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Fire Safety Audit in Automobile Industry

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ABSTRACT: This paper presents the Fire Safety Audit in Automobile Industry and it does speak about Fire Safety Audit is important for Automobile Industry. Fire one of the serious threads faced by all the individual and organization. Fire can occur irrespective of time and place. Being unexpected always, it can betide at house, office premises, hospitals, theatres, malls or other public places. Industrial safety decreases risks to people and processes. Maintaining safe and healthy working environment is not only in important human resources issues, the law. To avoid such calamity which can bring any business to a pause, proper fire Safety practices should be observed. The most potent tool for determining fire safety standards at any facility is fire safety audit. Safety audits are carried out so that the lacunas can be taken.

KEYWORDS: Fire Hazard identification, Fire safety equipment, Fire risk assessment, Fire drills, safety audit important, Life safety.

I. INTRODUCTION

Word Automobile is made up of two words ex. Auto and Mobile. Auto is self propelled and mobile is vehicle, and the meaning of the word Automobile is self propelled vehicle. Now a day the Indian Automobile market world is in second rank. First the following void are being bridged not on between India and world but also the present and future. Virtually every player is acquainting new engines which. Today, the modern universal automotive industry encompasses the principal manufacturers, General Motors, Ford, Toyota, Honda, Volkswagen and Daimler Chrysler, all of which operate in a global competitive marketplace. It is suggested that globalization of the automotive industry, has accelerated during the last half of the 1990's due to the construction of important overseas facilities and establishment mergers between giant multinational automakers. Fire Safety audit which is conventionally, prearranged and all fire safety inspectors will be in uniform and carry identification. The audit is an examination of the hypothetical and useful documents to discover how the premises are being managed concerning fire safety. The inspectors may also wish to talk to members of staff to authenticate their level of fire safety awareness. The emphasis is on the responsible person, substantiating they have met the duties required by the fire safety order. When we talk particularly about fire safety Audit, it is comprehensive well structured and systematic examination which helps an organization is identify to all the possible hazards from fire.

From components, services, equipment, it provides recommendation for the regularly compliance, as per the existing building codes, rules, standard and regulations.

Fire safety plan describes the arrangement for effectively managing fire safety so as to prevent fire occurring and, in the event of fire, to protect vehicles and property. Emergency plan should be based on the outcome of fire safety audit risk assessment and be available for the representative and enforcing authority. The emergency plan should be appropriate to the industry and it could be:

- A) How people will be warned if there is risks;
- B) What people should do if they discover a fire;

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- C) Any machines or processes supplies that need to be stopped if there is a fire;
- D) Specific arrangements, if necessary, for high-fire-risk areas;
- E) Contingency plans for when life safety system such as evacuation lifts, fire-detection and warning systems, sprinklers or smoke control systems are out of order;
- F) How the fire and rescue service and any other necessary services will be called and who will be responsible for doing this;
- G) Procedures for meeting the fire and rescue service on their arrival and notifying them of any special risks;
- H) What training employees need and the arrangements for ensuring that this training is given;
- I) Phased evacuation plans;
- J) Plans to deal with people once they have left the premises;
- K) Unaccompanied children;
- L) People wishing to rejoin friends;
- M) People with personal belongings;
- N) Getting people away from the building;
- O) Inclement weather;
- P) Identification of key escape routes, how people can gain access to them and escape from them to a place of total society;
- Q) Arrangements for fighting the fire;

II. FIRE SAFETY AUDIT

Fire Safety Audit
*Fire Hazard Identification
*Fire Production
*Life Safety
*Fire Extinguishers
*Gas suppression system
*Fire detection and alarm system

Purpose of the fire safety audit plan

A Fire safety Audit plan is a detailed document a designed to deal with all aspects of fire safety relating to the industry. Fire safety plan is designed by the industry owner to identify actions that should be taken by management in the event of a fire or similar emergency situation. In additions, action are Identified which must be implemented and documented, Where required, in order to maintain fire protection systems and assist in the prevention of fire on the premises. All recipient of this plan is required to study the Procedures outline and be prepared to followed the procedures in case of fire or any other emergency. While some workers know how to handle the situation, many of them are ill-equipped to deal with this situation.

A Fire safety audit will identify any non compliance or specific fire safety risk issues. Upon completion of the audit recommendations are provide to address the identified deficiencies, so that the building and it is systems comply with relevant legislation. Audit's are consistent with AS4655 and include:

- Emergency and exit lighting systems
- Adequacy and level of fire safety installation
- Evacuation exercise and testing
- Prescribed training in fire and emergency procedures
- Fire system interface testing
- Alternative solutions management and recording

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Fire Safety Audit plays a crucial role not only in mitigating fire hazards but also drastically reduces the dress of uncertainty. To ensure this, the following aspects are highly taken into consideration during auditing;

- Fire hazard identification
- Fire Risk Assessment
- Fire fighting system
- Fire detection and alarm system
- Sprinkler system
- Internal and external fire hydrant system
- Gas suppression system
- Fire pump house
- Fixed fire suppression system
- Fire extinguisher
- Passive fire protection
- Emergency management and life safety system

Fire warning signs

The first thing all drivers should know whether fire warning sign is dangerous. Vehicle may starts showing signs before the fire actually ignites.. Make sure your oil cap is on securely at all times and there is not a rapid fuel or fluid levels or in the engine temperature itself.

Emergency equipment

Every vehicle in your fleet should have several pieces of fire safety equipment on board. They should all be easily accessible by the driver and any passengers in the vehicle. You should have a fire extinguisher or suppression system and a warning device for stopped vehicle, like road flares, red flags, or emergency roadside triangle reflectors.. Fire extinguisher should be filled with an extinguisher agent that does not freeze and complies with the toxicity provisions set by the Environmental protection agency. It should be clearly marked or labeled with the manufacturer's instructions.

III. FIRE RISK ASSESSMENT

Fire Risk Assessment must be carried out for all parts of all mines dieses vehicles are a potential source of fire and require a Fire Risk Assessment (FRA). Vehicles designed for use in mines are typically manufactured to confirm to legislative requirements, environmental and operational parameters. Specifications. Modifications may typically include;

- Metallic fuel tanks and steel braided fuel lines in preference to plastic.
- Routing of fuel lines away from high risk areas and sources.
- Segregations of fuel lines from damage and potential fire risks.
- Separation of fuel lines and electrical cables.
- Adequate protection and support to mitigate vibration damage.
- Removal of undesirable inherent materials, cladding, insulation and etc.
- Shrouding of hot parts, example of shrouding fitted post delivery.

IV. MOTOR VEHICLE FIRE SAFETY

According to the National Fire Protection Association (NFPA), there were over 185,000 vehicle fires in the US in 2011, causing over 250 civilian deaths. Here we have some tips to prevent the vehicle;

- ◆ Properly maintain your vehicle. According to the NFPA, mechanical and electrical issues are the most common cause for car fires. Be sure to have your vehicle checked by a professional mechanic if it begins

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running irregularly or is leaking any fluids. Also have preventative maintenance performed regularly.

- ◆ Transport gasoline in small amounts in a properly seated gas on, do not transport fuel in the passenger compartment.
- ◆ Avoid smoking in your vehicle.
- ◆ Avoid accidents by driving carefully.
- ◆ Consider placing fire extinguisher in the car.
- ◆ All commercial vehicles are required to have
- ◆ At least a 5 - pounds BC dry chemical extinguisher on board or a 10-pound extinguisher if the vehicle is carried hazardous material. Cintas service extinguisher located on commercial vehicles, keeping them complaint with codes and regulations.

If your vehicle catches fire;

- Pull over as soon as it is safe to do so. It takes an average of out 5 minutes for a fire to reach the passenger compartment of a car after beginning in the engine, so it is crucial to get to safety as soon as possible. Make sure to signal appropriately if you must turn or change lanes.
- Once you have stopped, turn off your engine and get out of the car. Move at least 100 feet from burning car and away from traffic.
- Only use an extinguisher to stop a small, contain fire from growing and spreading or to clear safe path of escape from the vehicle.

V. CONCLUSION

Fire safety audit contribute the compliance strategy going forward, which in turn will assist you in providing a safe working environment, boost employee morale and increase productivity. Fire safety audits are intended to be dynamic and should take into account change. It is advisable to conduct audits in case of significant changes in the industry. As such, the process should be carried out in the event of the following:

- Changes to the industry
- A Fire incident or accident
- Hazardous substance storage is introduced or changed
- Changes to equipment and machinery

Fire safety audits to ensure that you have an idea of how safe your industry is. Along with identifying fire hazards, you will also get recommendations for changes you can make to help protect the tools.

Fire safety plays an important role in industrial safety Audits. It mainly covers;

- Fire safety awareness training for employees
- Emergency exit plan
- Fire safety management
- Fire drills
- Do's and Dont's in case of fire
- Ventilation, sprinkler and emergency lighting system
- For fire fighting

Findings of fire safety audit are then published as a report which has some recommendations for any sort of non-compliance identified. The review presented identifies remedial actions as well which plays a key role for improvements. Periodic fire safety audits thus help in preventing loss of property and human lives to a great extent.



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