



# MAINTENANCE AND FIRE SAFETY TIPS DURING LOCKDOWN

## OVERVIEW:

Coronavirus pandemic forced lockdown across India, impacting economic activity across the country, factories had to forcibly shut bringing manufacturing to a halt. The situation heightens the importance of putting in place, certain guidelines for addressing maintenance standards and risk management practices that would provide reliability over manufacturing machinery and fire protection equipment.

We at Liberty General Insurance Limited understand the importance of safeguarding and lowering the impact of this lockdown on your premises and manufacturing operations. Our 57th edition in this series is intended to address the threats and safeguards to minimize direct and consequential losses that could arise during and after this lockdown situation.



Maintenance is referred to procedures adopted with an aim to preserve a condition or situation or the state of an equipment. Robust maintenance plans enable confidence in management teams at facilities to achieve equipment reliability, services and cost efficiency to clients.

Safeguarding on the other hand is referred to steps being taken to protect a facility from harm or damage due the hazards and risks that it inherits.

## CASE STUDY

Closed tyre recycling unit gutted in Vadodara.

The manufacturing unit was closed currently due to lockdown. On morning of 19th April, due to short circuit a fire took place and spread very quickly in presence of rubber sheets and old tyres.



## LEARNING

- Electrical supply cutoffs could have averted such loss.
- Early detection by security or system could have helped in controlling the loss at incipient stage.



# CHALLENGES



## FIRE FIGHTING FACILITY

Fire fighting facilities which require human intervention like operation of Portable Fire Extinguishers (PFE), water-based fire protection systems dependent on manual mode operation of Fire Pump will be impacted.



## MAINTENANCE SCHEDULES

Periodical inspection and maintenance procedures for machines like daily checks, oiling, bearing lubrication will be impacted. This could result in lapse for noticing small problems and fixing them before they could develop to major ones.



## MISHAPS DURING STARTUP

In absence of above-mentioned maintenance program, plant machinery's startup operation will be impacted once lock down is over.



## LACK OF ADEQUATE SPARES

Interrupted supply chain and transportation would result in unavailability of machinery spares and increase in lead time for procurement.



## PLANT HOUSEKEEPING AND HYGIENE

Due to availability of limited workforce the overall housekeeping practices and hygiene practices would be affected. Housekeeping is integral part of facility maintenance. During and Post Lockdown, hygiene of workers would be very critical in order to avoid accidental spread of COVID-19.



# PRECAUTIONARY MEASURES

## MACHINERY MAINTENANCE

- Existing maintenance schedules should be reviewed and redrawn in accordance to criticality of machinery and probability of failures. Importance should be given to machineries which needs to run on regular interval to ensure their successful startup.
- Strategic plans should be developed for addressing various possible issues such as spare inventory, startup cleaning procedure, ideal run procedures etc. which would help for preparedness in post lockdown stage.
- Proper cleaning drives should be carried out for clearing accumulated dusts from equipment and machinery installed along with associated utilities.
- Basis OEM guidelines and SOP, the installed machinery should be put to ideal run and then brought to load in stages in order to avoid losses due to sudden surge.
- Although machinery maintenance is important, human health cannot be neglected. The first step for re-initiating the business should be sanitation of the premises. Maintaining social distance and use of masks and sanitizers should become a practice. Management can also form guidelines for visitors to maintain overall hygiene of the facility.**



- Ensure firefighting facilities including automatic detection systems are in healthy working condition and testing is done periodically.
- During shutdown it is possible to switch off power supply for manufacturing and unattended areas in plant. However, it should be ensured that uninterrupted power supply is provided to firefighting and detection facility.
- Storage practices plays crucial role in overall safeguarding of a facility. Storage of Combustible and Flammable materials should be maintained to minimum with adherence to safe storage practices such as maintaining distance and segregation; further, practice of frequent cleaning of combustible trash/waste from storage and manufacturing area should be adhered as these wastes may offer to rapid fire spread.
- Arrangement of security guard posts and patrolling is important to deter and notice an unforeseen abnormal incident of forced entry or accident at the premises. CCTV surveillance records can be reviewed periodically (weekly or fortnightly) to ensure safety of the premises.
- Provision for frequent mock drills addressing limited personnel availability for carrying out firefighting activities.

## SAFEGUARDING