



Government of Maharashtra

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In view of the prevailing situation of COVID-19 across the world and in Maharashtra and based on the Lock Down declared by the Government, certain directives were already given to all factories coming under the purview of Factories Act, 1948 and The Maharashtra Factories Rules, 1963. Now considering the situation of toxic gas release from a factory namely M/s. L.G. Polymers, situated at Vizag Andhra Pradesh, the following points shall be taken care by factories closed in lockdown period and while restarting of chemical plants/process plants or as a general start up precautions for all factories after prolonged closure, especially in the present lock down scenario.

I. Safety Instructions For Closed Factories :-

1. In view to secure adequate safety Measures in place appropriate numbers of trained and competent safety supervisors/workers must remain present in Chemical Factories.
2. Regular safety inspections of all storage tanks and vessels of Toxic, Inflammable, Explosive chemicals shall be carried out.
3. Proper functioning of cooling system ,agitation and pressure relief systems shall be ensured .
4. Chemicals like Styrene which goes on polymerisation on prolonged storage shall be added with required quantity of Inhibitors on regular intervals.
5. Firefighting systems, Emergency utility systems like chilling, refrigeration and cooling systems shall be maintained in good condition.

II. Safety Instructions Before Start-up of Chemical Factories :-

1. Ensure that operators involved in the start-up procedure are supervised and supported by experienced technically trained personnel during start-

up and they are sufficiently trained on the control system that they will be operating.

2. Proper PPE shall be ensured for workers engaged in the initial cleaning and start up process to address leakage/presence of toxic gases.
3. Identify all potential hazards due to lock down and based on the Safe Operating Procedure(SOP) shall be prepared and shall be strictly followed.
4. All type of work permit systems shall be strictly followed.
5. Ensure electrical cables and electrical equipment's are in good working condition and free of defects. Also make sure the functioning of all circuit breakers like ELCB, MCB etc.
6. Do not bypass critical safety devices while trouble shooting during start up.
7. All movable machinery/equipment must be de-energised or disengaged and locked out during cleaning, servicing, adjusting or setting up operations.
8. All lifting machineries and lifting tackles shall be checked before operation.
9. Ensure proper working of all emergency systems before starting up of plant.
10. Ensure adherence to all relevant start up procedure and Work instructions during start-up.
11. All factory building shall be properly ventilated before admitting any personnel. This should be checked and verified by a designated Safety Officer or in his absence by competent senior personnel of the factory.
12. All closed storage tanks – floating roof, fixed roof and underground storage tanks shall be checked for toxic gases and accumulated pressure due to formation of gases before hooking up to process lines.
13. Proper working of all safety relevant systems including Pressure gauges, Level gauges, Safety valves, Pressure relief valve etc. of all Underground storages tanks, Overhead storage tanks, Reaction vessels, and Pipelines shall be ensured and Calibration if required shall be conducted before start-up operations.
14. Process pipe lines shall be safely flushed for clearing toxic fumes and vapours to be neutralized, (which may have accumulated) and all line shall be leak tested before taking into use.
15. Ensure proper working of all detection systems including sensors for toxic gases and flammable gases.
16. Wherever possible emergency services shall be kept on standby or Onsite emergency plan to be activated for meeting unforeseen situation. During cleaning/start-up of plant.

Circular on Safety In Chemical Factories during Lockdown

It is the duty of Occupier to observe all reasonably practicable measures to ensure health, Safety and Welfare of all workers and persons residing in vicinity of Factory. The above instructions are not exhaustive in nature and they are only guidelines. If any additional precautions as may be necessary should be adopted by the factory management for safety of workers in the factories after prolonged shutdown.

Mahendra 8.5.2020

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