Ref.: ISO 45001:2018

EMERGENCY PREPAREDNESS & RESPONSE PLAN (ON – SITE EMERGENCY PLAN)

Document: OH&S/DI/12

			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 1 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

1. Purpose:

To ensure identification, monitoring, control of Emergency Preparedness and Response plan.

2. Scope:

This covers all activities at (COMPANY NAME) plant.

3. Responsibility:

HOD – HR, ERT Team, EOHS Committee & Process Owners.

4. Procedure:

4.1 Introduction:

a) Emergency:

Any Incident which occurs without giving any prior warning / intimation, which may result in loss or damage to life, property or both

b) Types of Emergencies Predicted at (COMPANY NAME) Premises:

- 1) Fire or Oven Explosion (Inside the plant/within premises)
- Accident (involving human beings and/or property, Machines, Structures and Vehicles)
- 3) Natural Calamities / Earthquake, cyclone and heavy rains with storm
- 4) Medical Emergency (Strokes, Attacks, Animal bites, fainting due to confined Space)
- 5) Environmental Emergencies such as Toxic Smoke, GAS Leakages / Chemical Spills etc. Failure of pollution control equipment (ETP Pump, Effluent Tank / line Burst etc)
- 6) Electrocution (Shock) & Lightening.
- 7) Emergency situations due to social reasons such as Labour / public unrest, riots, terrorism etc.
- 8) Rupture of utility pipe lines (Water, oil, chemicals, gas, waste water, effluent, etc)
- 9) Pandemic (such has Covid-19, Swine Flu etc.)
- 10) Structure Collapse

It has been realized that any incident in the plant may develop into a major emergency even with the best standards of safety measures and programs observed in the plant. Hence an emergency procedure is planned and documented to help reducing time loss and confusion among the emergency team members at the time of emergency.

c) Emergency Plan:

The emergency plan is prepared to handle the emergency with minimum delay to prevent the injuries, life loss, property damage and protection of the environment as well.

Emergency management is a comprehensive system set up to address and handles natural and man-made hazards.

It has four parts;

- 1) Prevention / Mitigation
- 2) Preparedness
- 3) Response
- 4) Recovery

			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 2 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

4.2 Preparedness to face different emergency situations:

a) Fire & Explosions:

- 1) Provision and maintenance of the adequate firefighting equipment & controls such as Hydrants, extinguishers and alarms etc.
- 2) Provision & maintenance of First aid boxes shall be located at the shop floors and the security office.
- 3) Proper earthing provided to the machine & other installations to prevent Electrical sparks & fire hazard.
- 4) LPG cylinders, other cylinders are stored, handled, used and replaced as per standard safety practices and as mentioned in Operational Control procedures.
- 5) For Ovens and furnaces are provided with safety features and Operation Control procedures are set to operate and monitor for safe operation.
- 6) Concerned persons are given awareness training, fire frightening trainings and the 'do's and don'ts' involved in the usage.
- 7) Necessary PPE's provided.

b) Accidents / Medical Emergencies:

- 1) First-aid box/eye washers are maintained at the shop floors.
- 2) First Aid training given to the first aid team to attend victim till further medical treatment is made available
- 3) In case of accidents, Food poisoning, where the victim needs immediate hospital care, suitable arrangements with nearby Hospitals are already made.
- 4) Telephone numbers of these hospitals in the vicinity are available at the security gate.
- 5) Transport facility (Company Vehicle) is available during working hours for transporting injured, victimized persons to the nearby hospital.
- 6) Necessary PPE's issued, Trainings provided & Identification and controlling unsafe conditions/ acts / hazards is routine process which is already followed.

c) Natural Calamities / Environmental Pollution Control Equipment Failures, and other unforeseen events:

- 1) Provisions are made for proper structure (stability certificate is being obtained every 5years from the competent authorities), proper lightening arrester to earth the lightning stroke, alternatives, Operational Control procedures, fail safe mechanisms.
- 2) Alerts / Information to all employees regarding such situation / Training to all employees given through classroom sessions and Mock drills.

d) Oil / Diesel / Chemical (Paint/Thinner/Hardeners/Resin) Spillage:

- 1) The person first noticing the oil/diesel/Chemical spillage shall inform to the shift shop supervisor, then to security & maintenance in-charge about the incident.
- 2) Use/apply sand from fire buckets/ Spill Kit to mitigate the spillage.

e) Public Unrest:

- 1) If any threat is received by anybody, shall inform the Security. He shall inform to the HOD HR immediately.
- 2) Nearby police stations with telephone numbers has been identified for reporting such emergency.

f) Structure Collapse:

- 1) Maintenance team along with safety in-charge will inspect the building structures, periphery area periodically. (Once in a year and specifically before monsoon season).
- 2) If any doubt, suspicion, external consultant / expert advice will be sought.
- 3) Routine maintenance to be ensured. Stability certificate obtained as required.
- 4) Necessary Sign/ caution boards, Entry restriction, barricading, to be observed.

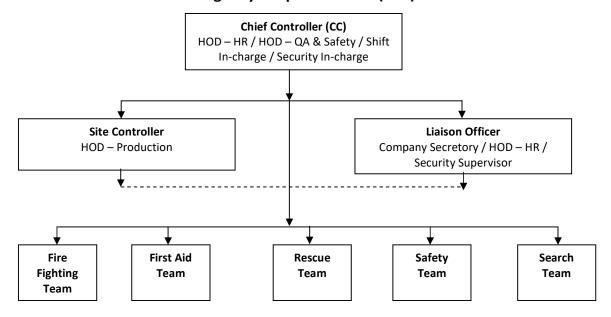
			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 3 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

4.3 Emergency Organization Chart:

Emergency Response Team (ERT)



4.4 Plan for Handling Emergency:

a) Sequence of reporting/receiving & attending Emergencies:

- 1) Whosoever observe or identify emergency situation, Emergency will be communicated to shop floor shift supervisor and Security by calling on Emergency Number 259 and then to HOD HR and HOD QA & Safety.
- 2) The Emergency communication will be done to employees for evacuation by blowing emergency siren for three times in up & down waving by the Security Shift Supervisor.
- 3) Chief Controller, Co-ordinator & Teams assemble at factory main gate area. All others to be available at safe assembly point and to follow further instruction given by CC.
- 4) Site controller will report to CC at security office (ECR Room) & proceed to Emergency Site along with the required team & attend to the emergency. Will report back to CC if any additional help, resources. To be coordinated by the Co-ordinator.
- 5) The declaration about the emergency All Clear will be declared by the Chief Controller and the same will be communicated to all the concerned at assembly point.

b) In case of LPG Leakage/ Toxic gases are released:

- 1) Site controller will report to CC, & proceed to Emergency Site along with the First aid team & attend to the emergency. Will also organize the utility team for electrical supply cut and alternative arrangements.
- 2) Clear the area, move the of personnel in opposite direction.
- 3) Identify the exact place of the leakage.
- 4) Utility team members with requisite PPE such as Nose mask/ hand gloves, Breathing Apparatus, Helmet etc. will close the emergency valves and try to fix the leakage.

			Issue No. 01	Date :
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 4 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

c) In case of failure of Pollution Control Equipment's:

- 1) In case of failure of any pollution control equipment like exhausts / stacks etc. The said activity to which these are provided will be stopped immediately.
- 2) Necessary restoration will be done and on confirmation and testing of equipment only the production activity will be resumed. In case of major environmental problem, the same will be reported to the local pollution authority and the further instructions from them will be followed.
- 3) The exit from plant will be from the regular exit door or emergency exit doors depending on decision of CC & assemble at the Safe Assembly Point (Safe Assembly Point is in front of stores gate near DG Set area) for head count which will be done by Co-ordinator.

d) In case of Electrocution:

Site controller will report to CC & proceed to Emergency Site along with the First aid team & attend to the emergency. CC will instruct to utility team for local area electrical supply cut and alternative arrangements.

e) In case of Explosion / Blast / Fire:

- 1) In case of explosion / Blast / Un-control fire, the total production activity will be stopped immediately. All operators and staff personals will be informed to leave the work station and gather at safe assembly point as per emergency sequences.
- 2) CC will instruct to utility team for local area electrical supply cut and alternative arrangements.
- 3) Site Controller along with Fire Fighting team will extinguish the fire, rescue if anybody is stuck up, necessary First aid is given to the causality if any.
- 4) External services, support of Ambulance & Fire brigade will be called for if found necessary through CC and Liaison coordinator
- 5) Only maintenance persons will stay nearby at a safe distance from the furnace to observe any further damage.
- 6) Main electric supply / LPG Supply of affected local area will be switched off and necessary restoration will be done.
- 7) Allow to cool down all burnt material on shop floor. After coming normal ambient temperature all fallen solid material will be collected.
- 8) Reasons of furnace blast will be discussed with team & Maintenance department will verify all electric / LPG lines if disturbed etc. before restarting the operations

f) In case of Medical Emergency / Food Poisoning / Animal Bites:

- 1) Site Controller along with trained First Aid team will rush to the site, necessary First aid is given to the victim.
- 2) External services / support of Ambulance / On Call Doctor, etc. will be called & necessary Liaison with Hospital for further treatment is coordinated.
- 3) The victim for further treatment sent to Hospital at the earliest.
- 4) Accident scenario photographs to be taken and area will be cordon off for further investigation.

g) In case of public Unrest:

- 1) Cordon the affected area.
- 2) Administer the first aid on the spot by the qualified first aider & Shift the victim to the medical center at the
- 3) Call police/Fire brigade for help.

h) In case of any uncontrollable emergency at exit door of plant/inside plant,

- 1) CC will ask to raise evacuation alarm & further follow the evacuation plan.
- 2) The exit from plant will be from the regular exit door or emergency exit doors depending on decision of CC & assemble at the Safe Assembly Point & head count which will be done by coordinator.
- 3) CC to give all clear messages once the emergency is tackled completely.

			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 5 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

i) In case of Structure collapse:

- 1) In case of Emergencies due to Structure collapse, the total production activity will be stopped immediately. All operators and staff personals will be informed to leave the work station and gather at safe assembly point as per emergency sequences.
- 2) Any causality/injured person will be given first aid and if required sent to hospital for further treatment.
- 3) Only maintenance persons will stay nearby at safe distance from the incident spot to observe any further damage. Main electric supply / LPG Supply of affected area will be switched off and necessary restoration will be done.
- 4) Allow to settle the debris and Clear debris from the site.
- 5) Area will be barricaded and entry restricted. Required utility help/ support will be taken to restore the situation. After coming to normal status, fallen solid material will be collected.
- 6) Reasons of Structure collapse and restored safety will be verified by Maintenance department & Safety Team before restarting the operations.

4.5 Roles & Responsibilities:

a) Chief Controller:

Overall in charge of the entire (COMPANY NAME) Plant in case of any Emergency.

b) Site controller

- 1) Overall in-charge at the site of emergency during the entire Emergency.
- 2) Cordon off the area and ensure that nobody except safety team members are allowed in this area
- 3) To arrange for First Aid & Medical Services
- 4) To secure valuable assets
- 5) To assist emergency services on their arrival
- 6) To consult CC regarding evacuation/ re-occupation of the premises.

c) Liaison Officer / co-ordinator

- 1) To arrange for any external help required, press release, communication etc. as per the instruction by chief controller
- 2) To Control & Instruct all assembled at the Safe Assembly area
- 3) To document the entire incidence
- 4) To arrange for resume normal business at the earliest.

d) Safety Teams

i) Fire Fighting:

- 1. Will be responsible for firefighting operation such as various types of fire extinguishers and fire hydrant system within the factory premises
- 2. To guide & Assist Fire Brigade personnel on their arrival

ii) Rescue Team

- 1. Will be responsible to rescue any person/s trapped / Injured
- 2. To guide & Assist Fire Brigade personnel on their arrival
- 3. Evacuation team member will take the head count at Safe Assembly Point.

iii) Search Team

- 1. Will be responsible to search any person/s trapped / Injured inside or at emergency situation area
- 2. To guide & Assist Fire Brigade personnel on their arrival

iv) First Aid team

- 1. Will be responsible for giving first aid to the injured
- 2. Assisting for their safe transportation to hospitals, If required.

			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page: 6 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

4.6 Emergency Control Room:

Security Office has been designated as the Emergency Control Room, from which the emergency activities will be controlled. It consists of below;

- 1) Adequate internal and external telephone
- 2) A plot plan showing the location of
- 3) Sources of safety and firefighting equipment's.
- 4) Factory buildings.
- 5) Fire hydrant system and fire water tank.
- 6) Location of Assembly Point.
- 7) Location of Medical Room.
- 8) Plant emergency exits and roads.
- 9) Nominal roll call of employees.
- 10) List of key personnel with their telephone no's and mobile nos.
- 11) Stationary items

4.7 Assembly Point:

An assembly point has been set up at the location in front of Factory Building near Security Gate.

4.8 Communication system:

- 1) External telephones in certain essential department, internal telephones to each and very department have been provided in the factory and the mobiles phones are available with concerned officers, which will be used as the main communication resources during the emergency.
- 2) Emergency will be communicated to shop floor shift supervisor and Security by calling on Emergency Number 259 and then to HOD HR and HOD QA & Safety.
- 3) The Emergency communication will be done to employees for evacuation by blowing emergency siren for three times in up & down waving by the Security Shift Supervisor.
- 4) The declaration about the emergency All Clear will be declared by the Chief Controller and the same will be communicated to all the concerned at assembly point.

4.9 Emergency controlling Facilities:

a) Fire Hydrant System:

- 1) Fire hydrant system has been installed in the factory, covering the entire plant. Fire Pump house equipped with two centrifugal pumps, Jockey pump and Main fire pump maintaining 7 kg/cm sq. pressure with automatic On / Off logical setting and alternative DG power supply
- 2) Firewater tank: storage capacity Firewater Tank with standby provision of Fire Brigade Inlet valves provided in the fire hydrant system.

b) Automatic Carbon di oxide total flooding system:

Automatic Carbon di oxide total flooding system installed at Oven area with temperatures sensing devices (Heat detectors).

c) Personal protective equipment:

- 1) Self-Contained Breathing Apparatus (SCBA) set -with spare cylinders,
- 2) PVC suits –for handling acid, and dust mask.
- 3) Safety shoes, helmets, safety goggles have been provided to employees.

d) Process (Fire and smoke detection) safety interlocks:

The safety interlocks are provided with alarm at the Security main gate. Frequent checking and maintenance done.

e) Facilities for Medical Care:

A First Aid Doctors Room with first aid provision has been made.

Tie up with nearby Surya Hospital and other Hospitals in Pune city area are made for emergency treatments.

			Issue No. 01	Date : 01-12-2022
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 7 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

4.10 DISCIPLINE:

Utmost discipline shall be followed in handling the Emergency. The guidelines of DO's and DON'TS are listed below

EMERGENCY DO'S AND DON'TS

DO'S	DON'TS
Anyone noticing an emergency: Whosoever observe or identify emergency situation, Emergency will be communicated to shop floor shift supervisor and Security by calling on Emergency Number 259 and then to HOD – HR and HOD - QA & Safety.	 Do not panic and avoid running all over the place. Prevent other from doing the same. Do not enter the site unless instructed if you are outside and emergency alarm is heard.
 All personnel available inside premises of (COMPANY NAME): On hearing EMERGENCY alert alarm, stop the work safely. On hearing EMERGENCY evacuation alarm assemble near assembly point quickly. 	 Security personnel should not allow anyone to enter or exit the main gate without permission. Do not panic and run here and there.
Security: 1) As soon as gets call from CC regarding emergency situation, security to brow emergency alarm for evacuation. 2) Security inside the factory to blow whistle to alert personal inside factory. 3) Keep the gate manned 4) Close the gates for normal traffic & keep the road clear for movement of fire tender or ambulance. 5) Control traffic at gates.	Do not allow anyone/ visitors to enter or exit the factory.
Visitors: Leave the place and assemble at assembly point without delay.	Visitors are not allowed to enter or exit the premises without permission.

DO's:

- 1) Give attention to all instructions.
- 2) Report to your Team Leader and carry out your assignment.
- 3) Conduct the visitors outside the emergency zone to designated location.
- 4) Only qualified First-aiders shall render first aid wherever possible and wait for the Doctor.

DON'Ts:

- 1) Do not panic.
- 2) Do not communicate with any external agencies unless instructed by the CC.
- 3) Do not spread unauthorized or exaggerated information to others.
- 4) Do not approach the emergency site as spectator.
- 5) Do not engage unnecessarily the communication aids like telephone, PA system etc.
- 6) Do not disturb the team leader assigned with specific work for the emergency.

			Issue No. 01	Date : 01-12-2022
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 8 of 9

Emergency Preparedness & Response Plan

Ref.: ISO 45001:2018

4.11 Post Emergency Situations

a) Head Count

- 1) The Main Security gate should furnish the details of employees, contract employees, visitors, transports and others.
- 2) Rescue team members & HR Officer will take the head count at Safe Assembly Point.
- 3) Both the count will be matched and will be informed to Chief Controller if matching or any discrepancy.
- 4) If any discrepancy observed, necessary action to be initiated to re-verify the count.
- 5) Even after the emergency is over, a Safety Team will be available at the site of the emergency to confirm that there is no further scope of escalating the emergency and all personnel have been survived.
- 6) The Safety Team will carry out an investigation of the emergency. All aspects of accident, must be documented for subsequent analysis for prevention in future, damage estimation, insurance recovery and compensation payment.
- 7) It may be noted that photographs, survey reports, main objects involved in the accident, etc. may have to be carried out before the cleanup and disposal phase.
- 8) This report shall be submitted within 24 hours of the occurrence to the Top Management and the report should be discussed to each of the team member on the next day for about their performance, omission, carelessness etc. However, the effort in all cases is to recommence the operation as soon as possible.
- 9) All emergency situations can have some adverse impacts either on individual & population or on the surrounding environment.
- 10) Even some of the response actions that are undertaken to tackle the emergencies have negative impact on the surrounding environment.
- 11) After the Emergency is effectively contained and controlled, the cleanup of the site of the accident and safe disposal of waste generated due to the accident are undertaken.

b) Mock Drills:

- 1) It is a rehearsal of the Emergency Plan in peace time.
- 2) It enables us to do the activity effectively in a real time situation.
- 3) As per statutory requirements, mock-drill of the On Site Emergency is to be conducted at least once in every six months.

c) Monitoring:

Monitor the emergency situations and response via mock drill reports.

5. Documents & Documented information:

Hazard Identification and Risk Assessment:

Mock Drill Reports:

6. Revision History:

Rev. no.	Date	Reason for revision
00		Original Issue

			Issue No. 01	Date:
Prepared By	Reviewed By	Approved By	Revision No. 00	Page : 9 of 9