

PRESENTATION ON MAKING THE FIRE & ELECTRICAL SAFETY MANAGEMENT EFFECTIVE

By

JAG MOHAN, IPS

Director General

West Bengal Fire and Emergency Services

National Crime Record Bureau

- There were 7743 deaths in 5 year (2010-2014) due to accidental fires caused by Electrical short circuits.
- Electrical fires are one of the major reasons for fires as 56 % of incidents are reportedly cause by electrical fires.
- Electrical short circuits are the most common and most overlooked causes of fire accidents around the World.

Why is Fire Safety Important

- Fires happen *every day* and the toll they take on our lives is *boundless*
- Every 24 seconds, a fire department *responds to a fire*
- Every 65 seconds, a fire occurs in a structure, and every 85 seconds, a *residential fire strikes*.

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- A fire *claims a civilian life* every 2 hours and 49 minutes and results in a *civilian injury* every 30 minutes.
- 62% of home fire deaths occur in homes with either *no smoke alarms* or no working smoke alarms.

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- Electrical failure or malfunction is a leading cause of home fires year after year.
- Many home electrical fires can be prevented simply by understanding basic electrical safety principles and following safe practices.

Causes of Electrical Fires

- 1) Frayed or faulty wiring.
- 2) Extension Cords.
- 3) Electrical appliances – A/C'S, Heaters
- 4) Light Fixtures & Decorations.
- 5) Electrical switches & outlets.
- 6) Unattended Charging point.

Precautions to take for Electrical Fire Safety

- Do not use extension cords to connect electrical appliances. Use extension cords only for temporary purposes.
- Do not run wires under carpets or rugs.
- Do not use cords that are worn out or frayed
- Check the circuit breakers once every year. If you have more instances of tripping. Get a qualified electrician to have the breaker checked.

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- Disconnect mobile chargers or laptop chargers when not in use.
- Replace outdated and worn out electrical appliances and switches.
- Use light fixtures only with the recommended wattage of lights.
- Clear the electrical systems regularly for any dust, trash or spider webs. As these can catch fire whenever there is a heating.

What should you do when there is an Electrical Fire

- **Do** not panic. The most common reason why an **electrical fire** becomes worse has something to do with heightened emotions. ...
- Cut off power in the affected area. ...
- Use baking soda as a first aid. ...
- Never use water to put out the **fire**. ...
- Call emergency services 101 or an electrician.

When to call a qualified Electrician

- If your electrical circuit breakers are frequently tripping.
- Whenever you touch an electrical appliance, you have a tingling feeling.
- The wall outlets are warm or burnt or discolored.
- There is a burning smell from an appliance.
- The lights in your home are flickering.
- If any outlets have sparks coming out of it.

Preventing Electrical Fires

- Understand the basics of your electrical system.
- Install advanced electrical safety technologies.
- Properly maintain your electrical system and components.
- Identify and correct potential electrical hazards.

Electrical System Safety Tips

- Safety should always be the main concern for working on or around electricity.
- It is recommends that a qualified, licensed electrician perform all home electrical work.
- Electrical work must comply with codes and standards.

Issues of Concern & Discussion

1. Rating of Electric Appliances -

How many hours it can run. ACs, Washing Machines, Mixture Grinders.

Fire from AC's – Whether AC is going to run for 24 hours or for shorter duration, - automatic shut down option.

2. Location of Electric Sub Stations and proper enclosing with 2 to 4 hrs fire rated material

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3. Location of Meters / Switch Boards :

- Visit to Nandaram Market and location of Meters.
- Siliguri incident – where 3/4 people were charred

4. Mechanical Stress & Material Stress :

- To Engineer is Human.
- Replacement of old Machines / Turbines & Capital cost

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5. Changes in Law required for fixing the life of electrical appliances and electrical wiring.
6. Fire Audits : Internal / External.
7. Fire and Evacuation Drills.
8. Quick repair and replacement of faulty electrical wiring / appliances.

A stitch in time, saves nine

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9. Fire and Life Safety Emergency Plan.
10. In built Fire Safety (Engineering) SOPs (Operations)
 - Who is authorized to take a call / enforcement of SOPs. Emergency response mechanism [Qualified team of people to handle Emergencies] .

THANK
YOU