

**ULTIMATE CREATION PVT. LTD.**

**Plot no 96, MIDC Road-16, Opp Suncity Hotel**

**Andheri (E ), Mumbai-400096**

**SAFETY AUDIT REPORT**

**October-2024**

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**SCHDEULE II**

**See Rule 8 & 9**

**Proforma for safety audit report**

|  |  |  |
| --- | --- | --- |
| **SR NO.** | **NAME** | **DISCRIPTION** |
| (1) | Name and address of the factory. | Ultimate Creation Pvt Ltd., Plot No. 96,MIDC Road No.16,1st Floor, Andheri-East, Mumbai-400093 |
| (2) | Name of occupier. | Mr. Samir Pragji Bhai Patel |
| (3) | Date of Audit. | 08.10.2024 |
| (4) | List of raw material with maximum Storage quantity. | Gold, Platinum, Silver,Alloys & Diamonds and Colur Stones |
| (5) | List of finished products with maximum storage Quantity. | Gold, Platinum, Silver,Alloys & Diamonds and Colur Stones Jewelry. Max 10 kg Raw materials and Finished Products |
| (6) | Manufacturing process flow chart. | Given in the report |
| (7) | PI Diagram of all plants (Chemical Factories). | Not Applicable |
| (8) | Name of the Safety Auditor and Certificate No. and name of the person who has carried out Audit  Safety Audit. | Pankaj Prabhakarrao Barbind  B-03/2024 |
| (9) | Whether enclosed Safety Report as per IS 14489: or any such standards prevailing at the relevant time, whichever is latest. | As Per BIS:14489-2018 |

**Date: Signature of Safety Auditor**

Person or Employee of an Institution

Authorized to carry out Safety Audit.

I, Mr.Samir PragjiBhai Patel (Occupier), undertake to submit the action taken report on recommendations of Safety Audit on or before

Date: Signature of occupier

**INTRODUCTION**

The Management is committed to the safety and health of its employees, protection of the environment and has taken adequate measures to ensure the same. However, as part of continual improvement of the prevailing OH&S system, the management felt the need to conduct safety audit from an external independent source and accordingly the audit was conducted by our Auditor Mr. Pankaj Prabhakarrao Barbind on 08.10.2024

We express our sincere thanks to the Management of M/s.Ultimate Creations Pvt Ltd, Mr.Samir Pragji Bhai Patel( Occupier), Mr. Rajesh Upathaya(Manager Admin/Accounts), and their team for their help and co-operation extended during the Safety Audit. All relevant documents, records were made accessible for scrutiny during audit. We are pleased and thankful for the trust that Management has shown on us in assigning the job of safety Audit. The audit report of M/s.Ultimate Creation Pvt Ltd has been prepared based on the field visit by the Auditor during the Audit.

We also extend our sincere thanks to all other employees of the company for their co-operation extended during the audit.

Safety Audit based on BIS 14489-2018 & as per M.F.R. (Safety Audit) Rules, 2014 (Rule-4)) has been conducted by our Auditor Mr. Pankaj Prabhakarrao Barbind (B-03/2024)

**FOREWORD**

The danger / risk inherent in industrial work have made the life of workers at risk. The accident, costs the organization a very high price. When there is an accident, the management has to incur two types of costs. There is direct cost in the form of medical expenses and compensation etc. more serious than the direct costs are the indirect or hidden costs which the management cannot avoid. Indirect costs include loss on account of down time of operations, slow production rate of other workers; materials spoiled and labour required, cleaning and repairs of damaged equipments etc. This indirect cost is four times more than the direct cost.

Moreover, the morale of the employees is lost. The firm may lose customers because of non-execution of orders in a scheduled time. But much more loss is suffered by the victim and his family members. The pains suffered by the victim and emotional sufferings endured by the family members of the victim cannot be compensated in any way.

Safety, therefore assumes greater relevance in industrial establishments. Safety is necessary as it has an impact on productivity, cost and loss of revenue. On the same lines Safety is important on human grounds too. Managers must undertake accident prevention measure to eliminate / minimize the pain and suffering of the injured worker and his family who are often exposed as a result of accident. An employee is a worker in the factory and bread winner for his family.

Therefore, organization must evolve elaborate safety Programmes to prevent accidents. Typically, Safety Programme comprises of:

* Development of policies, procedure and training systems.
* Creation of an organization to ensure safety.
* Analysis of causes and occurrence of accidents.
* Evaluation of effectiveness of the programme.

Safety audit means a systematic critical examination of an industrial activity. Safety audit is an important tool for identifying faulty standards, area of risk and vulnerability, hazards and potential accidents in proposed and existing plants and processes. It is a tool to determine the necessary actions required to be taken to remove hazard / unsafe action / unsafe condition, before personal injuries or damages occur.

Safety audit covers the systematic and critical examination of

1. Process Safety.
2. Instrumentation Safety
3. Equipment Safety.
4. Electrical safety.
5. Machine safety.
6. Operational Safety.
7. Personal Safety.
8. Emergency Preparedness
9. Use of PPE in Operating area

After the audit is carried out, a report is prepared by the audit team and is submitted to management. The management needs to discuss this report with the concerned people and the action plan must be prepared giving details such as who is to take corrective action and by what time.

The action plan should be monitored to ensure that the recommendations are communicated and understood by the concerned and the required work / change / modifications are carried out before the stipulated time.

The precautions and recommendations provided in this report are intended as a general guideline and may not contain all of the precautions required in every possible situation, though efforts are made to incorporate all possible measures. However, it shall be kept in mind that these are not the last but the least.

**EXECUTIVE SUMMARY**

The External Safety Audit for M/s.Ultimate Creation Pvt Ltd. as required under the Maharashtra Factories(Safety Audit) Rules and as per the Rule-4 has been carried out on 08.10.2024. As an Independent third party approved agency our Safety Auditor Mr Pankaj Prabhakarrao Barbind has carried out the Safety Audit in line with IS 14489-2018.

The Audit report observations and recommendations are based on the verification of sample documents provided to us and the practice and procedures being followed at the installation as against the standard operating procedures and practices.

Though we have covered all the areas and documents provided to us, the audit findings are based on the sample verification. These findings are not comprehensive. Therefore, location shall ensure that the similar findings are not appearing in other equipment or place.

Our Observation and Recommendations are summarized in the next page:

|  |  |  |  |
| --- | --- | --- | --- |
| Sl.no | Observations | Recommendations | Action taken |
| **COMPLIANCE** | | | |
| 1 | House keeping is Good | Good and appreciated |  |
| 2 | Licenses and Stability Certificate are available | Good |  |
| **OBSERVATIONS AND RECOMMENDATIONS** | | | |
| 1 | OS&H Policy is not available but not signed | Arrange to prepare OS&H Policy and Display the same in bilingual at the operating area |  |
| 2 | Air Receiver testing was not done | Arrange to carry out the pressure testing pressure vessel periodically in line with MFR 1963 | Action being taken |
| 3 | Ventilation, Illumination and Noise level survey not carried out | Arrange to carry out Ventillation, Illumination and Noise level survey |  |
| 4 | Annual return not filed | Arrange to file the Annual return every year in Form 27 | Action taken |
| 5 | Safety Committee is not constituted | Arrange to have the Safety committee in line with MFR 1963 and have periodical meeting and record the MoM. |  |
| 6 | Mock Drill records are not available | Arrange to conduct the Mock drill periodically in line with MFR 1963 and record the same |  |
| 7 | Few workmen were not wearing the PPE like Goggles, mask and Finger cap etc. at the time of inspection | Ensure that the workmen wera the PPE as required |  |
| 8 | Emergency response chart and Fire Order are not available | Arrange to prepare the Emergency response chart and the Fire Orders and display the same in bilingual |  |
| 9 | On site Emergency Plan is not available | Arrange to prepare the Onsite emergency plan and submit the same to DISH. |  |
| 10 | Accident register not maintained | Arrange to maintain the Accident Register as required under MFR |  |
| 11 | Safety, Fire Safety and First Aid training not provided | Arrange to provide Safety, Fire Safety and First Aid Training |  |
| 12 | Escape routes are not marked | Arrange to Mark the Escape route for emergency situation | Action taken |
| 13 | Employees medical checkup not done | Arrange to carry out the employees medical check up |  |
| 14 | Only 5 Fire extinguishers are available | Arrange to provide additional 5 Nos Fire extinguishers |  |
| 15 | SOPs are not displayed for Laser machine and Casting machine | Arrange to prepare the SOP for Laser Machine and the Casting machine in bilingual and display the same. |  |
| 16 | Emergency contact nos. are not displayed | Arrange to display the Emergency Contact numbers |  |

**INTRODUCTION TO SAFETY**

1. **TERMS AND CONDITIONS :**
2. **SAFETY:** The quality of system that allows the system to function under a predetermined condition with an acceptable zero or minimum of accidental loss.
3. **AUDIT:** A systematic and independent examination to verify conformance with established guidelines and standards to examine whether these arrangements are implemented effectively and are suitable to achieve objectives.
4. **ACCIDENT:** An unintentional, unexpected and unplanned event that causes harm to people, property or environment.
5. **HAZARD:** An inherent physical or chemical characteristic that has the potential for causing harm to people, property or environment.
6. **INCIDENT:**  An unplanned event that has the potential to lead to an accident.
7. **OCCUPATIONAL ACCIDENT:** An accident, the origins of which are from a workplace. A sudden occupational accident can take place either at the workplace or while commuting between home and the workplace.
8. **RISK:** The combination of the expected frequency (events/year) and consequence (effects/event) of a single accident or group of accidents.
9. **SAFETY MANAGEMENT:** A systematic control of worker performance, machine performance and physical environment. The control includes both prevention and correction of unsafe conditions and unsafe actions.
10. **SAFETY POLICY:** A management definition of the safety and health related actions to be followed in the work organization.
11. **SAFETY PROGRAM / SAFETY SYSTEM:** A set of policies, procedures and practices designed to ensure that barriers to incidents are in place, in use and effective.
12. **SAFETY REVIEW:** An inspection of a plant or process unit, drawings, procedures, emergency plans and / or management system etc. often by a team and usually problem solving in nature.
13. **WORK / WORKPLACE ANALYSIS:** An analysis of the work and work environment in order to determine the quality and the quantity of the task related stress factors which might have an effect on employees’ health and safety.
14. **WORKING CONDITIONS:** The employees’ experience of the quality of work environment, usually with special emphasis on health and safety.
15. **WORK ENVIRONMENT:** The physical, mental (psychological) and social environment where the employees work.
16. **ERGONOMICS:** A branch of science that aims at optimizing the functioning of a work system by adapting it to human capacities and needs.
17. **SAFETY AUDIT:**

Safety audit is defined as a systematic and independent examination to verify conformance with the established guidelines and standards and to examine whether these arrangements are implemented effectively and are suitable to achieve the objectives.

Safety auditing is a systematic method to evaluate company’s safety management system. It covers entire safety management system i.e. all the activities aiming to ensure adequate control of hazards affecting people, property and environment.

Two main tasks of auditing are:

1. Conformance and verification to establish whether the relevant legal / statutory requirements are met.
2. Validation to see whether the correct types of methods/procedures are in use and the correct standard operating procedures are effectively implemented.

Safety auditing is one part of company’s general management activities. It is a similar procedure to the auditing of environmental management system.

Several methods or tools have been developed for supporting safety auditing. These methods are **checklists** of the activities to be assessed. The aim of these safety audit methods is to help management systematically to follow the overall progress in safety control.

1. **AUDIT OBJECTIVES**:

Safety Audit is an important tool for identifying short fall of standards, areas of risks or vulnerability hazards and accident potential in proposed and existing plants and processes, for determining the actions necessary to remove hazards before personal injuries or damage occur.

The loss potential, in the industry is always high due to handling of hazardous products, and is not restricted only to large scale incidences like accidents, fires, explosions etc. but minor issues like failure or damage of instrumentation or equipment may lead to lengthy down time of plant, resulting in heavy financial loss.

Thus the objectives of the audit are:

* To evaluate the effectiveness of the company's safety effort and make recommendations which lead to a reduction in accidents and minimization of loss potential.
* To confirm the extent to which the management safety system is adopted by the Plant.
* To confirm that the Plant / Factory has effectively implemented the planned OH&S management system.
* To confirm that the plant is capable of achieving policy and objective set by the management.
* To confirm to the extent the OH&S management system satisfy the legal / statutory requirements.
* To identify the areas where improvement is required.

**D. SCOPE OF AUDIT:**

The scope of safety audit covers the systematic and critical examinations of the following fields:

**i. Process safety:**

It includes study of process parameters and procedures. Review of any operational changes carried out which can be responsible for safety of the factory.

**ii. Instrumentation Safety:**

It includes review of reliability of instrument trip systems and inter-locking systems. Study of bypassing of any of the important instruments and tripping systems.

**iii. Equipment Safety:**

It includes testing of pressure plant and pipelines, lifting equipment’s etc.

**iv. Electrical Safety:**

Thorough inspection of earthing / bonding, flame-proofing fittings if required, and elimination of any source of electrical ignition.

**v. Machine Safety:**

Audit of built-in safety devices provided on moving machineries, protective guarding and upkeep and maintenance procedures of moving machineries.

**vi. Operational Safety:**

* + - Review of startup and shutdown procedures.
    - Training of Employees.
    - Knowledge of operating personnel towards safety.
    - Housekeeping of plants.
    - Compliance of various safety procedure.

**vii. Personal Safety:**

Includes safe working methods, use of Personal Protective Equipment’s (PPE) and health aspects of employees.

**viii. Emergency preparedness:**

Include identifying potential hazard posing emergencies and steps to be taken to mitigate the emergencies. Preparation of On-Site Emergency Plan identifying the various emergency teams and their duty allocation and mock drill etc.

**ix. Action for Implementation of Occupational Safety & Health (OS&H) Audit Report.**

The organization is responsible for determining and initiating corrective action needed to correct the non-conformity or to correct the cause of non-conformity. **The auditors are only responsible for identifying the non-conformity**. The audit report is to be discussed with the concerned people and the **action plan** has to be prepared giving details who should take the action and by what time.

The action plan should be monitored to ensure that the recommended actions are communicated and are understood by the concerned and the required work or change is carried out before the stipulated date. The report should also be brought to the notice of the local **Safety Committee** members so that they will be aware of the Audit Report.

One of the most important follow-up action is the communication to appropriate personal of the substance of the Audit Report, the agreed recommendations for actions and where no action is agreed / required (although it may have been recommended), the reasons for the same.

**E. AUDIT METHODOLOGY:**

The Indian **Standard IS 14489-2018** is used as basis for the Audit.

* Collection of preliminary information regarding processes, existing safety norms and practices, fire hazards and their control measures, storage, handling of chemicals, safe working procedures, material handling, emergency planning etc.
* To examine OH&S related documents & records maintained by the organization.
* Field visit of the site
* Observation of organization activities
* Interview of personnel
* In-depth discussion with the concerned staff of the Company on the matters pertaining to the Audit points.

Safety Audit covers each area of receipt of raw materials to dispatch of finished products, and critical analysis of all potential hazards. Every component of the total system is included e.g., OS&H Policy, safety training, features of the process and design, layout of the plant, production, emergency plans, personnel protection, accident records etc.

**F. AUDIT PLAN**

The Audit plan was finalized after consultation with the company management and circulated to all Audittees. Check list of preliminary information about the various elements of safety system was filled-in in consultation with the Management.

Safety audit helps to identify the action necessary to remove the hazards and improve the condition before personal injury and / or loss of production take place.

**G. KEY ELEMENTS OF SAFETY AUDIT**

**i. Accident Record** : Accident record for last 3/5 years

Frequency Rate (FR)

Severity Rate (SR)

Incidence rate (IR)

**ii. Safety Management** : Safety Policy and Implementation

Safety Inspection Work Permit System Safety Organization Safety Practice

**iii. Operation Process** : Storage of Raw Materials

Material handling system with associated hazards

Production process with precautionary measures

taken against associated hazards, Machine

Guarding etc.

**iv. Maintenance Practice** : Maintenance Schedule and Procedure for

machinery and Tools Equipment testing schedule

and Test Reports.

**v. Legal Requirements** : As per Factories Act, 1948 and Maharashtra

FactoriesRules, 1963, Water Pollution Control Act and Air Pollution Control Act

**vi. Emergency Preparedness:** On site Emergency Control Plan

**vii. Training** : Training Programmes and Safety Week

Celebration, Safety Suggestion Scheme etc.

**H. REFERENCE DOCUMENTS VERIFIED:**

|  |  |
| --- | --- |
| **SR.No.oO** | **DESCRIPTION** |
| 1. | The company’s Safety policy |
| 2. | Safety organization chart. |
| 3. | Production Process schematic flow. |
| 4. | Training records on safety fire and first-aid. |
| 5. | Record of plant safety inspections format. |
| 6. | Accident Report |
| 7. | Accident investigations reports format. |
| 8. | Accidents and dangerous occurrences statistics and analysis. |
| 9. | Record of tests and examinations of equipment and structures as per statutes |
| 10. | Index of EOT/HOT Cranes & Lifting Equipment Certificates. |
| 11. | Index of Pressure Vessels & Pressure Vessels Certificate |
| 12. | Safe operating procedures for various operations. |
| 13. | Safety Training Calendar |
| 14. | Record of work permits. |
| 15. | Record of monitoring of flammable and explosives substances at Workplace |
| 16. | Maintenance and testing records of fire detection and firefighting Equipment |
| 17. | Medical records of employees. |
| 18. | Records of industrial hygiene surveys (noise, ventilation and illumination levels airborne & toxic substances, explosive gases) |
| 19. | Illumination levels and air pollution levels |
| 20. | Material safety data sheets. |
| 21. | On-site emergency plans and record of Mock Drills. |
| 22. | Records of waste disposal. |
| 23. | Records of effluent discharges to the environment. |
| 24. | Housekeeping inspection records. |
| 25. | Minutes of safety committee meetings. |
| 26. | Approval of layouts from statutory authorities. |
| 27. | Records of any modifications carried out in plant or process. |
| 28. | Maintenance procedure records. |
| 29. | Calibration and testing records. |
| 30. | Shut down maintenance procedures. |
| 30. | In service inspection manuals, records including that of Material |
|  | Handling. |
| 31. | Safety budget. |
| 32. | Inspection books and other statutory records. |
| 33. | Records of previous audits. |

1. **ABOUT THE FACTORY**

The major activity of Ultimate Creation Private Limited is Manufacturing, Sub-classified into other manufacturing and is primarily engaged in the Working of diamonds and other precious and semiprecious stones including the working of industrial quality stones and synthetic or reconstructed precious or semiprecious stones.

Ultimate Creation Private Limited is a 3 years old Private Limited Company incorporated on 01-Oct-2021, having its registered office located at 303, Khandwala Arcade Chs Ltd, Mumbai, C Wing, Off Daftary Road, Andheri East, Maharashtra.

The Company has the expertise in products set in rounds, baguettes jewelry. Having a strategic understanding with diamond manufacturers, the company has access to good resources of diamonds at a very competitive price. Company makes jewelry such as necklaces, pendants to small stud earrings, Finger rings and ring bands. They have 74 skilled personnel. M/s. Ultimate Creation assure the customer with timely production of exquisite jewelry in tune with the latest trends in the global markets.

**2. FACTORY FACILITIES**

* Gold Melting machine
* Casting Machine
* Investment Machine
* Dust Collector
* Furness Machine
* Water jet Machine
* Wax Injector
* Rhodium Machine
* Laser Machine
* Cad Cam Machine
* Air Compressor
* Polishing Machines/ Grinding Machines/Filing machines
* Microscope Machines

**3(a). LIST OF RAW MATERIALS**

* Gold
* Platinum
* Silver
* Alloys
* Diamonds and
* Colour stones

**3(b). LIST OF FINISHED PRODUCTS**

* Gold, Platinum and silver Jewelries with diamond and Colour stone of export quality
* Finger Ring
* Studs/Ear rings
* Bracelets
* Pendants
* Necklaces

1. **PROCESS DESCRIPTION AND PROCESS FLOW CHART**

The products manufactured are normally studded gold jewellery, rings, pendants, bracelets and Necklace etc. The manufacturing process is briefly described as follows:

First the Jewelry design is made by the designer based on the requirement of the customer. Once the customer approves the design, the three D model is prepared in CAD design.

Based on the CAD design, the Wax models are manufactured by Wax Injector. This wax design is fitted with diamond stones as required. Such wax pieces of various designs are assembled on the wax tree. Then soldered to a wax sprue to make rubber mould. This is kept in a stainless flask with one end covered with rubber bases. . Then the flask is kept in a furnace where the paste solidifies and wax gets burnt out and cavity formed in the shape of item for casting.

After the process in furnace, heated flask is placed in the casting machine and the material kept ready duly melted in melting furnace is poured to the flask.

Then the flask is removed and placed in water bucket. Finally, the metal formed while casting with item of jewelry is Filed, Ground, Polished and buffed to get fine finished piece of jewelry.

Then the required diamond and stones are set in the casted pieces by experienced setters and cleaned through steam/ soap water. Then final polishing and Rhodium process take place and then it is packed for further export after the quality test.

**Process Flow Chart**

Design on receipt of Orders

3D modeling

Wax tree making

Precious stone fixing

Casting

Grinding/Filing

Stone setting

Polishing

Quality Checking

Packing

Despatching

1. **POWER SUPPLY SYSTEM**

Factory connected load – 75KVA   from Adani Power

1. **WORKFORCE**

A total of 104 employees are employed by the factory the break-up of which is as under: -

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Male** | **Female** | **Total** |
| **Ultimate Creation Pvt Ltd (Staff)** | 64 | 7 | 71 |
| **Contract workmen** | 2 | 1 | 3 |
| **Total** | **66** | **8** | **74** |

1. **FIREFIGHTING FACILITIES AVAILABLE**

* Fire Extinguishers -5 Nos
* Manual Call Points-1 Nos.
* Hooter-1 Nos.

Apart from the above, the company has Smoke detector, Fire alarm system, Fire Siren s and Fire hydrant system (from Seepz).

1. **CHECK LIST AS PER IS 14489-2018**

**ANNEXURE – B (IS 14489: 2018)**

**(Clause 5.3.3)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Documents to be verified** | | | |
| **SR. NO.** | **ITEMS** | **OBSERVATION** | **RECOMMENDATIONS** |
| **1.** | **2.** | **3.** | **4.** |
| **1.** | OS & H Policy | Not Available. | Arrange to prepare the the OS & H Policy and display the same in bilingual |
| **2.** | Safety Organization Chart | Not available | Arrange to prepare the safety organization chart and display the same at the working area |
| **3.** | Training Records on Safety, Fire & First Aid | Not done | Arrange to prepare the training record and maintain the same for verification |
| **4.** | Record of Plant Safety Inspections | Safety inspection done daily but records are not maintained | Arrange to maintain the record of Safety Inspection |
| **5.** | Accident Investigation Reports | Nil | Good |
| **6.** | Accidents Dangerous Occurrences, Statistics & Analysis. | Nil | Good |
| **7.** | Record of Tests & Examinations of Equipment & Structures as per Statues | Not available | Arrange to get the pressure vessels tested periodically as per MFR 1963 |
| **8.** | Standard Operating Procedures (SOP) for various Operations | Available | Arrange to display the same in bilingual foe casting machine and Laser machine |
| **9.** | Record of Work Permits | N/A-Small unit | ---- |
| **10.** | Record of Monitoring of Flammable & Explosives Substances at Work Place | N/A | ---- |
| **11.** | Maintenance & Testing Records of fire detection & firefighting equipment | Checked periodically but records are not available | Arrange to maintain the record of maintenance of safety equipments |
| **12.** | Medical records of employees | Not available | Arrange for medical Check up of all employees and maintain the record for the same |
| **13.** | Records of Industrial Hygiene surveys (noise, ventilation levels, illumination levels, airborne & toxic substances, explosive gases). | Not available | Arrange to get Ventilation, Illumination and Noise level survey |
| **14.** | Material Safety Data sheets | Available | Good, but arrange to display the same |
| **15.** | On-site Emergency Plan & record of mock drills | Not available | Arrange to prepare the On site Emergency Plan as per MFR 1963 |
| **16.** | Records of storage of hazardous solid waste disposal | N/A | --- |
| **17.** | Records of effluent discharges gaseous emissions and to the environment | N/A | ---- |
| **18.** | Housekeeping inspection records | Being done daily | Arrange to maintain the house keeping record |
| **19.** | Minutes of safety Committee meetings | Not available | Arrange to maintain the Safety committee meeting record |
| **20.** | Approval of layouts & other approval from statutory authorities | Yes available , approved vide  121900000026325 dated 14.12.2021 | Good |
| **21.** | Records of any modifications carried out in plant or process. | Nil | --- |
| **22.** | Maintenance procedure records | Done as and when required | ---- |
| **23.** | Instrumentation and equipment Calibration & testing records | Yes | Good |
| **24.** | Planned Shutdown maintenance procedures | N/A | ---- |
| **25.** | In service inspection manuals, records including that of material handling | N/A | ---- |
| **26.** | OH & S budget | Spent as and when required | ---- |
| **27.** | Inspection books & other Statutory records | No, First time | --- |
| **28.** | Records of previous audits. | First time Audit | --- |
| **29.** | Procedure for Safe transportation of hazardous substances | N/A | ---- |
| **30.** | Records for breakdown of plants during the process of manufacture | Yes, as and when required | ---- |
| **31.** | Records for waste material generated and their disposal | Not disposed off since last three years | ---- |
| **32.** | SOP for disposal of waste materials | No | Arrange to prepare SOP for disposal of waste |
| **33.** | Records for issue of PPE items to the personnel working in process building. | Available | ----- |

**ANNEXURE – C (IS 14489: 2018)**

**(Clause 5.3.4)General Points**

**Check list as per IS 14489-2018**

|  |  |  |  |
| --- | --- | --- | --- |
| **SR. NO.** | **ITEMS** | **OBSERVATION** | **RECOMMENDATIONS** |
| **OH & S MANAGEMENT** | | | |
| **OH & S POLICY** | | | |
| **1.** | Does the organization have OH & S policy? | **To be prepared** | **Arrange to get the OH & S policy to be signed by Directors and display the same at the operating area** |
| **2.** | Who has signed the OH & S policy? | **N/A** | **---** |
| **3.** | Whether the OH & S policy is per guidelines of the statutory provisions? | **N/A** | **-----** |
| **4.** | When was the OH & S policy declared and adopted? | **N/A** | **--** |
| **5.** | Whether the OH & S policy reviewed periodically? | **N/A** |  |
| **6.** | Whether the OH & S policy is available in local language and made known to all? | **N/A** |  |
| **7.** | What was the last date of updation? | **N/A** |  |
| **8.** | Does the policy find a place in the annual report? | **N/A** |  |
| **OH & S ORGANIZATIONAL SET UP** | | | |
| **SAFETY DEPARTMENT** | | | |
| **9.** | Does the factory have a safety department and what is strength of safety department? | N/A | **---** |
| **10.** | Whether the strength and qualifications of Safety Officers are as per the statutes? | NA | **--** |
| **11.** | Does the head of safety department report to the Chief Executive? | **N/A** | **--** |
| **12.** | How often are the safety officers retrained in the latest techniques of total safety management? What is the frequency of retraining? | **No transfer takes place** | **---** |
| 13. | What additional duties the safety officer is required to do? | N/A | -- |
| **14.** | What is the power of safety officer vis-a-vis unsafe condition or unsafe act? | **N/A** | **--** |
| **SAFETY COMMITTEE (S)** | | | |
| **15.** | Does the factory have a safety committee(s)? What are the types, structures and terms of reference of the committees? | No | **Arrange to constitute the safety committee in line with MFR 1963** |
| **16.** | Is the constitution of the safety committee(s) as per the statute? | **N/A** | **--** |
| **17.** | How are the members of safety committee(s) selected? (nominated) | **N/A** | **--** |
| **18.** | How often are the meetings of safety committee(s) held? | **N/A** | **Arrange to have the Safety Committee meeting periodically** |
| **19.** | Are the recommendations of the committees(s) implemented? | **N/A** | **--** |
| **20.** | Are the minutes of the safety committee(s) meetings circulated among the members? | **N/A** | **--** |
| **21.** | Are the minutes forwarded to the trade union(s) and chief executive and occupier? | **N/A** | **--** |
| **22.** | Whether the management and trade union play their active roles in supporting and accepting the committee(s) recommendations? | **N/A** | **--** |
| **23.** | How are the safety committee(s) members apprised of the latest development in safety, health and environment? | N/A | **--** |
| **SAFETY BUDGET** | | | |
| **24.** | What is the annual safety budget? | Spent as and when required | **--** |
| **25.** | How much percentage is this budget of the total turnover of the company? | Safety requirements are met as and when required. | **--** |
| **26.** | How much budget has been utilized till date? | Spent as and when required | **--** |
| **27.** | Is the safety budget adequate? | Yes | **--** |
| **28.** | How is the safety budget arrived at? | As and when required | **--** |
| **29.** | What is the pattern of expenditure for the last five years? | On continual basis as per requirement | **--** |
| **30.** | What are the approved sanctions for the expenditure in this budget? | N/A | **--** |
| **31.** | Does this budget get reflected in the annual report of the company? | N/A | **--** |
| **SAFETY MANUAL** | | | |
| **32.** | What is the periodicity of updation / review of safety manual? | **N/A** | **--** |
| **33.** | Does the safety manual adequately address all the hazards in the plant? | **N/A** | **--** |
| **34.** | Are the employee made aware of safety rules / instruction mentioned in the safety manual? | **N/A** | **--** |
| **STANDARD OPERATING PROCEDURES (SOP)** | | | |
| **35.** | Are written Standard / safe operating procedures available for all operations and processes? | **Not Available** | **Arrange to prepare the SoP for Laser machine and Casting machines** |
| **36.** | Whether the written Standard / safe operating procedures are displayed or made available and explained in the local language to the workers? |  | **---** |
| **37.** | Whether concerned section and safety department prepares standard / safe operating procedure jointly? |  | **--** |
| **38.** | Are standard / safe operating procedures reviewed and updated? |  | **--** |
| **39.** | Have the workers been informed of the consequences of failure to observe the standard / safe operating procedures? |  | **--** |
| **PLANT MODIFICATION PROCEDURES** | | | |
| **40.** | What is the system for effecting any change in the existing plant, equipment or process? | As per management and DISH approval if required | **--** |
| **41.** | Whether the P & I diagrams and other related documents are updated accordingly? | N/A | **--** |
| **42.** | Whether hazard assessment done before implementation of modification? | N/A | **--** |
| **WORK PERMIT SYSTEM** | | | |
| **43.** | What types of work permits exist in the factory? | **N/A** | **--** |
| **44.** | Are the necessary forms detailing required safety precautions have been prepared and used for each type of work-permit? | **N/A** | **--** |
| **45.** | Is the responsibility assigned to authorized person for issuing of safety work permit? | **N/A** | **--** |
| **46.** | Is the copy of safe work permit sent to safety officer before execution of the job? | **N/A** | **--** |
| **47.** | Is validity period specified in the safety work permit? | **N/A** | **--** |
| **48.** | Are the records of work permit available and maintained in proper order? | **N/A** | **--** |
| **CONTROL MEASURES FOR WORK AT HEIGHT** | | |  |
| **49.** | Is adequate safe access provided to all places where workers need to work? | **N/A** | **--** |
| **50.** | Are all such access in good condition? | **N/A** | **--** |
| **51.** | Are all scaffolds are properly designed and erected? | **N/A** | **--** |
| **52.** | Are scaffolds inspected every day before work begins? | **N/A** | **--** |
| **54.** | Are planks in good condition? | **N/A** | **--** |
| **55.** | Are scaffold walkways, platforms, runs or stairs free of debris, grease, any unnecessary obstruction and projecting nails? | **N/A** | **--** |
| **56.** | Are the scaffolds higher than 20 m.? If yes, is a netting or intermediate railing provided between toe-boards and hand railings? | **N/A** | **--** |
| **57.** | Are folding stepladders properly used? | **N/A** | **--** |
| **58.** | Are ladders set up at the proper slope of about 1:4? | **N/A** | **--** |
| **59.** | Do workers use hand lines to lift tools or materials? | **N/A** | **--** |
| **60.** | Are proper ladders used around electrical hazards? | **N/A** | **--** |
| **61.** | On sloping roofs, are crawling boards, lifelines, safety belts and edge protection provided where needed? | **N/A** | **--** |
| **62.** | Whether the weak spots, skylights, or deteriorated asbestos-cement boards through which a worker might fall while working in the roof has been identified and safety net provided appropriately? | **N/A** | **--** |
| **63.** | Are the workers being medically examined for their fitness to work at height? | **N/A** | **--** |
| **WORK IN CONFINED SPACE** | | | |
| **64.** | Is work permit system followed for working in confined space? | **N/A** | **--** |
| **65.** | Whether monitoring of the atmosphere inside the confined space is carried out and ensured that there is no flammable or toxic gas in the area? | **N/A** | **--** |
| **66.** | Whether the person entering the confined space is using suitable personal protective equipment (PPE)? | **N/A** | **--** |
| **67.** | Is rescue team available in case of any emergency? | **N/A** |  |
| **CONTRACTORS’ SAFETY SYSTEM** | | | |
| **68.** | Is there any system for selection of contractors? | **Yes** | **Good** |
| **69.** | Are there any guidelines on contractor’s safety and training? | **Yes** | **--** |
| **70.** | Whether contract document includes necessary safety and welfare clauses as per statutes? | **Yes** | **--** |
| **71.** | Is there any programme to ensure use of PPE by contractors personnel? | **Yes** | **--** |
| **72.** | Do the contractors have their own safety organization? | **Yes** | **--** |
| **73.** | Are the contractors reporting all accidents and injuries? | **Yes** | **--** |
| **74.** | Are contractor workers trained to observe safety at work place? | **Yes** | **--** |
| **75.** | Whether contractor workers are engaged in process / operations? If yes, are they aware of safe operating procedures? | **Yes** | **--** |
| **PLANT DESIGN AND LAYOUT** | | | |
| **76.** | Whether hazardous operations in the plant are segregated? | **N/A** | **--** |
| **77.** | Whether occupational health & safety aspects are considered during the design? | **N/A** | **--** |
| **78.** | Are all the equipments provided with adequate space for working, maintenance etc.? | **N/A** | **--** |
| **79.** | Are the storage tanks provided with enough space / clearance between them? | **N/A** | **--** |
| **80.** | Whether the plant layout has taken care of the movement of fire-fighting equipment and emergency exits? | **N/A** | **--** |
| **MEDICAL MANAGEMENT OF ACCIDENTS** | | | |
| **81.** | Are medical facilities available with trained first aid staff and equipment in round the clock shift for all including contractors? | **MIDC Hospital** | **---** |
| **82.** | Is the ambulance van available for round the clock basis with the dedicated driver? | **MIDC is providing** | **--** |
| **83.** | Is there any mutual aid scheme available with the nearest hospitals to manage and treat injuries during emergency? | **MIDC is providing** | **--** |
| **84.** | Are the workers /contractor workers aware of emergency medical facilities? | **Yes** | **--** |
| **MANAGEMENT OF EMERGENCIES (NATURAL / MAN-MADE)** | | | |
| **85.** | Does the system exist to detect and control these Emergencies? | **Yes** |  |
| **86.** | Are the employees aware of the measures to be taken during emergencies? | **Yes** | **--** |
| **EMPLOYEES SELECTION AND PLACEMENT** | | | |
| **87.** | Whether norms are available for selection of different category of employees? | **Yes** | **--** |
| **88.** | Whether pre-employment medical examination is being conducted for employees? | **Yes** | **--** |
| **89.** | Is there any procedure to evaluate safety awareness and record of the employees during their promotion? | **Yes** | **--** |
| **SAFETY CULTURE** | | | |
| **ATTITUDES OF MANAGERS** | | | |
| **90.** | Do the managers follow the plant safety rules at all times? | **Yes** | **--** |
| **91.** | What are their attitudes towards safety reviews and audits? | **Positive attitude** | **--** |
| **92.** | What is the response of management to safety violation? | **Strict action in case of any safety violation.** | **Good** |
| **93.** | Whether safety related decisions are taken in consultation with the workers? | **Yes** | **--** |
| **94.** | What is the attitude of the managers towards non use of personal protective equipment? | **Strict action during non-use of personal protective equipment.** | **--** |
| **ATTITUDES OF WORKERS** | | | |
| **95.** | Whether workers are aware of the consequences of their wrong actions? | **Yes** | **Good** |
| **96.** | Are laid down safe working procedures followed strictly? | **Yes** | **--** |
| **97.** | What is the attitude of the workers towards their own mistake, which can prejudice safety? | **Positive attitude towards safety** | **--** |
| **98.** | Do the workers report near miss incidents and suggest safety improvements? | **Yes** | **--** |
| **99.** | Are the workers aware of the system of rewards and sanctions relating to safety matters? | **Yes** | **--** |
| **100** | What is the attitude of workers towards use of personal protective equipment? | **Positive attitude** | **Good** |
| **STATUTORY LICENSES, APPROVALS AND RECORDS** | | | |
| **101** | Whether all the safety related Acts / Rules (with latest amendments) applicable to your organization identified, informed to all employees and complied? | **Yes** | **--** |
| **102** | Whether the licenses have been validated? | **Yes, available** | **---** |
| **MOTIVATIONAL AND PROMOTIONAL MEASURES FOR OH & S** | | | |
| **103** | Does the factory have occupational health and safety suggestion scheme? | **Yes** | **--** |
| **104** | Are occupational health and safety contests organized in the factory? | **Yes.** | **--** |
| **105** | Does the factory participate in National Awards? | **No** | **--** |
| **106** | Has the factory been awarded during last five years? | **NA** | **--** |
| **107** | Does the organization publish safety bulletin / newsletters? | **N/A** | **--** |
| **108** | Whether the safety bulletins are widely distributed? | **Yes** | **--** |
| **109** | How is the occupational health and safety information including accident statistics disseminated in the factory? (Bulletin boards, Newsletter etc.) | **N/A** | **--** |
| **110** | What are the activities conducted during National Safety day / week? | **NA** | **--** |
| **111** | What is the percentage of Workers participating in the various safety promotional activities? | **No** | **--** |
| **HAZARD IDENTIFICATION AND JOB SAFETY ANALYSIS** | | | |
| **112** | Was an initial process hazard analysis (PHA) completed? | **N/A** | **--** |
| **113** | What are the stages of PHA? Whether a dedicated group is identified for PHA? | **N/A** | **--** |
| **114** | Was the PHA appropriate for the complexity of the process and identify, evaluate, and control the hazards involved in the process? | **N/A** | **--** |
| **115** | Does the hazard evaluation use one or more of the following PHA methodologies: What-If Analysis, Process Checklist, Hazard and Operability Study (HAZOP), Failure Mode and Effects Criticality Analysis (FMECA), Fault Tree Analysis (FTA) or any other appropriate equivalent methodology? | **N/A** | **--** |
| **116** | Does PHA assure addressing issues of inherent safety features with respect to material and their properties? | **N/A** | **--** |
| **117** | Does the PHA address the hazard identification, incidents history, consequences of failures (engineering and administrative controls), human factors, consequent analysis with respect to possible safety and health effects of failure of controls? | **N/A** | **--** |
| **118** | What are the stages of PHA? Whether a dedicated group is identified for PHA? | **N/A** | **--** |
| **119** | Does the system exists to promptly address findings and recommendations of PHA? | **N/A** | **--** |
| **120** | Are the PHA’s updated and revalidated at least every five years by a qualified team to assure that the PHA is consistent with the current process? | **N/A** | **--** |
| **121** | Whether the activities requiring Job Safety Analysis have been identified? | **N/A** | **--** |
| **122** | Whether the identified jobs for Hazard Identification have been carried out by trained and experienced persons? | **N/A** | **--** |
| **123** | Whether the checklists have been prepared on each Job Safety Analysis and are being used while carrying out the job? | **N/A** | **-** |
| **PRODUCT SAFETY** | | | |
| **124** | Whether hazards arising from use of the products are identified? | **NA** | **--** |
| **125** | Whether material safety data sheet prepared for the products? | **Yes and displayed** | **Good** |
| **126** | Are all the products labelled and packed appropriately? | **Yes** | **--** |
| **127** | Whether safety instructions are given along with products? | **Yes** | **--** |
| **128** | Whether policy exists for recall of products? | **Yes** | **--** |
|  | | | |
| **129** | Whether training needs have been identified? | **Yes** | **Good** |
| **130** | Is there any programme of induction training, its duration and topics covered? | **Yes** | **Arrange to provide Fire Safety and First Aid training from 3rd party.** |
| **131** | Whether the assessment of the trainees has been carried out? | **NO** | **--** |
| **132** | What are the infra-structural facilities available for training? | **Small Unit** | **--** |
| **133** | Whether training is conducted by qualified person? | **Yes** | **--** |
| **134** | Whether trainers are being re-trained from time to time? | **No** | **Arrange to have Training calendar for the year, provide training accordingly and record the same.** |
| **135** | Whether proper records of training program conducted are maintained? | **Yes** | **Good** |
| **136** | How training programs are evaluated? | **Not evaluated** | **Arrange to evaluate the effectiveness of training** |
| **137** | Whether schedule for training on occupational health and safety is available and maintained? | **No** | **Arrange to have the training Calendar for the year** |
| **138** | Whether the training programmes are reviewed? | **No** | **Arrange to review the training** |
| **139** | Are all the employees periodically trained / retrained and what is the frequency of such training? | **No** | **Arrange to provide periodical safety training to workmen** |
| **140** | Are the retraining needs identified whenever a new process / products and change in existing process introduced? | **N/A** | **--** |
| **141** | Whether training covers top management? | **No** | **Arrange to include the top Management in the training program** |
| **142** | How many hours of safety training is given to different employees? | **30 minutes** | **----** |
| **CHANGE MANAGEMENT** | | | |
| **MANAGEMENT OF CHANGE** | | | |
| **143** | Are there written procedures for managing change to process chemicals, technology, equipment and procedures and changes to facilities that affect the plant process / system operation? | **Yes** | **--** |
| **144** | Do the procedures assure that the technical basis for the proposed change addressed prior to any change? | **Yes** | **--** |
| **145** | Do the procedures assure that the impact of the change on safety and health addressed prior to any change? | **Yes** | **--** |
| **146** | Do the procedures assure that modifications to operating procedures are addressed prior to any change? | **Yes** | **--** |
| **147** | Do the procedures assure that the necessary time period for the change is addressed prior to any change? | **Yes** | **--** |
| **148** | Do the procedures assure that the authorization requirements for the proposed change are addressed prior to any change? | **Yes** | **--** |
| **149** | Are employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected by change informed of, and trained in, the change prior to the start-up of process or affected part of process / operations? | **Yes** | **--** |
| **150** | Is the safety information is reviewed and updated on changes? | **Yes** | **--** |
| **151** | Are the operating procedures or practices updated? | **N/A** | **---** |
| **MECHANICAL INTEGRITY** | | | |
| **152** | Does the mechanical integrity program include for all mechanical equipment including pressure vessels and storage tanks, piping and components, relief devices and vent systems, emergency shutdown systems, pumps, control systems? | **Yes** | **--** |
| **153** | Are there written procedures to maintain the on-going integrity of process equipment? | **Yes** | **--** |
| **154** | Whether training been provided to each employee involved in maintaining the on- going integrity of process equipment? | **Yes** | **--** |
| **155** | Are inspections and tests performed on each item of process equipment included in the program? | **Yes** | **---** |
| **156** | Does the inspection and test frequency meet the manufacturer’s recommendation and good engineering practice? | **Yes** | **--** |
| **157** | Are inspections and tests performed more frequently if determined necessary by operating experience? | **Yes** | **--** |
| **158** | Are deficiencies in equipment that are outside limits corrected before further use so as to assure safe operation? | **Yes** | **--** |
| **159** | In the construction of new plants and equipment, whether quality assurance programme is implemented to ensure that equipment fabricated is suitable for the process? | **N/A** | **--** |
| **160** | Are appropriate checks and inspections made during equipment installation stage? | **N/A** | **--** |
| **161** | Are the suitability of maintenance materials, spare parts and equipment ensured during maintenance? | **Yes** | **--** |
| **PHYSICAL HAZARD** | | | |
| **HOUSEKEEPING** | | | |
| **162** | Are all the passages, floors and the stairways in good condition? | **Yes** | **Good** |
| **163** | Is glass door taped or otherwise marked to make it visible to workers? | **Yes** | **--** |
| **164** | Do you have the system to deal with the spillage? | **Yes** | **--** |
| **165** | Do you have sufficient disposable bins clearly marked and whether these are suitably located? Are containers of refuse (waste) and trash emptied at the end of every day or soon after they are full? Are the containers or bins regularly cleaned? | **Yes** | **--** |
| **166** | Are drip trays positioned wherever necessary? | **N/A** | **--** |
| **167** | Do you have adequate localized extraction and scrubbing facilities for dust, fumes and gases? Please specify. | **N/A** | **--** |
| **168** | Whether walkways are clearly marked and free from obstruction? | **Yes** | **--** |
| **169** | Do you have any inter-departmental competition for good housekeeping? | **No, It is a small Micro unit** | **--** |
| **170** | Has your organization elaborated good housekeeping practices and standards and made them known to the employees? | **Yes** | **--** |
| **171** | Are there any working conditions, which make the floors slippery? If so, what measures are taken to make them safe? | **No** | **--** |
| **172** | Does the company have adequate measures to suppress polluting dust arising out of materials stored on the roadside? | **No** | **--** |
| **MACHINE AND GENERAL AREA GUARDING** | | | |
| **173** | Whether machinery and equipment which can cause physical injuries to operator have been identified? | **Yes** | **--** |
| **174** | Are all moving parts and point of operation of machinery adequately guarded? | **Yes** | **--** |
| **175** | Are all fixed guards securely bolted in position and in good condition? | **Yes** | **--** |
| **176** | Are all interlock guards for prevention of physical injury in good condition? | **Yes** | **--** |
| **177** | Are all emergency stop buttons effective and clearly labelled? | **Yes** | **--** |
| **178** | Are the operators for machines having moving parts aware of the danger of working with loose clothing? | **Yes** | **--** |
| **179** | Are the openings where there is free fall hazard covered or fenced securely? | **Yes** | **--** |
| **MATERIAL HANDLING** | | | |
| **180** | Are adequate equipments available for handling materials? | **N/A** | **--** |
| **181** | Are the workers aware of the hazards associated with material being handled? | **N/A** | **--** |
| **182** | Where manual handling is necessary, are the workers been trained? Do they practice this? Are workers warned for lifting of excessive weight? (Maximum weight of material for adult male and female are 55  Kg and 30 Kg respectively) | **N/A** | **--** |
| **183** | Do workers follow safe procedures for storage of materials? | **N/A** | **--** |
| **184** | Is the register maintained to record particulars of examination of all lifting machines, tools and tackles? | **N/A** |  |
| **185** | Are all the statutory examinations and tests carried out and certified by competent person(s)? | **N/A** | **--** |
| **186** | Are the operators of crane, lifts, hoists and other mechanized operations adequately qualified? | **N/A** | **--** |
| **187** | Is the safe working load clearly marked? | **N/A** | **--** |
| **188** | Has the person employed to operate crane, forklift, or to give signals to crane been medically examined for eyesight and colour vision? | **N/A** | **--** |
| **189** | Is the frequency of eyesight and color vision examination as per the latest rules? | **N/A** | **--** |
| **ELECTRICAL SAFE GUARDING** | | | |
| **190** | Are licensed electricians available for electrical work? | **Yes** | **--** |
| **191** | Whether area classification for electrical equipment has been carried out? | **Yes** | **--** |
| **192** | Do the electrical fittings conform to area classification for electrical equipment? | **Yes** | **--** |
| **193** | Is a ground fault current interrupter system (ELCB) in use? | **Yes** | **--** |
| **194** | Are all connections made by using appropriate plugs, receptacles or enclosures? Are fuses provided? | **Yes** | **--** |
| **195** | Are there any make shift connection bare wires or damaged cables? | **No** | **--** |
| **196** | Is there a system of ensuring periodical inspection of hand tools, extension boards used for electrical work? | **Yes** | **--** |
| **197** | Do the workers use proper types of PPE during the working on live line? | **Yes** | **--** |
| **198** | Is the separate work permit issued for working on high voltage line? | **N/A** | **--** |
| **199** | Whether the process(s) and equipment that generate and accumulate static charge have been identified? | **Yes** | **--** |
| **200** | Whether all such equipment including pipelines for flammable materials are properly bonded and earthed? | **Yes** | **--** |
| **201** | Whether earth pit resistance is measured and the record maintained? | **Yes** | **--** |
| **202** | Whether lightning arrestor has been installed and is adequate? | **Yes** | **--** |
| **SAFETY IN STORAGE AND WAREHOUSING** | | | |
| **203** | Whether the Material Safety Data Sheet for all chemicals is available? | **Very small qty of 1 Ltr of HCA** | **--** |
| **204** | Are the chemicals stored as per their hazardous properties including the incompatibility? | **Yes** | **--** |
| **205** | Are all containers clearly, indelibly labeled? Are all chemicals stored as per safety regulations? | **Yes** | **--** |
| **206** | Whether all racks and steel cages have sufficient load bearing capacity? | **Yes** | **--** |
| **207** | Is adequate natural ventilation provided to store room? Is there any emergency exit? | **Yes** | **--** |
| **208** | Whether adequate fire-fighting arrangement existing in flammable chemical storage? | **Yes** | **--** |
| **209** | Whether methodology for handling spillages of hazardous chemical available along with the equipment required handling the spillage? | **Yes** | **--** |
| **210** | Whether aisles are marked and emergency exits displayed? | **Yes** | **---** |
| **HAZARD ASSESSMENT FOR NEW EQUIPMENT** | | | |
| **211** | What is the system for effecting any change in the existing plant, equipment? | **Yes, As per requirement with the approval of Management and DISH** | **--** |
| **212** | Is there system for evaluating hazards from new equipment? | **N/A** | **--** |
| **213** | Whether the P and I diagrams and other relate documents are updated accordingly? | **N/A** | **--** |
| **214** | Is any Job Hazard Analysis (JHA)? | **N/A** | **--** |
| **HAZARDS FROM RADIATION SOURCES :-** | | | |
| **215** | Whether licences have been obtained for storage / handling of radioactive material? | **N/A** | **--** |
| **216** | Whether approved Radiological Safety Officer appointed? | **N/A** | **--** |
| **217** | Whether appropriate PPEs are used against radiation hazards? | **N/A** | **--** |
| **218** | Is the flooring of the radioactive material handling area amenable for proper decontamination? | **N/A** | **--** |
| **219** | Is the storage room of radiation source as per the licence condition? | **N/A** | **--** |
| **220** | Are all persons working in the facility have radiation safety training? | **N/A** | **--** |
| **221** | Is the operator handling devices using radioactive materials qualified and possess the necessary certificate? | **N/A** | **--** |
| **222** | Is the periodical radiation monitoring carried out? | **N/A** | **--** |
| **223** | Are the records of inventory of radioactive material maintained in the standard format and submitted to the competent authority as per the period specified? | **N/A** | **--** |
| **224** | Are emergency handling tools available? | **N/A** | **--** |
| **225** | Are the personnel monitoring badges (TLD, Pocket dosimeter etc.) assigned and worn by each radiation worker? | **N/A** | **--** |
| **226** | Are the radiation symbol and red light displayed as required? | **N/A** | **--** |
| **CHEMICAL HAZARD** | | | |
| **TRANSPORTATION OF HAZARDOUS SUBSTANCES :** | | | |
| **227** | What potentially hazardous materials are transported to or from the site (including wastes) | **N/A** | **--** |
| **228** | What modes of transport are used?  1) Road,  2) Rail, and  3) Pipelines | **N/A** | **--** |
| **1) ROAD** | | | |
| **229** | Does the company employ licensed vehicle of its own / outside sources? | **N/A** | **--** |
| **230** | Are the loading / unloading procedures in place and safety precautions displayed? | **N/A** |  |
| **231** | Is there a provision to check the healthiness of road tanker with respect to explosives rules? | **N/A** | **--** |
| **232** | Are loaded tankers or trucks parked in a specific area on-site? | **N/A** | **--** |
| **233** | Do all truck and tanker drivers carry transport emergency (TREM) card or instruction booklet? | **N/A** | **--** |
| **234** | Do all truck and tanker drivers get training in handling emergencies during transport? | **N/A** | **--** |
| **235** | Are all the tankers marked for proper Haz Chem code? | **N/A** | **--** |
| **2) RAIL** | | | |
| **236** | What hazardous materials are transported by rail? | **N/A** | **--** |
| **237** | Does the company have a direct siding on site? | **N/A** | **--** |
| **238** | Are tankers or other wagons used in transportation? | **N/A** | **--** |
| **3) PIPELINES** | | | |
| **239** | What materials are transported to and from the site by pipelines? | **N/A** | **--** |
| **240** | Are the pipelines underground or over ground? | **N/A** | **--** |
| **241** | Are corrosion protection measures employed in pipelines? | **N/A** | **--** |
| **242** | Whether intermediate booster pumps are used? | **N/A** | **--** |
| **243** | What is the maximum, minimum and average transfer rate? | **N/A** | **--** |
| **244** | Are the pipelines extended in the public domain? | **N/A** | **--** |
| **245** | Are the pipelines dedicated for each type of chemicals? | **N/A** | **--** |
| **246** | Are the pipelines fitted with safety equipment such as leak detectors, automatic shut-off valves etc.? | **N/A** | **--** |
| **247** | What is the frequency and method of testing of the pipeline? | **N/A** | **--** |
| **248** | Is there written procedure for tackling leakages in pipeline? | **N/A** | **--** |
| **HANDLING OF HAZARDOUS SUBSTANCES :** | | | |
| **249** | What are the hazardous substances handled in the factory? | **Yes in small qty(1ltr- max)** | **--** |
| **250** | Whether quantity of hazardous substances is above the threshold limit specified in the Manufacture, Storage and Handling of *Hazardous Substances Rule*, 1989? If yes, then required documentation is available as per the rule. | **No** | **---** |
| **251** | Whether written procedure for handling the hazardous substance is available and operators are trained for handling such substances including actions required in case of leakages and spillages? | **NA** | **--** |
| **252** | Are the employees aware of the hazards arising from hazardous substances and safety precautions to be taken during handling of these? | **NA** | **---** |
| **MATERIAL SAFETY DATA SHEETS (MSDS)** | | | |
| **253** | Are the material safety data sheets available for all the chemicals handled, used and manufactured in the factory? | **Yes** | **Arrange to display MSDS in bilingual** |
| **254** | Whether the latest MSDS are displayed at strategic locations? | **No** | **---** |
| **255** | Is it available in local language*?* | **No** | **--** |
| **SPILL CONTROL MEASURES :** | | | |
| **256** | Whether spill control procedure is available? | **N/A** | **---** |
| **257** | Whether spill collection pit / sump is available at the workplace? | **N/A** | **--** |
| **258** | Whether methodology for recovery / disposal of collected material has been established*?* | **N/A** | **--** |
| **STORAGE OF HAZARDOUS SUBSTANCES :** | | | |
| **259** | Whether storage vessels are identified with the capacity as required under *MSIHC, Rules* 1989. | **N/A** | **--** |
| **260** | What are the storage pressure and temperature? | **N/A** | **--** |
| **261** | Whether vessels are above ground / underground? | **N/A** | **--** |
| **262** | If any of the tanks storing flammable material, whether electrical equipment and fittings are as per electrical area classification? | **N/A** | **--** |
| **263** | Is the bunded area takes into account the total quantity of the largest tank? | **N/A** | **--** |
| **264** | Whether the bund perimeter takes into consideration of trajectory of leak from tank? | **N/A** | **--** |
| **265** | Are the vessels properly bonded and earthed and whether periodically checked and record maintained? | **N/A** | **--** |
| **266** | Are the vessels fitted with remotely controlled isolation valves? | **N/A** | **--** |
| **267** | Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge and overflow line? | **N/A** | **--** |
| **268** | Where do such vents discharge? | **N/A** | **--** |
| **269** | Are the vessels provided with alarms for high level, high temperature and high pressure? | **N/A** | **--** |
| **270** | Are standby empty tanks or any other alternate systems provided for emptying / transfer in case of emergencies? | **N/A** | **--** |
| **271** | What are the provisions made for fire- fighting / tackling emergency situations around the storage vessels? | **N/A** | **--** |
| **272** | Has any consequence analysis for loss of containment been carried out? | **N/A** | **--** |
| **273** | Whether the vessels are tested as per statute? | **N/A** | **--** |
| **274** | Whether log sheets are filled up on daily basis for recording the parameters of these vessels? | **N/A** | **--** |
| **275** | Whether monitors for detection of leakage of flammable / toxic material installed? | **N/A** | **--** |
| **276** | Whether the chemicals stored are as per their compatibility? | **N/A** | **--** |
| **GAS CYLINDERS:NA** | | | |
| **277** | What are the various gas cylinders used in the plant? | **N/A** | **--** |
| **278** | Are valid licenses available for storing all these cylinders? | **N/A** | **--** |
| **279** | Are the cylinders stored and segregated as per their compatibility? | **N/A** | **---** |
| **280** | What are the measures taken for combating any emergency in the cylinders storage area? | **N/A** | **--** |
| **281** | Whether integrity test certificates are obtained from the suppliers of the cylinders? | **N/A** | **---** |
| **282** | Are the cylinders chained and secured properly along with the valve caps and proper identification colour code? | **N/A** | **---** |
| **283** | Are the cylinders protected from heat or sun and rain? | **NA** | **--** |
| **284** | Whether monitors for detection of leakage of flammable / toxic gas installed? | **N/A** | **--** |
| **LABELING AND COLOR CODING:NA** | | | |
| **285** | Are all the containers, vessels and storage tanks labeled for its content and capacity? | **N/A** | **--** |
| **286** | Whether the pipelines are colour coded as per IS 2379? | **N/A** | **--** |
| **287** | Is any plant specific colour code followed? | **N/A** | **--** |
| **288** | Whether the color codes are displayed conspicuously in the working areas? | **N/A** | **--** |
| **HAZARDOUS WASTE MANAGEMENT:** | | | |
| **289** | Is identification done for various types of hazardous wastes? | **N/A** | **--** |
| **290** | Are these quantities less than those specified by the Hazardous Wastes (Management & Handling) Rules, 1989? | **N/A** | **--** |
| **291** | What are their disposal modes? | **N/A** | **--** |
| **292** | What are the systems / measures adopted for controlling air / water / land pollution? | **N/A** | **--** |
| **293** | Whether the solid waste like combustibles, plastic, metals etc. segregated? | **N/A** | **--** |
| **FIRE AND EXPLOSION HAZARD:** | | | |
| **ORGANIZATIONAL SET-UP FOR FIRE FIGHTING** | | | |
| **294** | What is the total strength of fire station and fire crew? | **N/A** | **---** |
| **295** | How many fire crews are available in each shift? | **N/A** | **--** |
| **296** | Is there fire squad identified in each shift? | **N/A** | **--** |
| **297** | Standing fire order is available with latest revision? | **N/A** | **--** |
| **298** | How is the communication with fire station? | **By Phone to MIDC Fire station** | **--** |
| **299** | Does fire safety inspections carried out? | **Yes** | **Arrange to maintain the safety Inspection record** |
| **300** | Does emergency procedure available for leakage or combustion of flammables? | **N/A** | **---** |
| **301** | What measures are available to control the fire load in the plant area? | **N/A** | **---** |
| **302** | Whether technical knowledge and skills of the manager and staff responsible for overall fire safety of the plant is adequate? | **Yes** | **--** |
| **303** | How many major and minor incidents / fires were there in the factory during the last five years? Give department / plant wise. | **Nil** | **Good** |
| **304** | Have all the fires / incidents been investigated and corrective actions taken? Give break-up. | **N/A** | **--** |
| **305** | Resources:  1) Adequacy of protective clothing (coat, trouser, gloves, boots and helmets);  2) Availability of SCBA for fire-fighting operations and spare cylinders (at least  2 for each SCBA);  3) Adequacy of hose, nozzles, ladders, lighting equipment and pumps; and  4) Communication facility at fire station, walkie talkie sets during fire-fighting. | **Yes**  **N/A**  **Yes available**  **NO** | **--**  **Through Mobile** |
| **BUILT IN SAFETY IN CIVIL DESIGN AND CONSTRUCTION** | | | |
| **306** | Whether the two safe means of escape available? Are they in separate directions? | **Yes** | **Arrange to mark the escape route** |
| **307** | Is emergency exits provided to the building handling flammables? | **Yes** | **--** |
| **308** | Whether emergency lights are provided? | **Yes** | **--** |
| **309** | Whether fire/ smoke detectors are installed in fire prone areas? | **Yes** | **--** |
| **310** | Whether fire call points are provided in different areas? | **Yes** | **--** |
| **311** | Whether Fire hydrants are provided near the buildings? | **Yes** | **--** |
| **312** | Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures? | **Yes** | **--** |
| **313** | Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth? | **Yes** | **--** |
| **314** | Access routes for fire fighting operations is available for areas having high fire load? | **Yes** | **--** |
| **315** | Whether building changes interferes with fire detection and / or fire suppression systems? | **No** | **--** |
| **316** | Whether building changes cause unreasonable fire loading / openings in the fire rated walls? | **No** | **--** |
| **BUILT IN SAFETY IN ELECTRIC CIRCUITS AND EQUIPMENT** | | | |
| **317** | Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type? | **N/A** |  |
| **318** | Are lightning arrestors are provided to the buildings / structures storing flammable materials? | **N/A** |  |
| **319** | Whether adequate bonding and grounding of electrical equipment / pipelines provided? | **N/A** | **\_\_** |
| **EXPLOSIVE SUBSTANCES:** | | | |
| **320** | Whether necessary license / approval taken from concerned statutory bodies? | **N/A** | **--** |
| **321** | Whether systems for explosion suppression, high speed fire detection with deluge, sprinklers, explosion venting etc. are provided? | **N/A** | **--** |
| **322** | Whether explosion resistant walls or barricades are provided around explosive storage? | **N/A** | **--** |
| **323** | Whether explosive substance storage areas are restricted for entry? | **N/A** | **--** |
| **324** | Whether only trained persons are handling explosive substances? | **N/A** | **--** |
| **325** | Whether explosive substances are stored and transported in approved containers only? | **N/A** | **--** |
| **326** | Whether electrical fixtures in areas handling explosives are explosion proof type? | **N/A** | **--** |
| **327** | Whether adequate measures are taken to prevent any sources of ignition where explosive substances are handled? | **N/A** | **--** |
| **FIRE SAFETY IN HANDLING FLAMMABLE AND EXPLOSIVE MATERIALS:** | | | |
| **328** | Whether emergency procedure is available for control of leakage? | **N/A** | **--** |
| **329** | Whether emergency measures are displayed locally in case of accidental spillage / leakage? | **N/A** | **--** |
| **330** | Whether facility is provided for safe drainage of combustible or flammable liquids in case of leakages? | **N/A** | **--** |
| **331** | Whether highly flammable liquids are stored under inert atmosphere? | **N/A** | **--** |
| **332** | Whether flammable storage tanks are provided with flame arrestors? | **N/A** | **--** |
| **333** | Whether suitable PPE’s are provided? | **N/A** | **--** |
| **FIRE DETECTION AND ALARM SYSTEM** | | | |
| **334** | What type of fire detection and alarm system provided? | **Yes, Fire Alarm, Smoke detector, Alarm system and Electrical siren provided** | **Good** |
| **335** | Whether all fire prone areas of the plant are covered with fire detection system? | **Yes** | **--** |
| **336** | Whether fire detection equipment and smoke alarms in good operating condition? | **Yes** | **--** |
| **337** | Whether the numbers of fire call points are adequate and free from obstruction? | **Yes** | **--** |
| **338** | Whether regular inspection / maintenance / testing of fire detection and alarm system carried out and records maintained | **Yes** | **--** |
| **339** | Whether any atmospheric monitoring is carried out for explosive mixture of gases or vapours? | **Yes** | **--** |
| **340** | Whether emergency power supplies are provided to fire detection and fire alarm system? | **N/A** | **--** |
| **341** | Whether smoke detectors are located considering ventilation pattern? | **Yes** | **--** |
| **342** | Whether annunciation of fire is local or in the control room or in both places? | **Yes** | **--** |
| **343** | Whether fire panel is constantly attended? | **Yes** | **--** |
| **PASSIVE AND ACTIVE FIRE PROTECTION SYSTEM :-** | | | |
| **344** | What are the passive fire protection measures available? (Barriers, Doors, Dampers etc.) | **N/A** | **--** |
| **345** | Are the areas requiring fire barriers identified? | **N/A** | **--** |
| **346** | Whether the fire barrier provided is of adequate ratings? | **N/A** | **--** |
| **347** | Whether ventilation ducts in flammable areas have been provided with isolation dampers of suitable fire rating? | **N/A** | **--** |
| **348** | Whether sprinklers / deluge are installed wherever necessary? | **N/A** | **--** |
| **349** | Whether regular inspection / maintenance / testing of fire -protection system carried out and records maintained? | **Yes, being done** | **Arrange to maintain the record for the same** |
| **FIXED FIRE EXTINGUISHING SYSTEM :-** | | | |
| **350** | What are the sources of firewater and whether they are dedicated to the fire extinguishing system? | **Yes** | **--** |
| **351** | Whether the capacity of dedicated water reservoir is adequate to supply to hydrants for minimum 2 h? | **Yes** | **--** |
| **352** | Whether un-interrupted power supply is provided to the firewater pumps? | **Yes** | **--** |
| **353** | Whether the extinguishing medium selected is appropriate to the class of fire (water, gaseous, foam, dry powder)? | **Yes.** | **Good** |
| **354** | Whether fire hydrants layout is available? | **N/A** | **--** |
| **355** | Whether additional (over minimum requirement) fire hoses, nozzles are available? | **N/A** | **--** |
| **356** | Whether the hydrants lines are kept pressurized? | **N/A** | **--** |
| **357** | Whether regular inspection / maintenance / testing of fixed fire extinguishing systems carried out and records maintained? | **N/A** | **---** |
| **PORTABLE FIRE EXTINGUISHING SYSTEM:-** | | | |
| **358** | Whether suitable type and numbers of fire extinguishers provided? | **Yes** |  |
| **359** | Whether the fire extinguishers are located at conspicuous position and easily accessible? Are they fully charged and tagged? | **Yes** | **--** |
| **360** | Whether fire extinguishers periodically inspected, tested, refilled and records maintained? | **Yes** | **--** |
| **361** | Whether defective / unchecked fire extinguishers present at site? | **No** | **--** |
| **362** | Whether additional fire extinguishers are available? | **Yes** | **--** |
| **FIRE FIGHTING EQUIPMENT AND FACILITIES:-** | | | |
| **363** | Whether fire tenders (water / foam) are available? | **No** | **Available from MIDC Fire Brigade** |
| **364** | Whether the fire-fighting system and equipment approved, tested and maintained as per relevant standard? | **Yes** | **--** |
| **365** | Whether the SCBA / fire suit provided to fire fighting team for immediate action? | **N/A** | **--** |
| **366** | What is system for maintenance / recharge of SCBA? | **N/A** | **--** |
| **367** | Is proper access available for fire fighting equipment? | **Yes** | **--** |
| **368** | Whether fire hose cabinets are in good condition, easily visible, and accessible? | **N/A** | **--** |
| **369** | Whether drill tower is available? Are fire personnel carrying out regular fire drill? | **N/A** | **--** |
| **370** | What is the communication facility at fire station? Is it adequate? | **Yes, Through Telephone** | **--** |
| **FIRE DRILL:-** | | | |
| **371** | Whether mock fire drills are conducted? What is the frequency of drills? | **Mock drill record not available** | **Arrange to conduct Mock drills periodically and maintain the mock drill records** |
| **372** | Whether fire drills are also performed in night shift? | **Only general shift** | **--** |
| **373** | Whether feedback of fire drill is documented? | **No** | **Arrange to discuss with the staff and record the same** |
| **374** | What is the system of mutual-aid scheme? | **Within MIDC** | **---** |
| **FIRE FIGHTING TRAINING:-** | | | |
| **375** | Whether there is a system of providing fire-fighting training to plant personnel? | **Yes.** | **---** |
| **376** | What is the frequency and duration of such training? Whether training records are maintained? | **Internal training given but records are not available** | **Arrange for Safety & First aid training periodically and maintain the record of the same** |
| **377** | Whether fire squads are identified for different areas for first-aid fire fighting and rescue, and suitably trained? | **Yes** | **---** |
| **378** | Are all personnel conversant with the fire prevention and protection measures? | **Yes** | **--** |
| **379** | Whether the fire staff are sent for refresher/ advanced training courses? | **No** | **Arrange for training** |
| **STATIC ELECTRICITY AND LIGHTNING:** | | | |
| **380** | Whether all vessels and pipes are provided with suitable bonding and grounding? | **N/A** | **--** |
| **381** | Whether arrangement has been made for grounding the tanker containing flammable liquid during loading / unloading? | **N/A** | **--** |
| **382** | Whether spark resistant tools are provided? | **N/A** | **--** |
| **383** | Whether lightning protection is provided and is adequate? | **N/A** | **--** |
| **384** | Whether antistatic clothing, hand gloves and footwear are provided? | **N/A** | **--** |
| **PRESSURE RELIEF SYSTEM:** | | | |
| **385** | Whether the listing of all ‘pressure plants’ [as defined under *Factories Act*] has been done? | **Yes** | **--** |
| **INDUSTRIAL HYGIENE / OCCUPATIONAL HEALTH :-** | | | |
| **VENTILATION** | | | |
| **386** | Whether any ventilation study has been carried out? | **No** | **Arrange for Ventilation survey** |
| **387** | Whether natural ventilation is adequate or not? | **More or less** | **--** |
| **388** | Whether dust / fumes / hot air is generated in the process? | **N/A** |  |
| **389** | Is there any exhaust ventilation system in any section of the plant? | **N/A** | **--** |
| **390** | Is periodic / preventive maintenance of ventilation system carried out and record is maintained? | **N/A** | **--** |
| **391** | Does any ventilation system re-circulate the exhausted air in work areas? | **N/A** | **--** |
| **392** | Is the work environment assessed and monitored for chemical and physical hazards? | **N/A** | **--** |
| **393** | Whether PPE are provided to workers exposed to dust / fumes and gases? | **Yes** | **Ensure that the workmen wear PPE while working on Filing and grinding machine** |
| **ILLUMINATION:-** | | | |
| **394** | Whether illumination study has been carried out for the assessment of illumination level? | **No** | **Arrange to conduct the Illumination survey and maintain the record for the same.** |
| **395** | Is there any system of periodical cleaning and replacing the light fittings / lamps in order to ensure that they give the intended illumination levels? | **Yes** | **--** |
| **396** | Are the workers subject to periodic optometry tests and records maintained? | **Covered in Health Checkup** | **---** |
| **397** | Are emergency lighting available at first aid center? | **Yes** | **--** |
| **NOISE:-** | | | |
| **398** | Whether any noise study conducted? | **No** | **Arrange for Noise level survey** |
| **399** | Are there any machines / processes generating high-noise? | **No** | **--** |
| **400** | Whether engineering and administrative controls been implemented to reduce noise exposure below the permissible limits? | **Yes** | **Good** |
| **401** | Is there a system of subjecting all those employees to periodic audiometric test who work in high-level noise areas? | **Yes, Covered in Health Checkup** | **---** |
| **402** | Whether the workers are made aware of the ill effects of high noise? | **Yes** | **Good** |
| **403** | Whether ear muffs / plugs are provided and used? | **No** | **--** |
| **VIBRATION:** | | | |
| **404** | Are there equipment which contributes excess level of vibrations and whether they are identified? | **N/A** | **--** |
| **405** | Whether any vibration study has been carried out? | **N/A** | **--** |
| **406** | Are the measures taken to combat vibration to acceptable levels? | **N/A** | **--** |
| **407** | What is the frequency for measurements of vibration? | **N/A** | **--** |
| **408** | Are the records of measurements and maintenance of equipment / system maintained? | **N/A** | **--** |
| **HEAT STRESS / COLD STRESS:-** | | | |
| **409** | Are there sources from equipment increasing the heat load in work places? | **N/A** |  |
| **410** | Whether evaluation of heat stress is carried out? | **N/A** | **--** |
| **411** | Whether natural ventilation is adequate to minimize the heat stress in work environment? | **N/A** | **--** |
| **412** | Are resources available to deal with very hot or very cold conditions (drinking water, lined gloves, insulated boots)? | **N/A** |  |
| **413** | Do workers know the symptoms of heat cramps / heatstroke or frost bite/ hypothermia? | **N/A** | **--** |
| **414** | Are the personal protective equipment suitable for reducing the effects of heat stress available? | **N/A** | **--** |
| **NON-IONIZING RADIATION:-** | | | |
| **415** | Does the work involve likely exposure to non-ionising radiations (ultraviolet, infrared, radiofrequency, microwaves, lasers, etc.) | **N/A** | **--** |
| **416** | Whether risk assessment has been done for all work areas involving presence of non- ionising radiations? | **N/A** | **--** |
| **417** | Are the work areas displayed with relevant safety signs? | **N/A** | **--** |
| **418** | Are the employees aware about the hazards of non-ionising radiations? | **N/A** | **--** |
| **419** | Does a written procedure exist for working in non-ionising radiations? | **N/A** | **--** |
| **420** | Is the work environment monitored periodically for physical hazards and control measures initiated whenever deviation from permissible values is observed? | **N/A** | **--** |
| **421** | Whether suitable personal protective equipments are provided to workers exposed to non-ionising radiations? | **N/A** | **--** |
| **WORK PLACE MONITORING FOR HAZARDOUS CHEMICALS:-** | | | |
| **422** | Whether the dust, fumes, smoke aerosols and mist are monitored as per statute and records maintained? | **N/A** | **--** |
| **423** | What are the types of detectors used for monitoring concentration of hazardous chemicals? | **N/A** | **--** |
| **424** | Is any alarm system installed for any leakage of hazardous chemicals? | **N/A** | **--** |
| **425** | Are antidotes available for toxic chemicals? | **N/A** | **--** |
| **426** | Are control measures initiated whenever deviation from permissible values is observed? | **N/A** | **--** |
| **FIRST AID FACILITIES AND OCCUPATIONAL HEALTH CENTRE (OHC):-** | | | |
| **427** | Are adequate numbers of first aid boxes provided? Give location details? | **Yes 1no. with security** | **--** |
| **428** | Are qualified / trained first aiders available in each shift? | **No** | **Arrange to to train the staff on First Aid and display their names** |
| **429** | How many qualified / trained first-aiders are available at each plant / department? | **Not available** | **--** |
| **430** | How many persons are trained / given refreshers training in first aid in a year? | **10, Internally** | **--** |
| **431** | Whether occupational health centre is provided? | **N/A** |  |
| **432** | Does OHC conform to the provisions of the existing statutes? | **N/A** | **--** |
| **433** | Are the Medical Attendants / Doctors available in each shift? | **N/A** | **--** |
| **434** | What facilities are available for transportation of the injured to hospital? | **Ambulance on call from MIDC** |  |
| **435** | Are the names of the trained first aiders displayed? | **No** | **Arrange for First aid training and maintain the record of the same. Display their name** |
| **436** | Are the name of nearest hospitals and its telephone number available in OHC? | **Yes** | **---** |
| **437** | Does the plant have any special preventive medicine program? | **N/A** | **--** |
| **438** | Is ambulance posted in proper place and is it available whenever required? | **N/A** | **--** |
| **439** | Are sufficient numbers of anti-dotes available in case of any emergency? | **N/A** | **--** |
| **440** | Are fire safety measures provided in first aid centre? | **N/A** | **--** |
| **441** | Are emergency lighting arrangements available at first aid centre? | **N/A** | **--** |
| **PERIODIC MEDICAL EXAMINATION:-** | | | |
| **442** | Whether the periodical medical examination of employees, required under relevant statute is carried out? | **No** | **Arrange to carry out the Health Check up of employee through approved surgeon** |
| **443** | Whether it is ensured that contractors employee are medically examined during pre-employment as well as during the course of employment? | **N/A** | **--** |
| **444** | During the periodical medical examination of the workers, are they examined as per the hazardous process in which they work? (First schedule of *The Factories Act,* 1948) | **To be done** | **--** |
| **445** | Are the records of all such examination maintained? | **No** | **Arrange to carry out the Medical Check up of the employees and maintain the record of the same** |
| **PERSONAL PROTECTIVE EQUIPMENT AND EMERGENCY EQUIPMENT:-** | | | |
| **446** | Whether list of required PPE for each hazardous activity is available? | **Yes** | **--** |
| **447** | Whether feedback from workers obtained during selection of PPE? | **Yes** | **--** |
| **448** | Have the workers been trained in proper use of PPE including BA sets? | **Yes** | **--** |
| **449** | What is the system of procurement, inspection, issue, maintenance and replacement of PPE? | **Yes** | **--** |
| **450** | Whether qualitative and quantitative fit- check for respirators is ensured prior to use? | **Yes** | **--** |
| **451** | What are the arrangements for safe custody and storage of PPE? | **Yes** | **--** |
| **452** | Are the contractor’s workers provided with the required PPE? | **Yes** | **--** |
| **453** | Do the PPE conform to any standard? | **Yes** | **--** |
| **454** | Are sufficient eye wash fountains and safety showers available? | **N/A** | **--** |
| **455** | Whether appropriate respiratory protective devices are available in accordance to the hazard potential? | **N/A** | **--** |
| **456** | Are the staff members trained in the right uses of respiratory protective devices? | **N/A** | **--** |
| **OCCUPATIONAL DISEASES:-** | | | |
| **457** | Whether pre-employment medical check up data available? | **No, Small Unit** | **--** |
| **458** | During the medical check up, is any person found having occupational diseases mentioned in 3rd schedule of *The Factories Act*, 1948? | **N/A** | **--** |
| **459** | Whether the medical practitioner informed the Chief Inspector of Factories about the occurrence of the occupational disease? | **N/A** | **--** |
| **ACCIDENT / INCIDENT REPORTING, INVESTIGATION AND ANALYSIS** | | | |
| **ACCIDENT REPORTING AND DATABASE MANAGEMENT:-** | | | |
| **460** | What is the procedure for accident/ incident / dangerous occurrence reporting? | **N/A** | **--** |
| **461** | Whether the accident data for the last *five* years for reportable and non-reportable accidents are available? | **Nil Accident** | **---** |
| **ACCIDENT INVESTIGATION:-** | | | |
| **462** | Are all the accidents investigated? | **Nil accident** | **--** |
| **463** | Whether accident investigation procedure is documented? | **N/A** | **--** |
| **464** | Whether accident investigation reports are submitted to top management? | **N/A** | **--** |
| **465** | How are the findings from accident investigation reports communicate to workers? | **N/A** | **--** |
| **ANALYSIS OF ACCIDENTS:-** | | | |
| **466** | Whether accident analysis is done as per IS 3786? | **Nil accident** | **--** |
| **467** | Whether root causes of accidents are analysed? | **N/A** | **--** |
| **468** | Is the accident statistics effectively utilized? If yes, how? | **N/A** | **--** |
| **469** | What nature of injuries occurred during the last five years? | **N/A** | **--** |
| **IMPLEMENTATION OF RECOMMENDATIONS:-** | | | |
| **470** | How does the management ensure implementation of the recommendations to avoid recurrence of accidents and incidents? | **Nil accident** | **--** |
| **REPORTING AND INVESTIGATION OF NEAR-MISS INCIDENTS:-** | | | |
| **471** | Are all near-miss incidents reported and investigated? | **Nil** | **--** |
| **472** | Is there any system of classifying and analyzing the near-miss incidents? | **N/A** | **--** |
| **EMERGENCY PREPAREDNESS:-** | | | |
| **SITE SPECIFIC DETAILS** | | | |
| **473** | Are the site area maps (including layout, access roads and assembly points) available in control room / emergency control centre? | **Yes** | **--** |
| **DUTIES AND RESPONSIBILITIES OF KEY PERSONNEL** | | | |
| **474** | Is the hierarchy of emergency response personnel right from site emergency controller downward? | **Yes** | **Arrange to develop emergency response chart/Fre Order and display the same** |
| **475** | Are the duties and responsibilities assigned to the designated officials during emergency? | **Yes** | **Arrange to maintain the record** |
| **IDENTIFICATION OF EMERGENCIES AND ACCIDENT SCENARIO:-** | | | |
| **476** | Are the possible accident scenarios leading to emergency identified and known to the operating personnel? | **Small Unit** | **--** |
| **477** | Are approved emergency preparedness plans (on-site and off-site) in place? | **No** | **Arrange to develop emergency response chart and display the same** |
| **DECLARATION AND TERMINATION OF EMERGENCY:-** | | | |
| **478** | Is the list of designated officials who are to be communicated about declaration and termination of emergency available in the control room / emergency control centre? | **Yes only HR/Safety person** | **--** |
| **479** | Are the methods of communication (siren, public address system etc.) for declaration and termination of an emergency known to all the workers? | **By shouting and siren- small area** | **--** |
| **RESOURCES-EVACUATION / TRANSPORT:-** | | | |
| **480** | Are the following resources (equipment, personnel and procedures) required handle emergency available?  **1.** Communications,  **2.** Public announcement systems  **3.** Monitoring of hazardous releases into the environment,  **4.** Emergency shelters at the facility,  **5.** Emergency exits with proper illumination, with uninterrupted power supply,  **6.** Direction for emergency exit / escape route marked in haulage / Alleyways,  **7.** Transport for evacuation of plant personnel,  **8.** Medical care including administration of antidotes,  **9.** Security / maintenance of law and order. | **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes** | **--** |
| **COMMUNICATION FACILITIES:-** | | | |
| **481** | Does the emergency control centre have direct communication links with the fire station and the plant control room? | **By phone** | **--** |
| **482** | Are there adequate alarm points from which an emergency alarm can be raised? | **Yes** | **--** |
| **483** | Is there infrastructure available for ensuring backup electric power supply for communication links where required? | **Yes** | **--** |
| **MEDICAL CARE:-** | | | |
| **484** | Is the procedure for emergency medical care available? | **Yes from MIDC** | **--** |
| **485** | Whether the system has been tested at regular frequency through mock drill / exercises for its adequacy? | **No** | **Arrange for Mock Drills periodically and record the same.** |
| **486** | Does the system of periodic replacement of antidotes and medicines required in emergency exist? | **N/A** | |
| **UPDATION OF EMERGENCY PLAN:-** | | | |
| **487** | Is the emergency plan updated based on the feedback from the periodic drills / exercises? | **No** | **Arrange to prepare and display the emergency plan** |
| **488** | Are the contact details of all concerned officials kept updated in the emergency plan? | **Yes** | **--** |
| **PERIODIC DRILLS / EXERCISES:-** | | | |
| **489** | Are mock-exercises conducted at stipulated intervals? | **Yes** | **Arrange to maintain the record** |
| **490** | Are the scenarios varied in the mock- exercises to ensure that all possible factors including meteorological conditions, affected plant personnel covered? | **Yes** | **--** |
| **491** | Whether emergency preparedness Plans have been tested and reviewed at regular frequency through mock drill for its adequacy | **No** | **Arrange for emergency preparedness and record the same.** |
| **TRAINING OF PLANT PERSONNEL:-** | | | |
| **492** | Are the plant personnel trained in handling emergency equipment? | **Yes** | **Arrange to maintain the record of the same** |
| **PUBLIC AWARENESS PROGRAMMES:-** | | | |
| **493** | Are public awareness programs conducted for the people around the site regarding the actions to be taken in case of off-site emergency? | **N/A** | **--** |
| **MUTUAL-AID PROGRAMME:-** | | | |
| **494** | Are the types of accidents where external organizations would be involved in remedial actions identified? Are their responsibilities defined? | **Within MIDC** | **--** |
| **495** | Is the plant responsible for rendering mutual aid assistance to any other external organizations? Does this assistance affect the plant’s emergency preparedness? | **NA** | **--** |
| **496** | Whether the communication channels for mutual assistance identified and known with and between two organizations? | **N/A** | **--** |
| **EMERGENCY CONTROL CENTRE:-** | | | |
| **497** | Is the emergency control centre located beyond the effective distances of identified emergency scenarios? | **N/A** | **--** |
| **498** | If the emergency control centre is located within the effect distance, is it suitably protected that it will be available in case of emergency? | **N/A** | **--** |
| **SAFETY INSPECTION:-** | | | |
| **INSPECTION PROGRAMME** | | | |
| **499** | Are checklists available for inspections? For example availability of checklists like:  a) Handling, Storage and Transportation of hazardous chemicals;  b) Electrical hazards;  c) Fire safety;  d) Hand and portable power tools;  e) Machine hazards;  f) Lifting equipment;  g) Ladders and scaffolding;  h) Environmental Monitoring;  j) Civil structure;  k) Housekeeping;  m) Emergency equipment; and  n) Gas cylinder and other pressure vessels used /  available in the organization. | **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes**  **Yes** | **-Arrange to maintain the record of the same** |
| **SAFETY RELATED DEFICIENCY (SRD) REPORT:-** | | | |
| **500** | Are SRDs generated based on the area wise checklists? | **N/A** | **--** |
| **501** | What is the procedure for resolving the SRDs? | **N/A** | **--** |
| **502** | Whether the procedure exists for notification and root cause analysis of non- conformities and action taken on them? | **N/A** | **--** |
| **SAFETY INSPECTION RECORDS:-** | | | |
| **503** | Are the safety inspection records maintained? | **No** | **Arrange for Internal Safety inspections and maintain the record** |
| **METHODOLOGY AND INSPECTION TEAM:-** | | | |
| **504** | Is there written procedure for safety inspection? | **No** | **Arrange for safety inspection record** |
| **505** | Whether safety inspection is carried out by a designated team? | **No** | **--** |
| **506** | What is the frequency of safety inspections? | **Not specified** | **--** |
| **507** | Whether an inspection report is generated? | **No** | **--** |
| **COMPLIANCE OF RECOMMENDATIONS:-** | | | |
| **508** | To whom the recommendations are submitted | **To higher authority** | **--** |
| **509** | Are recommendations of safety inspections complied in time? | **Yes** | **--** |
| **510** | Is compliance of recommendations sent to top management? | **Yes** | **--** |
| **511** | Is compliance of recommendations reviewed by safety committee? | **Yes** | **--** |
| **512** | Does top management follows-up the compliance? | **Yes** | **Good** |

1. **GENERAL OBSERVATION**

**i Health And Safety Policy**

While preparing ‘Health and Safety Policy’, Rule 73-L of “The Maharashtra Factories Rules, 1963” is to be referred to and provisions given under the statute are to be complied with.

‘Health and Safety Policy’ is to be, prepared and reviewed every year.

**ii Safety Budget**

Year-wise expenditure record of budgetary amount and expenditure needs to be recorded.

**iii. First Aid**

First Aid boxes to be fitted at strategic points in the Factory. The medicines kept in first-aid boxes are to be regularly checked for expiry dates and needs replenishment as and when required. Also arrange to provide the First Aid Training to the staff and display their name.

1. **Medical examination of Workmen**

Medical examination of all workers shall be carried out once in six months as per Rule 73 V (1)(b) of M.F.R.1963.

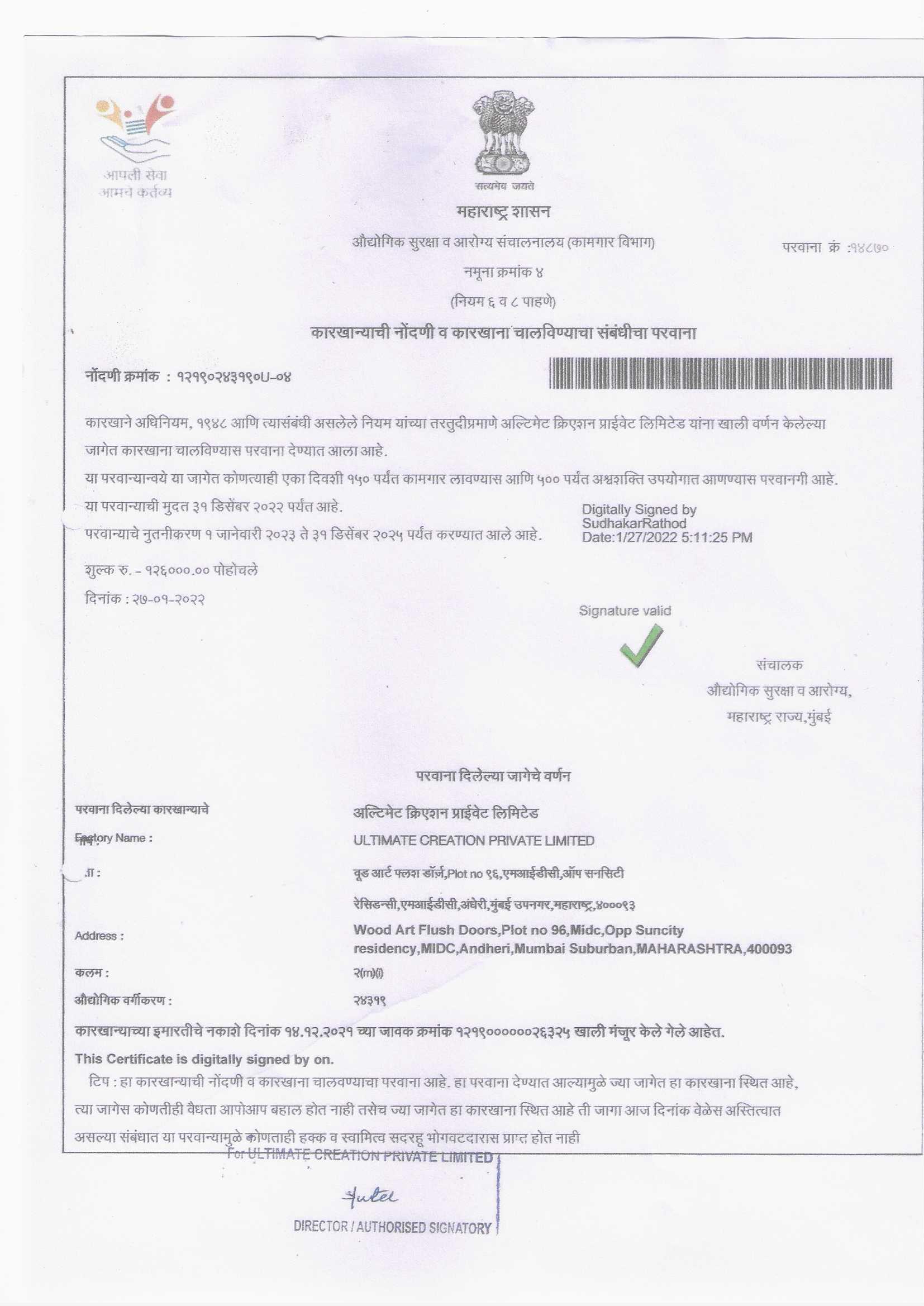
1. **Safe Operating Procedures**

SOPs are to be displayed in the operating areas.

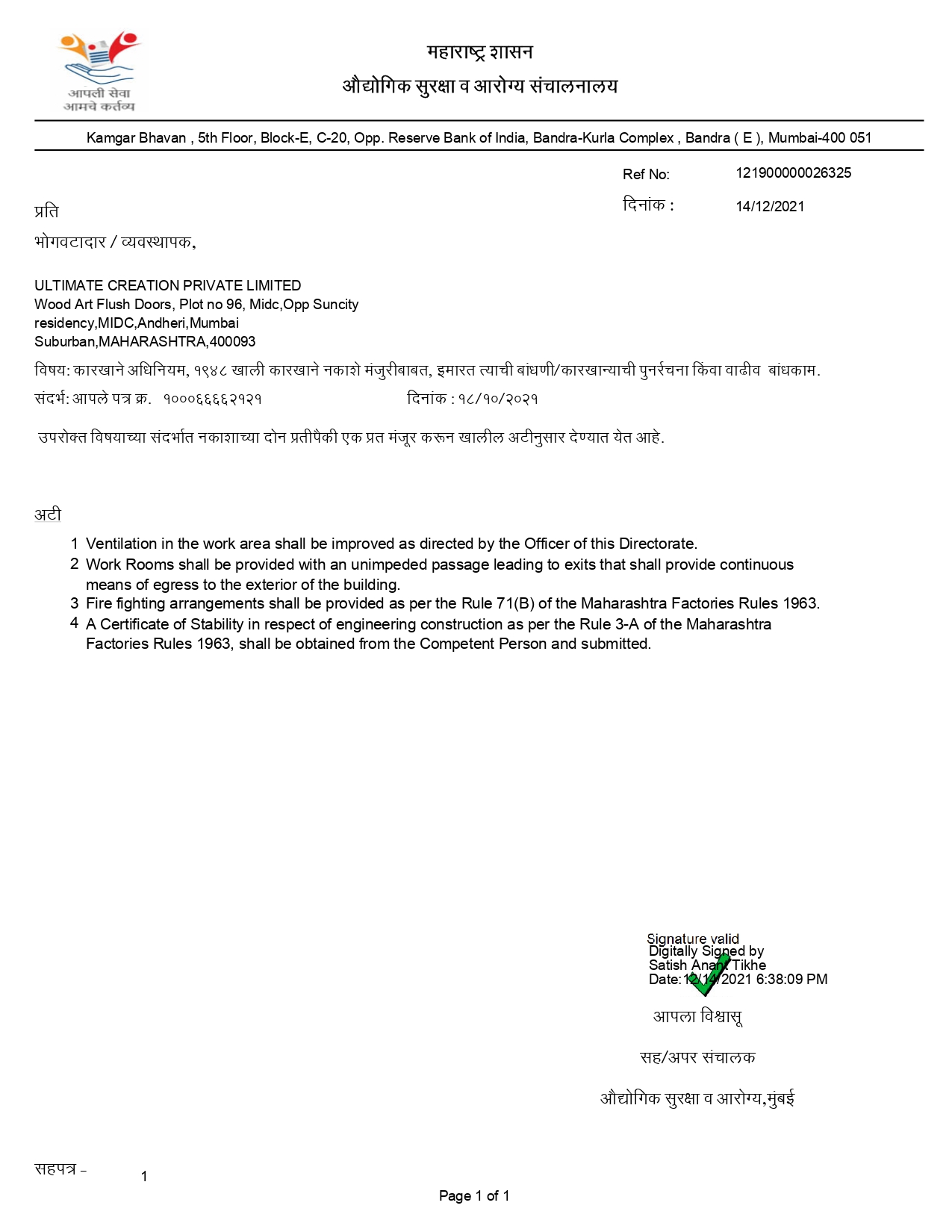
1. **DETAILS OF LICENSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **SL NO.** | **LICENSES, APPROVALS AND CONSENT LETTERS** | **NUMBER** | **VALID UPTO** |
| 1 | Factory License | 12190243190U-04 | 31.12.2025 |
| 2 | Plan Approval/Layout/PI Diagram | 121900000026325 dated 14.12.2021 | ---- |
| 3 | Stability Certificate | Issued on 17.12.2021 |  |
| 4 | BMC License | 871748070 | 28.12.2024 |
| 5 | MPCB Consent | 0000215812/CO/2408000073 | 01.08.2024 |

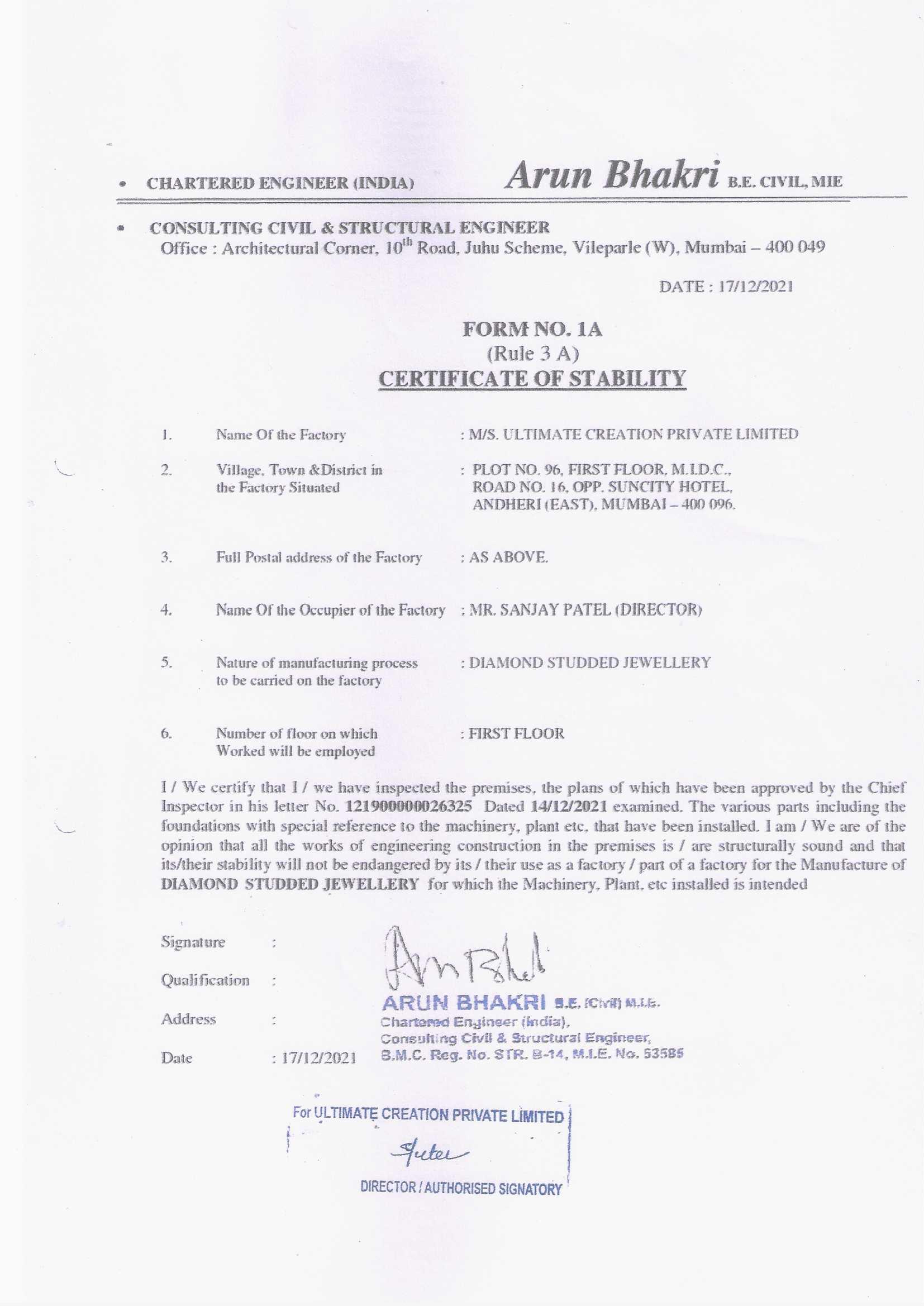
**FACTORY LICENSE**



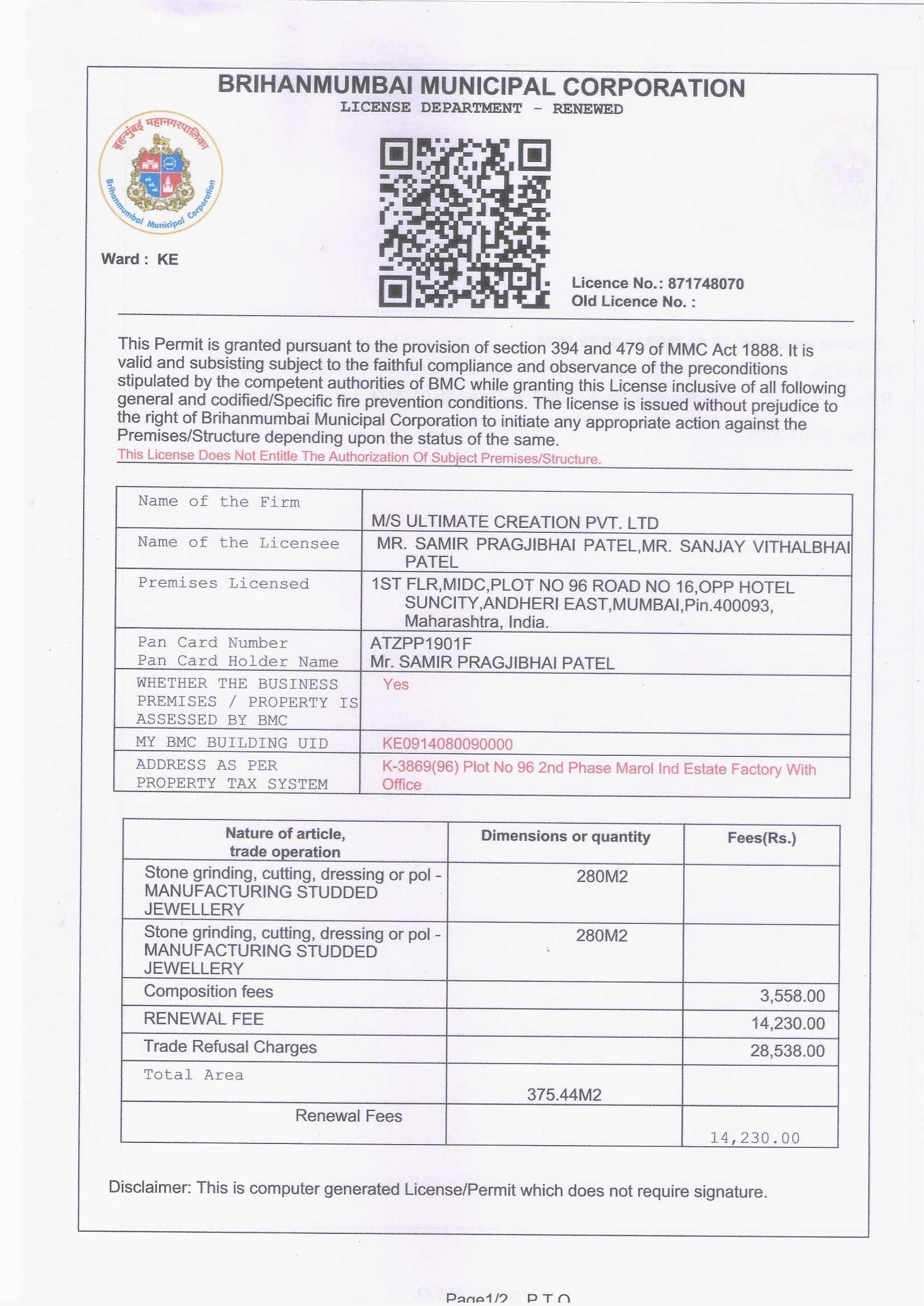
**PLAN APPROVAL LETTER**



**STABILITY CERTIFICATE**



**BMC LICENSE**



**MPCB Consent**

