ON- SITE & OFF- SITE EMERGENCY PLAN

FOR

STEAMHOUSE INDIA LIMITED

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FOREWORD

In compliance with Section 41-B (4) of the Factories Act, 1948, which mandates the preparation of an ON-SITE emergency plan for hazardous factories, we present this comprehensive ON-SITE and OFF-SITE Emergency Response Plan. This plan, meticulously developed for the welfare of our employees and the general public residing in the vicinity of the factory, outlines detailed disaster control measures to be implemented in the event of an accident or disaster within the plant.

Adhering to the proposed draft rules and guidelines provided by the Factory Inspectorate office, this plan covers a range of critical aspects:

1. **Risk Assessment and Environmental Impact:** Evaluation of potential risks and environmental impact in the case of toxic releases, along with preventive measures.
2. **Failure of Control Measures:** Assessing probabilities of hazards due to the failure of control measures and equipment, such as safety valves, pressure gauges, and temperature indicators.
3. **Immediate Control Procedures:** Provisions for immediate control facilities and procedures to minimize the impact of identified hazards.
4. **Mutual Aid Arrangements:** Establishing arrangements with mutual aid agencies for collaborative assistance.
5. **Emergency Communication:** Setting up systems to inform workers and the public through emergency alarms, telephones, and loudspeakers in case of emergencies.
6. **Evacuation Plans:** Strategizing and implementing plans for the evacuation of individuals likely to be affected by emergencies.
7. **Medical Response:** Coordinating arrangements for transporting affected persons to hospitals and medical centers, ensuring necessary treatment.
8. **Responsibility Chart:** Defining an organizational chart to assign responsibilities at different stages for handling emergencies, including liquid spillage, fire, and explosions.
9. **Training and Rehearsals:** Incorporating provisions for regular training, rehearsals, mock drills, and periodic testing of emergency response personnel.
10. **Emergency Facilities Map:** Submission of maps indicating emergency facilities such as hospitals, police stations, and fire services.
11. **Health and Safety Policy:** Articulating a comprehensive statement of the factory's health and safety policy.
12. **Material Safety Data Sheets:** Submission of material safety data sheets for hazardous chemicals.
13. **Accident Source Identification:** Providing a statement of all possible sources of accidents, including fire, explosion, and toxic substance releases, with plans for emergency control.
14. **Off-Site Emergency Services:** Establishing a link between ON-SITE and OFF-SITE plans, with a separate chapter devoted to OFF-SITE emergency planning, including joint rehearsals and duties.

In the preparation of this plan, we express gratitude to various resources, including guidelines from the Chief Inspector of Factories (Gujarat State), the Loss Prevention Association of India, and the ICMA for their contributions. A separate chapter is dedicated to OFF-SITE planning to explain the connection and facilitate joint rehearsals.

This comprehensive plan, covering hazards such as fire, explosion, and toxic releases, serves as a vital tool for operatives, employees, and the public in the vicinity to undertake appropriate steps during emergencies.

REVISION OF ON-SITE & OFF-SITE EMERGENCY ACTION PLAN

The ON-SITE and OFF-SITE Emergency Action Plan is subject to periodic reviews and revisions to ensure its adequacy and effectiveness. Changes in documents and data are thoroughly examined, revised if necessary, and approved before release. The designated authority overseeing these modifications has access to relevant background information, ensuring informed decision-making.

The nature of changes is clearly identified within the documents, and a meticulous record is maintained through the Amendment Record Sheet. Revisions are made based on investigations into emergency occurrences and insights gained from periodic tests and mock drills, as deemed necessary by the Safety Department. This ongoing commitment to improvement underscores our dedication to maintaining a robust emergency response framework.

Amendment Record Sheet							
Amd. No.	Chapter no.	Page no.	Replace current issue no.	New issue no.	New issue date	Reason & Description for change	Signature of copy holder

CHAPTER I

PRELIMINARY

1. INTRODUCTION TO *THIS* PLAN

Preliminary, this plan is meticulously crafted to provide detailed guidelines for factories to fulfil their statutory responsibilities for both on-site and off-site emergency planning. Comprising two sections, the plan aims to equip factories with essential information and procedures necessary for effective emergency preparedness. The first section outlines basic requirements, definitions, objectives, hazard identification, risk analysis, environmental impact assessment, organizational setup, communication systems, on-site actions, and the link with off-site emergency plans. The second section, presented as an annexure, encompasses 30 useful annexures designed to extract specific information derived from the initial section. Completing these annexures is crucial for seamless initiation of actions during emergencies, fostering mutual aid among neighbouring factories, and assisting the government in formulating area emergency control plans. A dedicated chapter addresses the off-site impact of emergencies, outlining associated duties, functions, and the crucial link with on-site emergency plans. The plan concludes with recommendations for training, rehearsals, and record-keeping for both on-site and off-site emergency planning.

2. IDENTIFICATION OF THE FACTORY: ANNEXURE – I

To commence the plan, begin by completing Annexure-I, detailing the identification of the factory for which this plan is prepared.

3. MAP OF THE AREA: ANNEXURE – 2

Include a map of the area in this section, showcasing the factory's location, residential areas, surroundings, approaches, main gate, other gates, and locations of external emergency facilities. Specify distances from the emergency control center to facilities such as fire stations, police stations, medical centers, transportation hubs, shelters, mutual aid centers, petrol pumps, schools, and relevant offices. Additionally, provide information on north direction, normal wind directions, and velocities at different times. Refer to Annexure-2 in the annexure section for guidance.

4. DEFINITIONS

This section elucidates key definitions relevant to emergency planning, ensuring a common understanding of terms. Definitions cover accidents, major accidents, emergencies, minor emergencies, major emergencies, disasters, environment, environment pollutant, hazardous substance, hazardous process, hazard, chemical hazard, risk, individual risk, and societal risk.

5. OBJECTIVES OF THE EMERGENCY PLAN

Enumerated here are the primary objectives of the emergency plan:

1. Clearly define and evaluate emergencies, including risk and environmental impact assessments.
2. Effectively manage and contain incidents.
3. Ensure the safety of employees and individuals in the surrounding areas.
4. Minimize damage to property and the environment.
5. Disseminate information on hazards/risks, safeguards, residual risks, and individual roles during emergencies.
6. Prepare for 'mutual aid' to assist neighbouring units.
7. Alert authorities and mutual aid centers for assistance.
8. Facilitate the rescue and treatment of casualties, along with identifying and listing any deceased individuals.

9. Inform and assist relatives of affected persons.
10. Secure the safe rehabilitation of affected areas and restore normalcy.
11. Provide authoritative information to the news media.
12. Preserve records, equipment, etc., and organize investigations into the causes of emergencies and preventive measures.
13. Ensure the safety of worksites before personnel re-enter and resume work.
14. Develop a comprehensive plan with provisions for emergency preparedness and periodic rehearsals, with clear assignment of responsibilities. Provide individual emergency duty information in a booklet or card format (see Annexure-31).
15. Emphasize that emergency planning is not a substitute for good design, operating, and maintenance practices, which must be consistently followed to avoid emergencies.

CHAPTER II

RISK AND ENVIRONMENTAL IMPACT ASSESSMENT

Importance of Implementing Control Measures for Both Natural and Technological Risks

The implementation of control measures for both natural and technological risks is paramount for ensuring the safety and well-being of individuals, the protection of the environment, and the preservation of assets. The significance of these measures can be underscored through several key points:

1. *Protection of Human Lives:*
   - **Natural Risks:** Control measures mitigate the impact of natural disasters, such as earthquakes, lightning, and floods, protecting individuals from harm.
   - **Technological Risks:** Effective control measures in technological processes safeguard against potential accidents or malfunctions, preventing injuries and fatalities among workers and the public.
2. *Preservation of the Environment:*
   - **Natural Risks:** Implementing measures to mitigate the environmental impact of natural disasters helps prevent long-term ecological damage.
   - **Technological Risks:** Controlling technological risks, such as chemical spills or emissions, safeguards the environment from contamination and degradation.
3. *Asset Protection:*
   - **Natural Risks:** Control measures prevent or minimize damage to infrastructure and assets caused by natural disasters like earthquakes or floods.
   - **Technological Risks:** Robust control measures protect industrial facilities, equipment, and structures from damage due to technological emergencies, ensuring business continuity.
4. *Community and Public Safety***:**
   - **Natural Risks:** Adequate control measures contribute to community safety by reducing the impact of natural disasters on residential areas and public spaces.
   - **Technological Risks:** Controlling technological risks ensures the safety of neighboring communities by preventing or managing potential hazards arising from industrial processes.
5. *Mitigation of Economic Losses:*
   - **Natural Risks:** Implementing control measures minimizes economic losses associated with property damage and disruption of business activities caused by natural disasters.
   - **Technological Risks:** Effective control measures prevent costly industrial accidents, production shutdowns, and environmental cleanup expenses.
6. *Legal and Regulatory Compliance:*
   - **Natural Risks:** Adhering to control measures demonstrates compliance with safety regulations and legal requirements related to natural disaster preparedness.
   - **Technological Risks:** Following stringent control measures ensures compliance with environmental and occupational health regulations, avoiding legal repercussions.

7. *Maintaining Public Trust:*
   - **Natural Risks:** Proactive measures to address natural risks contribute to building public trust by showcasing an organization's commitment to safety and resilience.
   - **Technological Risks:** Demonstrating a commitment to stringent control measures in industrial processes enhances public confidence in the responsible management of potential hazards.
8. *Preventing Long-Term Environmental Impact:*
   - **Natural Risks:** Effective control measures contribute to preventing long-term environmental consequences, ensuring the sustainability of ecosystems.
   - **Technological Risks:** Timely and well-executed control measures mitigate the environmental impact of technological emergencies, reducing the long-term consequences on ecosystems.

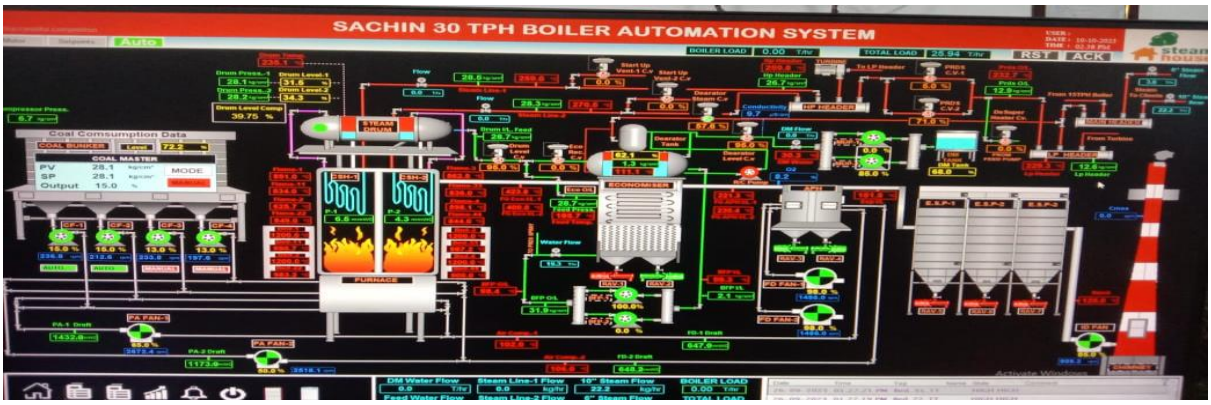
IDENTIFICATION, ANALYSIS, AND ASSESSMENT OF HAZARDS

Identification, analysis, and assessment of hazards and risks play a crucial role in effective risk management. The primary objective of this plan is to evaluate risks comprehensively and provide guidelines for addressing and controlling emergencies. This chapter furnishes information on potential hazards and their effects on workers, the public, and the environment.

1. *Factory Layout*
   The factory layout plan is detailed in Annexure-3.

2. *Storage Hazards and Controls*
   Refer to Annexure-4 for a list of hazardous materials. Material Safety Data Sheets for these materials are provided in Annexure-33. Major hazards in storage areas include fire, explosion, and spillage. Control measures in hazardous storage areas involve segregating materials, and safety equipment such as eye-washers, gloves, boots, goggles, helmets, and face shields are provided for tasks like loading and unloading.

3. *Process Hazards and Control*
   Annexure-5 provides a list of process hazards. Detailed process flow diagrams and descriptions are available for various operations, including the 30 TPH Boiler @ Sachin.



4. *Other Hazardous and Control*
   Hazards not classified as storage hazards or process and vessel hazards are addressed in Annexure-6. This includes risks associated with boilers, non-chemical pressure vessels, spills from pipelines, structural collapse, housekeeping, and potential hazards from neighbouring plants.

5. *Trade Waste Disposal*
   Annexure-7 lists solid, liquid, and gaseous trade waste generated.

6. *Records of Past Incidents*
   Past incident records are documented in Annexure-8

7. *Risk Assessment*
   Methodology for risk assessment is outlined, focusing on raw materials and hazardous chemicals identified per Amended MSIHC Rule – 2000.

8. *Environmental Impact Assessment*
   Details of environmental impact assessment are provided in Annexure-11, including weather conditions in Annexure-12.

9. *Types of Risk*
   Three main types of risks are identified:

A. **Natural Risks:**

- Earthquake: Employees should gather at assembly points during such emergencies, with senior members monitoring hazardous material overflow and taking appropriate measures.
- Lightning: Lightning arresters are installed on high buildings to mitigate this natural risk.
- Flood: No risk of flood is anticipated.

B. **Technological and Civil Risks (Medium Pressure Process Boiler – AFBC Type):**

- All structures and equipment adhere to engineering specifications.
- Boilers are equipped with safety features and undergo regular inspection, testing, and maintenance.
- Construction of building structures follows standard practices, with materials tested for quality.
- Heat Release Risk: Potential risks include the blast of the furnace and heat release. Control measures and evacuation procedures are detailed in the plan.

10. Detection Instrument

Continuous monitoring and control are facilitated through the PLC system, with pressure and temperature gauges provided for effective detection.

CHAPTER-III

EMERGENCY ORGANIZATION

The third chapter focuses on the Emergency Organization, outlining the specific procedures to be followed during emergencies and delineating the roles and responsibilities assigned to different personnel and teams.

EMERGENCY DEFINITION

An emergency is characterized as an anomalous event that has the potential to endanger personnel, property, and the environment. It encompasses incidents such as fire, explosions, hazardous liquid spills, and the release of toxic gases. Emergencies are categorized into minor and major based on their potential impact and the requirement for external assistance.

- **Minor Emergency:** Can be managed by internal plant personnel without external aid.
- **Major Emergency:** Demands external assistance due to the potential for extensive damage and harm.

EMERGENCY PLANS

1. **On-site Emergency Plan:**
    - Deals with emergencies within the factory premises, not affecting the public or the environment.
2. **Off-site Emergency Plan:**
    - Addresses emergencies that impact the public and the environment beyond the factory premises.

STRUCTURE OF EMERGENCY ORGANIZATION

1. **Alarm Raiser:**
    - Promptly reports hazardous incidents.
    - Takes initial preventive actions for minor incidents.
2. **Site Main Controller (SMC):**
    - Serves as the primary authority during emergencies.
    - Activates on-site/off-site plans.
    - Coordinates with incident controller and key personnel.
    - Informs and liaises with external authorities.
    - Manages evacuation and emergency services.
3. **Incident Controller (IC):**
    - Assumes control of the affected plant/area.
    - Evaluates the scale of the emergency.
    - Initiates on-site plan activation.
    - Coordinates with key personnel and essential teams.
    - Manages operations within affected areas.
    - Provides updates to SMC on the situation.

4. **Deputy Incident Controller:**
    - Assumes IC responsibilities in the absence of the plant/incharge.
5. **Key Personnel:**
    - Roles include IT, Engineering, Safety, Security, Medical, and Telephone Operator.
    - Aids SMC and IC in controlling emergencies.
    - Coordinates essential teams and services.
6. **Essential Personnel Team:**
    - Comprises Fire Fighting, Spill Control, First Aid & Rescue, Engineering Services, and Security teams.
    - Teams are trained for specific emergency response functions.
    - Deployed based on their expertise to handle incidents.
7. **Teams Working Under SMC:**
    - **Transport, Welfare of Evacuated Persons:**
        - Manages transportation and welfare during evacuation.
    - **Assembly Points Managing Team:**
        - Manages company assembly points.
        - Counts and records non-essential workers, contractors, and visitors.
    - **Runner's/Messengers for Off-site Agencies & Liaison:**
        - Communicates with off-site agencies.
        - Transmits messages as directed by SMC.
8. **Emergency Control Centre (ECC):**
    - Located in the legal office.
    - Equipped with communication facilities, plans, and essential data.
    - Functions as the coordination center during emergencies.

ADDITIONAL ARRANGEMENTS

1. **Fire and Toxicity Control Arrangements (Annexure – 20)**
    - Outlines procedures and resources for fire and toxicity control.
2. **Medical Arrangements (Annexure No.21)**
    - Describes medical facilities, treatment, and coordination.
3. **Transport and Evacuation Arrangements (Annexure No.22)**
    - Outlines procedures for transporting and evacuating non-essential workers.
4. **Pollution Control Arrangements (Annexure No.23)**
    - Covers measures for controlling pollution during emergencies.

5. **Other Arrangements (Annexure – 24)**
    - Includes miscellaneous arrangements for different aspects of emergency response.

CHAPTER-IV

COMMUNICATION SYSTEM

Following the thorough assessment of risks and the establishment of an emergency organization, the subsequent critical step is the development of an effective communication system. This is an indispensable factor in managing emergencies. As per Section 41-B of our Factories Act, the compulsory disclosure of information to workers, the general public, local authorities, and the chief inspector is now mandated. This advanced communication is designed to enhance emergency preparedness for both on-site and off-site emergency plans. A quick and efficient communication system is imperative to relay emergencies (a) within the factory (b) to key personnel outside normal working hours (c) to external emergency services and authorities, and (d) to neighboring factories and the public in the vicinity.

1. RAISING THE ALARM

Any individual observing an incident of a hazardous nature, such as fire, explosion, heavy spillage of hazardous liquids, or the release of toxic gases, must first inform their superior and co-workers. The response to the incident depends on its magnitude.

- **For Minor Incidents:**
    - Internal resources, such as fire extinguishers, should be utilized for prevention.
- **For Major Incidents:**
    - The Site Main Controller or Respective Incident Controller will order the raising of the alarm through the siren to the telephone office or security officer.
    - The telephone operator or security officer will, in turn, instruct the security staff to activate the alarm.
    - Manual bells can be rung in case of power supply failure.
    - The Incident Controller is alerted by the alarm and assesses the situation, implementing appropriate emergency measures.

Note: Separate alarms may be needed for different types of emergencies to avoid confusion.

2. DECLARING THE MAJOR EMERGENCY

The declaration of a major emergency triggers various agencies into action, potentially causing disruption. Therefore, this declaration should be made judiciously, avoiding whims or immature judgment. [Annexure - 28] provides details of nominated persons authorized to declare a major emergency.

3. TELEPHONE MESSAGES

After receiving the emergency alarm or declaration, the telephone operator plays a crucial role. The operator must be precise, sharp, attentive, and quick in receiving and noting the message for subsequent communication. [Annexure - 29] offers a form to record emergency telephone calls, outlining the necessary details.

Note: Lists of internal and external telephones are provided in [Annexure - 26] and [Annexure - 27], respectively.

4. COMMUNICATION OF EMERGENCY

An effective communication system is essential to reach different groups:

- **a) Inside the Factory:**
    - Communicate with workers, including key personnel and essential workers, on duty during normal working hours.

- **b) To Key Personnel Outside Normal Working Hours:**
    - Utilize updated lists (Annex - 13 to 17) kept in the emergency control center.
- **c) To Outside Emergency Services and Authorities:**
    - Inform emergency services promptly, using predetermined code words if necessary.
- **d) To Neighboring Firms and the General Public:**
    - Utilize the PAS system to alert the public.
    - Notify nearby industrial concerns directly for mutual aid and protection.

STATUTORY COMMUNICATION

Ensure that statutory information, as specified in [Annexure - 30], is communicated beforehand to workers, the public, and relevant authorities. This includes details about the factory, hazardous processes, emergency warning systems, disaster control measures, and more.

CHAIN OF COMMUNICATION (ORGANIZATION CHART)

[Organization chart to be provided for a clear depiction of the communication structure during emergencies.]

CHAPTER-V

ACTION ON-SITE

1. CO-RELATED ACTIVITIES

The on-site emergency plan focuses on preparing for and executing emergency activities to control and contain any arising emergencies following the failure of existing control measures. Three stages of co-related activities are established to enhance emergency preparedness, actions, and subsequent follow-up:

(a) Pre-emergency activities:

1. **Internal Safety Survey:**
    - Routine inspection conducted by the Safety Manager/Officer, Plant/Area In-Charge, with immediate corrective action for identified deficiencies.
    - Risk assessment performed by an internal team for all activities.
    - Routine personnel protective equipment and respiratory protective equipment program implemented.
    - Preventive maintenance carried out as per the Preventive Maintenance System (PMS) for critical equipment.
2. **Third-party survey:**
    - Competent third parties conduct risk assessments, and recommendations are implemented.
    - Safety audit, planned with a recognized company as per IS: 14489, is conducted, with internal audits performed.
3. **Pressure testing:**
    - Equipment list prepared, and regular test certificates obtained from vendors.
4. **Non-destructive/other testing:**
    - Equipment list prepared, and regular test certificates obtained from vendors.
5. **Safety/Relief valve testing:**
    - List of safety/relief valves prepared with names and numbers of pressure vessels.
    - Periodic schedule for testing implemented, with records maintained.
6. **Fire system testing:**
    - List of fire hydrants, appliances, extinguishers, and other equipment prepared.
    - Defective equipment or accessories replaced or modified.
    - Weekly checks on fire pump capacities, delivery pressure, and auto-start/stop systems.
7. **Mutual aid scheme:**
    - Mutual aid arrangements established with group companies and neighboring organizations.
    - Local crises and district crisis groups formed for efficient communication.
8. **Mock drills:**
    - Regular on-site and tabletop drills conducted.

- Major mock drills held after informing authorities, press, and police for effective handling of situations.
- Drills with local authorities conducted as per the local crisis group schedule.

9. **Training:**
    - Regular safety system training for employees.
    - Firefighting team members trained to handle disaster situations.
    - Training for spill and gas control, first aid, and rescue teams.
10. **Protective equipment:**
    - Adequate personal protective equipment maintained as emergency reserve.
    - Regular training arranged for all employees.
11. **Communications:**
    - Internal communication facilitated through intercom systems.
    - Siren system installed for on-site and off-site emergencies.
12. **Emergency lights:**
    - Emergency lights installed and maintained at prominent work areas.
    - Portable torches/batteries kept ready.
    - Diesel-operated power-generating set for on-site emergency lighting.
13. **Emergency control room:**
    - Director's cabin designated as the Emergency Control Center (ECC).
    - Internal and external communication systems available in the ECC.
14. **Plant assemblies and assembly points:**
    - Company assembly points designated at safe locations with consideration of wind direction.
    - Incident Controllers and their deputies manage respective plants during emergencies.
15. **Liaison with state authorities:**
    - List of state authorities with their telephone numbers kept ready.
    - BSNL telephone/mobile phone available at ECC for communication with state authorities.
16. **Hospital facilities:**
    - First Aid Box available at the factory and our group company.
    - Blood group records maintained for all employees.
    - Trained plant head/safety officer to handle emergent situations.
    - Nearby hospitals with adequate facilities identified for emergency situations.
17. **Outside shelters:**

- Addresses of schools, hospitals, and buildings in the area available for shelter.
- Adequate supplies of medicines, antidotes, clothing, food, and water ready for immediate use.

(b) Emergency time activities: In case of emergencies, staff at various levels with pre-assigned duties, as per the On-Site and Off-Site Emergency Action Plan (OEP), coordinate to address and resolve the situation using available resources within and outside the plant.

(c) Post-emergency activities: Activities undertaken after an emergency to establish its reasons and implement preventive measures include collecting and preserving records, conducting inquiries, making insurance claims, preparing inquiry reports, implementing recommendations, rehabilitating affected persons, and investigating incidents to prevent future occurrence.

2. CONTROLLING EMERGENCY

The successful management of an emergency relies on correct decisions and actions on-site. The control procedures for hazardous events are outlined briefly:

(1) **Flammable Release:**

a. Major fire or explosion in a boiler requires the Firefighting and First Aid & Rescue teams to rescue, treat the injured, and extinguish fires.
b. For hazards like prolonged thermal radiation and smoke from a coal yard, the same teams play a role in rescue and firefighting.

(2) **Toxic Release:**

a. Slow or intermittent releases, such as from a coal fire, require the Spill & Gas Control Team and First Aid & Rescue Team for rescue, treatment of the injured, and control of gas leaks or spills.

3. Evacuation & Transport:

Details provided in CHAPTER-III regarding the responsibilities and duties of the Transport and Welfare of Evacuated Persons Team. \

4. Safe Close Down (Safe Shutdown):

Full safe shutdown is guided by the Incident Controller and Site Main Controller, involving stopping all equipment in a safe manner and initiating the cooling of boilers.

5. Use of Mutual Aid:

Utilize available mutual aid from surrounding factories and agencies (Annexure - 20 to 24) as needed, considering distance and available means.

6. Use of External Authorities:

Contact and utilize external authorities like police, district emergency authority, collector, factory inspectors, health and medical officers, civil engineers, institutions, corporations, and safety experts as required.

7. Medical Treatment:

Urgently search for injured workers, provide prompt first aid, and arrange for further treatment at company facilities or evacuate to outside medical centers if necessary.

8. Accounting for Personnel:

Details provided in CHAPTER-III regarding the responsibilities and duties of Assembly Points Managing Team.

9. Access to Records:

Maintain lists of employee names and addresses in the personnel department and ECC documents in the emergency control center.

10. Public Relations:

Authorize Site Main Controller as the sole authoritative source of information for the news media. Instruct other employees to refer inquiries to the appointed manager.

11. Rehabilitation

The end of the emergency is signaled only when fires are extinguished, and there is no risk of re-ignition. Thorough examination before re-entry is crucial, and re-entry procedures should be followed.

Note: For more detailed procedures and information, refer to CHAPTER-III and the respective annexures.

CHAPTER-VI

OFF-SITE EMERGENCY PLAN

1. PURPOSE OF THE OFF-SITE EMERGENCY PLAN:

The primary objective of the off-site emergency plan is to establish preparedness and control for various types of emergencies and disasters. Key purposes of the off-site emergency plan include:

1. **Informing Local/District Authorities and Public:**
    - Provide essential information to local/district authorities, police, fire brigade, doctors, neighboring industries, and the public.
    - Communicate risk and environmental impact assessments, consequences, protection/prevention measures, and control plans.
    - Seek assistance from authorities to communicate with the public during major emergencies.
2. **Assisting Local/District Authorities:**
    - Aid local and district authorities in preparing off-site emergency (contingency) plans.
    - Organize regular rehearsals and corrective actions based on lessons learned.
3. **Planning and Coordination:**
    - Prepare a site plan identifying industries, hazardous points, control points, assembly points, and essential facilities.
    - Verify information provided by industries to comprehend dangers and ensure adequate emergency equipment.
    - Establish a command structure, identify roles of various service groups, and coordinate with relevant authorities.
    - Plan and conduct training programs for safety, health, and environmental protection.
    - Maintain liaison between agencies, industries, and emergency services.
4. **Medical Preparedness:**
    - Plan for antidotes, remedial medicines, and equipment in hospitals.
    - Establish a mutual aid scheme for sufficient stock and coordination.
5. **Continuous Monitoring and Early Warning:**
    - Implement a continuous monitoring system for essential pollution parameters.
    - Collect meteorological information for weather conditions, wind velocity, direction, rain, and flood data.
6. **Record Keeping and Mock Drills:**
    - Appoint a record keeper and historian to collect information on disaster causes.
    - Conduct mock drills and rehearsals to ensure plan efficacy, test responses, and gain experience.
7. **Operational Responsibilities:**

- Operate the plan during an off-site emergency, led by the District Collector.
- Contain, limit, and localize the loss and damage to persons, property, and the environment.
- Prevent the spread and recurrence of the disaster.
- Inform people about emergencies, plan for rescue and recovery, and provide relief and rehabilitation.
- Plan for evacuation, safe assembly points, and transportation.
- Develop prevention strategies for harm reduction and the avoidance of recurring disasters.

2. LOCAL CRISIS GROUP:

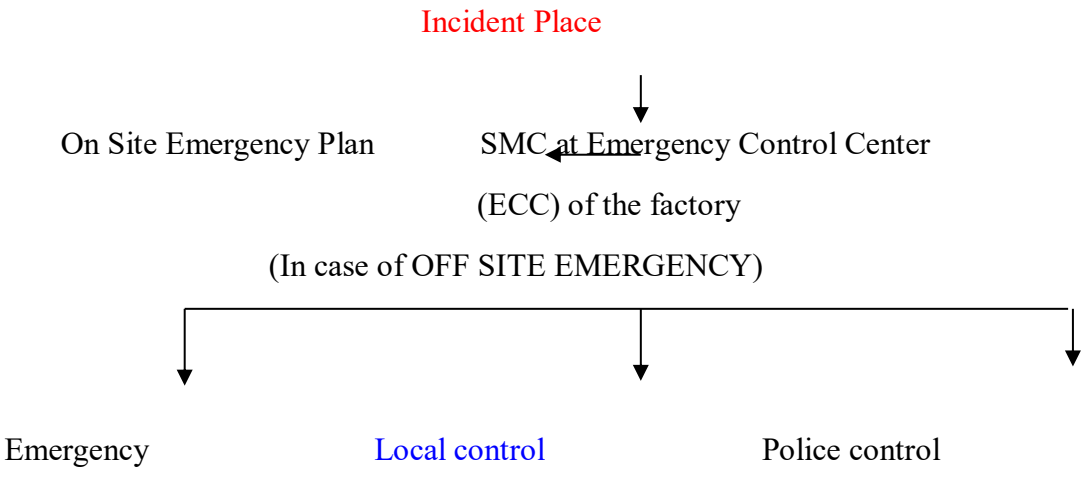
According to the Chemical Accidents (Emergency Planning, Preparedness, and Response) Rules 1996, the District Crisis Group and Local Crisis Group must be constituted. The functions and constitution of the Local Crisis Group are as follows:

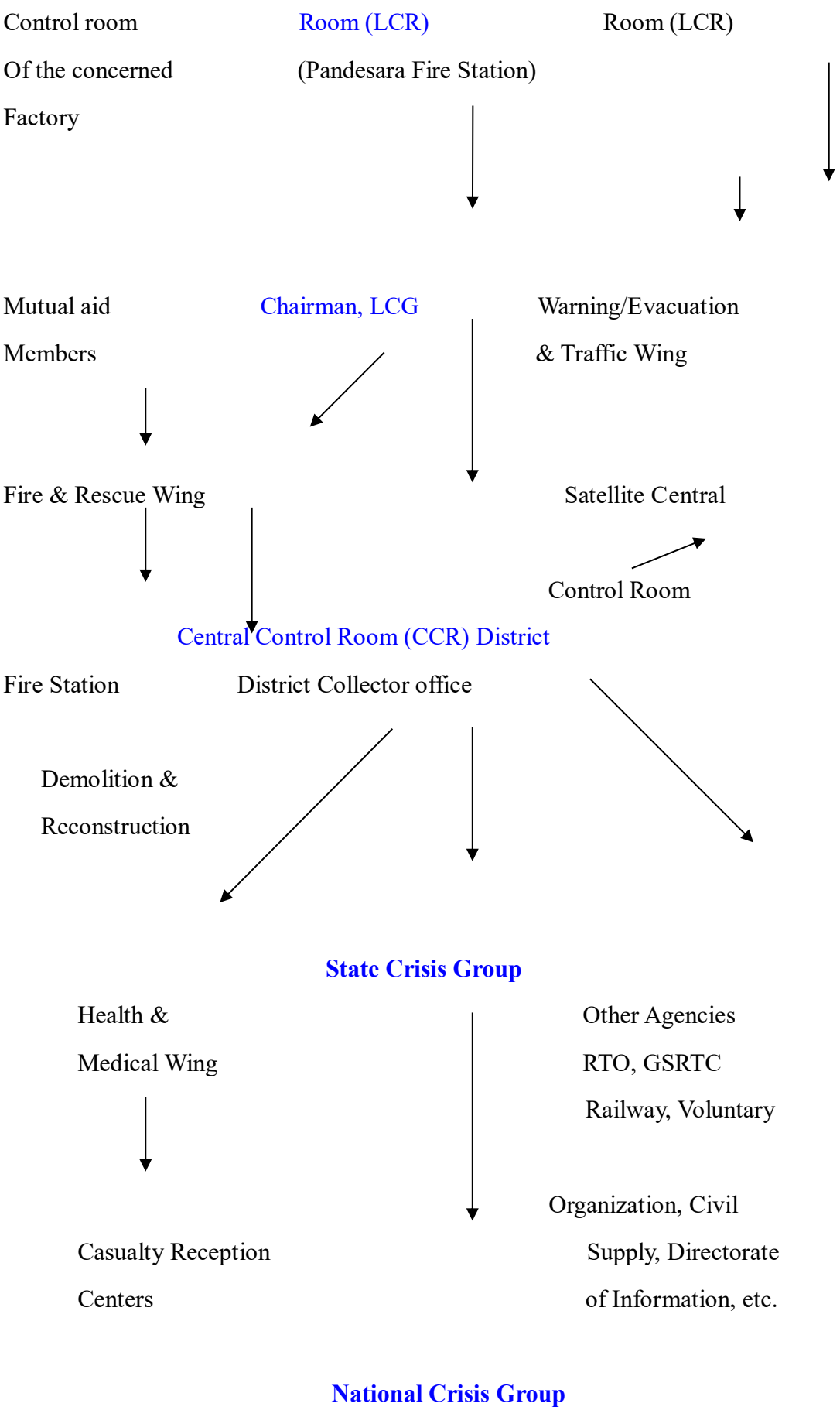
FUNCTION: Under Rule no.10, the functions of the LOCAL CRISIS GROUP include: (a) Prepare a local emergency plan for the industrial pocket. (b) Ensure alignment of the local emergency plan with the district off-site emergency plan. (c) Train personnel involved in chemical accident management. (d) Educate the population likely to be affected in a chemical accident about remedies and existing preparedness. (e) Conduct at least one full-scale mock drill of a chemical accident at a site every six months and report to the District Crisis Group. (f) Respond to all public inquiries on the subject.

Rule 12: Aid and Assistance: (1) Major Accident Hazard installations in the industrial pockets in the district shall aid, assist, and facilitate the functioning of the Local Crisis Group. (2) Major Accident Hazard installations in the industrial pockets shall also aid, assist, and facilitate the functioning of the Local Crisis Group.

Rule 13: Information to the Public: (1) The Central Crisis Groups provide information on request regarding chemical accident prevention, preparedness, and mitigation in the country. (2) The State Crisis Group provides information regarding possible chemical accidents at a site in the industrial pocket and related information to the public on request. (3) The Local Crisis Group provides information regarding possible chemical accidents at a site in the industrial pocket and related information to the public on request. (4) The Local Crisis Group assists Major Accident Hazard installations in the industrial pocket in taking appropriate steps to inform persons likely to be affected by a chemical accident.

3. A schematic diagram showing action from incident place to state level group is shown below:




Control room
Of the concerned
Factory
Room (LCR)
(Pandesara Fire Station)
Room (LCR)
Mutual aid
Members
Chairman, LCG
Warning/Evacuation
& Traffic Wing
Fire & Rescue Wing
Satellite Central
Control Room
Central Control Room (CCR) District
Fire Station
District Collector office
Demolition &
Reconstruction
State Crisis Group
Health &
Medical Wing
Other Agencies
RTO, GSRTC
Railway, Voluntary
Organization, Civil
Supply, Directorate
of Information, etc.
Casualty Reception
Centers
National Crisis Group

CONSTITUTION OF THE LOCAL CRISIS GROUP

UDHNA – PANDESARA – BHESTAN - SACHIN AREA

Sr. No.	*Name and designation*	**Status**	**Telephone Number**			
			Std. Code	**Office**	**Residence**	**Mobile**
1.	Sub Divisional Megistrate, Choryasi taluka, A block, First floor, Multistory- Building, Surat	Chairman	0261	2472473	2669004	98791 12193
2.	Asst. Director of Ind. Safety & Health 7th floor, Block C, Multistory- Building, Surat	Member Secretary	0261	2472422	-	-
3.	The Mamlatdar, Choryasi City Taluka, Chok Bazar, Killa, Surat.	Member	0261	2479204 Choryasi 2479159 City	2776486	-
4.	The Police Inspector, Pandesara Police station Surat.	Member	0261	2890200	2666634	98251 47699
5.	The Police Inspector, Udhna Police Station, Surat.	Member	0261	2277155	2688683	
6.	The Police Inspector, Sachin Police Station, Surat.	Member	0261	2392258	2689669	
7.	Fire Officer, Pandesara fire station, Surat Municipal Corporation, Surat.	Member	0261	3952826 93279 62605	2436636 Chief Fire officer	
8.	Fire Officer, Sachin fire station, Surat Municipal Corporation, Surat.	Member	0261	2372438	2428904	
9.	Civil Defense Inspector Surat	Member	0261	2474863	2273038 Chauhanbhai 2654384 Bhagubhai	
10.	Representative of Information Department	MMember	0261	2422429	2422233	

				2479172	2440033	
11.	Medical Officer ESI Dispensery, (D-10) Pandesara, Surat.	Member	0261	2890311		
10.	FMO Colourtex. Ind. Pvt. Ltd., Pandesara, Surat.	Member	0261	2890122	2775789	
11.	FMO, Navin Fluorine International Ltd. Bhestan.	Member	0261	2890325 to 2890329		
12.	The Director/ The Manager Navin Fluorine International Ltd. Bhestan, Dist.: Surat.	Member	0261	2890325 to 2890329	2892459	

Sr. No.	*Name and designation*	**Status**	**Telephone Number**			
			Std. Code	**Office**	**Residence**	**Mobile**
13.	The Director/ The Manager Colourtex Industries Pvt. Ltd. Survey No.: 80, G.I.D.C., Pandesara. Surat.	Member	0261	2890122 2891011	2240568	98250 56865
14.	The Director / The Manager Megatic Intermediates Pvt. Ltd. Plot No. 250 / 1-2,GIDC, Pandesara,Surat	Member	0261	2891105 2891108 2890046	Kamalbhai 2229529 2226098 Ashokbhai 2666149	98240 00021
15.	Mr. Jagdishbhai Patel Niken Chemicals, Road no.:15, Udhana Udhyog nagar, Udhana.	Member	0261	2895951 to 54	2232068	
16.	Mr. S. Devkaran, Darsan roadways,	Member	0261	2336240	-	

	501,Municipal Shopping Centre, Sahara Darwaja, Surat.					
17.	The President, Pandesara Industrial Association Pandesara, Surat. (N.G.O.)	Member	0261	2890205	Kamal Vijay Tulsiyan 2654334 2654345	98241 38636
18.	Corporator, Pandesara, S.M.C.,Surat	Member	0261	2895210 Champakbhai Patel	2890688 Champakbhai Patel	98254 05737
19.	Corporator, Pandesara, S.M.C.,Surat	Member	0261			
20	Mr. Pavan Sharma, The President, Rotary club of Udhana. 10,Shingar Society, Parle Point, Athwa lines,Surat.	Member	0261	2886154 2889591 2889425	2221241 2228632	98240 79320
21.	The Director/ The Manager Colourtex Industries Pvt. Ltd. Survey No.: 288/1-2, 289/1-2, 8108/2, G.I.D.C. Sachin. Surat.	Member	0261	2399666	2240568	98251 52053
22.	**Mr. Prabodh Pandya** **Member** Representative of Gujarat Mitra	Member	0261	-	2651653 2651905	
23.	The President, Sachin Industrial Association, Sachin	Member	0261	2372280	-	
24.	Mr. Pradip Shah Sachin Pollution Control & Welfare co. op. Society Ltd, Sachin, Surat. (N.G.O.)	Member	0261	2372454	2665158	
25.	Sarpanch Sachin	Member	0261	-	2394975	
26.	Rotary Club Hospital, Sachin	Member	0261	-	-	
27.	RTO, Surat	Member	0261	2472188	2669064	
28.	Executive Engineer Roads & Buildings,	Member	0261	2474230 2471097		

CHAPTER VII

TRAINING, REHEARSAL AND RECORD

1. NEED OF TRAINING & REHEARSAL

Extensive industry experience in on-site emergency planning has highlighted the necessity and value of rehearsing emergency procedures. Once major emergency procedures are finalized, it is crucial to set them down in clear terms and ensure that everyone on-site is aware of them, especially key personnel and essential workers. To put the procedures to the test, a series of preliminary exercises should be arranged to assess specific parts of the procedures, such as the effectiveness of communication systems, speed of mobilization of factory emergency teams, and search and rescue operations.

Key aspects of training and rehearsal include:

- Identifying deficiencies and difficulties through preliminary exercises.
- Refining procedures based on exercise outcomes.
- Conducting more elaborate exercises involving outside services.
- Monitoring exercises with independent observers.
- Conducting follow-up discussions to improve procedures.
- Regularly testing emergency procedures through major emergency exercises.

Close local liaison and combined exercises help individuals working together in emergencies become familiar with each other. Familiarization visits, especially for Fire Service Personnel, to the works assist in understanding the layout and potential hazards. Specialized training may be needed for non-routine duties, such as fire fighting, and key personnel should undergo training for their emergency roles, both individually and as a team.

Periodic Training and Rehearsal:

- Employers should ensure regular testing of on-site emergency procedures.
- Exercises should be designed to test each part of the emergency plan.
- Invite representatives from emergency services for on-site exercises.
- Conduct real rehearsals, including mutual aid agencies, periodically.
- Review and update the plan after each rehearsal or practice.

2. SOME CHECKPOINTS

CIMAJI (UK) suggests several checkpoints to assess the adequacy of the emergency plan during training. These include:

- **Coverage of Incidents:**
  - Ensure the plan covers a range of incidents from small events to major accidents.
  - Justify inclusion or exclusion of specific events.
- **Assessment of Incidents:**
  - Adequately assess the consequences of various incidents, considering quantities, rates, and effects.

- **Resources and Time Scales:**
    - Verify if there are sufficient resources (personnel and equipment) to execute the emergency plan.
    - Assess time scales for incident containment and external support arrival.
- **Logical Sequence of Actions:**
    - Confirm a logical sequence of actions for each person with a role in the plan.
- **Key Personnel Involvement:**
    - Ensure key personnel, especially incident controllers, were consulted in plan preparation.
- **24-Hour Cover:**
    - Verify 24-hour cover for various scenarios, including silent hours, shutdown periods, and unmanned sites.
- **Cooperation with Emergency Services:**
    - Assess cooperation with local emergency services and district or regional emergency planning officers.
- **Off-Site Plan Initiation:**
    - Establish procedures for initiating the off-site plan and ensure its adequacy.

3. RECORDS AND UPDATING THE PLAN

All records of on-site and off-site emergency plans, District Emergency Control (contingent) Plan, modifications, rehearsals, and inquiries should be well maintained and preserved by the District Emergency Authority or the Emergency Planning Officer and the Factory Inspectorate. A Data Bank should be maintained for the utility of industries and others. New information and deficiencies identified during rehearsals should be reviewed and incorporated into the document for continual updating of the plan, with communication to concerned authorities.

ANNEXURE-1- IDENTIFICATION OF THE FACTORY

Full Name & Address of the company:	M/S STEAM HOUSE INDIA LTD. Plot No. 8108/1,Road no.2 ,GIDC Sachin, Dist ;- Surat, GUJARAT

Full Name & Address of the occupier:	Phones:	
	Off.	Res.
Mr.Vishal S. Budhiya - Surat., GUJARAT	101	9825061861

Full Name & Address of the Unit Head :	Phones:	
	Off.	Res.
Mr. Mehul Chatniwala		9727740717

Manufacturing process: Supplying Steam By Installing Boiler Plant

Name of the shift	Maximum workers at a time			In "workers" include all employees contract workers, trainees, apprentices, etc.
	Male	Female	Total	
General (G)	29	11	40	
First (A)	09	04	13	
Second (B)	09	03	12	
Third (C)	09	03	12	
Total shifts 4 workers	56	21	77	

First person to be contacted in the case of emergency:

Name of the shift	First person to be contacted in the case of emergency				
	Name & designation		Place of availability	Phone No.	
				Off.	Res.
General (G)		Production Head	Office		
First (A)	Shift Incharge on duty		Plant office		-
Second (B)	-Do-		Plant office	-Do-	-
Third (C)	-Do-		Plant office	-Do-	-
On holiday		Plant Head	Office		

Any other information, if any:

Satellite / Google Image of STEAM HOUSE INDIA LIMITED – Sachin Plant

ANNEXURE-2- MAP OF THE AREA

Annexure-2
Area Layout

ANNEXURE 3- FACTORY LAYOUT

Attached Separately.

ANNEXURE 4-STORAGE HAZARDS & CONTROL

Sr. No.	Name of the Hazardous Substance	Quantity Max. stored	Type of storage	Quantity Actually Stored	Place of its Storage	In charge Person Name , Designation & Contact no.
1	**2**	**3**	**4**	**5**	**6**	**8**
1.	Morpholine	150 Ltr.	Drum	35 Ltr.	Store Room	Mr.Mehul Chatniwala – Plant Head- 9727740717
2	Tri Sodium Phosphat	150 Ltr.	Drum	45 Ltr.	Store Room	
3	Oxygen Scavenger	150 Ltr.	Drum	48 Ltr.	Store Room	
4	Coal	50 Ton	Yard	20 Ton	Coal Yard	

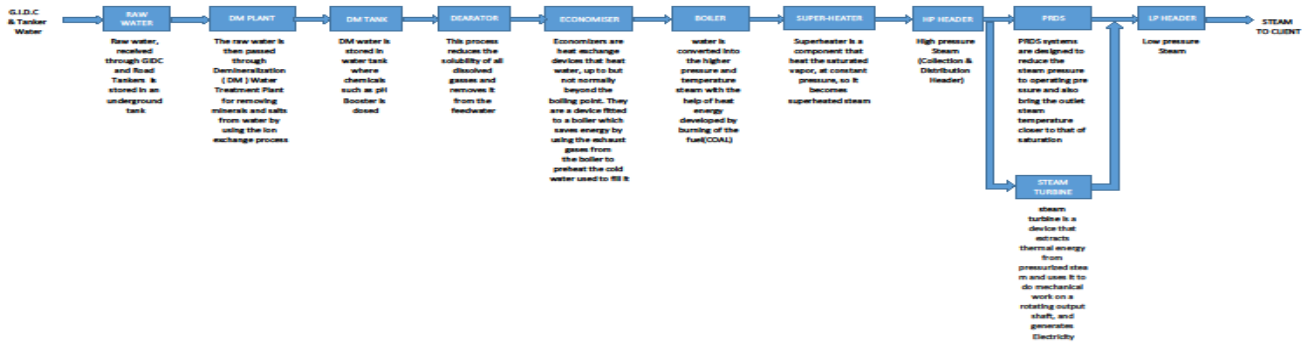
Control Measures Provided

- All drums are kept in shed
- Seprate storage provided
- All Equipment are checked periodically & if found defective are replaced by new
- Implemented job specific PPEs
- Sufficient amount of sand/soil are kept to control any spillage.
- Eyewash bottle is provided near added chemical handling area.
- Portable fire extinguisher provided.
- Fire Hydrant and Fire Hose reel System Installed
- Equipment earthing provided
- No Smoking board display

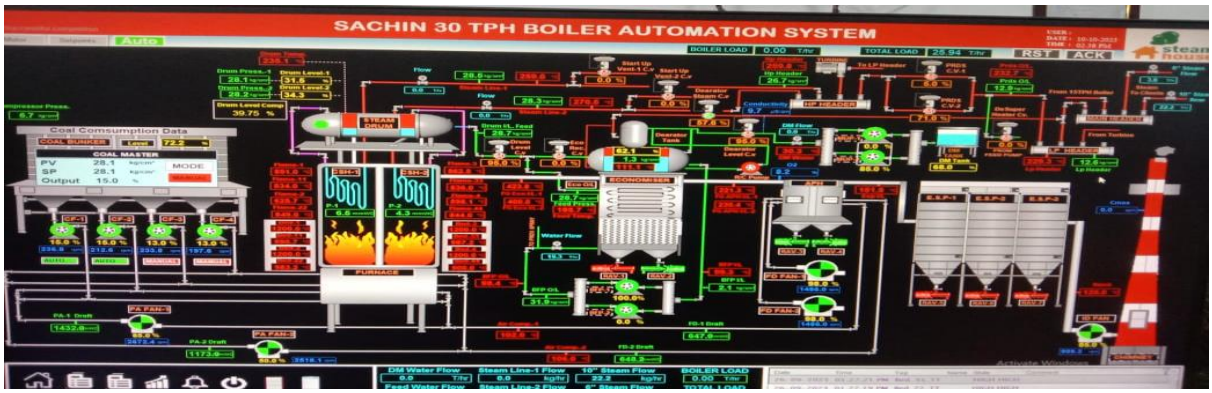
ANNEXURE 5- PROCESS DISCRIPTION - HAZARDS & CONTROL

1. Process Description

Process description is available in d



Detailed process diagram



30 TPH Boiler automation system @ Sachin

Hazards and Control

- In these section hazards of processes, operations and controls provided to cope up with all kinds of abnormalities. The details regarding various controls like exhausts and other operating control etc. have been mentioned.

Identification of sources of Fire & Explosion

Sr. No.	Hazards	Control Measure
1	Design failure	As per calculation specific design provided
2	Accident due Conveyor system, Material handling	Provide proper maintenance and trained workers
3	Steam Handling and Pressure drop (Steam Explosion)	Provide proper controling system , inspection & maintenance
4	Dust Exposure at coal crushing area	Provide job specific PPE
5	Dust Exposure of minerals, Slag (SMS), Gasifier	Provide job specific PPE
6	Dust Exposure of Sand and Stone dust	Provide job specific PPE
7	Slip/Trip/ fall due to improper stacking of material	Provide proper material management
8	Fly Ash handling	Provide job specific PPE and training
9	Exposure to High temperatures	Provide temprature gauge and controling system
10	Blast overpressure	Provide pressure guage and pressure release valve
11	Failure of Safety Relief devices	Provide periodic inspection and maintenance
12	ID fan/PA fan/SA fan failure	Provide periodic inspection and maintenance
13	Circulation line failure	Provide periodic inspection and maintenance
14	Turbine system failure	Provide periodic inspection and maintenance
15	Dosing System Failure (HP and LP)	Provide periodic inspection and maintenance
16	Failure of fuel firing system / Burner Management system (BMS)	Provide periodic inspection and maintenance
17	RCC chimney blockage	Provide periodic inspection and maintenance
18	Failure of re-circular system	Provide periodic inspection and maintenance
19	Pump failure (Boiler feed, HSD unloading, Transfer)	Provide periodic inspection and maintenance
20	Electrical Substations (Short circuit)	Provide periodic inspection and maintenance and plc system
21	Oil and Lubricant Room (spillage)	Provide sufficient sand and soil near by location
22	Catch fire in fine Coal Hoppers	Installed fire hose reel and fire hydrant system and Placed fire extinguisher
23	Catch fire in coal Storage area	Installed fire hose reel and fire hydrant system and Placed fire extinguisher

ANNEXURE 6-*OTHER HAZARDS & CONTROL*

Sr. No.	Name of the possible hazard or emergency	Its source & reasons (Activity)	Its effect on persons, property & environ-ment	Place of effects	Control Measure	In charge person at source		
						Designation	Name	Tele. No.
01	Boiler 1. Burning 2. Physical Injury 3.Explosion	Boiler-likely to cause due to temperature /pressure build up	Person and property	Factory Premises	Standard and necessary fittings to be provided regular inspection to be carried out.	BOE	Mr.Jatin	8140526033
02	Spillage during handling 1.Fumes 2. Fire	Pour the chemical -By not adhering safety norms and by negligence	Person and Property	- Do -	Regular inspection of equipment. The damaged equipment to be replaced	Shift Eng.	Shift Eng.	9099512222
03	Electricity 1.Burning 2. Shock 3. Fire	Loose contact of wires, weak earthing Short Circuit, Improper Insulation.	Person and Property	- Do -	Regular inspection of electrical fitting, flameproof fittings provided in flammable areas, proper earthing.	Electrical Dept.	Mr.Vishal Lukhi (Electrical Engg.)	8460825913
04	Bad House Keeping 1. Injury 2. Burning 3. Fire	Bad House Keeping	Person & Property	Factory Premises	Regular inspection of plant on day-to-day basis, Proper placement of materials.	Plant In charges	Mr.Mehul	9727740717
05	Structural Collapse 1. Injury	Due to over loading of machinery, bad workman ship of construction Earthquake	- Do -	- Do -	Designed plant as per structural stability.	Engg.	Mr.Balakrishna Jha	9727765881

ANNEXURE 7- TRADE WASTE DISPOSAL

- The ash generated in the boiler is sent out and it is used to make bricks.
- After consumption, the excess water is sent to the Central Effluent Treatment Plant as per limits after checking the parameters.

ANNEXURE 8- RECORDS OF PAST INCIDENTS

Sr. No.	Type of incident (Major Accident Emergency or Disaster)	Date & time of occur-rence	Its place	Dura-tion	Time required in contro-lling it	No. of workers working at that time	Persons Affected		Persons Died		Effects on the survivors		Subsequent Safety measures Provided	Other Details if any (e.g. antidotes used etc.)
							Inside the factory	Outside the factory	Inside the factory	Outside the factory	Immediate	Delayed		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.														
2.														
3.														
4.														
5.														

No incident of major accident or emergency or disaster had happened in the factory in the past.

Refer Form No. 29 (Accident Register)

ANNEXURE – 9 BOILER MAJOR HAZARD AND MITIGATION

Major Hazard:

A brief description of the possible hazards at M/s. Steam House India Limited, Sachin in,

Fire and Explosion of

- Boiler
- Utilities / Auxiliary
- Transformers / Elec. panel
- Coal storage

Safety and mitigation measures:

1. Adherence to international engineering standards in the design, construction and testing of the equipment and other hard wares.
2. Statutory approvals of hazardous storage, waste treatment and disposal stack emission etc.
3. Identified various hazards in plant area and are keeping a sharp and alert watch on various likely emergency spots.
4. Protective equipments are regularly checked and kept easily accessible and easily workable during emergency
5. Other ppes are also kept ready, duly tested at a regular interval.
6. Procedure of safe shut down and isolation.
7. Action to be taken if emergency arises from any fire, explosion, collapsing of structure or equipment etc.
8. Time to time they are feed with the knowledge of safety measures and controls.
9. List of emergency tools, fire-fighting procedure.
10. Periodically conduct fire fighting training.
11. use of personal protective equipment

Equipment and Storage Safety

1. Implement SOP and safe work method.
2. Various permits for different jobs like (Hot work, working at height etc.)
3. Safety valves, High-pressure switch is provided.
4. PLC monitoring system provided

ANNEXURE 10- EVACUATION TABLE

Identification of sources of Fire & Explosion

• Oil and Lubricant Storage area (spillage)

• Fine Coal Hoppers

• Coal Storage area

• Electrical Substations (Short circuit)

• AFBC Boilers

• Induction Furnace

Thermal radiation

Table 1 Enlists damage consequences due to different Heat Loads are given below:

Table 1 List of Damages Envisaged at Various Heat Loads

		Type of Damage Intensity	
Sr. No.	Heat Loads(kw/m2)	Damage to Equipment	Damage to People
1	37.5	Damage to process Equipment	100%lethality in 1 min. 1 % lethality in 10 sec.
2	25.0	Minimum energy required to ignite wood	50 % Lethality in 1 min. Significant injury in 10 sec.
3	19.0	Maximum thermal radiation intensity allowed on thermally unprotected equipment	--
4	12.5	Minimum energy required to melt plastic tubing	1 % Lethality in 1 min.
5	4.0	--	First degree burns , causes pain for exposure longer then 10 sec.
6	1.6	--	Causes no discomfort on long exposures
Source: World Bank (1988).Technical report no.55: Technics for Assessing Industrial Hazards. , Washington , D.C : The World Bank			

ANNEXURE 11- ENVIRONMENTAL IMPACT ASSESSMENT

CEMS (Continuous Emission Monitoring Systems) are installed to continuously monitor and record emissions of pollutants such as sulfur dioxide (SO2), nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM), and other relevant pollutants. These systems provide real-time data and reflect to GPCB allowing for immediate detection of any deviations from emission standards.

Fuel Analysis is done as the composition of the coal being burned can significantly influence emissions. Regular analysis of the coal's sulphur content, moisture content, and other characteristics helps in predicting and controlling emissions.

Company report emissions data regularly to environmental regulatory agencies. This includes submitting reports on a periodic basis, detailing the levels of different pollutants emitted.

ANNEXURE 12- WEATHER CONDITIONS

Sr. No.	Period of the Year		Wind Velocity M/Second	Wind Direction	Weather, Condition dry, moist, rainy, cold, hot, stable, unstable, stormy etc.	Pasquil Classification A to F
	Dates					
	From	To				
1.	**December**	**March**	1.97 M/S	**North East**	Cold and moist during Dec. to middle of February	----
2.	April	September	2.64 M/S	South West	Hot and dry during March to May.	----
3.	October	November	1.86 M/S	North East	Rainy and moist during June to September cold and stable during October to November	----

ANNEXURE 13- INCIDENT CONTROLLERS

Shifts	Sr. No. (Any one shall be available in each shift & on holidays on call)	INCIDENT CONTROLLER'S							Responsibility	**RUNNER'S**		
		Name	Designa - tion	Qualifi-cation	Place of availability		Phone No.			Name & Designation	Place of Availa - bility	Phone No.
					In the factory	Residence Address	Fac-tory	Resi de-nce				
General & First	1	Mr.Biswajit Mitra	COO	B.Teach Mech.	Plant Office	Sachin	Sachin	9925 239128	Plant & surrounding area	Mr. Rahul Panchal	Plant Office	7567 973143
	2	Mr.Pradeep Sharma	Dy. COO		Plant Office	Sachin	Sachin	9727 740733	-DO-			
Second	1	Shift In Charge on duty	Shift In charge	-Do-	Plant Office	-	Sachin		-	Assistant Shift In Charge on duty	Plant Office	9099 512222
Third	1	- Do -	-	-Do-	-Do-	-		-	-	- Do -	Plant Office	-

Holiday	1	Plant / Area Incharge Residing at near by company	-	-	-	-		-	-	Security officer on duty	Security Office	-

ANNEXURE 14- DEPUTY INCIDENT CONTROLLERS

Shifts	Sr.No. (Any one shall be available in each shift & on holidays on call)	DEPUTY INCIDENT CONTROLLERS							Persons to be called if IC Dy IC both are not available.		
		Name	Designation	Qualification	Place of Availability		**Phone No.**		Name & Designation	Place of Availability	Phone No.
					In the factory	Residence Address	**Factory**	**Resid e-nce**			
1	2	3	4	5	6	7	8	9	10	11	12
General & First	1	Mr.Mehul Chatniwala	Plant In charge	BOE	plant Office	Surat	9727740717	-	Shift in charge	Plant Office	9099512222
Second	1	Shift In Charge on duty	-Do-	-Do-	Plant offi ce	-		-	Assistant Shift In charge on Duty	-	-
Third	1	-Do-	- Do -	-Do-	- Do-	-		-	-Do-	-	-
Holi-day	1	Asst. Plant In charge Residing at nearby Company	-	-	-	-		-	Security officer on duty	Secu-rity Office	7043608168

ANNEXURE 15- SITE MAIN CONTROLLERS

Sr. No.	Site Main Controller's						Runner's		
	Name in Priority order	Designation	Place of Availability		Phone No.		Name & Designation	Place of availability	Phone No.
			In the factory	Residence address	In the factory	Residence			
1	2	3	4	5	6	7	8	9	10
1.	Mr.Vishal Budhia	Director	Plant Office	98-Subhash Nagar,Opp-Rutam Hospital,Ghoddod Road,Sunvali, Surat	101	9825061861	Mr.Jatin Bhavsar	Office	8140526033

ANNEXURE 16-KEY PERSONNEL

Sr. No.	KEY PERSON'S								NEXT PERSON'S				
	Department	Name (He may be called any time for this plan.)	Designation	Qualification	Place of availability		Phone No.		Name & Designation	Place of availability		Phone No	
					In the factory	Residence Address	Fact-ory	Residences		In the factory	Residence	In the fact-ory	Residences
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Director	Mr.Vishal Budhiya	Director		Office	98-Subhash Nagar,Ghoddod Road,sunvali, Surat	101	9825061861	Mr.Lallan Yadav	Office	Surat	104	9727740707
2	Production	Mr.Biswajit Mitra	COO	B.Tech	Office	Surat	9925239128	---	Mr.Pradeep Sharma	Office	Surat	9727740733	---
3	Engineering	Mr.A.K.Nayak	Head-Engg.		Office	Surat	9687650066	---	Mr.Jatin Bhavsar	Maintenance Eng	Surat	8140526033	---
4	Safety	Mr.Ravi Patel	Manager Safety	B.Teach ADIS,ADEE	Office	Joravasan(R.S),Valsad	9727740248	9727488331	Mr.Piyush	Officer	Surat	7990053642	---
5	Information Technology	Mr.Rohit	IT Officer		Office	Surat	8511927347	-----	Mr.Rohit	Office	Surat	6352238127	---
6	Security	Mr. Chittranjan bhai	Security Officer	---	Security-ity Office	Sachin, Surat	7043608168	---	Security on duty	Security office	---		---

ANNEXURE 17-ESSENTIAL WORKERS

Group No. (Any one Gr. shall be available in each shift & on Holiday on call)	Plant/ Area	Nos of Essential Personnel available in the factory Trained for work of fire fighting, Spill & Toxic control, First Aid & rescue etc.										Phone No. In the factory	Personal Protective Equipments Required.
		Fire fighting team	Spill & Toxic control team	First Aid & rescue team	Engineering Services team				Team work under SMC				
					Technical work force	Electrical black out & power supply	Arrang-ement of vehicle	Raw & Fire water supply	Transport, Welfare of evacuated person	Assembly Point Managing	Runner for off site Agencies & Liaison at on site		
1	2	3	4	5	6	7	8	9	11	12	13	14	15
	Boiler Plant	02	1	1	--	--	--	--	02	01	01		Helmet,hand gloves, Safety Shoes, Nose mask,Fire Proximity Suit.
	Office	02	--	--	--	--	--	--	--	01	01		

ANNEXURE 18- SAFE ASSEMBLY POINTS

Identification Sr. No. of the Assembly Point	Location	Accomodation Capacity	At the time of emergency						
			Person Incharge					Nearest Phone No.	PPE that may be required
			Name & Designation	Place of availability		Phone No.			
				In the factory	Residence Address	In the factory	Residence		
1	2	3	4	5	6	7	8	9	10
Assembly Point No. 1	Main Gate	30	Mr.Gaurav Rastogi	Office	Sachin, Surat	9909039961	---	---	Safety Helmet,Nose mask, Safety goggles, hand gloves, Gum boot etc. Required.
	---	---	Security on Duty	Security Office	Sachin, Surat	7043608168	---	---	

ANNEXURE 19-EMERGENCY CONTROL CENTRE

Location of the center: ~ (1) Ground Floor First office-

Telephone Nos. of the Center: - (1) Internal –104

Sr. No.	Items Kept in the Center	Number or Quantity	Person who will handle/ operate this item	Its period of operation		Notes
				Last	Present	
1.	Internal & External Telephone number	1	Site main controller and out side agencies		✓	
2.	List of External / Internal Tel.	1 Nos.			✓	
3.	Telephone nos. of mutual aid center	1 nos.			✓	
4.	Lay out plan of the factory showing the location of hazardous materials, assembly point, first aid centers etc.	2 Nos.			✓	
5	Map of surrounding area	1 No.			✓	
6.	Map of fire hydrants	1 No.			✓	
7	On site / Off site Emergency plan	1 No.			✓	
8	MSDS	1 No.			✓	
9	Employees roll / register with Address & Details of their Blood group.	1 No.			✓	
10.	Stationary like Pencil, Pads etc.	5 Nos.			✓	
11.	Torches, PPE safety goggles, helmets, hand gloves, gumboots etc.	2 Nos. each			At plant store	
12.	Portable fire extinguishers (DCP, CO_2)	2 Nos. each			At main gate	

ANNEXURE 20-FIRE CONTROL ARRANGEMENTS

For Flammable & Toxic subs. see Annexure - 4 & for their process see Annexure - 5.
For Key Personnel & essential workers see Annexure – 16 & 17.
Firewater: One tank-Total Quantity: 225000 ltr.

Other Source & Capacity	No. of hydrant points	No. of Fire pump, type & capacity	No. of hose reals & total lenght	No. of fire tender and capacity	No. of sprinklers/Monitors				Alternate Power arrange-ment	No.of Co2 Type Extingui-shers
					Fixed		Portable			
					Lifting height	Pressure	Lifting height	Pressure		
1	2	3	4	5	6	7	8	9	10	11
GIDC 2 Nos. water tank	5	Jockey Pump :- 10 HP Electric Driven Main Pump 60 HP	5	--	N/A		N/A		D.G. Sets	2

Dry Powder Type			**Foam Type**			**Water Jet products**	
Type of Powder & Quantity	No. of Portable		Type of Foam & total Quantity	No. of Portable		No. & size of blankets	Other jet products quantity
	Extingui-shers			Extinguishers			
12	13	14	15	16	17	18	19
--	DCP 06kg:7		AFFF	9 litrs-03		--	--

Other Extinguishers		Personal protective equipments			
Type	Quantity or Number	Respiratory		Non-respiratory	
		Type	Nos.	Type	Nos.
20	21	22	23	24	25

ABC CO2	03 03	-------	--------	Hand Gloves Gumboots Aprons Helmet Goggles	05 02 03 05 05

MUTUAL AID HELP ARRANGEMENTS

Name & Address of the factories & Fire stations.	App-rox Distance K. M.	Contact			F.F.E. Available		PPE Available		Nos. of experts & trained person available	Decontamination substance available	Gas detector Available-le
			Factory	Resid e-nce	Type	Quan-tity	Type	Quantity			
26	27	28	29	30	31	32	33	34	35	36	37
Anupam Rasayan (India) Ltd. Unit :-1 Plot No:8110-8111&268/1 GIDC Sachin, Surat	0.1 KM	Mr. Shreyans Dalal Director	0261-2398 9919 5	98791 05399	DCP CO_2 Foam ABC	35 02 10 09	**SBA sets** ELSA mask Air line Mask Non respiratory	03 03 05 Sufficient in Nos.	35	Lime, Soda ash, Dry sand	1 No of VOC, Explosive & O2 meter
Orgo Chem. Ltd GIDC, Sachin, Surat	0.3 KM	Mr. Parashbhai Mehta Director	8246 / 2397 474	98253 13515	DCP CO_2 Foam	10 08 02	**SBA sets** ELSA mask Non respiratory	02 01 Sufficient in Nos.	10	Lime, Soda ash, Dry sand	--

Mahavir Synthetics GIDC, Sachin, Surat	0.3 KM	Mr. Vatsal Naik	2398077	98251 16035	DCP CO_2 Foam	20 04 05	**SBA sets** ELSA mask Non respiratory	02 02 Sufficient in Nos.	15	Lime, Soda ash, Dry sand	1 No of Explosive & O2 meter
Sachin Fire Station	2.0 KM	Fire officer	2397412, 101, 7874714141		Water Tenders		SBA sets	02	10	--	--

ANNEXURE 21- MEDICAL ARRANGEMENTS

For Key personnel & essential personnel see annexure 16 & 17

For Ambulance:-

As and when required basis tie up with ……Hospital, Sachin, Surat

Contact no. pasted in various location of plant

For fist aid:-

We have qulified first aider available and contect no. mentioned in emergency contact list

For basic first aid no. of ……..first aid box provided in diffrant location i.e office , control room ,security office etc. also monthly inspection data sheet available in HSE department.

For Key personnel & essential personnel see annexure 16 & 17									
Sr. No.	**First aid center / Ambulance Room / OHC/Hospital: - First aid center & Ambulance Room at our system company Ltd., Sachin, Surat.**								
	Name & Location	Tel Phone Nos.	Incharge person			Facilities & equipments	Anti dotes available	First aiders aval.	Acco-mod-ation
			Name & Designation	**Residence**					
				Phone	Address				
1	2	3	4	5	6	7	8	9	10
1	First aid	--				First aid medicines.	--	Yes	2 Person

Ambulance van/alternate arrangement.				Doctors (all nearby)			Other Medical Staff		
Place of availabi-lity	Capacity	Facilities in the van	Driver' Name& address	Name & Address & Phone.	Phone	Address	Name & Address & Phone.	Phone	Address
11	12	13	14	15	16	17	18	19	20

As and when required basis tie up with …….. medical center	1.		--	1. E.S.I. Medical Officer ESI Dis-pensary, Sachin.	2394559	--

Mutual aid arrangement									
Name & Address of the factories and Hospital	App. Distance	Contact		**Facilities available**					
		Person	Phone No.	Accom-odation	Doct-or's	Other Staff	Equuip-ments	Autidotes	Ambu-lance Van
21	22	23	24	25	26	27	28	29	30
ESI Hospital Sachin, Surat.	2.0 K.M.	Doctor on Duty	2394559	35	2	12	Full equipped Hospital	--	1
									--
									--

ANNEXURE 22-TRANSPORT & EVACUATION ARRANGEMENTS

For key personnel & essential workers see Annexure – 16 & 17 and for assembly points see Annexure - 18.
Type of siren, if any, for evacuation: Electrical Siren / Hand Operated Siren

Sr. No.	In-charge Person			Type and No. of vehicle	Capacity	No. and type of public warning instruments	Driver's Name and address	No. of own Vehicle
		Phone	Add.					
1	Mr.Gaurav Rastogi	9909039961	Sachin/ Surat	01 Nos. of AC Bus	32 Seater	--------	Mr.Nitesh Bharwad 6356058628	8 cars

OUTSIDE SHELTERS FOR EVACUATING PERSONS

Sr. No.	Name & address	Distance	Phone No.	Incharge person			Accommodation Capacity	Facilities available
				Name & Designation	Residence			
					Phone	Address		
1	ESI Dispensary Sachin	6.0 K.M.	2394559	Chief Medical Officer	2394559	ESI Dispensary Sachin	50 Nos.	All facilities including medicine available

MUTUAL AID HELP ARRANGEMENTS

Sr. No	Name & Address of the factories & Fire stations.	Approx. Distance (K.M.)	Phone NO. Office	Incharge Person			Vehicle Available		
				Name Designation	Residence		Sr. No.	Type	Nos.
					Phone	Address			
1	Anupam Rasayan (India) Ltd. Unit :- 1 Plot No:8110-8111&268/1 GIDCSachin, Surat	0.1 KM	0261-239899195	Mr. Shreyans Dalal Director	Resi.- 9879105399	57-58 , Hariom nagar,opp-Haridwar Raw house, Pal-Adajan Road , Surat	1 2 3 4	Tractors Cars Tempo (3-vehicle) Fork lifts	01 01 01 01
2	Orgo Chem. Ltd GIDC, Sachin, Surat	0.1 KM	8130 / 2397474	Mr. Parashbhai Mehta Director	98253 13515	A.B. Mehta Tower, Near Union Park, Godod Road, Surat	1 2 3	Tractors Cars Fork lifts	-- 02 --
3	Mahavir Synthetics GIDC, Sachin, Surat	0.3 KM	2398077	Mr. Vatsal Desai Director	98251 16035	11, Megdoot Society, Athvalines, Surat	1 2	Cars Fork lifts	02 01
4	Aether India Ltd. Site-4 Plot-362, gidc Sachin,gujarat	1.8 KM	6603000 6603360	Mr.Aman Ashwin desai Director	022-49186270 49186200	------	1 2	Cars Fork lifts	02 01

ANNEXURE – 23- *POLLUTION CONTROL ARRANGEMENTS*

For key personnel & essential workers see Annexure - 16 & 17. Trade waste disposal see Annexure - 7.

Water Pollution Controls					Air Monitoring					
Types & Capacity of ETP	No. of Sample Monitoring centre & its frequency	Other control measures	Log book & records	Incharge Person's Name Address & Phones	No. & Place of samples Monitoring centers	Type parameters & frequency of tests	Wind direction & velocity meters	Instruments available	Log book & records	Incharge Person's Name, address & phones
1	2	3	4	5	6	7	8	9	10	11
Primary Secondary & Tertiary ETP	4 Centers Four times a day 1) Inlet 2) After Primary 3) After Secondary 4) Outlet	Company Laboratory equipped with instruments.	Daily Maintained	Ms.Nidhi Lad , Navsari 9727740719	1 Nos. 1) Plant Building	SPM SO_X, NO_X Live monitoring	Wind direction South West velocity 5-10 Km/hr.	No	---	Ms.Nidhi Lad , Navsari 9727740719

Stack Monitoring						Scrubber/Incinerator etc.			
No. & Location of sample places	Type parame-ters & frequency of tests	Control measures provided	Instru-ments available	Log book & records	Incharge person's name, address & Phones	Location	Type and capa- city	for what	Incharge person's name, address &phones
12	13	14	15	16	17	18	19	20	21
1 No. at Boiler	SPM SO_X, NO_X Live monitoring	Coal Fire	Yes	Records maintained at boiler office	Mr.Mehul Chatniwala	--	--	--	--

Land Pollution Control				Pollution Control Board	
No. of sample monitoring	other control measure	log book	Incharge person's name, Address & phones,	Permission obtained	Condition fulfilled

center & frequency		records			
22	23	24	25	26	27
Frequently	Water sprinkling	----	Mr.Balkrishna Jha9727765881	---	---

ANNEXURE – 24- OTHER ARRANGEMENTS

For key personnel and essential workers see Annexure – 16 & 17													
Sr. No.	Type and name of arrangements available	Qty	Place of avail-ability	Phone No.	Incharge person's			Mutual Aid Arrangements					
					Name & designa-tion	Residence		Place from where the same thing is available	Qty	Incharge person's			
						Phone	Address			Name & designation	Phones		Address
											Office	Resi	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Heavy Vehicles. 1 Dump truck	01	Coal yard-Port Division	9727 765881	Mr.Balkrishna Jha Yard incharge	-----	Surat	-----		-----	-----	----	
2	JCB	01	-Do-	-Do-	-Do-	-Do-	-Do-	-Do-	01	-Do-	-Do-	-Do-	-Do-
3	Power alternatives	02	Generator house	8460 825913	Mr.Vishal Lukhi	-----	Surat	--	--	--	--	--	--
5	Test Facilities	01	Env.Dept.	9727 740719	Ms.Nidhi Lad	-----	Navsari	----	---	-----	---	----	----

ANNEXURE – 25- ALARMS & SIRENS

Sr. No.	Plant wise alarm points							The alarm (Signal is heard (Seen) at	Sound difference if any			
	Plant/Dept./ Location			Sr. No. of the alarm Point.	Its Place of Location (with floor no. if any)	Type of the alarm or siren	Its period of Testing		Type of Emergency	Type of alarm or Siren	Duration of Sounding	Type of sound of alarm siren
	Name & Loc-ation	No. of floors	Area of each floor									
1	2	3	4	5	6	7	8	9	10	11	12	13
						Electric driven / Hand Oprated	Weekly	Abnormal time	On-site emergency	Siren	Wailing tone for one minutes	Wailing tone
									Off-site emergency	-Do-	Up to two minutes with complete breakup	Continues tone with breakup
									All Clear	-Do-	Continues tone for two minutes	Continues tone
									Testing	-Do-	Continues tone for One minutes	-Do-
In case of electrical failure used Hand Operated Siren.												

ANNEXURE – 26- INTERNAL PHONES

Sr. No.	Name & Location of the Plant/Dept. or area	Tele Nos. (Internal)	Persons available on this Phone				
			Name	Designation	Designation or duty under On-Site emergency Plan, if any.	Residence	
						Phone No.	Address
1	2	3	4	5	6	7	8
	Main Office	101	Mr.Vishal Budhiya	Director	KP	9825061861	Surat
	Second Floor Office	-----	Mr.Rohit	IT Officer	KP	8511927347	Surat
	Surveillance room	81-25	Mr.Nilu Pradhan	On Duty Officer	KP	7738019953	Surat
	Instrument Lab	----	Mr.Alan Patel	Instrument Eng.	KP	7802833081	Surat
	First Floor Office	----	Mr.Sanjay Singh	HR Executive	KP	8758510641	Pandesara , Surat

ANNEXURE 27- EXTERNAL PHONE

(TO BE USED IN EMERGENCY)

Sr. No	Name of Department / Agencies	TELEPHONE NUMBERS	
		OFFICE	RESIDENCE
1.	Collector, Surat	2471121/2472471/ 2472082	2669080/2669580
2.	Municipal Commissioner, Surat	2422244/2423751 to 55	2227090
3.	Police Commissioner, Surat	2472106	2311560
4.	Dist. Supdt. Of Police	2479064	2667458
5.	Resident Dy. Collector or/and Addl. Dist. Collector, Surat	2472211/2472082 to 84 /2471416	2653799
6.	Sr. Inspector of Factories, Surat	2472422	2667692
7.	Chief Fire Officer - Fire Control, Surat Municipal Corporation, Surat	2414195/96/2414139 /2436636	2428904/2436636/ 2423751 to 56
8.	Executive Engineer Public Health & Mechanical Divn. Gujarat Water Supply & Sewage Board, Surat	2476125	2220564
9.	The Executive Engineer (R&B) Surat	2474230	2270411
10.	Regional Officer, G.P.C.B., Surat	2442696/2429733	2655949/2235949
11.	The Executive Engineer, GIDC, Surat		
12.	Dist. Agriculture Officer, Surat	2425751	2687137
13.	Experts (Industrial Safety & Health)		
	i. General Manager- Safety, Reliance Ind. Ltd., Mora		2689920
	ii. Chief Manager, Fire & Safety, KRIBHCO Ltd., Surat	2802022, 2802122	
	iii. Suptd. Engineer (Safety), ONGC Ltd., Surat	2875500 to 05	
	iv. Chief Medical Officer Reliance Industries Ltd., Mora, Surat	725070/ 725059	2311514
14.	Suptd. Engineer, GEB, Surat	-	2550725
15.	Dy. Director of Information, District Information Office, Surat	2479172	2422233/ 2440033

16.	Chief Civil Defense, Surat		2472043	2669218/2669077/ 2669178
17.	Medical Superintendent, New Civil Hospital, Surat		2244985	2653900
18.	District Health Officer, District Panchayat, Surat		2425751	2669810
19.	Regional Transport Officer Surat		2472436/2472185	2669064
20.	Shri Kiritbhai Gandhi General Manager (P&A), Colourtex Pvt. Ltd., GIDC, Surat		2890122/ 2891010/ 2891011	2240568
21.	Chairman, Local Crisis Groups			
	i.	Hazira Area, Sub Divisional Magistrate, Tal: Olpad, Dist: Surat	2472012	2229761/ 2220066
	ii.	Udhna/Pandesara/Sachin Area, Sub Divisional Magistrate, Tal: Choriyasi, Dist: Surat	2472473	
22.	Railway Stations			
	a)	Surat	131, 132	

Sr. No.	**Name of Department / Agencies**		**TELEPHONE NUMBERS**	
	b)	Udhna	2277208	
	c)	Sachin		
23.	ST Depot, Manager		2342744/2422006	
24.	*Fire Brigade Chief Officer* Man Darwaja Control Room		2436636 2425751 to 56	101 2428904
25.	Hospitals			
	1)	Old Civil	2479311/ 2479610	
	2)	New Civil	2244457 to 59	
	3)	Mahavir Hospital	2330273 - 274	
	4)	Surat General	2479791	
	5)	Ashakatashram	2427702 to 03	
	6)	Mishan Hospital	2349586	

	7)	Maskati Hospital	2420412/ 2426638	
26.	Fault Repair Services			
	1.	Surat Electricity Co.	2413014/2413019	
	2.	Municipal Water Supply	2422285/6	
	3.	Gujarat Gas Co.	2736333/2736310	
	4.	Telephone	***198(198 with in the area)	***Code+198
	5.	SMC	2422285	
27.	Chamber of Commerce		2479431 to 35	
28.	Doordarshan		2238672/ 2231766	
29.	Akashwani (All India Radio)		2234154/ 2234450	2347108
30.	Parivar Video Magazene (Surat Channel)		2442507-2423719	
31.	*Channel Surat*			
32.	MY TV Channel			
	Social Services			
	1.	Akhil Hind Mahila Parishad Bruhad Surat Branch	2470413	
	2.	Akhil Hind Mahila Parishad Surat Branch	2423611	
	3.	Shree Saibaba Satsang Mandal	2410966	
	4.	Shree Manav Seva Trust Pramukh	2442079/2424883	
	5.	Manav Uthan Seva Samiti	2443198	
	6.	South Gujarat Productivity Council	2653242	
	7.	Giants Group of Surat	2343770	
	8.	Lions Club of Surat	2423185	
	9.	Rotary Club of Surat	2423172	
	10.	Surat Mahila Club	2422414	
	11.	Nav Sargen Manav Vikas Kendra	2475683	
	12.	Saurashtra Patel Seva Sangh	2340418	
	13.	Kanjibhai Desai Samaj	2438884	
	14.	Shikshan Bhavan	2340518	
	15.	Manav Seva Samaj	2479852	

	16.	Sarvajanik Education Society	2347309	
	17.	Rashtriya Swayamsevak Sangh (RSS)	2736149/ 2736255	
	18.	Ambika Niketan Trust	2666600	
	19.	Surat Modh Vanik Samaj	2432964	
	20.	Agakhan Trust	2438588	

Sr. No.	**Name of Department / Agencies**		**TELEPHONE NUMBERS**	
33.	Educational Institutes for Shelter or Assembly Points			
	1	Navyug Arts College, Rander Road	2734293	
	2	Navyug Commerce College, Rander Road	2734102	
	3	Navyug Science College, Rander Road	2734103	
	4	M.M.P. High School, Rander Road	2735023	
	5	Swaminarayan Vidhyala, Ramnagar	2737486	
	6	Shanti Niketan High School, Palanpur Patia	2737483	
	7	Sanskar Bharti Vidhyalaya	2739553	
	8	V.D. Desai Vadiwala High School, Adajan Road	2734941	
	9	Sardar English High School Palanpur Patia	2735660	
	10	I.N. Tekrawala High School, Adajan Patia	2734415	
	11	Daliya High School, Adajan Gam	2734002/8346110	
	12	Lokmanya Vidhyalaya, Rander	2734181	
34	Other places for shelter			
	1	Amidhara Wadi, Adajan	2735144	
	2	Choksi Wadi, Adajan	2735690	
	3	Sugam Hall, Sugam Society	2734350	
	4	Kadwa Patidarni Wadi		
	5	Mahyawanshi Samaj Sankul, New Rander Road		
35	Safe Assembly Point for Udhna-Pandesara-Bhestan - Sachin			
	1	Udhyog Bharti School, GIDC Colony, Pandesara.	2893469	

	2	Nagar Prathmic School School No. 214 to 216, Bhestan		
	3	Sharda Vidhya Sankul Gopal nagar, GHB, Pandesara.		
	4	Sharda Vidhya Mandir, GHB, Pandesara.		
	5	Nagar Prathmic School, Miranagar, Udhana.		
	6	S.E.M. Samiti School, Postal Society, Udhna.		
	7	R.N. Naik High School Opp. Adarsh Chemical, Udhna.	2272970	
	8	R.N. Naik High School, Road No.15, Udhna.	2278101	
	9	Sachin Gujarati Primary School Surat - Navsari Road, Surat		
	10	Laxmiben Dayabhai High School Station Road, Sachin, Surat	2392221	

ANNEXURE 28- NOMINATED PERSONS TO DECLARE MAJOR EMERGENCY

Sr. No.	Name of the plant department or location	Name & designation of the nominated persons to declare major emergency	Duty of designation given if any under the on-site/off-site emergency plan	Phone No.	Residence	
					Phone No.	Address
1	2	3	4	5	6	7
1	Steam House India Ltd.- 8108/1,Road No.2,GIDC,Sachin, Surat-394230	Mr.Vishal Budhiya	Site Main Controller	101	9825061861	98-Subhash Nagar,Opp-Rutam Hospital,Ghod dod Road,Sunvali,Surat

ANNEXURE 29- A FORM TO RECORD EMERGENCY TELEPHONE CALLS

PART A : ESSENTIAL INFORMATION	
Details Of call as reported	
Caller's Name & designation _____ Date _____ Time _____ phone No. _____	
Purpose of call. Is any particular advice required immediately?	
Name of Chemicals To be spelt out clearly	
Brief description of incident Fire / Explosion / Liquid Spill Quantity involved. Storing / handling / using details. Location of incident. Cause, if known, in brief.	
PART B : INFORMATION TO BE OBTAINED IF READILY AVAILABLE	
Has anyone been injured? Yes / No If yes, how many? Affected by Steam or Fire? Yes / No If yes, how many?	
What first-aid had been given?	
Has any one been taken to hospital? Yes / No If yes, address of the hospital	
Is the road blocked? Yes / No Closed to traffic? Yes / No	
Has the area owner been informed? Yes / No	
If caused by vehicle, Vehicle Number _____ and Name & Address of the owner _____ Has the owner been informed? Yes / No	

ANNEXURE – 30- STATUTORY COMMUNICATION

Statutory information to be given to:	Periodicity of such information to be given (statutory or self decided)	Date of last information given	To how many persons	Suggestions received if any	Last date of implementation of useful suggestions
1	2	3	4	5	6
1. The workers	As & when required	Before a month back	Concerned person	-	-
2. The general public & neighboring firms	As & when required, Given 41-B booklets "Discloser of information to surrounding public & vicinity".	---	-	-	-
3. District emergency Authority	This is being conveyed by local factory office	-	-	-	-
4. Factory Inspectorate	As and when demanded as per scheduled.	Regular information is given to factory office & factory inspector carries out Regular inspection of factory.	Factory inspectors	-	-

ANNEXURE – 31- *EMERGENCY INSTRUCTION BOOKLET*

1. ALARM RAISER

Responsibilities:

- ***Any person noticing hazardous incidents.***
- ***Informing superiors and co-workers of hazardous incidents.***
- ***Taking immediate action for minor incidents using internal resources.***
- ***Raising the siren for major incidents on the order of the Site Main Controller (SMC).***

2. SITE MAIN CONTROLLER

Responsibilities:

- ***Head authority of the Emergency Organization.***
- ***Rushing to the Emergency Control Center (ECC) upon notification.***
- ***Activating on-site/off-site Emergency Plan if not already activated.***
- ***Coordinating with Incident Controller (IC) and key personnel.***
- ***Activating off-site plan and informing neighbors and surrounding population.***
- ***Reviewing and assessing possible developments continuously.***
- ***Directing safe plant shutdown, evacuation, and casualty management.***
- ***Liaising with local crisis groups, district crisis groups, and health experts.***
- ***Instructing the Security officer to raise the "All Clear Siren."***

3. INCIDENT CONTROLLER

Responsibilities:

- ***Plant/Area incharge responsible for incidents in their area.***
- ***Assessing the scale of emergencies and taking preventive actions.***
- ***Activating on-site plan for major emergencies.***
- ***Deputizing for the SMC until their arrival.***
- ***Coordinating with essential personnel teams and key personnel.***
- ***Directing shutdown, evacuation, and operations within affected areas.***
- ***Briefing the SMC and informing them to raise the "All Clear Siren."***

4. DEPUTY INCIDENT CONTROLLER

- ***Assumes the role of the Incident Controller in their absence.***

5. KEY PERSONNEL

5.1 Production, Engineering, R & D Manager

- ***Keeping in touch with IC & SMC.***
- ***Guiding essential personnel teams.***
- ***Assisting in safe plant shutdown and evacuation.***
- ***Keeping the SMC informed about developments.***

5.2 Security Officer

- ***Assisting IC & SMC during emergencies.***
- ***Cordoning the area and providing necessary equipment.***
- ***Fighting fires with available resources.***
- ***Managing evacuation and crowd control.***
- ***Liaising with mutual aid services and raising sirens.***

5.3 Factory Medical Officer

- ***Taking charge of Occupational Health Centre.***
- ***Providing treatment and liaising with hospitals.***
- ***Arranging stock of antidotes and life-saving drugs.***
- ***Informing SMC about the developing situation.***

5.4 Telephone Operator

- ***Managing Tel. Board/Telephone Section.***
- ***Calling the local fire brigade and sounding alarms.***
- ***Transmitting messages to key personnel and outside agencies.***
- ***Maintaining records of outgoing and incoming messages.***

6. ESSENTIAL PERSONNEL TEAM

6.1 Fire Fighting Team

- ***Rushing to the site with firefighting equipment.***
- ***Deciding actions in consultation with IC & Key Personnel.***
- ***Assisting fire brigades and mutual aid teams.***

6.2 Spill & Gas Control Team

- ***Responding to control gas leaks or spills.***
- ***Using emergency kits or neutralizing materials.***
- ***Knocking down vapor/gas clouds in case of liquid spillage/gas release.***

6.3 First Aid & Rescue Team

- ***Rushing to the site for rescue with necessary equipment.***

- ***Providing first aid and assisting medical officers.***
- ***Taking charge of the first aid room and recording details.***

6.4 Engineering Services Team

- ***Handling electrical blackouts, power supply, fire & raw water supply.***
- ***Performing emergency engineering work and arranging vehicles.***

6.5 Response Force (Security)

- ***Ensuring clear roadways for emergency vehicles.***
- ***Stopping non-emergency traffic and preventing unauthorized entry.***
- ***Assisting in evacuation, crowd control, and providing necessary equipment.***

7. FOLLOWING TEAM WORKS UNDER SITE MAIN CONTROLLER

7.1 Transport, Welfare of Evacuated Person

- ***Evacuating non-essential workers and arranging transport.***
- ***Providing food, clothing, and arranging transports for materials.***

7.2 Team for Assembly Points Managing

- ***Counting non-essential workers and preparing lists.***
- ***Arranging transport and informing relatives.***
- ***Providing information to the SMC and searching for missing persons.***

7.3 Runner/Messengers for Off-Site Agencies & Liaison at On-Site

- ***Reporting to the SMC and transmitting messages.***
- ***Sending messages to neighboring factories and local authorities.***
- ***Following directives of the SMC for communication.***

ANNEXURE – 32- RECORD OF CHANGES

Sr. No.	Date	Page No. Chapter/ Annexure	Record of Previous Status	Amendment Present Status	Reason as amendment	Approved by	*Remark*

ANNEXURE – 33- MATERIAL SAFETY DATA SHEET

Sr. No.	Name of the raw materials	M.S.D.S. NO.
1.	Morpholine	001
2.	Tri Sodium Phosphat	002
3.	Oxygen Schevenger	003

1. MSDS –Material Safety Data Sheets of all the Chemicals is available at plant control center & in HSE Dept.

2. Plant wise MSDS available at all the Plant Control Rooms.