignited. The fire spread rapidly in the vessel, killing two workers and severely damaging the system.

- Villains at work: **Ember Wraith** doesn't need much — hidden resin, a little heat, and trapped vapors were enough.
- Root cause: Hazard recognition failed. Ignition sources were brought into contact with flammable material inside a vessel. Oversight and fire-watch duties didn't extend where they should have.
- Lesson: Ember Wraith thrives in places you *think* are safe. Even a small tool like a heat gun can turn deadly when no one is actively watching for smolders and fuel. Fire Watch isn't just about sparks flying across the floor — it's about protecting every space where fuel could be hiding.

So, while Ember Wraith makes the headlines, Fire Watch remains the unsung hero — unseen, steady, waiting, and always on alert for the fire that doesn't get to start.

### During Hot Work — Holding the Line

- Stay in clear view — no wandering off.
- Keep an extinguisher at arm's reach, exit at your back.
- Watch all sides: behind shields, under blankets, around corners.
- Adjust shielding as sparks shift.
- Carry radio to sound alarm instantly.
- Zero distractions — no phones, no side jobs.

### After Hot Work — The Watchful Exit

- Stay 30 minutes minimum after sparks stop. Extend that if needed.
- Patrol for smolders in cracks, insulation, debris.
- IR thermometer to feel heat.
- Never leave until relieved and logged on permit.
- No breaks or shift changes without coverage.

### Wrong-Instinct Check

The most common mistakes Fire Watches make aren't from laziness — they're from bad habits crews have seen before:

- *"I'll just sit in the corner and wait..."* → Fire Watch is not a chair job. Villains hide above ceilings, under floors, behind walls. Patrol means moving.
- *"We stopped sparks, so I can leave early..."* → Ember Wraith smolders for hours. Fires usually start after hot work ends. That's why the 30-minute rule exists.
- *"One extinguisher is enough..."* → If it's not the right class, or it's not staged where sparks land, it's as useless as none at all.

The trained instinct: Patrol, stay the full watch, stage the right tools, and assume the villains are waiting for you to relax.

### SDS Pictogram Spotlight — Gas Cylinder

This symbol marks gases under pressure — oxygen, acetylene, propane, compressed air, CO<sub>2</sub>. They don't burn on their own, but if damaged, heated, or leaking, they can turn into deadly projectiles or fuel a firestorm.

Real-world picture:

- A worker knocks over an uncapped cylinder → the valve shears → the tank rockets through a cinderblock wall at 200 mph.
- A leaking propane hose goes unnoticed → a spark from grinding ignites it → the entire work bay becomes an inferno.
- Cylinders stored in direct sun or near hot work → pressure builds until the relief fails → the result is an explosion that no extinguisher can stop.

Why it matters on our site:

- Cylinders are everywhere — tucked under scaffolds, behind shields, and lined up in storage.
- A single mistake — dragging instead of carting, uncapped valves, unsecured chains — is all Cyclone Cylinder needs to attack.
- Fire Watch must actively patrol these areas, not just glance from a distance making sure they are out of the reach of Spark Slinger.

### Villains

- **Cyclone Cylinder isn't patient — he's violent.** The second a valve snaps, he doesn't just fall over — he launches like a missile, smashing through walls at 200 mph.
- He's Spark Slinger's favorite ally: sparks rain across hoses, regulators, and leaking connections, giving Cyclone the fuel to explode.
- Ember Wraith lurks in rags and cardboard near the tanks. If she catches, the heat feeds Cyclone until he detonates like a warhead.
- Together, they don't just cause a fire... they turn the jobsite into a blast zone.

**Crew reminder:** Fire Watch's eyes must always sweep the cylinder yard and hoses, not just the sparks in front of the torch. Cyclone is fast, brutal, and unforgiving — but he's powerless if the Fire Watch is vigilant.

