

RISK ASSESSMENT & DMP

INTRODUCTION

Modern Disaster Management goes beyond post-disaster assistance; it includes pre-disaster planning and preparedness activities, organizational planning, training, information management, public relations and many other fields.

The events of a disaster move rapidly and can be extremely traumatic for those who are unprepared. Disaster managers often do not get a second chance.

Principles of disaster management apply in both routine & crisis incident, during disaster mitigation & disaster reconstruction.

Emergency operations cover both the preparedness phase & the immediate post disaster period.

PURPOSE

The Disaster Management Plan has two primary goals: to reduce the likelihood that the society premises will experience disaster and to mitigate the impact of any disasters that do occur. The "best" disaster is one for which we are so well prepared that it never happens. Potential for disaster can be reduced by identifying and correcting hazardous conditions and by encouraging staff alertness in detecting and reporting problems.

The Disaster Management Plan is created with the aim of an effective management for the disaster with the minimum possible impact on the human being, society and the establishment as a whole. We at Ajitnath Hi-Tech Builders Pvt Ltd. (Subsidiary of Lodha Group) aim to achieve this through pro-active measures, protective equipment's, efficient and rigorous trainings & drills and practicing exhaustive emergency procedures.

DEFINITION OF A DISASTER

A catastrophe, mishap, calamity or grave occurrence in any area, arising from the following;

- Natural Causes
- Man made Causes or by
- Incidental Causes or
- Negligence

These causes may result in substantial loss of life or human suffering or damage to and destruction of Buildings or damage to and degradation of environment and is of such a nature or magnitude as to be beyond the coping capacity of the affected area.

TYPES OF DISASTERS

- **Natural Disaster**

It is the consequence of a natural hazard which affects the human activities. Human vulnerability, exacerbated lack of planning or lack of appropriate emergency management, may lead to loss in financial, environmental or human aspects. The various types of natural disasters to occur in Mumbai are as follows:

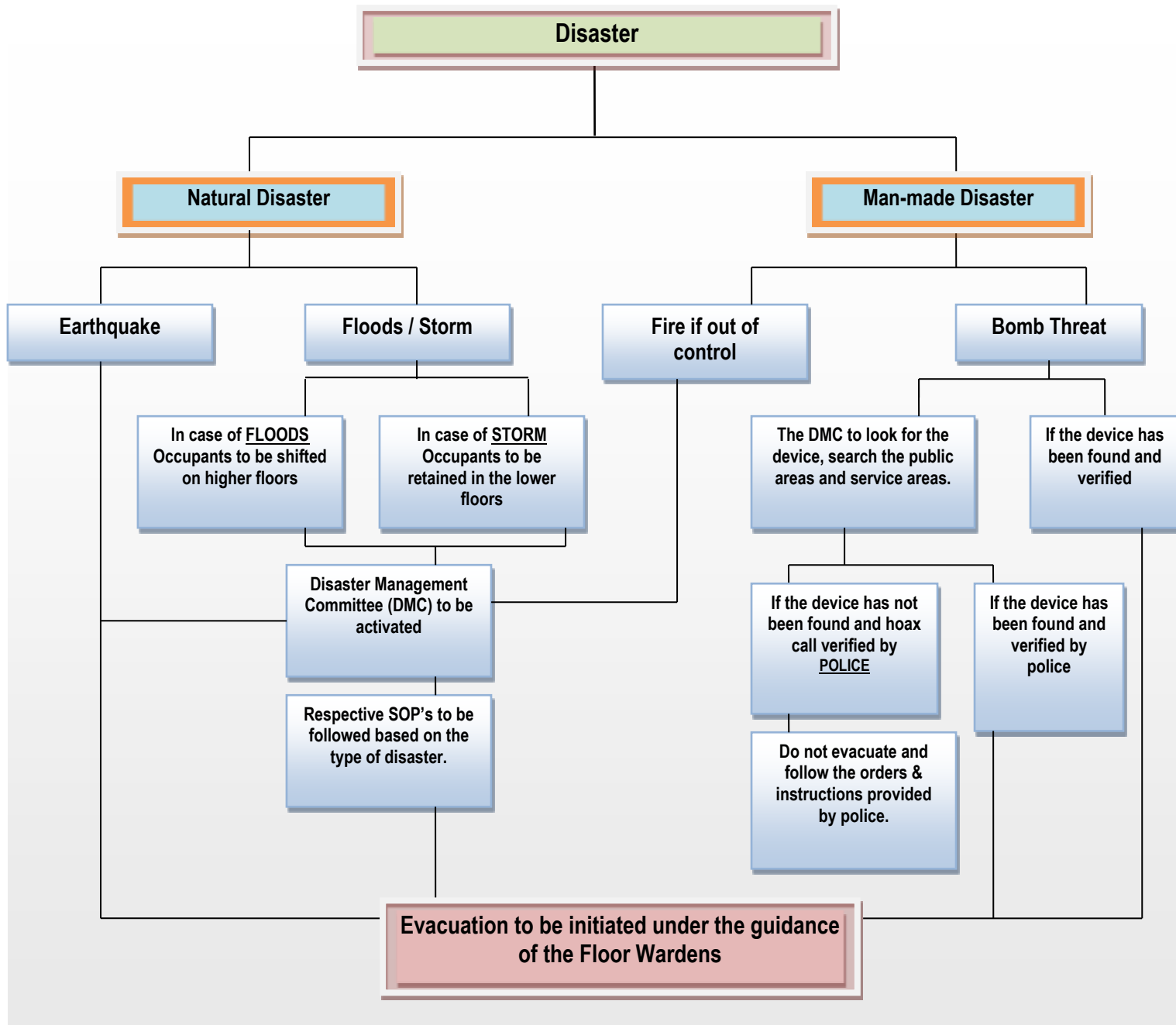
1. Earthquake
2. Floods
3. Storm/Cyclones
4. Flash Floods

- **Man Made Disaster**

Man-made disasters are the events that occur due to some incidental or accidental mishandling of mankind or equipment. This may lead to a severe threat on the well being and also affect the public health. As there occurrence is uncertain and unpredictable, it poses a challenging threat that must be dealt with through vigilance, and proper preparedness and response. Following are the types of man made disasters prone to occur in Mumbai:

1. Building Collapse
2. Fire
3. Terrorist Activities (Bomb Threat, Sabotage)
4. Riot – civil disturbance

. DISASTER RESPONSE PLAN



DISASTER MANAGEMENT-POLICY STATEMENT

The company understands the various hazards and disasters that we are likely to face, as well as their respective behaviour and the risks that they may pose to our customers, occupants, tenants and employees. The firm belief forms the basic foundation of our Disaster Management Policy.

The Safety, Security and Well-Being of the customers, retailers and employees at this building being of prime importance, concerted and coordinated efforts of all internal and external agencies involved in Disaster Management will be accorded the highest priority. In order to accomplish the aforesaid objective, it has been ensured that a holistic, proactive, integrated and a technology-driven approach of the highest order is followed for meeting and managing disasters which may strike our office building. This will be supplemented with the best available industry practices and legal requirements.

This Disaster Management Policy, therefore, will encompass the three essential components, as follows:-

1. Pre-Disaster Phase (Preparedness)
2. Disaster/Impact Phase (Mitigation)
3. Post-Disaster Phase (Management)

OBJECTIVES

The objective of this Disaster Management plan is to tackle any emergencies based on concept of Comprehensive Emergency Management:

- To safe guard the lives of all the personnel in the premises of the Building.
- To train the Resident/Individuals for the effective handling of the situation.

DISASTER MANAGEMENT CONTINUUM & CYCLE

The nature of disaster management is highly dependent on the economic and social conditions pertain. The cycle of disaster management must include long-term work on infrastructure, public awareness, and even human justice issues.

The process of disaster management involves four phases: mitigation, preparedness, response, and recovery.

DISASTER MANAGEMENT CYCLE



Phase	Strategies
PREPAREDNESS	<ul style="list-style-type: none">• Protection of the public;• First Aid Arrangement• Mock Drill training and practice• Community/Individual awareness and education• Preparation for disaster management plans for Building/community/individual• Inventory of resources both material resources and human skill resources• Public address systems• Coordination with Police/Fire Services/Hospitals etc• Identifying the vulnerable areas
MITIGATION	<ul style="list-style-type: none">• Land use planning• Disaster resistant Office at the site• Finding ways to reduce risk even before the disaster strikes• Community awareness and Education
RESPONSE	<ul style="list-style-type: none">• Activate the emergency operation centres (control room/Building Management system)• Implementing the disaster management plan• Medical Help• Issuing updated warnings• Important telephone numbers used are altered or changed.• First Aid• Mobilizing resources• Providing adequate shelter and toilet facilities• Deployment of search and rescue team
RECOVERY	<ul style="list-style-type: none">• Reconstructing or alteration of existing structure is carried out.• Restoring the important communication links in the Building• Restoring all the essential services

7.3. DISASTER MANAGEMENT APPROACH

A systematic approach begins with the identification of potential disaster. After the identification is complete, policies have to be laid and the mechanics of disaster management operations have to be worked out. In short, planning of disaster management can be summarized as follows:

- Research – Assessment of potential disaster situation.
- Identification of probable risk areas that will be affected.
- Formulation of Strategies to deal with each potential crisis.
- To work out mechanics of disaster management operations.

Devising effective communication channels to all concerned and those affected so as to minimum damage.

- To arrange for early warning system.
- To impart training to concerned staff members.
- To adopt effective preventive measures.
- Vulnerabilities Analysis and Risk Assessment.
- Citizen Preparedness / Public Education.
- Communication or Two way communication system
- Recovery

The plan also provides organization & procedural framework as under –

1. Constitution & composition of committee.
2. Resource availability in the following areas -
 - I. Fire
 - II. Security
 - III. Medical
3. Declaring emergency.
4. Functions to be discharged by each member of the committee.
5. Co-ordination with internal & external agencies.
6. Directing rescue operations.
7. Extending medical facilities.
8. Restore normalcy.
9. Documentation of the occurrence and steps to prevent similar incidences.
10. Mock drills.

7.4. DETAILS OF PLAN

The organizational structure refers to the command and control structure of the Building Management which is a major part and essential for an effective Disaster Management Plan **(DMP)**.

Disaster management Plan for proposed building/project is prepared. When the disaster strikes, Sr. Safety supervisor/ Security officer will give the direction to the occupants/Residence to move towards the safer places/ Nearest Refuge floor. Control Room is proposed in the project premises. Control room has two way communication systems which can help during Fire, Lift failure, Electricity failure or any other emergency. Location of the control is provided at Ground floor.

Regular inspection of safety equipment's i.e. every six month is done by the external agency. Structural and safety audit is also done at regular interval of time.

In the control room, personnel Protective Equipment's are provided which includes: - stretchers, Mask, Helmets, First Aid kit, Fire Extinguisher Portable etc.

Responsibility of watchmen/security officer will be to evacuate the occupants/Resident during course of emergency. Each and every person of the building should know the direction for evacuation. Hence, proper Evacuation routes are given on each and every floor. Display board with important telephone no. is provided which consist of Nearest Fire Brigade, Hospital, Ambulance Services, police station etc.

Also neighbourhood building details are provided at the Security gate.

CONSTITUTION OF BUILDING DISASTER MANAGEMENT COMMITTEE:

The Building Disaster Management committee shall consist of following members:

- 1) Chairman of Building (Chief controller)
- 2) Secretary of Building(Dy. Chief controller)
- 3) Security Officer (Site controller)
- 4) Sr. Electrician
- 5) Safety Supervisor (Engineering in-charge)
- 6) Fire & Safety in-charge

RESOURCE AVAILABILITY:

Fire:

Trained member of the society to assist security in case of emergency. This staff is also supported by other members. In the proposed project we have BMS room/control room being watched in shift 24 x 7 along with security head, fire marshal/warden and technical specialists to counter any emergencies.

Necessary communication equipment's are provided for improving the response time. This Dept. is also equipped with various firefighting equipment are as follows:



Security:

Ajitnath Hi-Tech Builders Pvt Ltd. (Subsidiary of Lodha Group) will hire the professional services at of well-known security agency. Security Services will comprise of 20 staff including management staff. The selected staff will be trained for all the emergency response. The staff is strategically deployed at project site in all three shifts on all days throughout the year. Security officers are trained in Firefighting / Lift rescue /First Aid experience. Thus, it facilitates availability of trained manpower for 'disaster management'.

In addition, Security officer/Safety supervisor is equipped with Public Address system. This facilitates the security officer/Safety supervisor to reach the site of incident in the shortest possible time and warn / fore-warn the Resident of the building. The Security cabin is in possession of Walkie-Talkie sets which facilitates communication from the site of accident to Emergency Control Centre.

Security officer/Safety supervisor are dealing with all emergency situations like Lift rescue operations, Firefighting etc. They have acquired knowledge in disaster management and are well trained to act in case of disaster and can contribute effectively.

In addition Security officer/Safety supervisor has a good liaison with nearest police station of the project area. This will come handy in an emergency situation like Fire, bomb blast, terrorist attack/threat etc. The resources available at their end can also be utilized to fight any emergency with proper sharing arrangement.

Medical:

Emergency rooms are well equipped with following equipment to meet emergencies that can occur during disaster. In addition, one first aid room is provided in proposed project.

- 1) Wheel chair
- 2) Stretcher
- 3) Suction machine
- 4) Nebulizer
- 5) Emergency Drugs Trolley
- 6) Vision Tester

To meet our needs for hospitalization in case of need arising out of situation we will tie up with following hospitals in nearby vicinity –

Lotus Hospital

Mankoli, Bhiwandi,
Mumbai, Maharashtra, 421302

Bala ji Hospital

Bhiwandi Road puranik Villas, Kalher, Bhiwandi
Mumbai, Maharashtra, 421302

All these hospitals have operation theatres, Intensive Care Units, Multi-specialty expert Doctors and Ambulance service round the clock.

Updated blood group directory of residence are also available in Control Room or at the Security Cabin. The blood group is also mentioned on the Identity Cards of Security officers and Guards.

RESPONSIBILITY OF COMMITTEE MEMBERS:

The Primary responsibility of the committee would be:

- Analysis of the incident.
- Prompt decision making, prioritization and distribution of tasks.
- Communication of information and decisions to all involved parties.
- Development of media/public relations response.
- Reviewing Post-crisis situation and making necessary changes in Manual for future use.

The Team should also ensure that:

- The team role during the crisis situation is very important. Maintaining calmness both in action and manner of speaking is very important.
- Directions must be given firmly and clearly, without excessive anxiety. A moderate level of tension is expected and, in fact, can help convey an appropriate sense of urgency.
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Identification of Vulnerable Areas in the Building and the resources that are available or can be made available with the building in case of any disaster.

A check-list should be prepared on the following points to plan actions for future, so as to make the building a safer place:

- Are the corridors and stairwells clear of any obstruction?
- Does the Property have provision for emergency backup?
- Does the building have minimum two exits?
- Are all the exits from the building clear?
- Are there adequate arrangements for fire safety etc.?

Evacuation Route-Map – the following things have to be kept in mind:

- The entire building to be divided into zones with each zone having its own staircase.
- The exit routes should be clearly marked and path should be free of any obstruction.
- The safe places where the people shall gather should be clearly located and the location should be clearly marked and communicated to the respective classes. (Assembly point in the building).

Dissemination Of Plan To Everybody – This is very essential for effectiveness of the plan. This can be done by making every staff in the building aware of the plan and following steps as:-

- Put up signs for exits on walls and roofs etc.
- Display the maps on every floor in the building.
- Call a meeting and discuss the plan with all staff members.
- Prepare floor-wise evacuation route maps.

FUNCTIONS OF COMMITTEE MEMBERS:

SOCIETY CHAIRMAN:

During normal working hours the Society Chairman shall be available in Emergency Control room & he or Society Secretary shall give directions to all other committee members based on the information received from the site controller. For Ajitnath Hi-Tech Builders Pvt Ltd. (Subsidiary of Lodha Group). The site controller will be coordinating from Control Room which is located at Ground Floor.

Exclusive telephone extension number i.e. Extn No. **10** / mobile tel. number of the Society Chairman/ Secretary/Security officer shall be displayed at all conspicuous locations in the project site for easy accessibility. For Ajitnath Hi-Tech Builders Pvt Ltd. (Subsidiary of Lodha Group) Security Control Room extn No. is **01/02**. The said extension number shall always be kept free & shall not be normally used by any security staff/control Room staff.

In case any help is required from the neighboring / external agencies such as Fire brigade / Civil defense / Local Police / Hospitals / Ambulance / Blood Bank etc. the same will be handled by Security Officer only and in his absence by the officer appointed by him to handle such situation.

SITE CONTROLLER/SECURITY OFFICER:

Based on the geographical locations of the shops/Building, following member is nominated as site controllers.

Sr. Security officer - Mr. XXX

The site controller shall inform about the emergency situation to the society chairman on exclusive extension number or his mobile number and wait for instructions from the society chairman / Secretary. The Site Controller shall not issue any instruction whatsoever to any other Committee Members which may result in confusion.

- Any Emergency noted in his respective area is to be immediately communicated to Society Chairman / Dy. Society Chairman/Secretary.
- Also, he can communicate this over phone on Emergency telephone no. 1000, which is kept at the Gate No. 1.
- He is responsible for taking care of employees and material of his area during Emergencies.
- If the area is likely to be flooded, the electrical supply of that area is to be cutoff with the help of electrician.
- If evacuation is required to be done, he has to guide his employees to assemble at a safer place.
- Any further instructions from Society Chairman are to be followed.

FIRE SAFETY INCHARGE:

On receipt of information from any source, the Fire officer shall check with Society chairman and rush to the place of incident along with his team & security team and shall also communicate emergency squad members from the shop / location where the incident has taken place to rush to the site. In emergency, the fire officer will coordinate with site controllers and fire marshal appointed.

The Fire & Safety Officers shall evacuate and carry out rescue operation with the help of emergency squad members and if the situation is beyond their control, the Fire officer shall inform the Society Chairman to seek help from outside agencies.

ENGINEERING INCHARGE/SAFETY SUPERVISOR:

The Engineering Incharge/safety supervisor after receiving the information shall contact the Society Chairman and inform him about the action initiated to isolate the machines / power / generators – as per the situation. For Ajitnath Hi-Tech Builders Pvt Ltd. (Subsidiary of Lodha Group) buildings he will coordinate with the control Room. He will not do any operation independently which can cause harm to the life and or property. He shall also ensure availability of water with

sufficient pressure and quantity. Necessary help for civil work / removal of debris etc. shall be arranged by him.

DECLARING EMERGENCY:

In case of any such major hazards, which is likely to cause extensive damage to property or human life, the Society Chairman shall communicate through the various communication channels like blowing of siren, Telecommunication, Two way communication system, Public Address System available with him and make the residence aware of the situation and give instruction / direction what is expected from them and instruct them to evacuate / assemble at designated assembly points as under:

- 1) Nearest Refuge floor
- 2) RG Area

CO-ORDINATION WITH INTERNAL & EXTERNAL AGENCIES:

The communication of a disaster refers to the escalation channel that needs to be followed during the notification or occurrence of disaster (or if the disaster has occurred). It shall depend on its nature whether it's a predictable or an unpredictable disaster. A predictable disaster is the one that is followed by a warning or a notification whereas in case of an unpredictable disaster there is no warning or notification.

After taking stock of the situation based on feedback received from various members of central committee the Society Chairman shall decide if any help needs to be sought from neighboring / external agencies. This should also be made known to all residence through different communication channels viz. Two way communication system, public address system, circulars, newsletters, e-mails etc. working in different shift to avoid confusion.

DIRECTING RESCUE OPERATIONS:

All the members of Central Emergency Committee shall work under instructions from Society Chairman and shall take decisions in their areas of operation, however they shall keep the Society Chairman informed about the action being initiated and update him on the same.

MEDICAL FACILITIES:

No occupant has been assigned medical or rescue duties during an emergency situation in this building. There may be some occupants who have volunteered and been trained for building search and rescue or Disaster First Aid by any professional agency or by any government agencies for building disaster situations (e.g. a large earthquake). These volunteers will report to the Emergency Management teams in a disaster.

DECLARING NORMALCY:

After all operations are over the Society Chairman shall declare the normalcy.

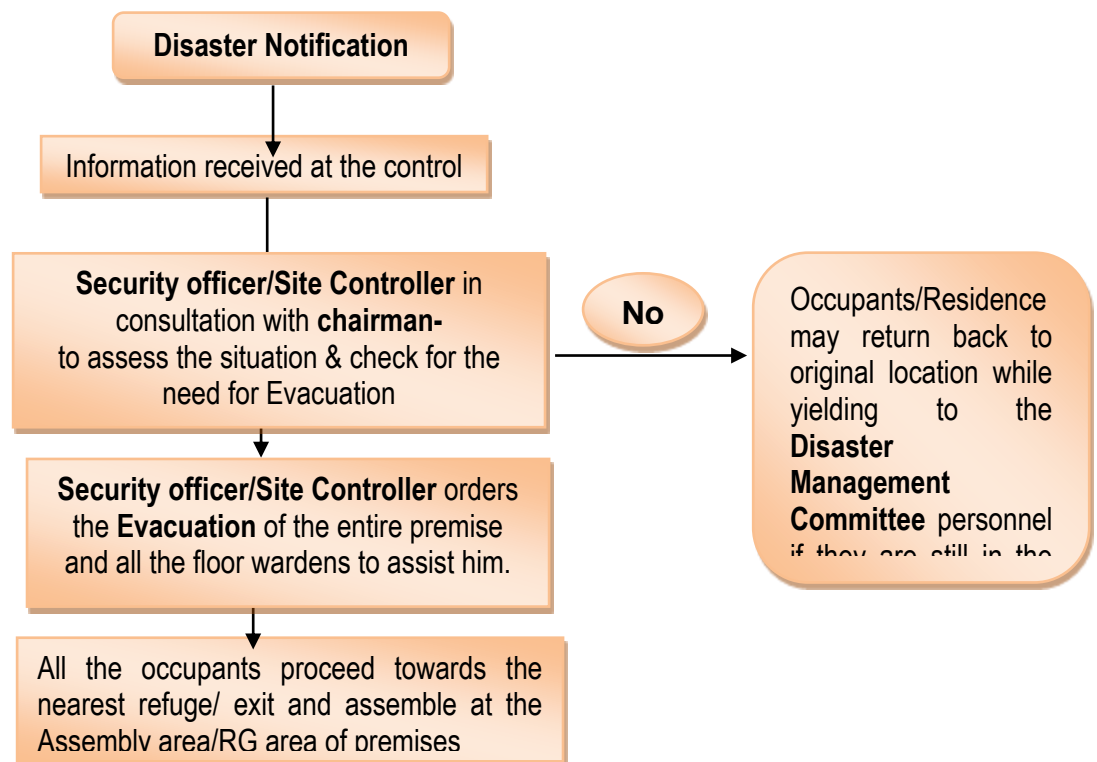
DOCUMENTATION:

The Society Chairman on completion of the activities, keep track of the events and record the same. He shall inform the Management / Occupier about the occurrence and in consultation with all committee members suggest / recommend additional facilities / amendment in procedures required to meet such situation in future.

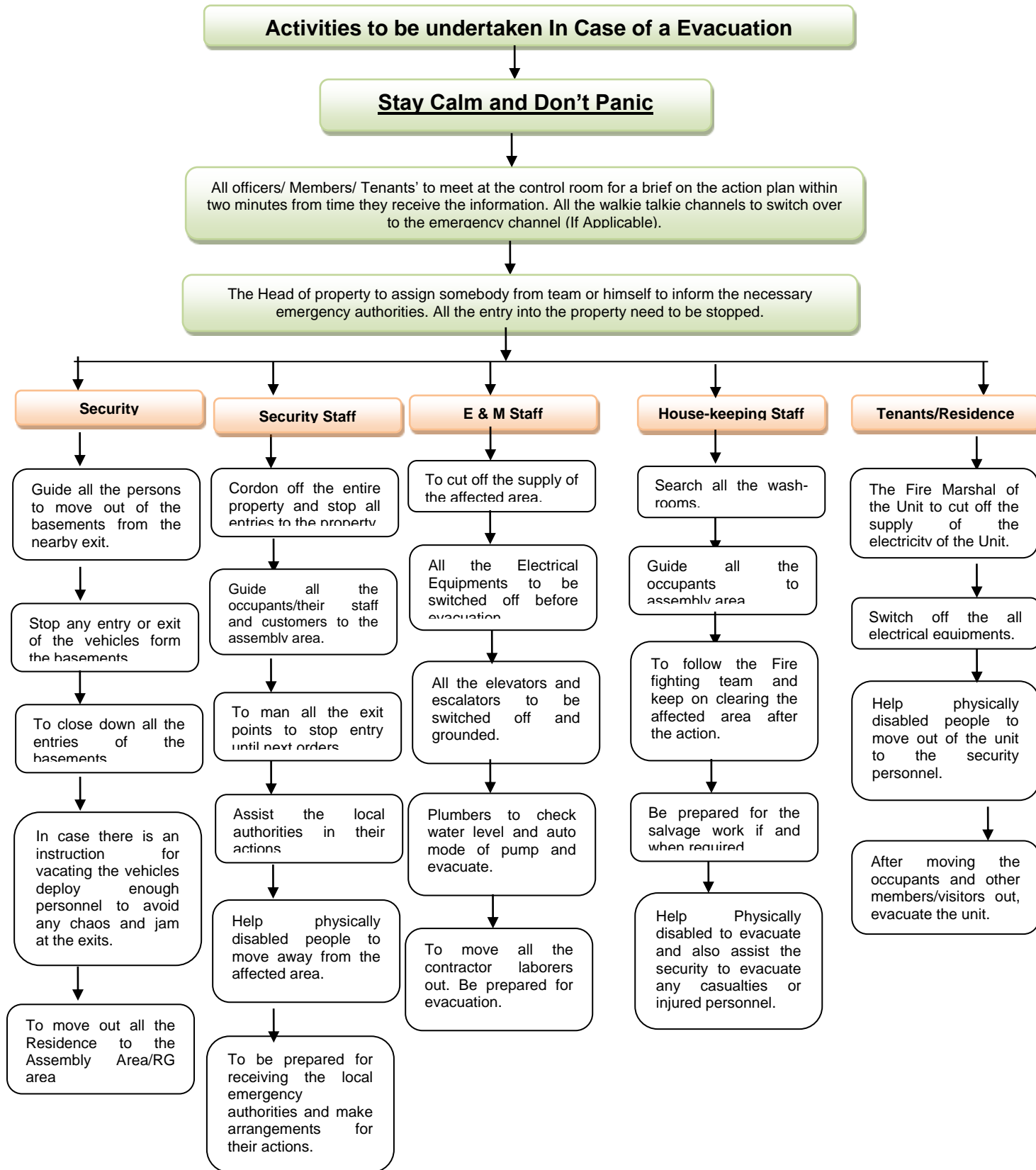
MOCK DRILLS:

Mock drills activities should be conducted six monthly bases for ensuring its efficiency during emergency as well as for refinement and up gradation. These drills based on the plan will help achieve its objectives of the disaster management plan.

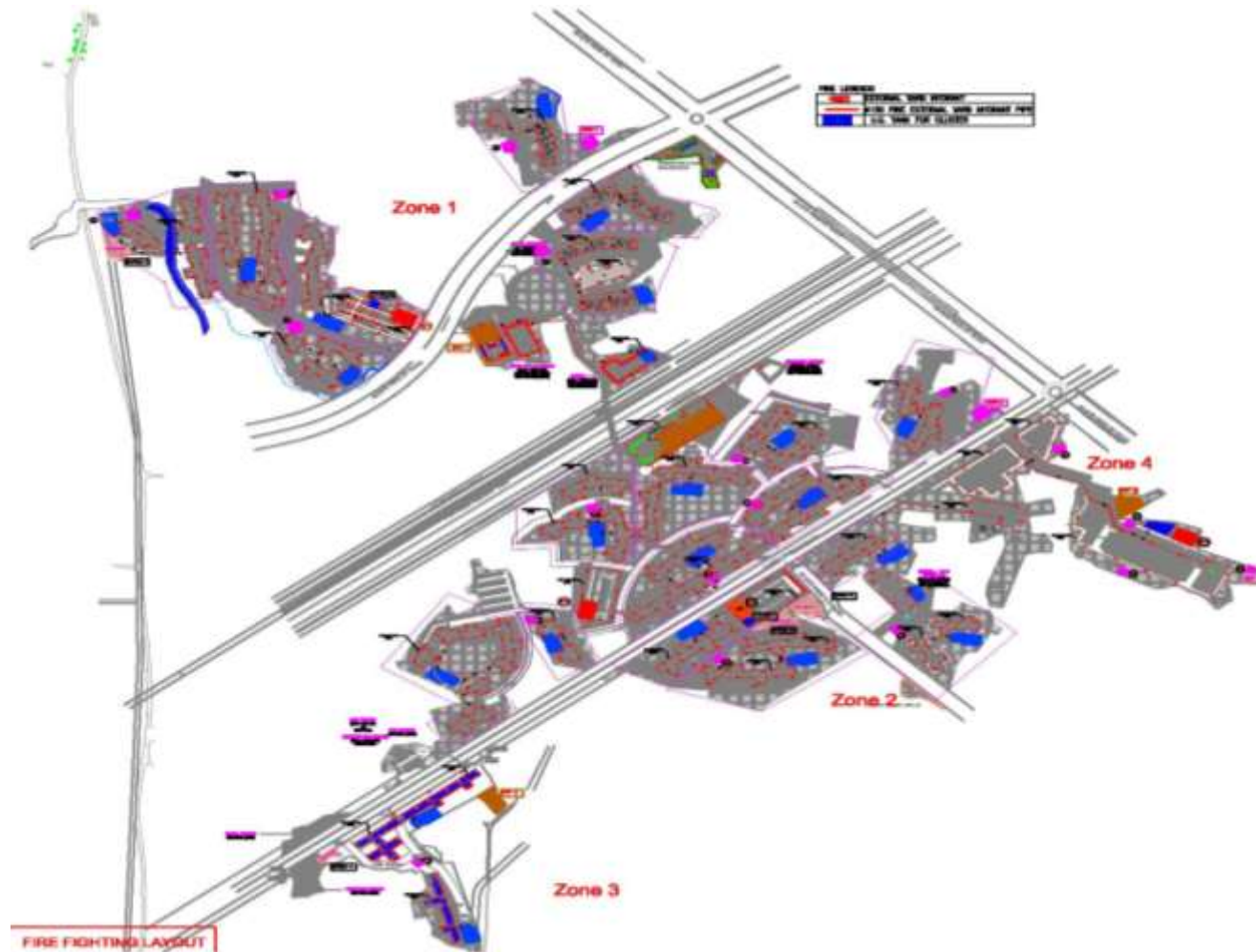
EVACUATION- FLOW CHART:



ACTIVITIES TO BE UNDERTAKEN IN CASE OF EVACUATION



Fire Fighting Layout Plan

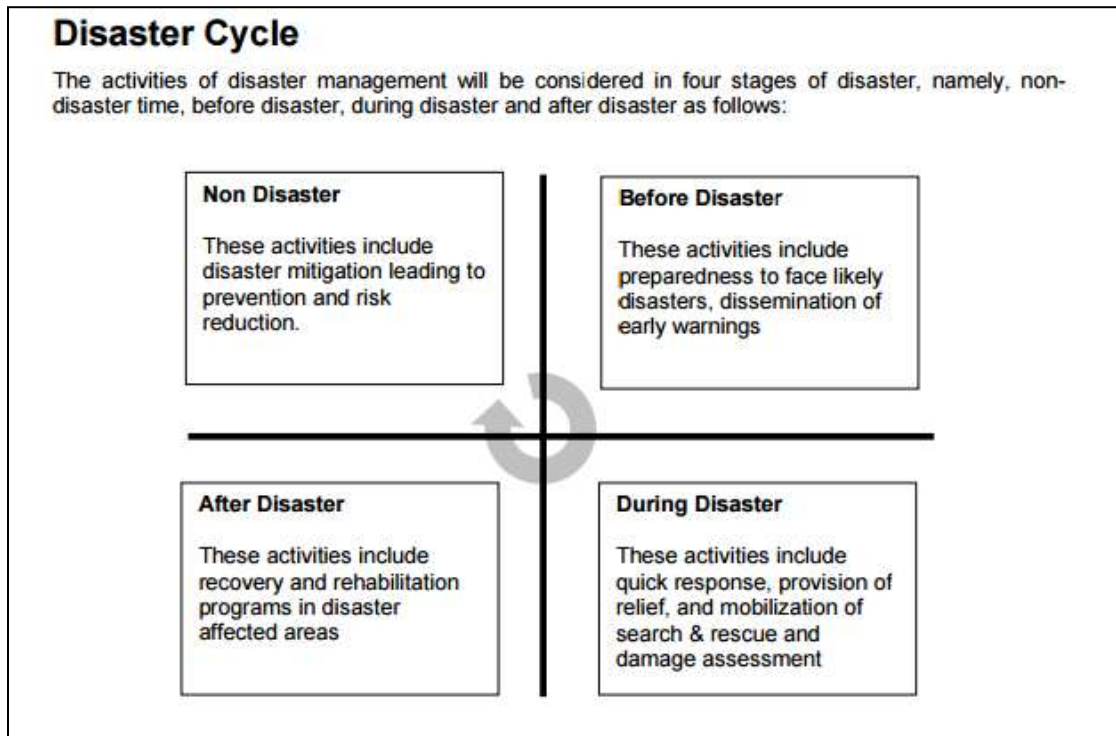


LIST OF ANNEXURES AND APPENDIX:

1. Plan showing locations of Emergency Control Centre.
 2. Disaster Management Team.
 3. List of telephone Nos of Committee Members
 4. Names of LTR ERT Members and their contact Nos and locations
 5. List of Fire Fighting Equipment's
 6. Guidelines for providing information to Society Chairman – Flow charts
 - a) Fire / Explosion
 - b) War
 - c) Flood
 - d) Earthquake
 - e) Bomb Explosion
 7. Address & Tel Nos. with names
 - a) Maharashtra Pollution Control Board
 - b) Fire Brigade
 - c) Police Stations
 - d) Hospitals / Blood Banks
 - e) List of PPE to be always kept in Emergency Control Room
 - f) Residence & Mobile Nos. of all Disaster Management Team Members and Senior Management personnel.
 8. Standard Operating Procedures
 - a) Appendix 1 - Standard Operating Procedure (SOP) On Evacuation
 - b) Appendix 2 - Standard Operating Procedure (SOP) For Earthquake
 - c) Appendix 3 - Standard Operating Procedure (SOP) For FIRE
 - D)
 - e) Appendix 5 - Standard Operating Procedure (SOP) For Floods
 - f) Appendix 6- Standard Operating Procedure (SOP) For Terrorisms
 - g) Appendix 7- Standard Operating Procedure (SOP) For Human And Man Made Threats
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ANNEXURE -1 DISASTER MANAGEMENT CELL

Disaster Management cycle is prepared by the committee which describes as follows:



Training will be given to each and every person/occupant of the building for how to use the fire extinguisher or Personnel protective Equipment's.

ANNEXURE -2 DISASTER MANAGEMENT TEAM

SOCIETY CHAIRMAN

Mr/Mrs. XXXXX

SOCIETY SECRETARY

Mr/Mrs. XXXXX

SECURITY OFFICER:

SITE CONTROLLERS

Mr. XXXXXX

SR. ELECTRICIAN

Mr. XXXXXX

SAFETY SUPERVISOR

ENGINEERING IN-CHARGE

Mr. XXXXXX

FIRE & SAFETY IN-CHARGE

Mr. XXXXXX

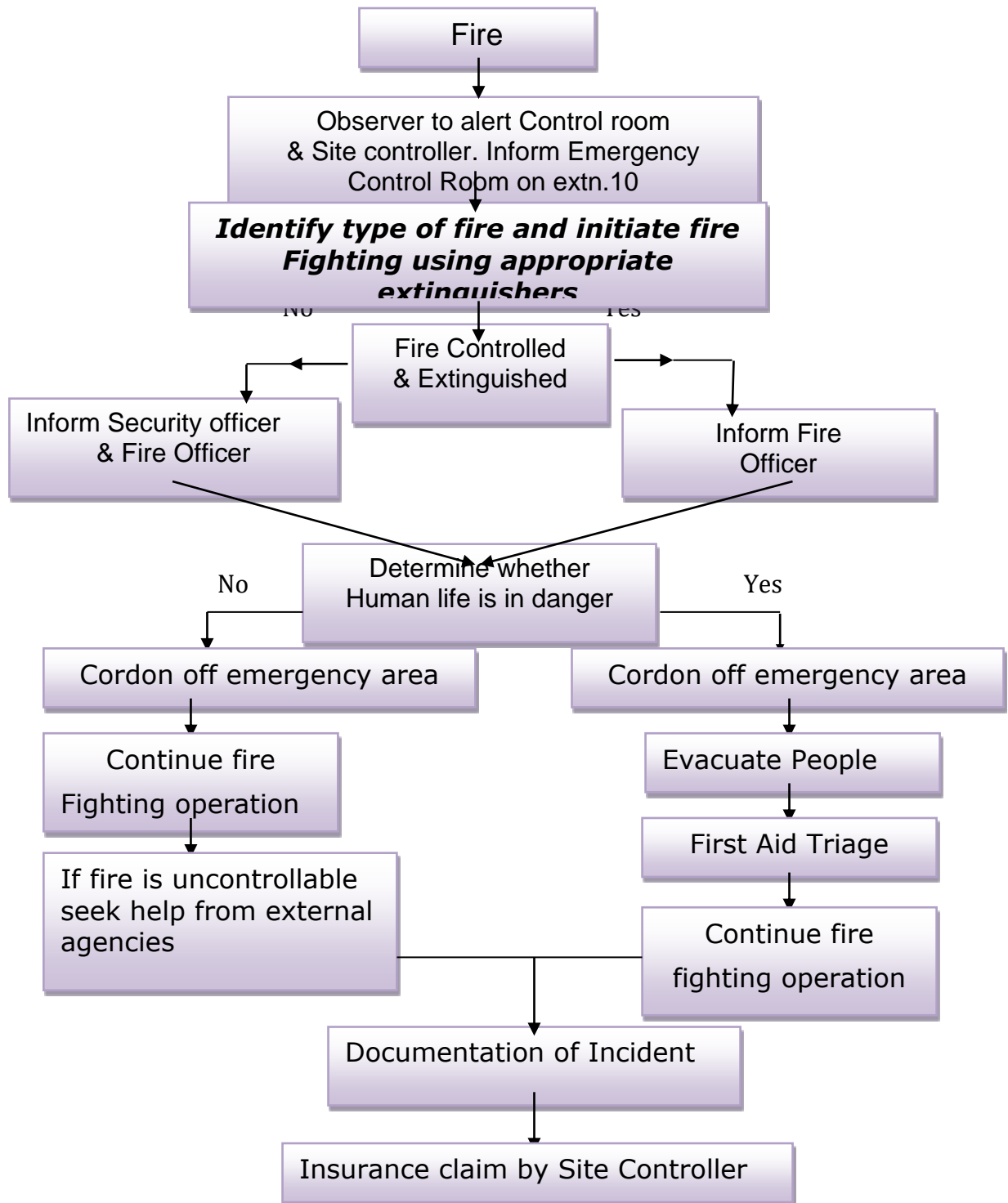
ANNEXURE -3: LIST OF TELEPHONE NUMBERS OF COMMITTEE MEMBERS

SN.	Role	Name	Extn. No.	Mobile No.
1	Society Chairman	Mr/Mrs. XXXX		
2	Society Secretary	Mr/Mrs. XXXX		
3	Security officer	Mr.XXXX		
4	Sr. Electrician	Mr.XXXX		
5	Safety Supervisor	Mr.XXXX		
6	Fire & Safety In charge	Mr.XXXX		

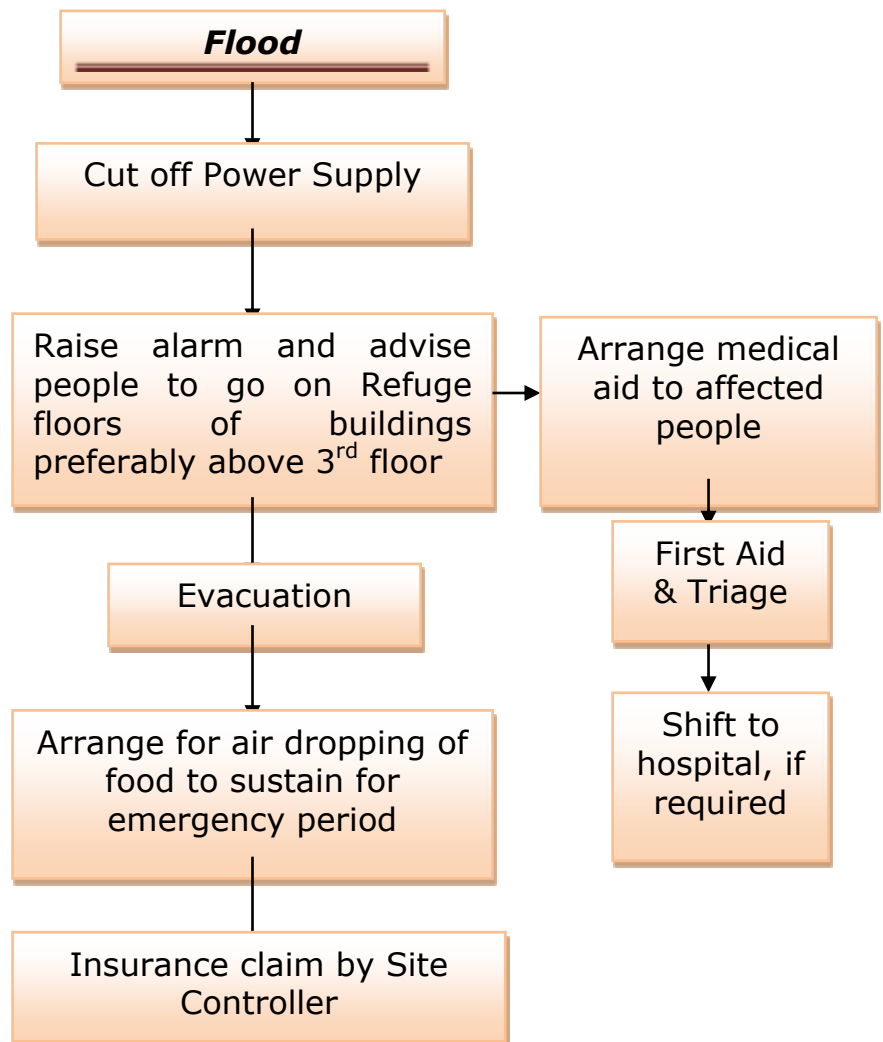
ANNEXURE –4 FIRE FIGHTING EQUIPMENT

Equipment	Quantity
Fire Extinguishers	
Fire Sprinklers	
Foam Maker	
Flame Arrester	
Fire Hydrant Posts	
Fire Hydrant Pipe line	
Fire Reservoir (water)	
Hydrant Pump	
Booster Pump	

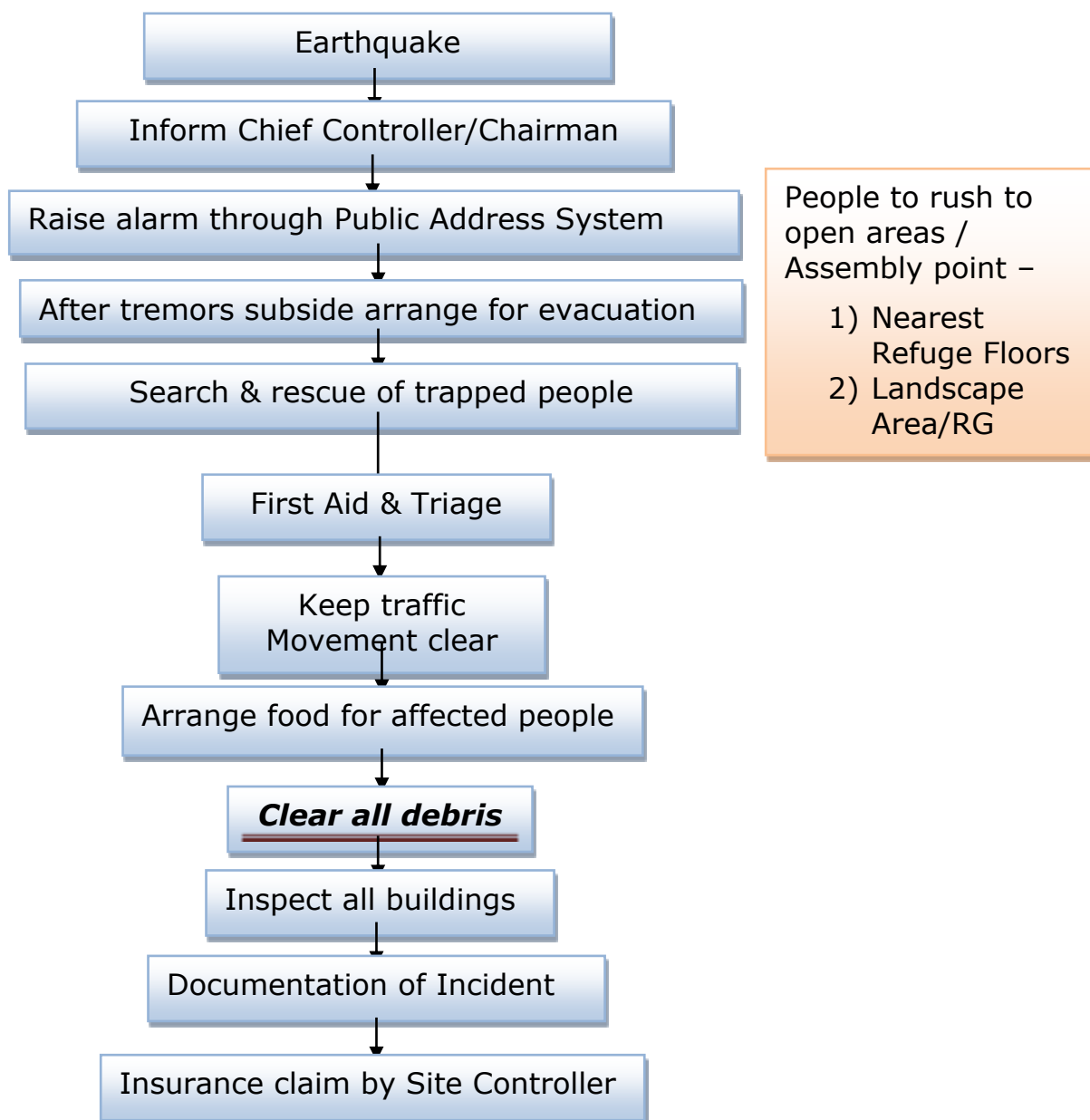
ANNEXURE- 5 EMERGENCY GUIDELINES IN CASE OF FIRE



EMERGENCY GUIDELINES IN CASE OF FLOOD



EMERGENCY GUIDELINES IN CASE OF EARTHQUAKE



ANNEXURE -6 LISTS OF PPE'S AVAILABLE IN STORES

S. No.	ITEM	DESCRIPTION
1.	APRON PVC	PVC APRON 24" X 36" YELLOW COLOUR
2.	EAR MUFF	EAR MUFF WITH HEAD BAND
3.	EAR PLUG FOAM	FOAM PLUGS WITH TYING CORD
4.	EYE SHIELD PLAIN	EYESHIELD WITH ELASTIC BAND-PLAIN
5.	EYE SHIELD GREEN	EYESHIELD WITH ELASTIC BAND-GREEN
6.	FACE SHIELD	PVC HOOD WITH TRANSPARENT VISOR
7.	FINGER STALLS	RUBBER STALLS IN SET OF FIVE
8.	GLOVES ELECTRICAL	CRYSTAL MAKE ELECTRICAL GLOVES

9.	GLOVES NYLON	WHITE NYLON CLOTH HANDGLOVES
10.	GLOVES POST-MORTEM	POST-MORTEM ORANGE COLOR GLOVES
11.	GLOVES PVC (YELLOW)	PVC GLOVES WITH SERRATION ON PALM.
12.	GUMBOOT PVC	ACID / ALKALI PROOF GUMBOOTS
13.	HOOD CANVAS	DRILL CANVAS CLOTH HOOD
14.	KEROCLEAN TUBE 100 GMS.	KEROCLEAN TUBE 100 GMS.
15.	KEROCLEAN 5 KG. JAR	KEROCLEAN 5 KG. JAR
16.	KERODEX 71 JAR 100 GMS.	KERODEX 71 BARRIER CREAM 100 GMS.JAR
17.	KERODEX 52 & POWDER	KERODEX 52 CREAM & POWDER
19.	KERODEX 71 – 5 KG. JAR	KERODEX 71 BARRIER CREAM– 5 KG. JAR
20.	KERODEX L.D.C. TUBE	KERODEX LIGHT DEFLECTANT CREAM
21.	LUNG PROTECTOR	LUNG PROTECTOR WITH CATRIDGE
22.	MASK MP8	DISPOSABLE MP8 MASK WHITE COLOUR
23.	MASK OP2	DISPOSABLE OP2 MASK WHITE COLOUR
24.	RIO-REINOL CREAM 200 GMS	RIO-REINOL CREAM IN 200 GMS JAR
25.	SAFETY BELT	SAFETY BELT WITH 11FT. LIFELINE
26.	SAFETY SHOES	SAFETY SHOES WITH LEATHER LINING
27.	SPECTACLES PLANO	PLANO SPECTACLES WITH SIDE SHIELDS
28.	HEAT RESISTANT SUIT	HEAT RESISTANT SUIT WITH FLANNEL LINING
29.	GLOVES SURGICAL	NATURAL WHITE SURGICAL GLOVES
30.	HELMET	AS PER IS: 2925 – 1984
31.	LEG GUARD	MADE OF LEATHER
32.	NON ASBESTOS HAND GLOVES	KEVLAR/ CERAMIC FIBRE HAND GLOVES

ANNEXURE –7 ADDRESSES AND PHONE NUMBERS OF EXTERNAL AGENCIES

Sr. No.	Details	Contacts
1	Maharashtra Pollution Control Board	022-25829582 022-25805390
2	Fire station has been installed	-
3	Chief Fire officer	022-24132058 022-29200940
4	Disaster Management Cell	022-25371010

		022-25392323
5	Kapurbawadi Police Station, Thane Kapurbawadi Naka, Behind Lake City Mall, Maharashtra, Thane West, Thane, Maharashtra 400601	022- 2533 0098
6	Police Control Room	100
	Hospitals	
7	Lotus Hospital Mankoli, Bhiwandi, Mumbai, Maharashtra, 421302	02522 654 500
8	Bala ji Hospital Bhiwandi Road puranik Villas, Kalher, Bhiwandi, Maharashtra, 421302	022 - 2374 0000
	Blood Banks	
9	Triumph Blood Bank 216, 2nd Floor, Oron Business Park, Next To Wonder Mall, Kapur Bawdi, Thane West, Thane, Maharashtra 400607	022 2584 0086
10	Bloodline Charitable Blood Bank Vikas Palms, Ambedkar Rd, Dhobi Ali, Charai, Thane West, Thane, Maharashtra 400601	022 2415 3790

APPENDIX –1 STANDARD OPERATING PROCEDURE (SOP) ON EVACUATION

Scope

1. This SOP is for evacuation of all personnel from proposed buildings and all vehicles from the society premises. Its purpose is to provide the essential guidelines to the employees for the safe and efficient evacuation from Office building premises.
2. This is to be read in conjunction with the SOPs on Fire Fighting, Earthquake and Medical Aid.

Need for Evacuation

3. The need for evacuation could arise due to any one or more of the following:-
 - (a) Fire
 - (b) Natural Disaster.
 - (c) Man-made Disaster.
 - (d) Requirement of the Management.

Important: Be it an actual or a simulated incident, the procedure to be followed or actions taken will be the same as specified in the succeeding paragraphs.

Intensity of the Incident

4. The intensity of the incident could be local, marginal, high. Also the measures to be taken and the decision & procedures of evacuation depends on the intensity of the incident. This decision lies with the Building manager at the time of the incident within the guidelines of this SOP. This has to be done in consultation with the Security and fire-fighting authorities.

Time of the Incident

5. The incident may take place any time, during the operational or the non-operational hours. The actions listed in this SOP will apply for both the contingencies. However, in certain situations, actions will have to be taken using the ingenuity of the personnel present.

Reporting of the Incident

6. The incident could come to notice as a result of one or more of the following reasons and the reporting action will be taken as follows :-

- (a) The magnitude of the incident being so large, for instance an earthquake or an explosion, that everyone becomes aware of it immediately.
- (b) The incident is localised initially that it is noticed by one or more of the employees, tenants, visitors or customers. The incident would invariably be intimated to the closest security supervisor/guard on duty.
- (c) The incident, say, a fire, has been noticed by the person on duty in the Control Room, either due to the sounding of the alarm or noticed on the CCTV monitor.
- (d) During normal working hours the security officer of building shall be available in

Emergency Control room & he or Chairman / Secretary of building shall give directions to all other committee members based on the information received from the site controller.

Note: The reporting hierarchy for different shifts and contingencies and their telephone numbers, in addition to the telephone numbers of important agencies, i.e., the Police Station, the Fire Station and the Hospital(s) should be displayed prominently in the BMS Room with names.

Declaring Emergency:

- 7. In case of any such major hazards, which is likely to cause extensive damage to property or human life, the Chairman / Secretary of building shall communicate through the various communication channels like blowing of siren, Telecommunication, Public Address System available with him and make the employees aware of the situation and give instruction / direction what is expected from them and instruct them to evacuate / assemble at designated assembly point.

Raising an Alarm

- 8. The need to raise a general or a localised alarm will be decided by the Security officer/ senior supervisor. The alarm could be raised in (one or more of) the following manners:-
 - (a) **Manual Calling:** Though this is an available option, it should be resorted only if other options are not available. Since the voice is not likely to be audible in the ensuing chaos and multiple manual callings will create confusion.
 - (b) **Flashing of Exit Beacons:** If the provision exists, however, this will be supplemented by announcements on the Public Address System.

- (c) **Public Address System:** Rising of the alarm over the Public Address System should be preceded by the word “Attention” twice before conveying the instructions for evacuation. These instructions could be issued across the entire building or to selective zones/areas, as instructed by the control room/Chairman / Secretary of building.

Necessity of Evacuation

9. The requirement to evacuate the building premises or otherwise will be decided by the Security Officer, preferably after consultation with the police and the fire-fighting authorities. Further actions will be dictated by this decision.

Evacuation Assembly Point

10. The Evacuation “Refuse area” will be signposted using a standard 4 feet X 3 feet sign, mounted on a post of 6 feet height, at the pre-determined location. The lettering on the sign will read “Evacuation Assembly Point” both, in English and the local vernacular in blocks. The size of the lettering will be minimum 5 inches X 3 inches and will be painted in white over a blue background. An alternate Evacuation Assembly Point will be decided and mentioned in this SOP. (Location of the Evacuation Assembly Point and the alternate Evacuation Assembly Point is marked on the Evacuation Plan).

Immediate Actions

11. When the decision has been taken to either evacuate the building or parts of it, the following actions will be taken immediately:-
- (a) Notify the control room, the Fire Station and the Hospital(s).
 - (b) Disable all the elevators and the escalators.
 - (c) Notify the neighbouring unit(s) if a Mutual Aid Plan has been practised with them.
 - (d) Switch off the electric mains.
 - (e) Try to control the cause of the emergency, if feasible. However, this should not be done at the risk of one’s own life.
 - (f) Enforce strict control at the main entry of the building for enabling free and unhindered access to the security, fire-fighting and the medical personnel.

Distribution of Resources. (To be decided by the control room/security officer)

12. All the resources available to the control room at the time of the incident should be mobilised, including the personnel on rest/relief or on a meal break. These will include the security, housekeeping and the technical personnel and others. The control room/security officer should promptly assess the man power available to manage the crisis.

13. The distribution of man power resources will inevitably vary, depending upon the different stages of the emergency.

Cordon Party

14. This party will be led by and comprise the following:-
 - (a) The nominated Security Supervisor or the Security Guard till the arrival of the Chairman / Secretary of building.
 - (b) By the Chairman / Secretary of building once he arrives.
 - (c) All the security guards / Fire parties/marshals, as nominated.
15. The duties of this party are:-
 - (a) Cordoning off the area of the incident and preventing any persons, other than the fire-fighting, police and the medical personnel, from accessing the area.
 - (b) Keeping the main entry and exit points free for the movement of the fire-fighting, police and medical personnel and equipment as also for the evacuation of casualties.
 - (c) Guide the fire-fighting, police and medical personnel within and around the building premises, if required.
 - (d) Keeping contact with the fire-fighting party leader to know the extent and situation of the incident.
 - (e) Assist in evacuation of medical casualties and will also assist disabled persons towards the fire exits and out of the building.
 - (f) Ensure that the Evacuation Assembly Point is safe from the consequences of the incident and, if not, then establish the alternate Evacuation Assembly Point.
 - (g) Ensure that the lane for incoming vehicles, specially the fire-fighting, police and the medical vehicles, is kept free at all times.
 - (h) Will evacuate the building and subsequently the premises on the orders of the chairman/ Secretary of building. Will also ensure that the security personnel deployed at various other locations evacuate and reach the Evacuation Assembly Point when instructed by the chairman/ Secretary of building

Duties of Control Room in charge

16. The person nominated as in charge of the Control Room staff should be a mature, experienced Supervisor who has been in society Building for at least 3-4 months and is known to remain reasonably calm in adverse situations. Another staff should always be placed with him to assist him in carrying out duties during an emergency. Some of the tasks which control room In charge will be required to perform are enumerated below and the same should also be displayed prominently in the control room. (The list of tasks is attached as follow):-

- (a) Monitor the CCTV at all times, especially during an emergency. Look out for any person stuck or left behind and unable to evacuate.
- (b) Allocation of manpower at all means of communication available in the chairman/ Secretary of building. On being informed about an incident/emergency, immediately inform the Site Controller/Chief Security Officer and the or the next persons in hierarchy subject to the availability with all the details available.
- (c) Raise a general/localized alarm, as directed by the Building Manager/Site Controller / Chief Security Officer on the Public Address System. Precede the announcement with the word 'Attention' twice.
- (c) Inform the Fire-Fighting Station, Police Station, Hospital (s) and anyone else, as instructed by the Chief Security Officer/Chief controller.
- (d) Call for all the employees to report to their Emergency Duty stations. Confirm the same subsequently and record it.
- (e) Confirm that electrical mains, elevators and escalators have been switched off and inform the Shift Engineer /Site Controller/ Chief Security Officer.
- (g) Convey instructions from the control room/ Security Officer to concerned persons, if directed.
- (h) Make periodic announcements on the Public Address System regarding maintenance of calm, preventing panic, existing situation if correctly known, advising the disabled/infirm persons to contact the nearest security personnel.
- (i) Announce an "All Clear", when instructed by the control room/ Security Officer, to indicate the termination of either the practice drill or controlling of the incident.

Movement of Vehicles

17. In the eventuality of an emergency, unnecessary movement of vehicles would hamper the evacuation and rescue operations. It is imperative that movement of vehicles be strictly controlled to obviate the said situation. As is evident, the maximum number of vehicles would belong to the residents and be parked in the basement parking areas. The following sequence will be followed which is related to the three stages mentioned:-
 - (a) **Stage I.** The personal vehicles will be allowed to be taken out by the owners in an extremely controlled manner so as not to create a logjam inside the parking area. 2 to 3 vehicles should be allowed to

exit from the basement at one time before taking permission from the security personnel at the exit whether the next lot can be released. This is done to prevent a vehicle logjam outside the Building. Vehicles must not overtake each other. The security guard at the exit will note down the Registration Numbers of the vehicles, leaving the building premises. It will be ensured that the Main Entry to the premises is kept free at all times for enabling uninterrupted access to fire-fighting, police and medical personnel/vehicles/equipment. **However, even in this stage, if the security officer feels that there should be no vehicle in/out movement, it may be so instructed specifically.**

- (b) **Stage II.** On issue of instructions from the control room/ Security Officer to commence evacuation, the following actions must be taken immediately in respect of the vehicles and their owners or drivers:-
 - (i) All persons in the parking area, basement or outside, who will be waiting to take out their vehicles during Stage I will be ushered out and taken to the Evacuation Assembly Point.
 - (ii) During evacuation process, including casualty evacuation, (that will be on during this stage), movement of all vehicles will cease. It will be ensured that the main entry and exit, the carriageway and the passage around the building are kept free for the movement of the personnel/vehicles/equipment from the fire-fighters, police and the medics.
- (c) **Stage III.** Even after evacuation has been completed, vehicles will not be allowed to be taken out till explicitly permitted by the fire-fighting and the police authorities present at the building. Even after that, the movement of vehicles will be controlled.

18. Assistance to Persons with Disabilities

- (a) During an emergency, any person who would need assistance in evacuating the Building via the stairwells will notify any of the building employees of his/her need for special assistance. The need for assistance could result from mobility impairment, a respiratory problem, a vision or hearing impairment or an injury resulting in a temporary impairment for mobility.
- (b) Such persons will be provided immediate assistance by the control room/ Security Officer staff present to ensure their expeditious evacuation.

19. Points to Remember

- (a) Help in maintaining calm and controlling panic.
- (b) Use stairways; not elevators and escalators.
- (c) Advised to walk: Not to run.
- (e) Use all available exits.

20. Public Relations

In case any help is required from the neighboring / external agencies such as Fire brigade / Civil defense / Local Police / Hospitals / Ambulance / Blood Bank etc. the same will be handled by Chief Security Officer only and in his absence by the officer appointed by him to handle such situation. No other committee member shall deal in any way with outside agencies for mitigation of emergency.

Co-ordination with Internal & External Agencies:

21. After taking stock of the situation based on feedback received from various members of central committee the Chief Controller shall decide if any help needs to be sought from neighboring / external agencies.

Directing Rescue Operations:

22. All the members of Central Emergency Committee shall work under instructions from Chief Controller and shall take decisions in their areas of operation, however they shall keep the chairman of building informed about the action being initiated and update him on the same.

Documentation:

23. The Chief Controller on completion of the activities, keep track of the events and record the same. He shall inform the Management / Occupier about the occurrence and in consultation with all committee members suggest / recommend additional facilities / amendment in procedures required to meet such situation in future.

Mock drills:

24. To ensure smooth, efficient and panic free response from employees at the time of emergency, the mock drills shall be conducted on six monthly bases. The mock drills shall help modify and improve the procedures / action plan for disaster management. For the No harm to the Environment or other Festival Management plan is prepared. Especially during Diwali, bursting of crackers are carried out at safer places. Proper advice will be given by the security officer.

APPENDIX -2 STANDARD OPERATING PROCEDURE (SOP) FOR EARTHQUAKE

Objective

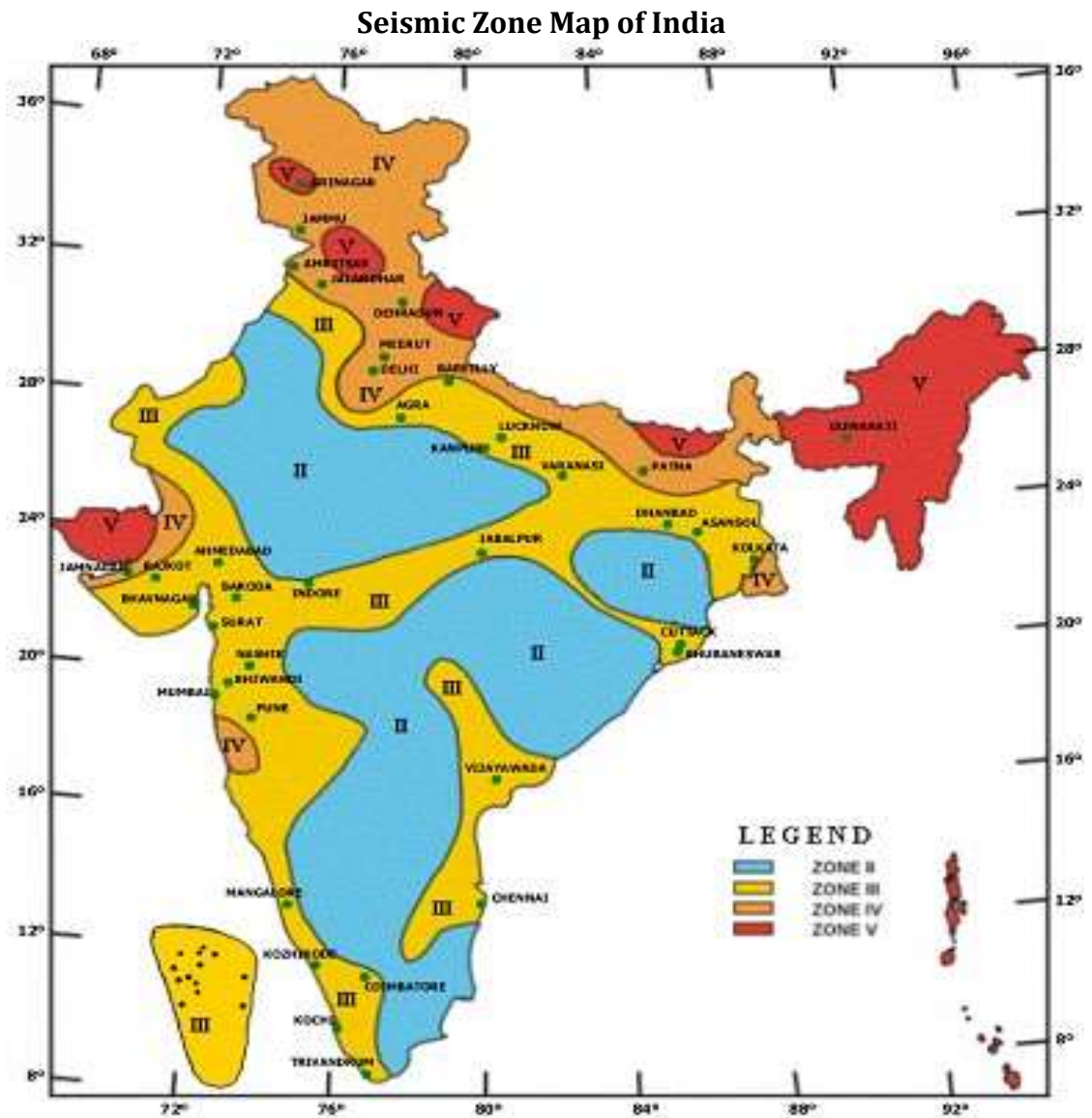
1. The main objective of this SOP is to establish a procedure for handling the incident of an earthquake if it strikes building.
2. The objective is also to ensure that no harm or injury is caused to any customer, visitor, tenant or employee as a result of the earthquake or actions that may be initiated consequent to the incident of earthquake.
3. This will be read in conjunction with the SOPs on Fire-Fighting, Medical Aid and Evacuation.

Policy

4. To ensure that the procedure is simple, clear and easy to follow to enable continuous training of all concerned persons and effective handling of the incident if it occurs.

Definition of an Earthquake

5. An earthquake is the sudden violent movement of the earth's surface due to the release of energy in the earth's crust. Earthquake is a perceptive movement of the earth's surface. The movement of one rock mass or plate against another causes vibration that shakes a part of the earth's crust and all structures resting on it. Earthquake is the greatest destroyer of manmade buildings, bridges, power plants and industrial structure etc.



ZONE	Intensities* of Earthquakes in each Zone
II	This zone is susceptible to earthquakes that can be felt by all and may frighten people enough to run outdoors. Dishes and glassware break, books fall down, heavy furniture gets moved. Few instances of fallen plaster and some damage to buildings may also be observed. (Intensity: I to VI)
III	In Zone III, earthquakes of higher intensity may be felt. Earthquakes that frightens everyone, making it difficult for people to stand. Even people in moving vehicles may feel such quakes. Structures/buildings of good design and construction suffer slight damage, while poorly designed /built ones suffer considerable damages . (Intensity: VII)
IV	This zone is susceptible to strong earthquakes , which create panic all over, moving even heavy furniture. Such earthquakes could cause moderate damage in well-designed/built structures/buildings, while poorly built structures suffer great damages . Other effects could be landslides on steep slopes, cracks in ground up to widths of a few centimeters and water in lakes could become turbid. (Intensity: VIII)
V	This is the maximum risk zone in the country and is susceptible to great earthquakes . Quakes that can cause total panic and considerable damage to life and property. Considerable damages happen even in specially designed structures. Great damage in buildings with partial or total collapse. Railway tracks bend and roadways get damaged; ground cracks to widths of several cm, underground pipes break, landslides, rock falls and mud flows occur, large waves in water. Where intensities exceed XI, total destruction may be caused with changes in landscape that could even change the courses of rivers. (Intensity: IX and above)

* Intensity is here considered a classification of the severity of the ground shaking on the basis of observed effects in a limited area and is measured in the MSK Scale ranging from I to XII

6. According to the **Seismic Zone Map** of India identified in the UEVRP, areas which have population exceeding half a million in earthquake **Zones III, IV, V** are as follows:-
- Zone III** :- Ghaziabad, Ahmedabad, Vadodhara, Rajkot, Bhavnagar, Surat, **Mumbai**, Agra, Bhiwandi, Nashik, Kanpur, Bhubneshwar, Cuttack, Asansol, Kochi, Kolkata, Varanasi, Bareilly, Lucknow, Indore, Jabalpur, Vijayawada, Dhanwad, Chennai, Coimbatore, Mangalore, Kozhikode, Trivandrum.
 - Zone IV** :- Dehradun, New Delhi, Jamunanagar, Patna, Meerut, Jammu, Chandigarh, Amritsar, Jalandhar.
 - Zone V** :- Guwahati and Srinagar.

Pre-Earthquake Preparations

7. While an earthquake will strike without any notice or warning, certain pre-earthquake preparations can go a long way in mitigating the post incident losses and damages. These are as follows :-
 - (a) Ensure that the structure is earthquake-proof.
 - (b) Procedures and drills on evacuation are regularly practiced.
 - (c) All the occupants are in the know of their roles and responsibilities for all contingencies.
 - (d) Continuous liaison is maintained with civic agencies so that prompt assistance is received, when required.
 - (e) Items and objects maybe which cause injury, like heavy/blunt/sharp items, ought to preferably not be kept overhead, especially in the shops/Pantry/office.
 - (f) Requisite emergency and recovery equipment, like ladders and personal protective equipment should be catered for and every one should know their location and usage.

Responsibility

8. The control room/ Security Officer will be responsible for handling the incident of an earthquake for which he/she will be assisted by the Security Officer and their teams. In case the control room/ Security Officer is not available, the person who has been nominated as the next in hierarchy will supervise and handle the incident. **Clear hierarchy for reporting, controlling and handling the disaster/emergency for each contingency should be laid down and made known to every occupant of the Building.**
9. In addition, it is the responsibility of each member of the control room/ Security Officer to remain alert at all times and be prepared to become an integral part of the Disaster Management/Emergency Response procedures immediately on the instructions of the control room/ Security Officer.

Reporting of the Incident

10. As is evident, there will be no typical reporting procedure when an earthquake strikes the property since it would happen without affording any reaction time to anyone. It is, therefore, imperative that all the employees and occupants are thoroughly conversant with the relevant drills and procedures and his/her role in them.

Time and Intensity of the Earthquake

11. The earthquake may strike during the 'on' or 'off' hours of the Building. While the handling of the incident during 'off' hours will require minimum effort, that is, to evacuate only the occupants present in the

Building at that time, the effort during 'on' hours will be colossal. Therefore, this SOP will primarily deal with latter though the procedures would be similar on a smaller scale.

12. The intensity of the earthquake may vary from low to high to very high. **Whatever be the initial intensity of the earthquake, total evacuation of the property will be carried out.**

Procedure

13. As soon as an earthquake strikes the building, the control room/ Security Officer will put the Standard Operating Procedure for Evacuation into effect which would also include the following actions :-

- (a) **Control room/ Security Officer:**

- (i) Go on the Public Address System and make an announcement that the Building will be immediately evacuated; exhort the customers to cooperate with the Building Management, avoid panic and pay heed to the guidance of the Floor Wardens and other employees.
- (ii) Inform the Chairman of building.
- (iii) Intimate the police and the fire-fighting authorities on instruction.
- (iv) Instruct all employees who are on meal breaks or off duty, but still on the Building premises, to report immediately to their nominated work stations or the control room/ Security Officer.
- (v) Periodically apprise and update on the existing situation on the Public Address System under intimation to Chief controller.
- (vi) Supervise and control the disaster till the arrival of the police and fire-fighting personnel.

- (b) For evacuation, refer to the **SOP on Evacuation.**

Coordination and Important Points

14. In any emergency or that which has escalated to the level of a disaster, it is extremely important that certain important and coordination points are always kept in mind. These are as follows:-
 - (a) Calm is maintained and panic prevented. This is possible only if there is confidence in own abilities and in them who are in charge of the situation.
 - (b) If an emergency situation/incident has been observed, intimated or suspected, it must be reported.

- (c) Channel of reporting must be known to all employees and important contact numbers displayed for others.
- (d) All important documents, like the important telephone numbers incident formats, formats for after incident reports, floor plans, etc. should be displayed/ available in the Control Room which should be manned 24 X 7.
- (e) Means of communication must be kept in a high state of maintenance at all times.
- (f) When a building is being evacuated, ensure that the people moving out are taken a safe distance away from the building and especially away from windows and other potentially hazardous areas.
- (g) Ensure that the main entry and the passages around the property are kept free from any encumbrances to enable free movement of emergency services vehicles, personnel and equipment.

All Clear Signal

15. An All Clear Signal will be announced on the Public Address System only on the explicit instructions of the Security Officer after the incident has been controlled.

Medical Aid

16. If anyone has been injured during the incident, he/she will be immediately evacuated to a notified hospital on the instructions of the Security Officer, if required, or provided first aid on the facility premises.

APPENDIX -3: STANDARD OPERATING PROCEDURE (SOP) FOR FIRE

Objective

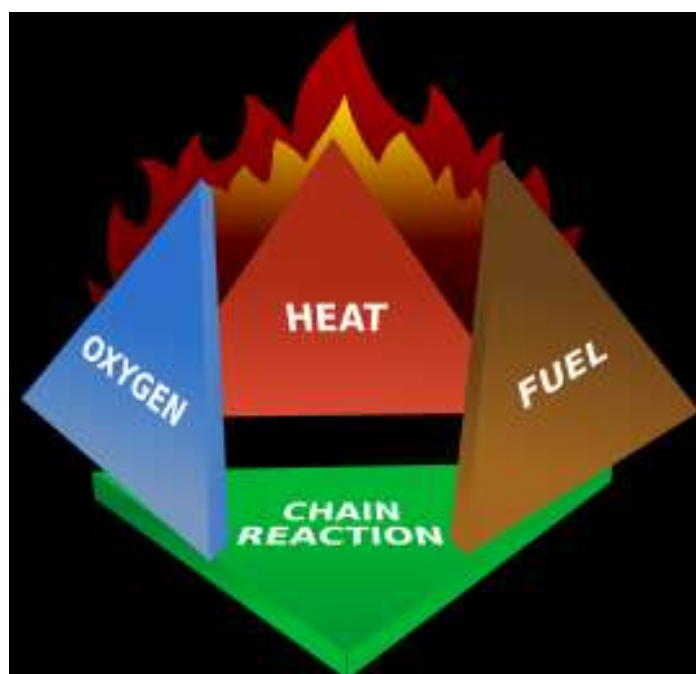
1. The main objective of this SOP is to establish a procedure for handling the incident of fire if it strikes building.
2. The objective is also to ensure that no harm or injury is caused to any customer, visitor, tenant or employee as a result of the fire or actions that may be initiated consequent to the incident of fire.
3. This will be read in conjunction with the SOPs on Fire-Fighting, Medical Aid and Evacuation.

Policy






4. To ensure that the procedure is simple, clear and easy to follow to enable continuous training of all concerned persons and effective handling of the incident if it occurs.

Definition of a Fire

5. A process in which substances combine chemically with oxygen from the air and typically give out bright light, heat, and smoke; combustion or burning. Fires start when a flammable or a combustible material, in combination with a sufficient quantity of an oxidizer such as oxygen gas or another oxygen-rich compound (though non-oxygen oxidizers exist), is exposed to a source of heat or ambient temperature above the flash point for the fuel/oxidizer mix, and is able to sustain a rate of rapid oxidation that produces a chain reaction.



CLASSES OF FIRE

CLASSES OF FIRES	TYPES OF FIRES	PICTURE SYMBOL
A	Wood, paper, cloth, trash & other ordinary materials.	
B	Gasoline, oil, paint and other flammable liquids.	
C	May be used on fires involving live electrical equipment without danger to the operator.	
D	Combustible metals and combustible metal alloys.	
K	Cooking media (Vegetable or Animal Oils and Fats)	

Pre-Fire Preparations

6. While Fire will strike without any notice or warning, certain pre-fire preparations can go a long way in mitigating the post incident losses and damages. These are as follows :-

- a. Ensure that the structure is fire-proof.
- b. Procedures and drills on evacuation are regularly practiced.
- c. All the occupants are in the know of their roles and responsibilities for all contingencies.
- d. Continuous liaison is maintained with civic agencies so that prompt assistance is received, when required.
- e. Items and objects maybe which cause injury, like heavy/blunt/sharp items, ought to preferably not be kept overhead, especially in the shops/Pantry/office.
- f. Requisite emergency and recovery equipment, like ladders and personal protective equipment should be catered for and every one should know their location and usage.
- g. Automatic Sprinkler system on each floor level
- h. Sprinklers shall be distributed throughout the building as per the National Building Code requirement, so as to cover every 12 sq.m

area with one sprinkler. Sprinklers shall be provided in lobbies at all apartment levels.

- i. The sprinkler pump shall be suitable for automatic operation in case of a drop of pressure in the system. Sprinklers shall be provided throughout the building with a separate sprinkler riser. All the risers shall be provided with installation control valves. An electrical sensor switch shall be provided on each floor and connected to the fire control panel in the security room to make it possible to identify the location of effected floor immediately.
- j. An overhead water storage tank adequate capacity shall be provided to back up the fire fighting system.
- k. Automatic drencher system on each car parking floor.
- l. Fire Hydrant Cabinets with hose reels & hand held Fire Extinguishers.
- m. Fire tank capacities as per NOC, with separate fire pumps for Hydrants and Sprinklers.
- n. Under Ground Fire Tank
- o. Over Head Fire tank 25 cum each per Staircase.
- p. Stand by diesel operated pumps.
- q. All fire pumps will be powered from the emergency panel, which in turn is fed by DG sets.
- r. Fire pumps are manufactured as per BIS and selected based on that the pumps should deliver water at terrace with minimum pressure of 3.2 kg/sq.cms.

Types of Fire Extinguishers

b)

TYPE of EXTINGUISHER		WATER 	FOAM 	WET CHEMICAL 	CO2 	VAPORISING LIQUID 
CLASS	TYPE OF FIRE					
A	Water	✓ YES Most Suitable	✓ YES	✓ YES	✓ YES Not Very Suitable	✓ YES B(E) Powders Not Suitable
B	Vapourising Liquid	× NO	✓ YES Special Foam Required for Alcohol -Type Fire	× NO	✓ YES	✓ YES
C	Foam	× NO	× NO	× NO	✓ YES	✓ YES
D	Co2	× NO	× NO	× NO	× NO	× NO
E	Wet Chemical	× NO	× NO	× NO	✓ YES	✓ YES

c)

Evacuation

- a. Fire Lifts provided.
- b. Refuge areas are provided

General Guidelines and Chief Fire Officer Considerations

The CFO Considerations for the project are as follows:

- a. Carriage way provided for Fire Engine movement.
- b. All installation for ducting and piping will be class G.I. "C" as per D.C. Rules and CFO Regulation.
- c. Each floor has access to both the Fire lift and Staircase.

Responsibility

7. The control room/ Security Officer will be responsible for handling the incident of a fire for which he/she will be assisted by the Security Officer and their teams. In case the control room/ Security Officer is not available, the person who has been nominated as the next in hierarchy will supervise and handle the incident. **Clear hierarchy for reporting, controlling and handling the disaster/emergency for each contingency should be laid down and made known to every occupant of the Building.**
8. In addition, it is the responsibility of each member of the control room/ Security Officer to remain alert at all times and be prepared to become an integral part of the Disaster Management/Emergency Response procedures immediately on the instructions of the control room/ Security Officer.

Reporting of the Incident

As is evident, there will be no typical reporting procedure when an fire started to property since it would happen without affording any reaction time to anyone. It is, therefore, imperative that all the employees and occupants are thoroughly conversant with the relevant drills and procedures and his/her role in them.

Time and Intensity of the Fire

9. The fire may strike during the 'on' or 'off' hours of the Building. While the handling of the incident during 'off' hours will require minimum effort, that is, to evacuate only the occupants present in the Building at that time, the effort during 'on' hours will be colossal. Therefore, this SOP will primarily deal with latter though the procedures would be similar on a smaller scale.
10. The intensity of the fire may vary from low to high to very high. **Whatever be the initial intensity of the fire, total evacuation of the property will be carried out.**

Procedure

11. As soon as an fire strikes the building, the control room/ Security Officer will put the Standard Operating Procedure for Evacuation into effect which would also include the following actions :-

(a) **Control room/ Security Officer:**

1. Go on the Public Address System and make an announcement that the Building will be immediately evacuated; exhort the customers to cooperate with the Building Management, avoid panic and pay heed to the guidance of the Floor Wardens and other employees.
2. Inform the Chairman of building.
3. Intimate the police and the fire-fighting authorities on instruction.
4. Instruct all employees who are on meal breaks or off duty, but still on the Building premises, to report immediately to their nominated work stations or the control room/ Security Officer.
5. Periodically apprise and update on the existing situation on the Public Address System under intimation to Chief controller.
6. Supervise and control the disaster till the arrival of the police and fire-fighting personnel.

(b) For evacuation, refer to the **SOP on Evacuation**.

Coordination and Important Points

12. In any emergency or that which has escalated to the level of a disaster, it is extremely important that certain important and coordination points are always kept in mind. These are as follows:-

- (a) Calm is maintained and panic prevented. This is possible only if there is confidence in own abilities and in them who are in charge of the situation.
- (b) If an emergency situation/incident has been observed, intimated or suspected, it must be reported.
- (c) Channel of reporting must be known to all employees and important contact numbers displayed for others.
- (d) All important documents, like the important telephone numbers incident formats, formats for after incident reports, floor plans, etc. should be displayed/ available in the Control Room which should be manned 24 X 7.
- (e) Means of communication must be kept in a high state of maintenance at all times.

- (f) When a building is being evacuated, ensure that the people moving out are taken a safe distance away from the building and especially away from windows and other potentially hazardous areas.
- (g) Ensure that the main entry and the passages around the property are kept free from any encumbrances to enable free movement of emergency services vehicles, personnel and equipment.

All Clear Signal

- 13. An All Clear Signal will be announced on the Public Address System only on the explicit instructions of the Security Officer after the incident has been controlled.

Medical Aid

- 14. If anyone has been injured during the incident, he/she will be immediately evacuated to a notified hospital on the instructions of the Security Officer, if required, or provided first aid on the facility premises.

APPENDIX -4 STANDARD OPERATING PROCEDURE (SOP) FOR BOMB THREAT

Objective

1. The main objective of this SOP is to establish a procedure for handling a bomb threat if received in respect of Buildings.
2. The objective is also to ensure that no harm or injury is caused to any residents, occupant as a result of the actions that may be initiated consequent to the receipt of the bomb threat.
3. This will be read in conjunction with the SOPs on Fire-Fighting, Medical Aid and Evacuation.

Policy

4. To ensure that the incident of bomb threat is handled effectively.

Nature of the Incident

5. All bomb threats must be treated as real and handled as such.

Preparation

6. It is always prudent to remain prepared for eventualities like the bomb threat, especially in view of the existing scenario wherein bomb threats and blasts have become common place. Certain actions and responses to mitigate and counter a bomb threat or a blast are given as follows:-
 - (a) Carry out an assessment of the vulnerable areas in the Building where a bomb can be placed unobtrusively, ensure that these areas are constantly under physical and/or electronic surveillance and carry out their systematic search daily.
 - (b) Ensure that the access points are manned at all times and checks conducted on all entrants are scrupulously done. This will include security check of all personnel, private and commercial vehicles.
 - (c) Keep the area around the building under physical and electronic surveillance to pick up any suspicious item(s), person(s) or activities.
 - (d) Prepare a comprehensive plan and procedures for mitigating and countering an incident of a bomb threat or a blast, educate all the employees and train them to carry them out, if required.

Receipt of a Bomb Threat

7. A bomb threat may be received by the reception, help-desk, and a tenant, Chairman / Secretary of building or any other person related or unrelated

to the Building. It may be received on telephone, in the form of a letter, via e mail or any other means of communication.

- a. Take cover under sturdy furniture, or leave the building
- b. Stay away from windows.
- c. Do not light matches.
- d. Move away from the hazard site to a safe location.
- e. If instructed to evacuate, use the stairs only; do not use the elevators.

Reporting of the Incident

8. Immediately on receipt of a bomb threat, the **recipient** will inform the Chairman / Secretary of building or whoever next in hierarchy is present in the building at that time. The recipient of the bomb threat will also inform the Security Control Room (SCR). If it is a telephonic threat, it will be attempted that all the points in the Telephone Bomb Threat Report and Bomb Threat Check List are covered. Copies of these must be readily available at all times.
9. The Chairman / Secretary of building, on receipt of the information about the bomb threat will immediately inform the Chairman/ Secretary of building incumbent of the building and, in consultation with him, inform the **police, fire-fighting and the bomb disposal authorities and arrive at a decision to evacuate the property.**
10. Formats of the Telephone Bomb Threat Report and Bomb Threat Check List are attached as Appendices 'A' and 'B' respectively.

Procedure

11. On receipt of a bomb threat by any means, the procedure as elucidated below will be followed.
 - (a) The recipient of the bomb threat will immediately inform the Chairman / Secretary of building and the SCR giving out all the details.
 - (b) The Chairman / Secretary of building will immediately inform the Chief Controller- DMC and in consultation with him/her, inform the police, fire-fighting and the bomb-disposal authorities. The Chairman / Secretary of building should also prepare for immediate evacuation and issue instructions for the same if approved by the Chief Controller- DMC. The Site Controller should also initiate the procedures as follows:-

Immediate Evacuation

- (i) If it has been decided to evacuate the property immediately, actions contained in the **SOP on Evacuation** will be

initiated. In addition, actions as elucidated in the succeeding sub-paragraphs will also commence.

Location of Bomb Indicated

- (ii) If the location of the alleged bomb has been indicated by the caller, nominate a team under the Chairman / Secretary of building to reach the location, search for the alleged bomb and if the bomb or an unattended object is noticed, take the following actions :-
 - (a) Organise a cordon of the affected area from a safe distance.
 - (b) Carry out local evacuation of the affected area by removing all persons from there.
 - (c) Keep the alleged bomb/object under constant observation.
 - (d) Once the local evacuation has been completed, reduce own strength to minimum to ensure no ingress into the evacuated area.
 - (e) Continue reporting the situation to the Chairman / Secretary of building.
 - (f) Hand over the situation to the police and the bomb disposal personnel on their arrival.
 - (g) Carry out total evacuation, if ordered.

Location of Bomb Not Indicated

- (iii) If the location of the alleged bomb has not been indicated by the caller, zone-wise search parties under the respective Zone-Wardens will be instructed to carry out a search as at Paragraph 6 (a) above. If the alleged bomb or a suspicious object is found, the concerned search party will carry out actions as at Paragraphs 11 (b) (i) (a) to (g) above. It may be noted that more than one search party may find a suspicious object; however, the procedure to be followed will remain the same.

Note. UNDER NO CIRCUMSTANCE WILL THE SUSPICIOUS OBJECT BE TOUCHED UNLESS SPECIFICALLY INSTRUCTED BY THE SITE CONTROLLER AND ONLY UNDER THE DIRECT SUPERVISION OF THE CHIEF SECURITY OFFICER.

Telephone Bomb Threat Report – Appendix A

If you receive a bomb threat (via the telephone):

- Stay calm.
- Pay close attention to details. Talk to the caller to obtain as much information as possible.
- Take notes. Pay attention to details. Ask as many questions as possible:
 - When will it explode?
 - Where is it right now?
 - What does it look like?
 - What kind of bomb is it?
 - Where is it planted?
- Listen to the caller's voice. See if you can identify
 - Speech patterns (accent, tone)
 - Emotional state (angry, agitated, calm, etc.)
 - Background noise (traffic, people talking and accents, music and type, etc.)
 - Age and gender
- Write down other data:
 - How threat was received (letter, note, telephone)
- Call the Police and relay the information from the bomb threat telephone call or bomb threat letter. Follow the Police's instructions.
- Check your area for unfamiliar items. Do not touch suspicious items; report them to the Police.
- If you are told by emergency responders to evacuate the building, see "Evacuation Procedures".

Report call immediately to the Chairman / Secretary of building with all available details

APPENDIX -5: STANDING OPERATING PROCEDURE (SOP) FOR FLOODS/ HEAVY DOWN POUR

Objective

1. The main objective of this SOP is to establish a procedure for handling the incident of a flood if it strikes buildings.
2. The objective is also to ensure that no harm or injury is caused to any residents, or occupant's, tenant as a result of the flood or actions that may be initiated consequent to the incident of flood.
3. This will be read in conjunction with the SOPs on Fire-Fighting, Medical Aid and Evacuation.

Policy

4. To ensure that the procedure is simple, clear and easy to follow to enable continuous training of all concerned persons and effective handling of the incident if it occurs.

Responsibility

5. The Chairman / Secretary of building will be responsible for handling the incident for which he will be assisted by control room and their teams. In case the Chairman / Secretary of building is not available, the person who has been nominated as the next in hierarchy will supervise and handle the incident. **Clear hierarchy for reporting, controlling and handling the disaster/emergency for each contingency should be laid down and made known to every person of the Building.**
6. In addition, it is the responsibility of each member of the Building Management Team (control room) to remain alert at all times and be prepared to become an integral part of the Disaster Management/Emergency Response procedures immediately on the instructions of the Chairman / Secretary of building.

Reporting of the Incident

7. As is evident, there will be no typical reporting procedure when a flood strikes the property since it would happen without affording any reaction time to anyone. It is, therefore, imperative that all the employees, clients and tenants are thoroughly conversant with the relevant drills and procedures and his/her role in them.

Procedure

8. The control room shall consider the following action if the property is threatened by the potential of heavy rains
 - i. Report the expected incident to the Chairman / Secretary of building, and activate the DMC.
 - ii. Consult with tenancy/workplace managers to arrange measures to be implemented to mitigate the effects of a rains by:
 - (a) Moving valuables/essential assets to a floor likely effected.
 - (b) Placing sandbags at entry points to eliminate or minimise the amount of water that could enter the space, lift shafts, electrical shafts/panels.
 - (c) Switching off electrical equipment if water is likely to enter in the system.
 - (d) Arrange for lifts to be parked at the top of a rise and shut down or locked off;
 - iii. Arrange for an electrician to be available to disconnect the mains power;
 - iv. Evaluate the need to evacuate the area affected; and, if necessary and dependent on the evaluation, commence a partial or full evacuation of the building.
 - v. Ensure any person who advises of or is observed with any sign of distress is placed in the care of appropriate paramedical personnel.
9. The Chairman / Secretary of building or control room shall consider the following action when a **severe storm, cyclone** occurs
 - i. Relocate occupants located in those parts of the property that could be subjected to storm impact or flood water to a safe area within the property;
 - ii. Evaluate the need to evacuate the space; and, if necessary and dependent on the evaluation, commence a partial or full evacuation of the property;
 - iii. Instruct occupants to turn off electrical equipment that could be effected by power surges;
 - iv. Move valuable records and high cost items onto a floor away from windows and to a point above any area that may be subject to flood water penetration;
 - v. Ensure any person who advises of or is observed with any sign of distress is placed in the care of appropriate paramedical personnel; and
 - vi. Follow the directions of and assist the Emergency Services upon their arrival.

Precautions& Mitigations during Disasters-Flood

- Cleaning of Storm water and sewerage system at regular interval.
- Map areas within or leading in or out of the building that may be water logged, flooded or isolated due to the flood. The areas will be marked after completion of the project (as final ground levels etc. will be available after completion).
- Dewatering pumps at Basements
- The specific precautions shall be as under:
- Design of storm water drainage system for average peak rain fall at the site (150 mm/hr). Also to check suitability of storm water drainage outside the premises.
- Proper slope for drainage within premises
- Weep holes in the boundary wall
- Proper maintenance and audit of electrical wiring.
- Monitoring the contamination of U.G. water tank due to infiltration of storm water.

APPENDIX -6 STANDING OPERATING PROCEDURE (SOP) FOR TERRORISM

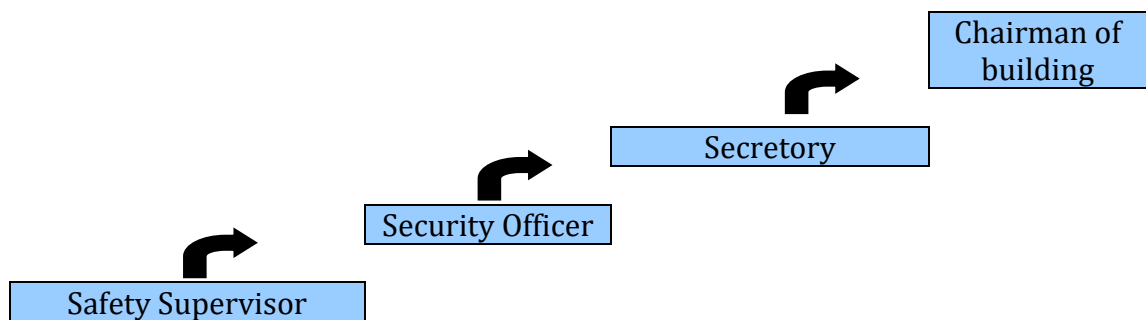
Objective:

To establish a procedure in case of a Terrorist Attack.

Policy:

Ensure effective Handling in case of a Terrorist Attack

Responsibility:



Procedure:

- On receiving the information regarding a **Terrorist attack** in the building the control room must be informed.
- He would order to **seal all access points** to the building and order for the **people to gather at the refuse area** in the building and activate disaster management team in operation.
- He would inform as per hierarchy and wait for the instructions, will call the police/call for the **Ambulance and for the Fire Brigade**.
- The Chairman / Secretary of building will be informed immediately.

Terrorism is the unlawful use of force or violence, or the threat of violence for purposes of intimidation, coercion or ransom. Terrorists often use such threats or actions to create fear among the public, to try to convince citizens their government is powerless to prevent terrorism and to get public attention for political or social objectives.

The effects of terrorism can vary significantly from injuries and loss of life to property damage and disruptions in services such as electricity, water supply, public transportation and communications. Attacks can take several forms, depending on the technological means available to the terrorist. Other terrorist methods **include kidnappings, arson, shootings and the use of chemical, biological or nuclear agents**.

Some of the techniques to deal with terrorist incident are:

- **Be alert** and aware of your surroundings.

- The very nature of terrorism suggests there may be little or no warning.
- **Be cautious.**
- **Be aware** of conspicuous or unusual behaviour of people in the building.
- **Do not** accept packages from strangers.
- **Do not** leave luggage unattended.
- **Be aware** as to where emergency exits are located.
- **Be aware** about where the staircases are located.
- **Notice your immediate surroundings.**
- **Be aware** of heavy or breakable objects that could move, fall or break in an explosion.

Preparing for a building explosion

The use of explosives by terrorists can result in collapsed buildings and fires.

The following steps should be followed:

- Review emergency evacuation procedures.
- Know where the fire exits are located.
- Keep fire extinguishers in working order.
- Know where they are located and how to use them
- Training for first aid should be given.

Keep the Following Items In A Designated Place On Each Floor Of The Building:

- Portable battery operated radio
- Extra batteries
- Several flashlights first aid kit and manual
- Several hard hats
- Fluorescent tape to rope off dangerous areas.

Suspicious Mail

Characteristics Of Suspicious Packages And Letters Include:

- Inappropriate or unusual Labelling
- Excessive postage
- Handwritten or poorly Typed Addresses
- Misspellings of common words
- Strange return address or no return address
- Incorrect titles or title without a name
- Not addressed to specific person; marked with restrictions, such as "Personal," "Confidential" or "Do not X-Ray"
- Marked with threatening language
- Postmark from a city or state different from the return address and excessive packaging material Appearance
- Powdery substance felt through or appearing on the package
- Oily stains, discolorations or odour
- Lopsided or uneven envelope

- Excessive weight
- Protruding wires or aluminium foil

Suspicious Packages or Envelopes should be handled as follows:

- Do not carry the package or envelope.
- Don't show it to others or allow others to examine it.
- Put the package or envelope on a stable surface; do not sniff / touch/ taste or look closely at the package or any contents that may have spilled.
- Alert others in the area about the suspicious package or envelope. Leave the area and take actions to prevent others from entering the area.
- If possible, shut off the ventilation system.
- Wash hands with soap and water to prevent spreading potentially infectious material to face or skin.
- Notify the Supervisor who in turn would notify the Security Officer.

Preview of Action Plan

Part – 1 Aspect of coordination between NSG and Civil agencies.

Part – 2 Coordinate aspects during no crisis situation.

Part – 3 Scenario when crisis occur in a building.

Part – 4 Post operation Aspects.

Part – 5 Conclusions.

Part -1

Aspect of Coordination

1. **Contact persons in Management, NSG and in Civil agencies.**
 - (a) Exchange of Phone/Tele No.
 - (b) Names of persons i.e. Civil and NSG with addresses. Be included in the escalation list
 - (c) Exchange of relevant data i.e. Building directory, floor plans, location of burnable installations which can be sabotaged by terrorism.
 - (d) Willingness of permission to allow NSG/commando's for recce of the building.
 - (e) Regular liaison and meetings to be held with NSG. Disaster management group.

2. **Coordination aspect during no crisis situation.**

- (a) Blue print of Building to be provided to NSG.
- (b) Ask NSG for recce of building.
- (c) Mock practice by NSG in each section of the building.
- (d) Practice of drills during day and Night time separately.
- (e) Mock drill to include NSG personnel and control room Staff once in a Year.

3. **Scenario when crisis occur.**

- (a) Means of Communication.
- (b) Hand over Building to NSG
- (c) Early evacuation of personals in the building.
- (d) Blocking of Exit and Entry routes.
- (e) Staff who had practiced with NSG in mock drills to get into action.
- (f) Volunteer staff to move along with NSG to guide them into various sections of the Building and especially to the place of incident.
- (g) Organize first aid, ambulance evacuation of casualties.

4. **Post operation Aspects.**

- (a) Do not make haste to check for collateral damages occurred during the crises.
- (b) First let NSG complete its entire ops till clearance given by them.
- (c) Proper handing taking over of the building.
- (c) Insurance agencies only to be called by management after NSG had given its Clearance.

5. **Conclusion.**

- (a) Saving human lives is of paramount importance in all disaster management operations.
- (b) Minimum collateral damage is Secondary. The Civil agencies must understand and take into account that the people struck in the crises

should be provided safety at all Costs. Hence there is a need for the management to coordinate.

APPENDIX –7: STANDARD OPERATING PROCEDURE HUMAN/MAN MADE THREATS

Riot/Civil Disturbance/Mob

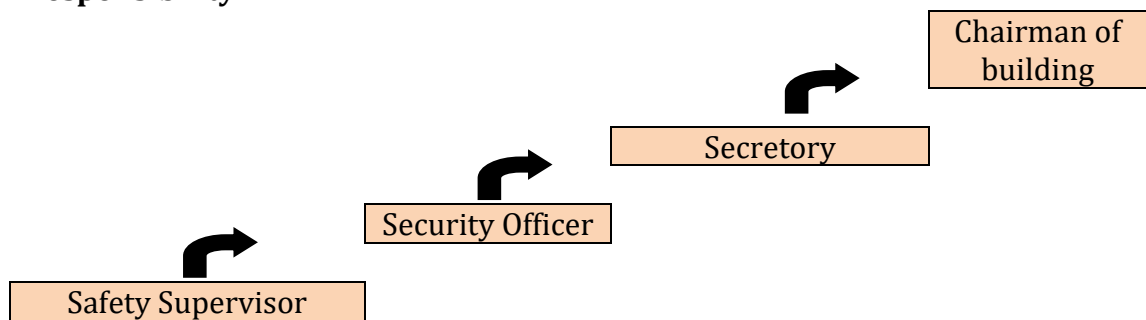
Objective

Aim is to establish a procedure to react to a civil /riot/mob in the vicinity of the property.

Policy:

To establish a procedure in case of riots/mob or civil disturbance.

Responsibility:



Procedure:

The shift Security Officer, upon noticing the size and agitation of the crowd, should take the following action:

- Immediately notify the Security officer.
- Direct security staff to close all non-essential entrances to the Building and concentrate additional security personnel at the main entrance.
- Dispatch two security officer and supervisors to the respective area to watch the crowd and report their activities to the Chairman / Secretary of building.
- Chief Security officer informs Chairman / Secretary of building and keep update. He will try to video graph activity of Mob from distance safely.

The Chairman / Secretary of building should take the following action:

- Limit the number of security personnel on meal break. Keep those on break in a stand-by mode, accessible by walkie talkie
- Notify building occupants of the situation outside and recommend they remain within the Building until the situation is under control.

- Chairman / Secretary of building will make contact with mob and identify their leader to negotiate to know their demand, accordingly brief management.
- The Chairman / Secretary of building will request local police assistance to give coverage to avoid human /material loss in the Building. He will also activate readiness call for fire services and medical services help if it necessitates under emergency.
- Chairman / Secretary of building will keep them engaged in negotiation or otherwise till local police arrives on scene and takes over the situation.
- Building operation and entry exit of occupant's vehicles will be allowed to regulate only once mob is dispersed and police give clearance.
- During this activity there will be no shift change over and existing shift will continue, management will arrange necessary food etc for the staff.
- During negotiation with management only selective representatives of mob will be allowed to attend meeting. It will be ensured that those who attend meeting have their command on the agitators, rather than everyone becomes leader and demands enters in to personal interest.

APPENDIX -8 DMP COSTING

Sr. No.	Parameters	Capital Cost (Lakh)	O & M Cost (Lakh)
1	Fire Fighting measures (Sprinkling System, Fire alarm, Portable fire extinguishers, Fire Tanks, Fire Hydrant Cabinets with hose reels, Fire Lifts, Fire alarm, fire Curtains)	6594.7	330
2	Disaster Management Kit (First Aid Facility, Stretcher, A portable battery-powered radio, Flashlight and extra batteries, First aid kit and first aid manual, Safety shoes, helmets, Hand gloves, fire mask, fire blanket, Axe, Cutter)	225	11.25
3	Well-equipped Control Room , CCTV	200	10
4	2 way Public announcement system	225	11.25
5	Diesel Pump for emergency	25	2.5
6	Disaster Management training to Residents and Security Staff, Mock Exercise	-	6
7	Alternate source of power supply / D.G sets	10	2
Total		7279.7	372.7

