



# **CITY DISASTER MANAGEMENT PLAN**

## **YEAR: 2026-27**

**VADODARA MUNICIPAL CORPORATION**

**FIRE AND EMERGENCY SERVICES**

**GUJARAT STATE DISASTER MANAGEMENT AUTHORITY**

## **MUNICIPAL COMMISSIONER**

Global warming and climate change has led to the shift in weather conditions all around the globe. Erratic weather patterns such as flash flood, cloud burst, heat waves, drought, etc. have affected/obstructed normal human lives and livelihoods. When a disaster is struck it obstructs normal human life and leaves humanity in great grief. Vadodara city is densely populated and is mainly narrow lanes and roads. Vishwamitri River passing from the heart of the city swells doubles its size during floods. It is found in some cases that this short outburst even ridicules the drainage system engineered so well. Although various ponds created in the area drain rainwater and store them, excesses of it can lead to flooding. Another problem is the old city has old houses which are mostly in tired conditions, they pose risk of falling during the earthquake events, and the corporation identifies such buildings and gives instructions to its residents to evacuate and even helps in aiding the repairs. High rise-buildings such as malls, shopping and office complexes and residential complexes are taking place at a faster pace nowadays. Electrical systems are also a day-to-day need. Schools and coaching centers are blooming with children. These all pose a huge fire risk. To overcome these efforts such as fire platform for fire brigade, compulsory fire NOC procedure, mandatory firefighting system in the high-rise buildings, multi and sperspeciality hospitals as well is being carried out throughout the city. After the devastated flood of 2024 Currently VMC is focusing on rejuvenation and revival of river Vishwamitri due to which flood situation will be minimizing at multiple level. GSDMA supports the efforts of the VMC, and help is being provided when needed. I thank the team for creating this document by compiling and listing various resources.

Municipal Commissioner  
Vadodara

## **PREFACE**

Municipal corporations face the challenge of administrating rapid urban growth. High rise buildings, densely populated areas, narrow roads, slums, schools, electrical systems, surrounding industrial areas, etc. are some of the traits of urbanization. The objective of disaster management would be to implement a plan with the following criteria.

With given information including maps, disaster history, current population and economic data, available disaster management plans, development plans, and disaster organization, Analyses information about hazards, vulnerability and development to identify opportunities or situations where prevention, mitigation and preparedness measures might be applied to reduce risk and improve response. Determine the role of the various agencies/organizations in implementing disaster management programs and activities. This project will enable the readers to understand the various aspects of disaster management.

As per NDMA Guideline and addition of Sendai framework of Disaster Risk Reduction (2015-2030) and focusing its goals and targets this will facilitate the stakeholders involved while preparing this document by providing insight into various aspects of Disaster and its preparatory strategies at the grassroots level and necessary migratory and response action steps to be undertaken. Again, it will be fruitful to many departments as well as authorities to mobilize and co-ordinate during any kind of disaster situation which will be a great aspect to help and protect society and people.

## **ACKNOWLEDGEMENT**

The process of updating this City disaster management started in April 2026 and was having a consolidated team management for data collection from all departments/officials as well as stakeholders followed by series of consultations from senior officials and members of disaster management committee of Vadodara Municipal Corporation. As various department suggested numerous things numerous things happened past years and previous year eye witnessed live scenario.

We thank the departmental authority who was associated with this plan in collaboration with Gujarat state disaster management authority, Gandhinagar, for all timely support by positioning their officers.

We thank the corporation as well as district authority officials for their timely engagement to provide updated information for detailing the report. Also, we gratefully acknowledge the support of various departmental authorities and stakeholders for being involved in such a handful exercise for updating such a plan for any future seriousness and agencies for providing all necessary elements for perfect documentation.

## TABLE OF CONTENT

| Sr. No. | Chapter No. | Details                                         | Page No |
|---------|-------------|-------------------------------------------------|---------|
| 1       | -           | Message: Municipal Commissioner Vadodara        | 1       |
| 2       | -           | Preface                                         | 2       |
| 3       | -           | Acknowledgment                                  | 3       |
| 4       | -           | Abbreviations                                   | 7       |
| 5       | Chapter 01  | 1.1 Document Outline                            | 9       |
| 6       |             | 1.2 Need of the Plan                            | 9       |
| 7       |             | 1.3 Sendai Framework of Disaster Risk reduction | 10      |
| 8       |             | 1.4 Brief Introduction about Vadodara City      | 13      |
| 9       |             | 1.5 Introduction to Hazard and Disaster         | 15      |
| 10      | Chapter 02  | 2.1 Ward wise composition of Vadodara City      | 24      |
| 11      |             | 2.2 Concept of HRVA                             | 25      |
| 12      |             | 2.3 Multi Hazard profile of Vadodara            | 26      |
| 13      |             | 2.4 Hazard Identification and Risk Assessment   | 27      |
| 14      |             | 2.5 Disaster Planning risk Reduction            | 28      |

|    |            |                                                                    |    |
|----|------------|--------------------------------------------------------------------|----|
| 15 |            | 2.6 Capacity Analysis of Vadodara                                  | 29 |
| 16 | Chapter 03 | 3.1 Disaster Preparedness                                          | 31 |
| 17 |            | 3.2 Flood Response Plan-Vadodara City                              | 35 |
| 18 |            | 3.3 Heat Wave action Plan- Vadodara City                           | 53 |
| 19 |            | 3.4 Tsunami Action Plan- Vadodara City                             | 55 |
| 20 |            | 3.5 Chemical Disaster Action Plan- Vadodara City                   | 55 |
| 21 |            | 3.6 Cyclone Action Plan-Vadodara City                              | 57 |
| 22 |            | 3.7 Earthquake Action Plan- Vadodara City                          | 58 |
| 23 |            | 3.8 Biological Disaster Action Plan- Vadodara City                 | 59 |
| 24 |            | 3.9 Fire Management Plan- Vadodara City                            | 62 |
| 25 |            | 3.10 Roles and Responsibilities of Officials and<br>Departments    | 63 |
| 26 |            | 3.11 Roles and Responsibilities –Municipal Corporation<br>Officers | 68 |
| 27 |            | 3.12 List of Shelter Places                                        | 71 |
| 28 | Chapter 04 | 4.1 Emergency Response Centre, Vadodara                            | 79 |

## **LIST OF TABLES**

| <b>Sr. No.</b> | <b>Details</b>                                               | <b>Page No</b> |
|----------------|--------------------------------------------------------------|----------------|
| 1              | Ward wise Composition of Vadodara City                       | 24             |
| 2              | HRVA Study as per disasters in Vadodara                      | 25             |
| 3              | Multi Hazard Profile of Vadodara                             | 27             |
| 4              | Capacity Analysis of Vadodara District                       | 29             |
| 5              | State level Control room contact details                     | 32             |
| 6              | Sub basin Characteristic of Vadodara Rivers                  | 37             |
| 7              | Area and level at Vishwamitri River/Affected Places          | 41             |
| 8              | Heat wave Characteristics and First aid treatments           | 54             |
| 9              | List of Shelter Places: Vadodara Municipal Corporation       | 71             |
| 10             | District/Jurisdiction of Emergency Response center: Vadodara | 79             |
| 11             | Information/Contact details: ERC Vadodara                    | 80             |

## **ABBREVIATIONS**

CCTV: Closed Circuit Television  
CD: Civil Defense  
CDHO: Chief District Health Officer  
CDMP: City Disaster Management Plan  
CDMC: City Disaster Management Committee  
CEO: Chief Executive Officer  
CFO: Chief Fire Officer  
CMRF: Chief Minister Relief Fund  
COVID: Corona Virus Disease  
CP: Commissioner of Police  
CRF: Calamity Relief Fund  
DEO: District Education Officer  
DPEO: District primary Education Officer  
DEOC: District Emergency Operations Centre  
DCR: District Control Rooms  
DDO: District Development Officer  
DISH: Directorate of Industrial Safety and Health  
DM Act: Disaster Management Act, 2005  
DM Plan: Disaster Management Plan  
DPRR: Disaster Planning Risk Reduction  
DRM: Divisional Railway Manager  
DSP: Deputy Superintendent of Police  
EOC: Emergency Operation Centre  
ERC: Emergency Response Centre  
ESW: Early Warning system  
GIDC: Gujarat Industrial Development Corporation  
GEB: Gujarat Electricity Board  
GSDMA: Gujarat State Disaster Management Authority  
GSFC: Gujarat State Fertilizers and Chemical Limited



GWSSB: Gujarat Water Supply and Sewerage Board

HIRA: Hazard Identification and Risk Assessment

HFL: High Flood Level

HRVA: Hazard Risk Vulnerability Analysis

IATA: International Air Transport Association

IEC: Information Education and Communication

ICAO: International Civil Aviation Organization

IOCL: Indian Oil Corporation Limited

IMD: Indian meteorological Department

MAH: Major Accident Hazard

NGO-Non-Governmental Organization

NOC: No Objection Certificate

OPD: Outpatient Department

PCR: Police Control Room

PPEs: Personal Protective Equipment's

PMRF: Prime Minister Relief Fund

RTO: Regional/Road Transport Office

SEOC: State Emergency Operations Centre

SOPs: Standard Operating Procedures

SSG Hospital: Sir Sayajirao General Hospital

TEOC: Taluka Emergency Operation Centre

UPHC: Upper Primary Health Centre

VFES: Vadodara Fire and Emergency Services

VMC: Vadodara Municipal Corporation

VMSS: Vadodara Municipal Seva Sadan

# CHAPTER 1

## INTRODUCTION

# CHAPTER 1: INTRODUCTION

## 1.1 Document Outline

### **The City Disaster Management Plan of Vadodara Municipal Corporation for the Year: 2026-27**

contains Chapters. The sections provide detailed information on the following points:

1. Need of the plan and objective of the plan
2. Brief Introduction about Vadodara City
3. Concept of Disaster Management
4. Disaster Preparedness: Role & Responsibilities; Early Warning systems and Disaster Management Trainings.
5. Hazard, Risk & Vulnerability Analysis of Vadodara City.
6. Miscellaneous essential services.
7. Emergency Response Centre (ERC).
8. Disaster Response: Key contact personnel and response resources.

## **1.2 Need of the plan**

Preparation of Disaster Management Plan is one of the mandatory provisions under the Gujarat State Disaster Management Act-2003 and the National Disaster Management Act-2005. With respect to the above-mentioned provisions, Gujarat State Disaster Management Authority and Relief Commissioner have issued guidelines for the preparation of District Disaster Management Plan.

As per THE GUJARAT STATE DISASTER MANAGEMENT ACT, 2003 under CLAUSE 26. Sub section (1), (2), (3), (4) & (5) Of CHAPTER X - FUNCTIONS OF LOCAL AUTHORITIES, Each department of the Government in a district shall prepare a disaster management plan for the district and the Collector shall ensure that such plans are integrated into the Disaster Management Plan for the whole of the district and submit a copy of the District Disaster Management Plan, and of any amendment thereto the Authority and the Commissioner.

Under the provision of the DISASTER MANAGEMENT ACT, 2005, under Clause 30 Section (2), subsection (i) & Clause 31 Section (1) of CHAPTER IV District Disaster Management Authority, without prejudice to the generality of the provisions of sub section (1), the district authority may (i) prepare a Disaster Management Plan including District Response Plan for the district, and there shall be a Disaster Management Plan for every district of the state.

Similarly, the entire municipal corporation needs to have their own disaster management plan for respective city or municipal corporation limit.

## **1.3 Sendai framework of Disaster Risk Reduction**

### **1. Disaster Risk Reduction Post-2015**

Post 2015, there has been a significant shift from the approach of Managing Disasters to Managing Risk. The three landmark global agreements viz. – the Sendai Framework for Disaster Risk Reduction 2015-30 (SFDRR), Sustainable Development Goals (SDG) and the Paris Agreement (CoP 21) set the stage for future global action on Disaster Risk Reduction (DRR), sustainable development and climate change.

### **2. Sendai Framework of Actions for Disaster Risk Reduction 2015-2030**

The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) was adopted at the Third United Nations World Conference on Disaster Risk Reduction held in Sendai, Japan in March 2015. The SFDRR is a document that outlines four priorities for action to achieve 7 targets, which in turn would lead to one outcome which is- a substantial reduction of disaster risk and losses in lives, livelihoods, health, the economy of persons, businesses, communities and countries. India is a signatory to the Sendai Framework for a 15-year, voluntary, non-binding agreement that recognizes that the State has the primary role in reducing disaster risk, but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

**The Four priorities of action are: -**

1. Understanding Disaster Risk
2. Strengthening Disaster Risk Governance to Manage Disaster Risk
3. Investing in Disaster Risk Reduction for Resilience

#### 4. Enhancing Disaster Preparedness for Effective Response and to ‘Build Back Better’ in Recovery, Rehabilitation and Reconstruction

**The seven global targets are: -**

- A. Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015
- B. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030 compared to the period 2005- 2015
- C. Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- D. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- E. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- F. Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- G. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

#### **Sustainable Developmental Goals**

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by

all United Nations Member States in September 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The 17 SDGs are integrated, that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. They recognize that ending poverty and other deprivations must go together with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. To make the 2030 Agenda a reality, broad ownership of the SDGs must translate into a strong commitment by all stakeholders to implement the global goals.

### **Paris Agreement on Climate Change Action and Disaster Risk Reduction (CoP 21)**

The CoP 21 the Paris Climate Conference held in December 2015 led to a new international climate agreement, applicable to all countries, aiming at “holding the increase in the global average temperature to well below 2°C above-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change”. The Paris Agreement recognized the need for loss and damage associated with the effects of climate change. The agreement identified areas of cooperation central to DRR and called for investments to address the underlying risk drivers associated with rising greenhouse gas (GHG) emission levels and to inspire innovation and low-carbon growth.

**The State Disaster Management Plan (SDMP) has tried to envisage coherence across the states. Efforts for DRR, sustainable development, and the actions in response to climate change.**

### **Prime Minister’s 10-Point Agenda towards Disaster Risk Reduction**

The Prime Minister, Shri Narendra Modi, listed a Ten -Point Agenda in his inaugural speech at the

Asian Ministerial Conference on Disaster Risk Reduction 2016, held in New Delhi in November 2016 (AMCDRR), which has also been incorporated in the SDMP. The ten key elements consist of the following:

1. All development sectors to imbibe principles of Disaster Risk Management
2. Work towards risk coverage for all-starting from poor households to small and medium enterprises to multi-national corporations to nation states.
3. Encourage greater involvement and leadership of women in disaster risk management.
4. Invest in risk mapping globally related to hazards such as earthquakes based on widely accepted standards and parameters.
5. Leverage technology to enhance the efficiency of disaster risk management efforts.
6. Develop a network of universities to work on disaster issues.
7. Utilize the opportunities provided by social media and mobile technologies.
8. Build on local capacity and initiative. Response agencies need to interact with the communities and make them familiar with the essential drill of disaster response.
9. Ensuring that disaster learning is well documented.
10. Bring about greater cohesion in international response to disasters.

## **1.4 Brief Introduction about Vadodara city**

Vadodara city is prone to multiple hazards such as Floods, Chemical Hazard, Heatwaves, Cyclone, Heavy Rain, Lightening, Earthquake, Fires and



Epidemics/Pandemics and have experienced & witnessed too on several occasions in the past. Vadodara city experienced the effects of cyclone in the year 1998, effects of devastating earthquake of year 2001 & faced the impact of major floods once in every three-year period. In the past, the city was severely affected by the floods of 1978, 1994, 2005, 2006, 2013, 2014 and 2019. Moreover, the whole Vadodara District comes under the golden corridor and has several chemical industries / industrial areas in the district hence there is a need to have such disaster management plan which may be useful to comply with multi hazard approach to deal with different disasters. Recognizing the fact that most tasks and actions before and following a disaster are common at the district level, the Vadodara district administration has used a multi-disaster approach (all disasters covered by one plan) while developing disaster management plan for the district and simultaneously municipal corporation authorities of Vadodara city have prepared the Disaster management plan for the Vadodara city by focusing on past experiences and considering many suitability approaches towards minimizing the terrible losses due to any kind of natural as well as

#### **1.4.1 Followings are the main objectives of this Plan:**

1. To Understand Disaster, risk and vulnerability studies of Vadodara city
2. To protect and minimize the loss of human lives from the effects of different disasters.
3. To promote a culture of prevention and preparedness by ensuring that disaster management receives the highest priority at all levels.
4. To ensure that community is the most important stakeholder in the disaster management process.
5. To minimize the sufferings of the people arising due to different disasters.
6. To mainstream disaster management concerns into the developmental planning process.

7. To minimize the damage and losses that occur to the Property and Infrastructure due to different disasters.
8. To reduce the vulnerability aspect of both the people and infrastructure due to different disasters.
9. To promote the culture of disaster risk prevention and mitigation at all levels.
10. To Strengthen disaster risk modelling, assessment, mapping, monitoring and multi-hazard Early warning systems.
11. To Promote the leadership for active participation in disaster risk reduction and to aware about disaster-resilient in schools, colleges and other educational facilities.
12. Special focus on health care sectors to build an integrated platform for disaster preparedness and resilience of communities to cope with and recover from disaster impacts.
13. To prepare resilience for poor communities or lower line areas to prevent disasters aggravating poverty and to protect livelihoods.

## **1.5. Introduction to Hazard and Disaster**

There are a few terms and definitions of Disaster and Disaster Management as per the Disaster Management Act, 2005:

### **1.5.1 Hazard**

It is natural or manmade phenomenon which may cause physical damage, loss or threaten human life and wellbeing if it occurs in an area of human settlement, agricultural or industrial activity.

### **Category of Hazard**

Natural hazards are the hazards that are caused because of natural phenomena (hazards with meteorological, geological or even biological origin). Examples of natural hazards are cyclones,

tsunamis, earthquakes and volcanic eruptions which are exclusively of natural origin. Landslides, floods, drought, fires are socio-natural hazards since their causes are both natural and manmade. For example, flooding may be caused because of heavy rains, landslides or blocking of drains with human waste.

1. Geophysical: Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hydro-meteorological factors are important contributors to some of these processes.
2. Hydrological: Events caused by deviations in the normal water cycle and/or overflow of bodies of water caused by wind set-up.
3. Meteorological: Events caused by short-lived/small to meso-scale atmospheric processes (In the spectrum from minutes to days).
4. Climatological: Events caused by long-lived meso- to macro-scale processes (in the Spectrum from intra-seasonal to multi-decadal climate variability).
5. Biological: Process or phenomenon of organic origin or conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances that may cause loss of life, injury, illness or other health impacts, property damage, loss of Livelihoods and services, social and economic disruption, or environmental damage.  
e.g.: Epidemics/Pandemic of all types.

Manmade hazards are the hazards that are caused due to human negligence. Manmade hazards which are sudden and progressive which impact with such severity that the affected community has to respond by taking immediate and exceptional measure including help from outside of the community.

1. Accidents: road, rail, sea, air, transport of hazardous material
2. Fire: Forest Fire, Building coal mines and oil refinery
3. Industrial accidents: chemical leaks, fire, explosion, plant safety failure etc.
4. Nuclear Hazard: Radioactive leaks
5. Warfare: Conventional, Chemical, Biological and Nuclear
6. poisoning: Food, Water supply
7. Civil Conflicts: Terrorist Attack
8. Ecological, Environmental Pollution

### **1.5.2 Risk**

It is defined as the expected losses (lives lost, persons injured, damage to property, economic activities of livelihoods disrupted) to a community when a hazard occurs. The probability of the loss will occur as the result of an adverse event, given the hazard and vulnerability.

### **1.5.3. Vulnerability**

It is defined as the degree of loss it is sets of prevailing conditions, which adversely affect people's ability, prevent, to prepare for and respond to hazards events. These long-term factors, weaknesses or constraints affect a household or community's ability to absurd losses after disaster or to recover from the damage.

### **1.5.4 Disaster**

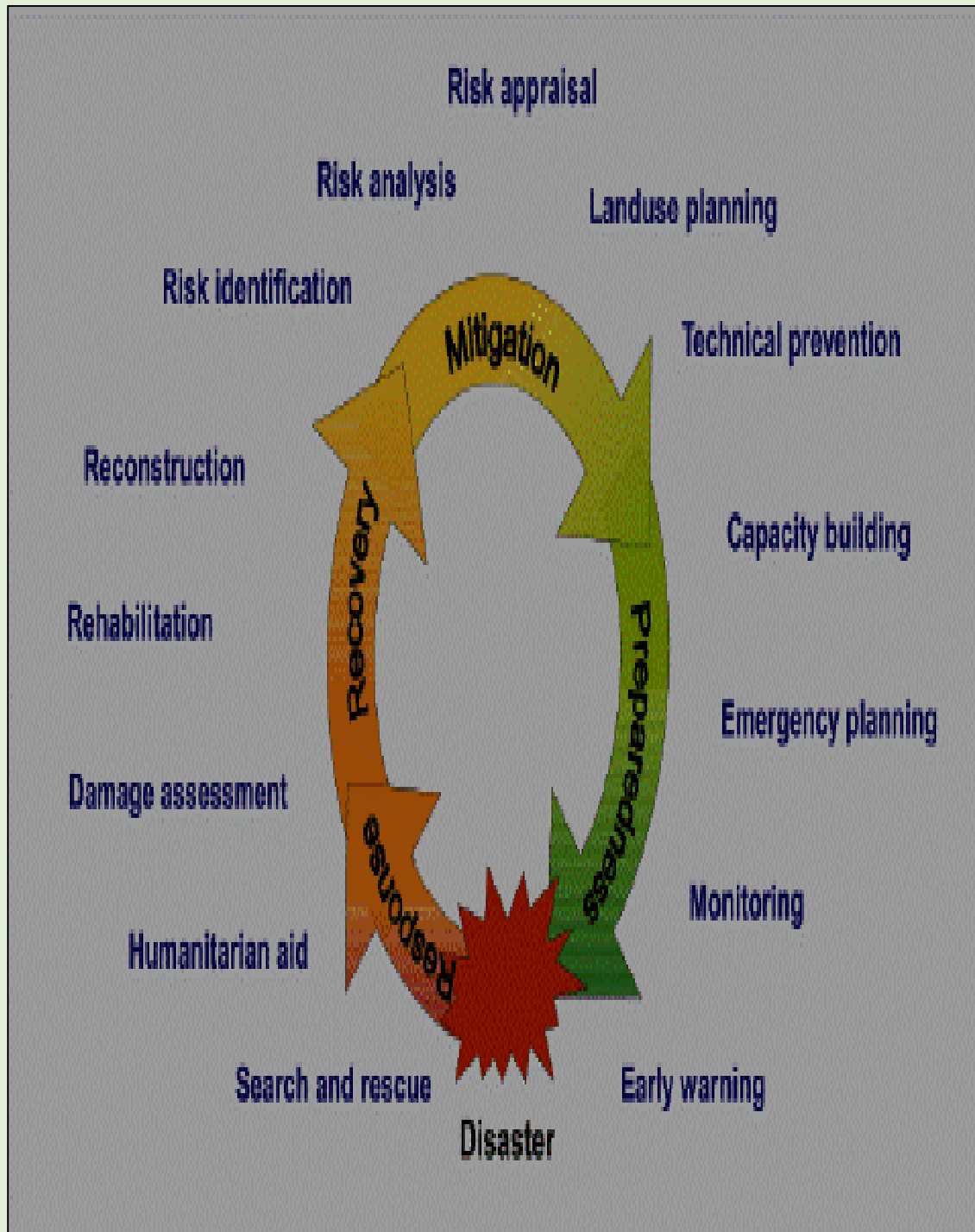
It means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.

### **1.5.5 Disaster management**

It means a continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary or expedient for

1. prevent danger or threat of any disaster.
2. Mitigation or reduction of risk of any disaster or its severity or consequences.
3. Capacity-building.
4. Preparedness to deal with any disaster.
5. Prompt response to any threatening disaster situation or disaster.
6. Assessing the severity or magnitude of effects of any disaster.
7. Evacuation, rescue and relief;
8. Rehabilitation and reconstruction.

Figure- Disaster Management Cycle



### 1.5.6 Hazard Management and Citizen Empowerment

The concepts of all hazard management and empowerment provide the foundation for disaster management plans and efforts. All hazards management involves considering, planning for and taking actions to avoid or mitigate, all possible hazards, which may affect the district.

Empowerment means that each citizen is enabled through education, training and support, to be able to address all hazards and disasters, which may threaten their lives or livelihoods. Empowerment does not transfer full responsibility for dealing with disasters to the individual but strives to ensure that everyone has the means and support needed to avoid or limit the impact of disaster.

The district and subsidiary plans seek to limit vulnerability and reinforce the resilience of communities in the face of hazards and disasters. Addressing vulnerability generally takes place before a disaster through actions to reduce the opportunities for disasters to occur. Reinforcement of resilience occurs through actions to reduce the scale or potential impact of a disaster and building capacities and systems that facilitates (shorten and make less costly) the recovery process.

The Disaster Management Act, 2005 is a key document which provides guidelines for disaster management in India. The Prime & Chief Minister's Office, Ministry of Home Affairs, National Disaster Management Authority, State Disaster Management Authorities, National Institute of Disaster Management, Indian Meteorological Department and Department of Space are key institutions for disaster management in India.

***According to the DM Act, 2005:***

“District Plan” means the plan for disaster management for the district prepared.

“Local authority” includes panchayat raj institutions, municipalities, a district board, cantonment board, town planning authority or Zila Parishad or any other body or authority, by whatever name called, for the time being invested by law, for rendering essential services or, with the control and management of civic services, within a specified local area.

**Here, the case would be the local authority of Vadodara Municipal Corporation/ Vadodara City which lies within the boundary of the Vadodara District.**

### **1.5.7 Stakeholders and their responsibilities**

The Institutional framework for operationalization of the DM plan at the district level is conceived in terms of integration of both rural and urban areas and by recognizing the interdependence between line departments, district and state level authorities. The constitution of the District Disaster Management Committee will be as per the Gujarat Disaster Management Act 2003.

#### ***Authorities and Responsibilities***

The requirement for district and subsidiary plans is set by the GSDMA under the authority of the Gujarat State Disaster Management Act of 2003. The Act authorizes the collector to secure cooperation and assistance from other parties in efforts to avoid or reduce the impact of disasters.

The Collector (Specifically) and Government authorities (generally) are responsible for managing hazards and disasters that affect a district, with support from GSDMA, the Relief Commissioner and other public and private parties as may be needed. The roles, responsibilities and obligations of the Collector and other key parties are set out in detail in the Act and are considered as part of this plan. Here, the case would be Municipal Commissioner and other departments of the corporation to coordinate and cooperate with the district administration for achieving better disaster management.

### **1.5.8 Mitigation, Preparedness and Prevention**



Mitigation, preparedness and prevention actions are to be taken before a disaster to reduce the likelihood of a disaster (risk reduction) or the level of damage (vulnerability reduction) expected from a possible disaster. Vulnerability reduction is given priority over risk reduction. The district can avail itself of any or all of four mechanisms to reduce risk and vulnerability:

1. Long term planning for mitigation, preparedness and prevention-investments to this effect in the district,
2. Enforcement of regulations, particularly building and safety codes and land use plans;
3. Review and evaluation of development plans and activities to identify ways to reduce risks and vulnerability.
4. Capacity building, including warning, the provision of relief and recovery assistance and community-level identification of risk and vulnerability.

Here, the Municipal Commissioner assisted by other officers of the corporation, is responsible for developing plans and activities to effect mitigation, preparedness and prevention using the mechanism noted above. Based on the interim assessment of risk and vulnerabilities, the focus will be on the following areas for mitigation, preparedness and prevention, which are specific to Vadodara City:

1. Resilience of lifeline systems (water, power, roads, communications, etc.),
2. Reduction in disaster impact on health care facilities and schools,
3. Vulnerability reduction in flood-prone areas, including riverbank erosion,
4. Vulnerability reduction to high winds,
5. Improvement of Off-site Preparedness near Industrial sites.

### **1.5.9 Warning, Relief and Recovery**

Warning, Relief and Recovery actions are intended to eliminate the loss of life and property and reduce hardship because of disasters. Plans and SOPs at corporation level should provide a seamless mechanism of warning, relief and recovery assistance to avoid or reduce losses and hardship.

The focal point for early warning, relief and recovery is the District Collector, who directs and coordinates these efforts within the district. The Collector is also responsible for coordinating warning, relief and recovery with similar activities in neighboring districts and with the GSDMA and Revenue Department.

The Collector is further responsible for developing long-term relief, recovery and rehabilitation plans while a disaster. These plans will include steps to reduce disaster impact in the future and be coordinated with the GSDMA in terms of policy and implementation.

#### **1.5.10 Plan Review and Updating**

City Disaster Management Plan is prepared and reviewed by the Municipal Commissioner in collaboration with the line departments and other organizations in the corporation. The plan reviewed annually (in the Month of May) and in special case periodically too and updated:

1. When significant changes in any hazards,
2. Lessons learnt following any major disaster or
3. When there is any significant change to organization or responsibilities of primary members of the task forces defined in the plan.

#### **1.5.11 Financial Arrangements**

With respect to the updating of the CDMP the expenditure shall be booked either from the grant provisions of GSDMA under the CDMP Updating head and time to time guidelines of GSDMA or as per the directions of Municipal Commissioner. There are other provisions which are utilized in different kinds of relief measures as per the directions released from Central Government, State Government and so the Collector & DM viz. the funds like Calamity Relief Fund (CRF), Mayor relief fund which is utilized for the affected people / nature / cattle death in case of the natural calamities, NCCF, CM Relief Fund, PM Relief Fund etc.

### **1.5.12 Scope of the Plan**

The City Disaster Management Plan for Vadodara Municipal Corporation has been prepared for its execution by various departments and agencies of the district and other Non-Governmental Agencies expected to participate in disaster management process. This plan provides for Vulnerability Assessment and Risk Analysis, Preventive Measures, Mainstreaming disaster management concerns into Developmental Plans, Preparedness Measures, Response Mechanism, and Partnership with Stakeholders, Financial Arrangement, Roles and Responsibilities of the various agencies interlinks in disaster management and the scope of their activities. An elaborate inventory of resources has also been formalized.

### **1.5.13 Trigger mechanism**

The plan would be put into action as per the levels of disasters categorized i.e. L0, L1, L2 & L3.

**Levels of Disaster (The L Concept):** The L concept has been developed to define the different levels of disaster to facilitate assistance to State and the Centre. It has four levels which are as follows.

**L0 level:** Denotes normal times, which will be utilized for close monitoring, documentation and preparatory activities. Training of Search and Rescue teams, rehearsals, evaluation and inventory updating for response activities will be carried out during this period.

**L1 level:** Denotes when the disasters which can be managed at the district level where the State and the Centre need to be on guard in case assistance is required for disaster relief operations.

**L2 level:** Disaster situations that require assistance and active participation of State resources for management of the disaster.

L3 level: Disaster situation arises in case of large-scale disasters that have a noticeable impact on several districts of states and when the State and District authorities have been overwhelmed with the disaster and require assistance from the Centre for rescue and relief operations.

## **CHAPTER 2**

# **HAZARD, RISK AND VULNERABILITY ANALYSIS**

## **2.1 Ward-wise composition of Vadodara City**

| <b>Ward No.</b> | <b>Zone</b> | <b>Area names with office address</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4,5,6,14,15     | East        | <p>4-Current Ward-2 Office, Nr. Sawad Community Hall, Harni-Warasia Road, Near Shweta Park Char Rasta, Vadodara-22</p> <p>5-Current, Ward-9 Office, Near Post Office, Navjivan, Ajwa Road, Vadodara-19</p> <p>Office of Ward No.-6, Gadheda Market Char Rasta to Super Bakery Road, Bs. Vegetable Market, Kishanwadi, Vadoara14-Current Ward No.1, Kalupura Central Store, Adaniya Bridge Road, Vadodara</p> <p>15-Current Ward-3, B/h. Prarambh Complex, Nr. Mahesh Complex, Waghodia Road, Vadodara</p> |
| 8,9,10,11,12    | West        | <p>8-Current Ward-10 Office, Near VMC Atithi Gruh, High Tension Line Road, ShubhanPura, Vadodara-23</p> <p>Office of Ward No. 9, B/h. Gotri Urban Health Centre, Opp. Pursharth Bunglows, B/s. Adarsh Duplex, Gotri10-TP-16, FP-148, Vasana Affordable Housing Shops , Office of Ward No.-10, Near Nilamber Circle, Opp. Linde's Corporate office, Gotri - Bhayali Road</p> <p>11-Current Ward-11 Office, Opp. New Sindhi Market, Nr. Maheshwari Society, Iskon-Vasna Road, Vadodara</p>                  |

|             |       |                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |       | 12-Current Ward-6 Office, Near Sahajanand Apartment, Off Old Padra Road, Akota, Vadodara-20                                                                                                                                                                                                                                                                               |
| 1,2,3,7,13  | North | Office of Ward No.-1, Opp Ambedkar Nagar, Near Ding Dong chowkdi, TP 13, Chhani, Office of Ward No.-2, Opp. Ayyappa Ground, Sama Office of Ward No.-3, Old Octroi Bldg., Fatehgunj Office of Ward No.-7 ,Nr. Loksatta Press, Opp. Bhathiji Mandir, Bahucharaji Road, Nagarwada Tin Rasta Office of Ward No.13, BagiKhana-JayRatna Building Main Road, Navapura, Vadodara. |
| 16,17,18,19 | South | Office of Ward No.-16, Gajaravadi Main Road 17-Current Office, Sindhwai Mata Road, PratapNagar, Vadodara-4<br><br>18-Current Ward-12 Office, G.I.D.C. Industrial Estate, Makarpura, Vadodara10<br><br>Office of Ward No.19, Besides Makarpura Police Station, Makarpura Village                                                                                           |

## **2.2 Concept of HRVA**

Hazard risk assessment and vulnerability mapping & vulnerable elements to specific hazards. The Hazard technically is not a disaster unless the 'Trigger' set it off. It could be weak legislation that failed to regulate the functioning of the facility. The Risk and Vulnerability factors analyzed from these Hazards vary from Minor to Major impacts affecting the smaller or larger areas of the district.

"Risk is a technical concept, which is used by engineering and management specialists to arrive at an estimation of losses in the event of disaster and the expected probability of its occurrence."

$$\text{Risk} = \frac{\text{Hazards} \times \text{Vulnerability}}{\text{Coping capacity}}$$

"Vulnerability gives the extent to which a community is affected by a disaster". The idea of danger or threat points out the possibility of physical event capable of causing damage, like earthquake, floods, industrial accidents etc. The vulnerability brings to light, the structural susceptibility of society or social group to suffer harm, based on physical event constituting a "Threat". Vulnerability concerns the relationship between the social, economic and physical elements, on which the wellbeing of the society or the group in question depends. The analysis of vulnerability is specific and based on the type of danger or threat, which is apprehended.

The table below summarizes the results of an analysis of impact of HRVA of Vadodara city. This analysis indicates that disaster planning at Vadodara city level should first focus on the functional response to the Flood, Industrial Accidents and Earthquakes which triggers to the other hazards like Dam Failure, Water logging, Fire, Failure of critical infrastructure and building collapse.

| Hazards              | Probability Rating | Impact Rating | Vulnerability Ranking | Vulnerable Areas/Talukas                            | Vulnerable Population                        |
|----------------------|--------------------|---------------|-----------------------|-----------------------------------------------------|----------------------------------------------|
| Industrial Accidents | 5                  | 4             | 12                    | Industrial area of Makarpura and Vadsar-Kalali area | Population residing in the surrounding areas |

|                               |   |   |    |                                                      |                                              |
|-------------------------------|---|---|----|------------------------------------------------------|----------------------------------------------|
| Fire                          | 4 | 3 | 12 | Densely Populated Old City Areas                     | Population residing in the surrounding areas |
| Leakage of gases              | 4 | 3 | 12 | Makarpura GIDC and Vadsar-Kalali Area                | Population residing in the surrounding areas |
| Oil Spill                     | 3 | 2 | 10 | Makarpura GIDC                                       | Population residing in the surrounding areas |
| Drought                       | 4 | 3 | 12 | -                                                    | -                                            |
| Flood                         | 5 | 5 | 20 | Low lying areas                                      | Areas mentioned                              |
| Epidemics                     | 5 | 4 | 25 | Densely Populated areas                              | Areas mentioned                              |
| Heat Wave                     | 4 | 3 | 12 | Whole Corporation                                    |                                              |
| Rail/Road/Air Accidents       | 4 | 2 | 10 | Rail network distribution places                     |                                              |
| Earthquake                    | 3 | 2 | 16 | Whole Corporation                                    | More likely are the old buildings            |
| Terrorism<br>Cyber<br>Robbery | 2 | 5 | 15 | Whole Corporation                                    |                                              |
| Boat Sinking                  | 2 | 1 | 2  | Major areas with water bodies such as pond and lake. |                                              |
| Building Collapse             | 1 | 2 | 2  | Densely Populated Old City Areas                     | Population in Low lying areas                |
| Dam Failure                   | 2 | 1 | 1  | AjwaSarovar Dam failure and Narmada Dam Failure      |                                              |



|                                    |   |   |   |                                                                                                    |  |
|------------------------------------|---|---|---|----------------------------------------------------------------------------------------------------|--|
| Failure of Critical Infrastructure | 2 | 1 | 2 | The hydrocarbon cross-country pipelines and gas pipelines running through Vadodara may be affected |  |
|------------------------------------|---|---|---|----------------------------------------------------------------------------------------------------|--|

## **2.3 Multi-Hazard Profile of Vadodara**

Vadodara city is prone to multi hazards and experienced & witnessed too on several occasions in the past. Past few decades Vadodara city faces number of hazards due to which normal lifestyle has been disturbed during that time. Natural Environment / Atmosphere get affected due to certain kind of chemical hazards mainly of industrial areas and its surroundings where the drinking water and the water used for farming get contaminated.

Vadodara city experienced the effects of cyclones in 1998 due to which most of the area has been affected, mainly temporary establishments like slums, low lying areas, tree uprooting, etc. which hindered routine life.

Because of the devastating earthquake of the year 2001, panic conditions have been seen throughout the city. Majorly the residents of the high-rise buildings have experienced the jolt of the quake, minor cracks have been noticed in buildings and other structural establishments.

The city faces the impact of major floods once every three-year time. Majorly the city was severely affected by the floods of 1978, 1994, 2005, 2006, 2013, 2014, 2019, 2024; almost the whole Vadodara district was affected due to these hazards. Due to road and rail accidents, major life losses have been observed in most of the urban part of the district from where the National high ways / State high ways / Express way and Railway lines passes through.

### **2.3.1 Multi-Hazard Profile of Vadodara (Based on past 10 years' history of events):**

| Sr.No | List of Hazards     | Areas under risk                |
|-------|---------------------|---------------------------------|
| 01    | Flood               | Majority of all municipal wards |
| 02    | Cyclone (Partially) | Majority of all municipal wards |
| 03    | Earthquake          | Majority of all municipal wards |
| 04    | Drought             | Not Applicable                  |
| 05    | Industrial/Chemical | Majority of all municipal wards |
| 06    | Tsunami             | Not Applicable                  |
| 07    | Fire Incident       | Majority of all municipal wards |
| 08    | Heat waves          | Majority of all municipal wards |

## **2.4 Hazard Identification and Risk Assessment (HIRA)**

### ***Cyclone***

There are possibilities of strong winds before monsoon, majorly in the river prone areas and city areas as well. As per the Disaster Calendar, the months of May to November are for advance preparation against cyclone. The main reason behind the loss to the properties is the loss due to weak construction (especially weak& connected roofs or ceilings).

### ***Flood***

Vadodara city has many low-lying areas, with Vishwamitri River passing through its centre. Rainwater drains to this river from the upstream areas as well as the city thus increasing the water levels. Also, when AjwaSarovar surpasses its level it starts emptying excess water in the river, which carries it to the downstream areas in the city. Both low lying areas, congested areas and poorly drained areas become waterlogged in the city. The list of waterlogged areas/flooded areas during the previous year are given in table.

## **Earthquake**

Vadodara district falls under seismic zone-3; the District is located over a fault line so it may possible that the magnitude of the earthquake can be of 7 on the Richter scale. Thus, there is high possibility of failure of various infrastructures and chances of risk of loss of live, properties too in certain highly populated areas of the city. Mostly the high rise buildings and constructions which are not made as per the earthquake resistant technology in the urban area, old / defective constructed buildings, huts with the mud walls etc. has the most danger of earthquakes. Certain areas which have less open space in surroundings probably are more affected at the time of earthquake.

Population / Density wise area / residents details can be drawn from the City Disaster Management Plan / Ward Disaster Management Plan of VMC in case of city area, from Taluka Disaster Management Plan / City Disaster Management Plan of Municipalities for urban and rural areas of the district.

### **2.5 Disaster planning Risk Reduction:**

Disaster Planning implies securing administrative arrangements involving unity of command, span of control, line and staff co-ordination, delegation etc. which involve providing the administrative arrangements to prevent small scale, frequently occurring Disasters, which keep disrupting growth and set back development by a number of years.

- Forecasting, forewarning of disaster threat and providing the institutional and organizational set up and logistic personnel, inventory, finances etc. to achieve desired level of preparedness.
- Mobilizations of resources from internal and external sources.
- Taking organizational and administrative steps, including disaster action plans, regular and updating of plans and project securing institutional where withal to implement it, providing horizontal and vertical co-ordination through a network of official and non-official agencies

involved like govt. departments, civil defense military and paramilitary organizational running through the central, state and filed levels.

- Generating capabilities for prompt and rapid rescue, relief and rehabilitation work on the other.
- Proper planning and medical assistance and health cover would be a critical requirement.
- Providing for other miscellaneous needs like stocking and distribution food, medicine, shelter, clothing, evacuation, transportation and long term resettlement and rehabilitation of affected communities

## **2.6 Capacity Analysis (Vadodara District)**

### **Traditional Coping Capacity:**

It is important to identify and recognize the traditional coping capacity of the community to enable them to enhance their capacity to withstand disasters.

| <b>Hazard</b>               | <b>Early Warning</b>                          | <b>Preparedness</b>                               | <b>Early Response</b>                               |
|-----------------------------|-----------------------------------------------|---------------------------------------------------|-----------------------------------------------------|
| Flood                       | Monitoring of water courses through community | Identified high elevation places and rescue teams | Evacuation, search and rescue and first aid support |
| Cyclone                     | Information through fisher folks              | Evacuate to safe place                            | Search and rescue and first aid support             |
| Earthquake                  | -                                             | Identification of safe places                     | Search and rescue and first aid support             |
| Drought                     | Own assessment mechanism                      | Fodder storage, food storage at individual level  |                                                     |
|                             |                                               |                                                   |                                                     |
| Industrial/ Chemical Hazard | Local Administration                          | OCR, DISH and EOC                                 | Local response Teams                                |
| Tsunami                     | -                                             | Evacuate to safe place                            | Search and rescue and first aid support             |

# **CHAPTER 3**

## **PREVENTION, MITIGATION**

### **AND**

## **PREPARDNESS**

**CHAPTER 03: PREVENTION, MITIGATION AND PREPARDNESS**

### **3.1 Disaster Preparedness:**

The Idea of protective city planning suggests decentralization and isolation of vulnerable facilities from the rest of the city. The following are the typical ingredients indicate the broad scope of an urban risk reduction programme.

- The preliminary process includes hazard mapping, vulnerability assessment, resources identification and loss estimation
- Training key officials through job training, mentor training and workshops.
- Development of City disaster management plan as a part of District as well as state DM Plan and should have proper DM Information system module.
- Protecting lifeline resources such as key infrastructure, media resources book, schools, shelter places, communication network, key economic asset etc.
- Developing and Implementing disaster mitigation measures is a demanding task in developing nations because such measures are relatively high investments inputs such as flood response and mitigation system, early warning system etc.
- Organizing community vulnerability reduction programmers to aware and prepare measures through public education system like radio, newspaper and awareness.

### **3.1.1 SEOC-DEOC-TEOC and Other Control Rooms**

| <b>Sr. No.</b> | <b>EOCs/ Control rooms</b>                                                                                                      | <b>Contact Numbers</b>                                                                          |
|----------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1              | State EOC                                                                                                                       | <u>079</u> 23251900 23251914, 23251916,<br>23251906,<br>23251912 (F), 23251916 (F)              |
| 2              | Relief Commissioner                                                                                                             | <u>079</u> - 23251509, 26301728 (R)                                                             |
| 3              | CEO-GSDMA                                                                                                                       | <u>079</u> - 23259275(F) 23259276                                                               |
| 4.             | Director of Relief                                                                                                              | <u>079</u> -23251611, 23251612                                                                  |
| 5              | Addl. CEO, GSDMA                                                                                                                | 23259451, 23259302 (F)                                                                          |
| 6              | Vadodara District EOC                                                                                                           | 0265-2427592, 0265-1077                                                                         |
|                | <b>TASK FORCE Operation Room</b>                                                                                                |                                                                                                 |
| 7              | Warning and Communications<br>(DEOC)                                                                                            | 0265-2427592<br>1077                                                                            |
| 8              | Law & Order<br>(CP)<br><br>(DSP)                                                                                                | 100<br>0265-2431515<br>99784 06290<br>0265-2412255<br>99784 06094                               |
| 9              | Search & Rescue<br>(Civil Defence)<br>(Chief fire Officer)<br><br>For Whole District with support of DSP and<br>Liaison officer | 0265-2431410 (CD)<br>98796 15036 (CFO)<br>0265-2420881 (CFO)<br>0265-2420882 (CFO)<br>101 (CFO) |

|    |                                                            |                                                                               |
|----|------------------------------------------------------------|-------------------------------------------------------------------------------|
|    |                                                            | 0265-2427592 (DEOC)<br><br>1077 (DEOC)<br><br>0265-2412255<br><br>99784 06094 |
| 10 | Public Works<br>(Ex. Eng, R&B)                             | 6554306 (D) , 6554308 ( C )<br><br>98792 75036 (D)<br><br>98792 75036 ( C )   |
| 11 | Shelter<br>(Dist. Pri. Edu. Officer)                       | 0265-2436411<br><br>99099 87576                                               |
| 12 | Water Supply<br>(Ex. Eng. GWSSB)                           | 0265-2411905<br><br>99784 06614/ 16                                           |
| 13 | Food & Relief supplies<br>(District Supply Officer)        | 0265-2416190 , 2433201<br><br>75670 22247                                     |
| 14 | Public Health & Sanitation<br>(CDHO)                       | 0265-2432383<br><br>8980039102                                                |
| 15 | Power<br>(Supt. Engr. GEB)                                 | 0265-2436121-33, 2416270<br><br>99252 08224                                   |
| 16 | Logistics<br>(DDO)                                         | 0265-2432027<br><br>99784 06249                                               |
| 17 | Animal Health & Welfare<br>(Asst. Director, A&H)           | 0265-2426949<br><br>9712668399                                                |
| 18 | Damage assessment / Survey<br>(Dy.DDO Panchayat & Revenue) | 0265-2431037,2431770<br><br>7567017954, 7567017977                            |



|    |                                                                      |                                                            |
|----|----------------------------------------------------------------------|------------------------------------------------------------|
| 19 | Media/public Information<br>(Sr.Sub Editor - Info)                   | 0265-2458760 ,2423358<br>9426333748                        |
| 20 | Planning and coordination<br>(Collector)                             | 0265-2433000,<br>99784 06224                               |
| 21 | Finance/ Administration/ protocol<br>(Resident Additional Collector) | 0265-2419700<br>99784 05196                                |
| 22 | Vadodara [City]                                                      | [0265] 2421095, [0265] 2418145                             |
| 23 | Vadodara [Rural]                                                     | [0265]2420154, [0265] 2422168                              |
| 24 | Padra                                                                | [02662] 222590                                             |
| 25 | Savli                                                                | [02667] 222045                                             |
| 26 | Karjan                                                               | [02666] 232046                                             |
| 27 | Dabhoi                                                               | [02663] 254315                                             |
| 28 | Waghodia                                                             | [02668] 262229                                             |
| 29 | Shinor                                                               | [02666] 264272                                             |
| 30 | Offsite Control Room                                                 | 2230342,2232327,2230556<br>6696471, 9998953963, 9979853450 |
| 31 | PCR - City                                                           | 100<br>2241430, 2431414,2415111                            |
| 32 | PCR - R                                                              | 2459777, 2412255                                           |
| 33 | Fire brigade and VMSS CR                                             | 101<br>2413753/54,2413635,2420881<br>2413436/39            |
| 34 | Telephones                                                           | 198,2422000<br>2433333,2467540                             |

|    |                              |                                                       |
|----|------------------------------|-------------------------------------------------------|
| 35 | Railways CR<br>DRM           | 2638377,2632600, 2638081<br>9724091000, 9033534339    |
| 36 | SSG Hospital                 | 2459641,2424848                                       |
| 37 | Jamanabai Hospital           | 2517400,8238012039<br>2517915,2517916,2517919,2517920 |
| 38 | IMD (Harni)<br>Nodal Officer | 2482228<br>9426749506                                 |
| 39 | VIC control room             | 2415376, 2431291, 9978405572                          |
| 40 | Forest Department            | 2431128, 99782 33747                                  |
| 41 | MGVCL                        | 2290572-73, 2416270, 99252 08224,<br>9825407971       |

## **3.2 List of Action Plan**

### **3.2.1. Flood Response plan**

The flood forecasting system for Vishwamitri Basin is being looked after by the Superintending Engineer, Vadodara Irrigation Circle, and Vadodara. Various Wireless Stations are established at the location upstream of Vadodara from where gauge and rainfall data and spillway discharges from various tanks are obtained by him. The gauge and rainfall data are being communicated to him through Wireless Stations.

The flood forecasting and flood warning arrangements for following water supply projects under VMC will be looked after by Municipal Commissioner, Vadodara. He shall directly collect weather bulletin. H.R.W. from Indian Meteorological Department, Ahmedabad or Revenue Control Room of the concerned districts and shall formulate the flood forecast and convey to the Concerned Collector regarding the area likely to be affected for alerting and evacuation of the people as warranted by flood. Simultaneously, they convey the flood forecast and action taken by them to the Flood Control Cell (Irrigation) nearest to them.

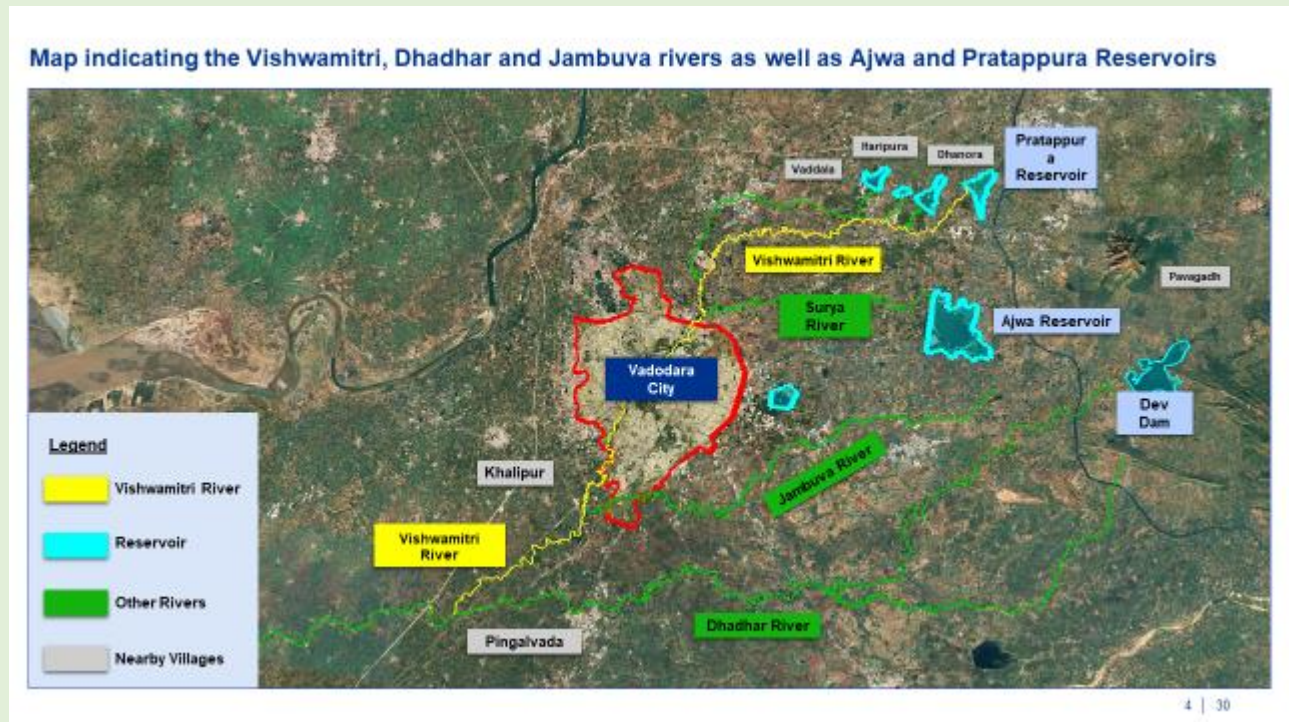
- Ajwa Water scheme: Municipal Commissioner, VMC, Vadodara (In charge)

| <b>Name of the officer with Telephone Nos.</b>                                                                     | <b>Observation to be made by officer</b>                                                                                                                     | <b>Officer to whom the messages to be sent</b>                                                                                 |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| (A) Officer in Charge<br>Dhanora Wireless Station under Executive Engineer, Vadodara Irrigation Division, Vadodara | 1. Messages about rainfall gauge levels, outflow of Haripura, Vadodara and Dhanora and M.I. tanks to be conveyed to the officer at Sr. No. (A) in Col. No.3. | a. Deputy Executive Engineer, Goma Project Sub – Division, Halo.<br>b. Officer in charge of Ajwa Station under V.M.C. Vadodara |

|                                                                                                                     |                                                                                                                                                                                      |                                                                      |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| (B) Deputy Executive Engineer , Project Sub – Division, Halol                                                       | 2. Messages received from Dhanora to be conveyed to the Officers at Sr.No. (b) in Col. No.3.                                                                                         | c. Chief Engineer (Fire), Central Wireless Station, V.M.M. Vadodara. |
| (C) Officer in Charge of Bhaniara & Pilol Wireless Stations under Executive Engineer, Irrigation Division, Vadodara | 3. Messages about rainfall, gauge levels, and velocity of River Vadodara channel and discharge data to be conveyed to the Officer at Sr. No. (b) in Col. No.3 Corporation, Vadodara. | d. Executive Engineer, Vadodara Irrigation Vadodara, Vadodara.       |
| (D) Officer in Charge of Ghansarav Wireless station under Executive Engineer, Vadodara Irrigation Division.         | 4. Messages about rainfall gauge levels, outflow of Ghansarav Tank to be conveyed to the officer at Sr.No.(b) in Column No.3                                                         |                                                                      |
| (E) Officer In Charge of Ajwa Station under V.M.C. Vadodara                                                         | 5. Messages received vide (1)to (4) about rainfall and water level of Ajwa and Pratappura to be                                                                                      |                                                                      |
| (F) Chief Officer(Fire) Central Wireless Station.M.C. Vadodara                                                      | 6. Messages received from Ajwa Wireless Station as per (5) above, to be conveyed to the Officer at Sr.No. (d) and (e) in Col.No.3.                                                   |                                                                      |

The City Engineer, VMC, Vadodara, shall also give messages about the gauge levels at City Bridge and also rainfall observed at the M.S. University Observatory, Sayaji Gunj, and Vadodara. Whenever the rainfall recorded at the observatory over the previous 24 hours, exceeds 50 mm, the hourly rainfall shall also be obtained by the City Engineer and transmitted together with gauges at City Bridge to the

Flood Cell of the Vadodara Irrigation Circle, Vadodara. When the water level at the City Bridge is likely to cross the danger mark i.e. various signal stages as given vide Table 2 & 3. The message shall immediately be conveyed to the Flood Control Cell of the Collector, Vadodara for taking necessary measures by the City Engineer, Vadodara Municipal Corporation



### Vishwamitri Rejuvenation and Desilting

- River length in the city: 24.7 km, outside the city: 25 km
- Soil extraction done:- 18.85 Lakh cubic meter
- Start date: 12-03-2025, Completion Date 15-06-2025 (100 days)
- More than 250 nos. Of machinery work together in 4 parts of the River.
- During the monsoon 2025, due to heavy rainfall in the upper reaches of Ajwa and Pratappura lakes as well as in the city area, the gates of Ajwa and Pratappura lakes were kept open for more than 24 hours, due to which water inflow was observed in the Vishwamitri river.
- Correspondingly, there was a flow of approximately 500 cumec (17657 cusecs) at Kalaghoda, out of which more than 300 cumec (10170 cusecs) were released from Ajwa and Pratappura lakes together. Correspondingly, the river level at Kalaghoda bridge was recorded as 21.55 feet.

- Before the Vishwamitri clearing and resectioning work, the river level for the same discharge was about 29 feet. (As per old records). Thus, overall, the **river level has come down by 7-8 feet due to the Vishwamitri flood control work.**

## River Bank Stabilization:

### Coir :

- It stabilizes soil to prevent erosion.
- Basking place for aquatic life
- Maintain green cover
- Estimated quantity: 135000 Sq.mt
- Work done Quantity: 135000 Sq.mt

### Real benefits of all the works completed by VMC before Monsoon 2025

| Year           | Total Rainfall of the season |                                        | Rainfall Percentage with respect to last 10 years Avg. Rainfall |
|----------------|------------------------------|----------------------------------------|-----------------------------------------------------------------|
|                | City                         | Catchment of Ajwa & Pratappura Sarovar |                                                                 |
| <b>Average</b> | 893.00 mm                    | 909.00 mm                              | —                                                               |
| <b>2024</b>    | 1708.00 mm                   | 1796.00 mm                             | 200 %                                                           |
| <b>2025</b>    | 1020.80 mm                   | 1369.00 mm                             | 150 %                                                           |

- At **Dena lake 25 Cr. Litre (250 ML) Capacity New Lake** Created that would act as a buffer lake at Surya River.
- At **Pratappura Lake 116.4 Cr. Litre (1164 ML) Capacity increased** that would helps to create more buffer stock for flood absorption and also helps to preserve more water for city water supply demand.
- At **Ajwa Lake 48 Cr. Litre (480 ML) Capacity increased** that would helps to create more buffer stock for flood absorption and also helps to preserve more water for city water supply demand.

17

- Removal of 2.5 lakh cubic meters Sediments
- Area: 50,000 square meters is to be deepened by 5 Meters
- Work Started on: 24-02-2025



- Progress : 2.50 lakh cubic meters (100% completed)
- 25 Cr. Litre Capacity New Lake Created

Approximately 3 Hitachi excavators and 20 dumpers were being used in this operation

- Excavation of 15 Lakh Cubic meters of soil was targeted.
- ### Dredging of Ajiwa Lake
- An area of 5,00,000 square meters is scheduled to be deepened by 1.5 meters
  - The plan is to gradually increase the storage capacity of Ajiwa Lake by 1.5 billion liters.
  - Work Start Date: 04-03-2025
  - Progress as of 19-06-2025: 4.88 lakh cubic meters (33% completed)
  - 4.8 Cr. Litre Capacity increased in Ajiwa Lake area helps to create more buffer stock for flood absorption and also helps to preserve more water for city water supply demand
  - Remaining Work will Restart after monsoon season
  - Approximately 10 Hitachi excavators, 15 JCBs, and 75 dumpers are being used in this operation at their own cost.



After work Lake Formation pic D:-05/09/2025  
26/30

Kalghoda, Vadodara, following discharge (floods) will be obtained.

| Sr. No. | Sub basin            | Peak Flood value at sub basin in m <sup>3</sup> /s | Time lag between GD site to Kalaghoda in hrs. min. | Distance from GD site to Kalaghoda in km. | Peak discharge at Kalaghoda in m <sup>3</sup> /s |
|---------|----------------------|----------------------------------------------------|----------------------------------------------------|-------------------------------------------|--------------------------------------------------|
| 1       | Pilol                | 2182.59                                            | 4 hrs 40 min                                       | 12.7                                      | 1032.93                                          |
| 2       | Bhaniyara            | 1255.66                                            | 2 hrs 22 min.                                      | 42.83                                     | 437.07                                           |
| 3       | Vadodara (Kalaghoda) | 2061.05                                            | 1 hrs 40 min.                                      | 8                                         | 1209.81                                          |

From the above it can be seen that floods at Kalghoda (ie flood developed in free catchment area of Vadodara city) is more critical as it reaches with in 1 hr 40 minutes' time. If all these floods are routed with time lag at Kalaghoda, as per NIH computation the peak value will be 2198.26 m<sup>3</sup>/s. for 1 in 100-year return period. As per CDO Gandhinagar study 1 in 100 year return period flood is computed as 2317 m<sup>3</sup>/s

### **3.2.3 Pre –Monsoon Work done:**



- Pre-Monsoon meetings to be conducted with chaired of Municipal Commissioner Vadodara with presence of all the departments to have a discussion on Monsoon work done and if flood situation arise.
- Work completion of reinstatement of potholes and trenches taken by department and by various utility services. Cleaning of storm water entrances, storm water drainage / nallhas and other water bodies in the wards.
- Command and control Centre which will be working major flood control cell should have adequate generator capacity and also in major departments and all the ward offices.
- Identification of blockage of roads, drainage system and paver blocks as well as defaults in roads of lower line areas in the city and to check whether engineering structure has been damaged (Partially/ fully) should have more concerned before monsoon.
- To check on Pruning of dangerous tree branches in city areas and clearances bushes near the area of Vishwamitri so those visibilities of crocodiles should be there and no one gets hurt, which are majorly found near the river banks.
- Identification of Shelter homes/ temporary shelters and also rehabilitation Centre for flood conditions.
- Demolition of dangerous structure must have done prior to heavy rain fall and flood condition.
- To prepare the stock of necessary health care elements and check on medicine availability in all the UPHCs and Govt. Hospitals.
- To check the emergency vehicle and equipment should well functioned and boat must run in proper condition.

### **3.2.4 Early Warning & Communication:**

#### **GENERAL TERMINOLOGY USED IN WEATHER BULLETINS**

##### **(A) Intensity of Rainfall Terminology Used**

1. 0.1.mm to 2.4 mm (24 hrs) ----- Very light rain
2. 2.5 mm to 7.5 mm ----- Light rain.
3. 7.6 mm to 34.9 mm ----- Light to Moderate rain
4. 35.0 mm to 64.9 mm ----- Moderate rain
5. 65.0 mm to 124.9mm ----- Heavy rain
6. Exceeding 125 mm. ----- Very Heavy rain.

#### **(A) Special distribution of weather phenomenon**

##### **Percentage Area Covered Terminology Used**

1. 1 to 25 ----- Isolated
2. 26 to 50----- Few Places
3. 51 to 75 -----Many Places
4. 76 to 100 -----At most Places

#### **(C) Emergency Situation**

1. When water level is rising above the danger of H.F.L
2. When intensity of rainfall is above 65 mm/hr
3. When breaches are anticipated and which may cause disaster
4. When water levels are rising abruptly and which may cause disaster

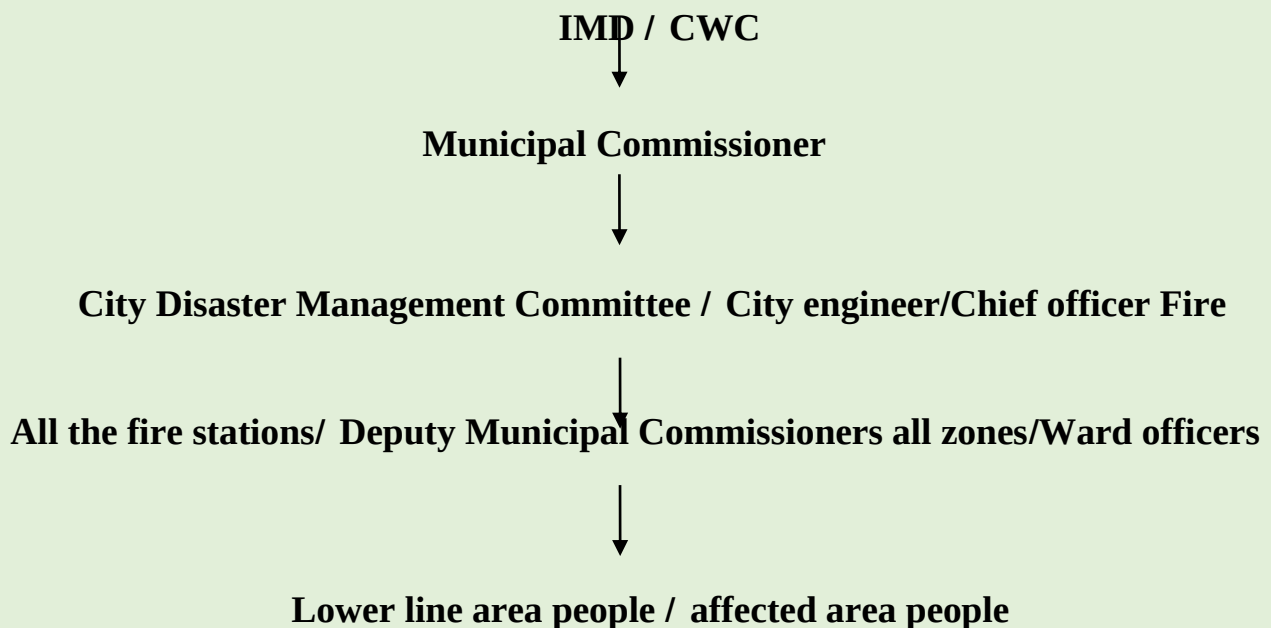
#### **(D) Evacuation**

- (1) White Signal- Alert condition
- (2) Blue Signal - Ready for Evacuation
- (3) Red Signal - Immediate Evacuation

As and when the warning come from Indian Metrological department (IMD), or from Irrigation department regarding heavy rainfall or water release the following channel has been intimated and appropriate message conveyed to the concerned department / official / control rooms / community members using telecommunication, wireless message, by fax or in written by DEOC at district level. where as in city area the route has been finalized for early warning, accordingly early warning task force leading by fire brigade personnel, spreads the message of alert in respective low line areas, in villages local methodologies of early warning has been used (by beating up of drums etc.) to communicate the message of alert to the affected population of the village.

The following channel has been intimated and appropriate message conveyed to the concerned.

### **3.2.5 Early Warning & Communication Chart:**



When early warning has been circulated the same department heads, focal officials and administrative heads will put their own DM plan in to the action and the response activities will be carried out accordingly.

### **3.2.6 Vishwamitri Basin affected Places**

| Sr. No. | Area Name  | Vadodara city/Vadodara Taluka Name        | Bridge level                                                               | Signal               |
|---------|------------|-------------------------------------------|----------------------------------------------------------------------------|----------------------|
| 1       | Sayajiganj | Parshurambhatto                           | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 2       |            | Near Bhimnath mahadev temple              | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 3       |            | 1.Camp fatehgunj harjanwas<br>ranchhod ji | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |

|   |      |                                                                                                                                    |                                                                                    |                              |
|---|------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------|
|   |      | 2. Moffusil Kamatipura,<br>Modikhana, Area Near Methodist<br>Church                                                                |                                                                                    |                              |
| 4 |      | 1.Chhani road sardar nagar,<br>sardarnagar, kans, lalpur, ramwadi<br>2.Pensionpura                      3.Akota<br><br>4.manenagar | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 1 | Wadi | Lowerline area of panigate                                                                                                         | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 2 |      | Mahemad talav area                                                                                                                 | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 3 |      | Marial wada malibas mandir                                                                                                         | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 4 |      | Gujarat Housing board behind<br>ranmukteswar barvi                                                                                 | 96.68mts. (29.34 ft.)                                                              | white<br><br>Blue            |

|   |  |                                                                               |                                                                                    |                              |
|---|--|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------|
|   |  |                                                                               | 98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.)                              | Red                          |
| 5 |  | Road beyond Yamuna Mill                                                       | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 6 |  | Hakim's Palace Nr. Sindwai Mata                                               | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 7 |  | Behind Godi & Navagam<br>Mandir                                               | 96.68ft(29.34 mts)<br><br>98.25 ft.( 29.95mts)<br><br>100.28 ft.(30.57 mts)        | white<br><br>Blue<br><br>Red |
| 8 |  | From Jawaha Society to<br>Simodwali Talawadi place<br>near Satyadev Chemicals | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 9 |  | Warasia new colony<br>surrounding society                                     | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)                                | white<br><br>Blue<br><br>Red |

|    |            |                                                   |                                                                            |                      |
|----|------------|---------------------------------------------------|----------------------------------------------------------------------------|----------------------|
|    |            |                                                   | 100.28 mts. (30.57 ft.)                                                    |                      |
| 10 |            | Mangleshwar area                                  | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 11 |            | Harai marg society area                           | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 1  |            | Behind navapura tank khanderao<br>Mahavir mohalla | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 2  | Babjjipura | Kumbharwado near SRP Mangal<br>park               | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 3  |            | Sindhwai road                                     | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |

|   |         |                                                                              |                                                                            |                      |
|---|---------|------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------|
| 4 |         | dandiabazar                                                                  | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 1 | raopura | North of binoba bhav<br>marg,tulsibais chal, bhavman chall,<br>ravari faliya | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 2 |         | Lowerline area of kasmahalla camp                                            | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 3 |         | North side of societies in kareibaug                                         | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 4 |         | Naya dharti area                                                             | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |



|   |                    |                                                             |                                                                                    |                              |
|---|--------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------|
| 5 |                    | Portion Nr. Ajabadi mill,<br>Taraknath. Mahadev             | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 6 |                    | Surrounding areas of Sarasia Tank<br>and new Societies area | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 1 | Vadodara<br>Taluka | Dumad                                                       | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 2 |                    | Ganpatpura                                                  | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 3 |                    | Harni                                                       | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 4 |                    | Sama                                                        | 96.68mts. (29.34 ft.)                                                              | white                        |

|   |  |            |                                                                                    |                              |
|---|--|------------|------------------------------------------------------------------------------------|------------------------------|
|   |  |            | 98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.)                              | Blue<br><br>Red              |
| 5 |  | Ambaliara  | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 6 |  | Sukalipura | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 7 |  | dena       | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 8 |  | virod      | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)<br><br>100.28 mts. (30.57 ft.) | white<br><br>Blue<br><br>Red |
| 9 |  | kotali     | 96.68mts. (29.34 ft.)<br><br>98.25 mts. (29.95 ft.)                                | white<br><br>Blue<br><br>Red |

|    |  |        |                                                                            |                      |
|----|--|--------|----------------------------------------------------------------------------|----------------------|
|    |  |        | 100.28 mts. (30.57 ft.)                                                    |                      |
| 10 |  | vemali | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 11 |  | chapad | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 12 |  | Kalali | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |
| 13 |  | Vadsar | 96.68mts. (29.34 ft.)<br>98.25 mts. (29.95 ft.)<br>100.28 mts. (30.57 ft.) | white<br>Blue<br>Red |

### 3.2.7 Flood Mitigation Plan

Proper maintenance of all the embankments as and where located and where applicable is extremely important as breaches in these can be disastrous and can cause even greater damage than the inundation

by the floods from rivers where no embankments are provided, very careful maintenance of the embankment is necessary during high waters. Frequent inspections and constant attendance by all concerned is essential particularly in case of new embankments or dangerous section of old embankments. The establishment required for proper upkeep and maintenance of an embankment will vary according to its importance as also the behavior and discharge of the river. The concerned field official, whenever such embankments come under their jurisdiction, shall exercise proper control and take necessary steps for their maintenance.

### **Patrolling:**

It should commence as soon as water comes against an embankment and should continue until water finally leaves the embankment. When the river is in floods, the embankment requires close and constant watching and unremitting supervision both by day and night by adequate trained staff.

### **Wave-Wash:**

During the bad storms erosive wave action takes place which sometimes erodes/washes the soil on slope of earth embankment resulting into wave-wash. Short grass and small thick bushes like pilchi; lai etc. growing on the embankment is good protection against erosion and wave-wash.

### **Leaks:**

Water coming out through the body of embankment in any form such as seepage through cracks or piping action may be termed as leak. Rodents and other borrowing animals make holes, cavities and tunnels through and under an embankment. These are a source of danger as very often these causes leaks and excessive seepage and even serious breaches during flood periods.

## Breaches: -

Failure of a section of earth embankment due to over-topping causes breach of section. Successive and heavy rains cause very often severe erosion of unprotected slopes and render the section unsafe. This may result in disastrous breaches. In case of such emergencies the top and sides of particularly weak and dangerous sections of freshly made up earth should be protected by materials like sand bags etc.

Materials required during monsoon period should be provided in ample quantity as experience shows them to be necessary. Particular care should be taken that there is an adequate quantity of the required materials distributed with carefully fore thought so as to be readily available everywhere, particularly at dangerous sites. The quantity of materials required depends on importance or dangerousness of the embankment line and the distances of the embankment from the nearest stations at which there can be purchased. Adequate provision should be made at the discretion of the City Engineer of VMC. The following scale of materials prescribed is an indication of the relative quantities of the different kinds of materials usually required during monsoon period.

### 1 Patrolling

|      |                 |                                                                                                                                   |
|------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------|
| i)   | Lamps Hurricane | 1 For every 2 Labours<br><br>1 For every Work Asst/Karkoon<br><br>1 For every A.E./A.A.E./Overseer And 20% of the Total for Spare |
| ii)  | Wicks           | 9 Nos. per Lamp                                                                                                                   |
| iii) | Globes          | 1 No. spare for each Lamp                                                                                                         |

|       |                                                                 |                                                                                                                                                                                               |
|-------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| iv)   | Burners And Caps                                                | Spare of 1/3 No. of Lamp                                                                                                                                                                      |
| v)    | Torches                                                         | 1 No. for Executive Engineer<br><br>1 No. for Dy. Executive Engineer<br><br>1 No. for every A.E./A.A.E./Overseer And 2 Nos. for Spare                                                         |
| vi)   | Cells                                                           | 1 Fills and Two Spare sets                                                                                                                                                                    |
| vii)  | Petromax Lamp                                                   | At dangerous places as necessary; each lamp with 2 spare Globes; 2 Nozzles, 2 Washers, 2 Wire Gauzes, 2 Needleless and 6 Mantles. (3/4th of the members should be 300 C.P. and 1/4th 200 C.P. |
| viii) | Fuel for Lighting Fire to be collected by labour establishment. |                                                                                                                                                                                               |
| ix)   | Kerosene & Oil                                                  | 1 Tin per hurricane Lanterns (Excluding Spare) and 2 Tins for Petromax lamp per season.                                                                                                       |
| x)    | Match Boxes                                                     | One Dozen per Lamp per season                                                                                                                                                                 |
| xi)   | Spirit                                                          | 1 Bottle per petromax lamp per season                                                                                                                                                         |
| xii)  | Funnels                                                         | ½ Dozen per Work Asst /Karkoon                                                                                                                                                                |
| xiii) | Oil Extractor/Caps                                              | ¼ Dozen per Work Asst/Karkoon                                                                                                                                                                 |
| xiv)  | Spirit Cane                                                     | 1 per Petromax                                                                                                                                                                                |

## 2 Wave-Wash: -

|     |                                                                                                                                                                                                                             |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i)  | Lat fascines or any other mattress made up of split bamboos or “pilchi” or any other locally available materials. Material for providing light longitudinal Groynes sewed with compactly woven pilchi or split bamboos etc. |
| ii) | Munj rope of lengths to be provided with fascines 11 Kg/Km.                                                                                                                                                                 |

## 3. Leaks:-

|      |            |    |                                                                                                                                |
|------|------------|----|--------------------------------------------------------------------------------------------------------------------------------|
| i)   | Gunny Bags | a) | Where High Flood Depth is less than 1.80 m and the embankment is generally safe then 65 Bags per Kilometer.                    |
|      |            | b) | Where High Flood Depth is greater than 1.80 m or the embankment is known to give trouble of leaks then 130 Bags per Kilometer. |
| ii)  | Stakes     |    | 65 to 130 Stakes per Kilometer                                                                                                 |
| iii) | Baskets    |    | 1 Basket of Toot per labour or                                                                                                 |
|      |            |    | 1 Basket of lai per labour                                                                                                     |
|      |            |    | And One Spare                                                                                                                  |
| iv)  | Sutli      |    | 450 gms. Per 100 Bags                                                                                                          |

|     |         |  |                                                                             |
|-----|---------|--|-----------------------------------------------------------------------------|
| v)  | Needles |  | ½ Dozen with each Work Assistant                                            |
| vi) | Sand    |  | Collection of 1.80 to 3.60 Cu.m. per every Kilometer for Dangerous Lengths. |

### Breaches:-

Provision for materials required should be made for one or more small breach length each 76 m long depending upon the embankment.

**Materials for protecting ends of one breach and constructing one 76 m long, 4 rows are as under:**

|      |                                       |                                                                                      |
|------|---------------------------------------|--------------------------------------------------------------------------------------|
| i)   | Big stakes or Sal Ballies             | Every 1.50 m apart with 100% spare                                                   |
| ii)  | Split<br>Sal<br>Ballies<br>or Bamboos | For Horizontal bracing of Vertical bulies –<br>3.0 m long each for the entire length |
| iii) | Split<br>Sal<br>Ballies<br>or Bamboos | For Cross bracing of Vertical ballies – 3.0 m long<br>One for each vertical ballies  |



|       |                                                                                   |                                                                                                   |
|-------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| iv)   | Mattresses of split bamboos or<br>“Pilchi” or other locally<br>Available Material | For sufficient Length                                                                             |
| v)    | Brushwood<br>of<br>local Material                                                 | For sufficient Length                                                                             |
| vi)   | Stakes                                                                            | 0.45 m centre long each row of frame                                                              |
| vii)  | Munj Rope                                                                         | Enough Quantity                                                                                   |
| viii) | Coir Rope                                                                         | Enough Quantity                                                                                   |
| ix)   | Gunny Bags                                                                        | 2500 Nos. For every A.E./A.A.E./Overseer                                                          |
| x)    | Sutli                                                                             | 450 grams. Per 100 Nos. Bags                                                                      |
| xi)   | Needles                                                                           | 1 No. per 100 Nos. Bags                                                                           |
| xii)  | Baskets                                                                           | 500 Nos. per Ordinary Sub Division, and 1000 Nos.<br>for Sub Divisions with Dangerous Embankments |

### **3.2.8 Public Health Measure:**

Flood causes actual physical destruction in addition to putting out of operation of such vital public health associated facility as water purification and sewage treatment plants and pipe lines. During and after floods serious problems of drinking water emerge because the wells and other sources are polluted. Sinking of hand pumps and tube wells will have to be arranged to prevent epidemics. Sufficient number

of pumps will have to be mobilized to dewater logged areas. Medical care and prevention of epidemic services have to be organized for serving all kinds of emergencies that arise during floods since floods occur constantly and without much warning.

### **3.2.9 Response:**

The response mechanism would be the same as describes with the general response mechanism chapter, here the focus will be on administrative officials and the affected areas/population.

All the concerned CDMC members along with the Liaison officers and response group members of districts and city were actively worked together for control of flood situation.

- As disaster declares the response managed and monitored through City command and control center to look after flood condition.
- Being a part of emergency team Vadodara fire and emergency services department to carried out the flood work done status while level of Vishwamitri rises up to its danger level.
- Municipal Commissioner, Deputy Municipal commissioner (Admin) and City engineer should kept provide technical as well as guidance for control of Flood by present at city command and control Centre.
- Deputy Municipal Commissioner (General) should be present at substations flood control cell and Assistant Commissioner Zone should assist during emergency condition.
- Deputy Municipal Commissioner (Admin) should appoint all those departmental officials who all are will work with District collector for the liaison process during urban flood condition.
- Majorly City Health officer should alert to deal any post traumatic flood victims as well as injured persons. Electrical Department executive should highly alert to remove street light fall situations.

### **Mode of working during Flood:**

- Deputy Municipal Commissioner (Admin) should ask following department to carry out flood rescue and relief operations for the affected people in the city.

- District Collector
- Commissioner of Police
- Commandant Home guard
- RTO
- GSRTC
- R & B Dept.

- For equipment required during rescue operation, Executive engineer (Road Project) should working on the status while present at central station of flood control cell and all the officials of class 2 and class should present at the same for managing such emergency.
- For relief measures Deputy Municipal Commissioner (Admin) and City engineer should priory brainstorming on the subject and ask concerned officials to look after on the same.
- Wireless system should be activated during the emergency flood situation and should be stationed at Ajwa Tower, Asoj, Paratap pura, City Command and Control centre Badmadibaug, Khanderao market (Central Flood control cell), Vehicle pool, Fire and emergency services control room, raika, dodka, poicha, fajalpur and harni water tank.
- Flood situation updation should be done in every hour by Central fire station to Municipal corporation officials as well as to state Govts.

**3.2.10 Post Emergency:** Focus will lie on Medical Treatment, Disease Control, Poison control, Reconstruction & Rehabilitation, Floodwater Removal, and Providing Relief—Clothing, Shelter, etc. to affected people, Damage Assessment, Funeral processes.

**Temporary Shelter:**

- For temporary shifting of affected persons, temporary shelters are used during the effect of floods.
- In city area, Vadodara Municipal Corporation has decided ward wise primary schools, Secondary/Higher secondary schools, Community hall, Colleges etc. as temporary shelter for flood affected persons and incorporated the same with their DM Plan which is used at the time of floods. Sasnadhikari is the focal person for temporary shelter for corporation area.
- Primary/Secondary/Higher secondary schools, Colleges, Community hall etc. of taluka and villages are used as temporary shelter and the focal officer for the same is DEO and DPEO.
- Arrangements will also have to be made in advance for the return of the evacuees to their houses, taking of preventive measures to ensure against epidemic; provision of financial and material assistance as admissible for reconstruction and supply of essential commodities during the period that the population is staying so as to enable them to stand again on its feet.
- Sufficient funds will have to be arranged for assisting the people in repairing of or re- building houses damaged during floods. Possibility of removing building/structures obstructing existing natural drainage lines should be seriously considered. In any case with immediate effect unplanned growth can be restricted so that no construction obstructing natural drainage or resulting in increased flood hazard is allowed.

In all the future buildings (Re-constructed after the floods) the following regulation may be stipulated:

- Plinth levels of all building should be kept higher and above the drainage/flood submersion lines in that area.
- In the areas liable to frequent floods, all the building should preferably be of double.

### **3.3 Heat Wave action plan**

The heat-wave action plan is intended to mobilize individuals and communities to help protect their neighbors, friends, relatives, and themselves against avoidable health problems during spells of very hot weather. Broadcast media and alerting agencies may also find this plan useful. Severe and extended heat-waves can also cause disruption to general, social and economic services. For this reason, Government agencies will have a critical role to play in preparing and responding to heat-waves at a local level, working closely with health and other related departments on long term strategic plan.

- **Establish Early Warning System and Inter-Agency Coordination** to alert residents on predicted high and extreme temperatures. Who will do what, when, and how is made clear to individuals and units of key departments, especially for health.
- **Capacity building / training programme** for health care professionals at local level to recognize and respond to heat-related illnesses, particularly during extreme heat events. These training programmes should focus on medical officers, paramedical staff and community health staff so that they can effectively prevent and manage heat-related medical issues to reduce mortality and morbidity.
- **Individuals, community groups, and the media** are also essential in fighting the effects of extreme heat. Individuals can take specific preventative steps to protect themselves, their families, and their communities from harmful heat waves including
  - Talking with their doctor or Health Centre about early signs of heat wave
  - Limiting heavy work during extreme heat
  - Drinking water
  - Staying out of the sun
  - Wearing light clothing

-Checking on neighbors

-Informing their fellow community members about how to keep cool and protect themselves from heat.

The media plays an essential awareness-building role by sharing news about health threats, and increases public protection by running ads and providing local resources information. While summer is defined as spanning March, April, and May, Gujarat's hottest temperatures can run from March through June, with temperatures generally peaking in May and warm days through November.

Across India, higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to climate change; thus the deadly extreme heat events already impacting Vadodara are expected to increase in intensity, length, and frequency in the coming decade.

- Public Awareness and community outreach Disseminating public awareness messages on how to protect against the extreme heat-wave through print, electronic and social media and Information, Education and Communication (IEC) materials such as pamphlets, posters and advertisements and Television Commercials (TVCs) on Do's and Don'ts and treatment measures for heat related illnesses.
- Collaboration with non-government and civil society: Collaboration with non- governmental organizations and civil society organizations to improve bus stands, building temporary shelters, wherever necessary, improved water delivery systems in public areas and other innovative measures to tackle Heat wave conditions.

| Heat Disorder | Symptoms | First Aid |
|---------------|----------|-----------|
|---------------|----------|-----------|

|                                     |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sunburn</b>                      | Skin redness and pain, possible swelling, blisters, fever, headaches.                                                                           | Take a shower, using soap, to remove oils that may block pores preventing the body from cooling naturally. If blisters occur, apply dry, sterile dressings and get Medical attention.                                                                                                                                                                                                     |
| <b>Heat Cramps</b>                  | Painful spasms usually in leg and abdominal muscles or extremities. Heavy sweating.                                                             | Move to cool or shaded place. Apply firm pressure on cramping muscles or gentle massage to relieve spasm.<br><br>Give sips of water. If nausea occurs, discontinue.                                                                                                                                                                                                                       |
| <b>Heat Exhaustion</b>              | Heavy sweating, weakness, skin cold, pale, headache and clammy. Weak pulse.<br><br>Normal temperature possible.<br><br>Fainting, vomiting.      | Clothing. Apply cool, wet cloth. Fan or move victim to air-conditioned place. Give sips of water slowly and If nausea occurs, discontinue. If vomiting occurs, seek immediate medical attention. Or call 108 and 102 for Ambulance                                                                                                                                                        |
| <b>Heat Stroke<br/>(Sun Stroke)</b> | High body temperature (106°F). Hot, dry skin.<br><br>Rapid, strong pulse.<br><br>Possible unconsciousness.<br><br>Victim will likely not sweat. | Heat stroke is a severe medical emergency. Call 108 and 102 for Ambulance for emergency medical Services or takes the victim to a hospital immediately.<br><br>Delay can be fatal. Move victim to a cooler environment. Try a cool bath or sponging to reduce body temperature. Use extreme caution.<br><br>Remove clothing. Use fans and/or air conditioners.<br><br>DO NOT GIVE FLUIDS. |

### **3.4 Tsunami action plan**

The possibility of the above stated disaster is very less with respect to Vadodara District, but if the effect of it is felt by the nearby district / state, will accordingly respond as per the State directions.

### **3.5. Chemical Disaster Action Plan**

The chemical disaster management procedure is outlined in the chemical accidents (Emergency, preparedness, planning and response) rules 1996. A layered structure to manage such disasters at central, state, district and local level is stipulated. Management groups are modified as below.

- Central Govt: National Level
- Chief Secretary of the state: State level
- District Collector: District and local level

1. Hazard Mapping: Accurate information of location, type and quantities of hazardous material being stored, used and produced should be known at district level.
2. Hazardous material Identification: This should be stored and handled as per laid down norms and should be divided into different categories with each having identification mark for packaging as well as transportation.
3. Inspection of Chemical plants and storage facility: This should be followed as per govt. guidelines under storage and moveable facility.
4. Monitoring of Toxic Waste Disposal: Waste disposal is the prime factor and must be followed by all waste disposal norms while passing through any populated area in proper authorised disposable vehicles.



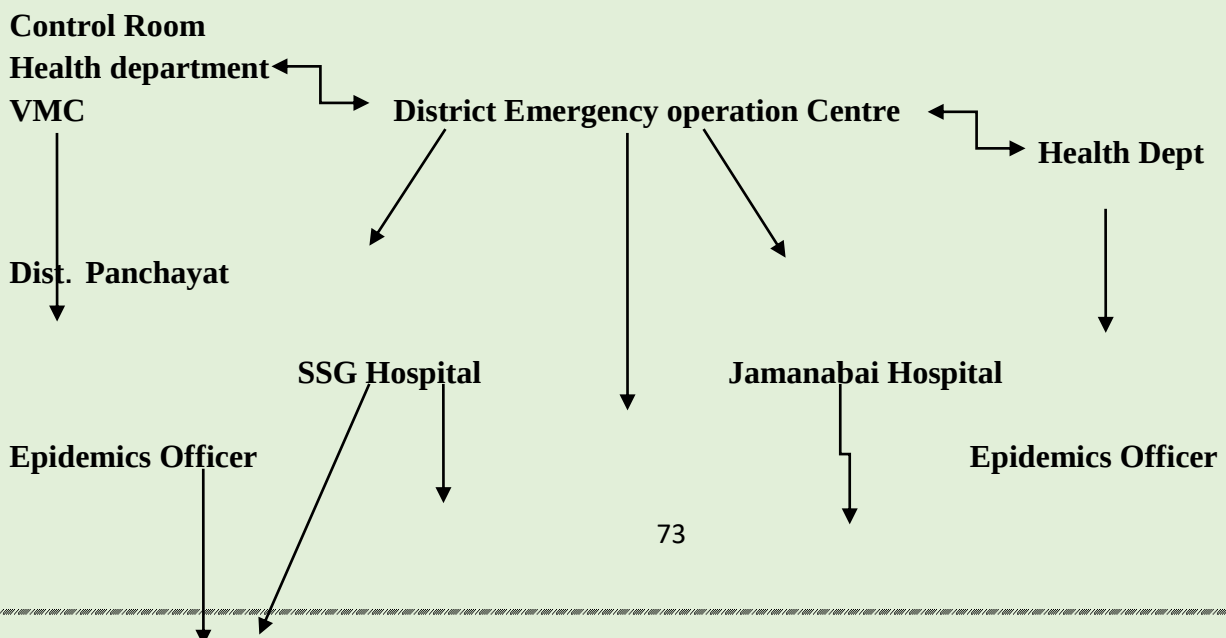
5. Monitoring pollution levels: Monitoring of pollution levels gives warning of toxicity in land, water and atmosphere which could also forewarn the authorities of any unusual and hazardous substances in the environment.

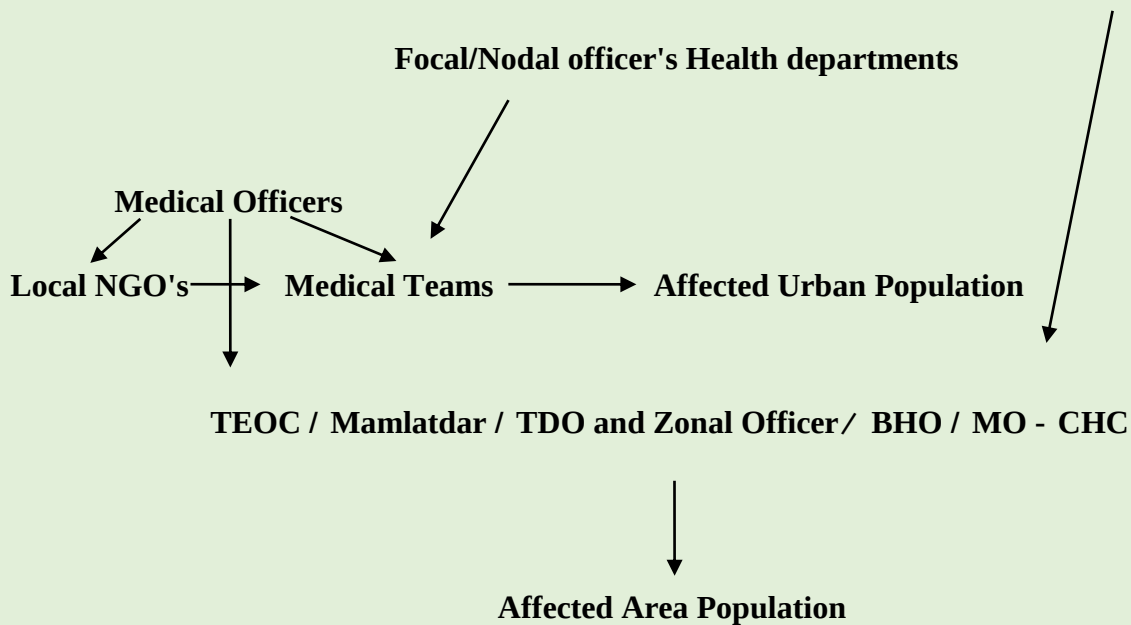
6. Preparation of Onsite and Offsite emergency management plan of each and every Industries especially MAH Units.

#### **Chemical disaster management plan includes:**

- Awareness among works and people likely to be affected.
- Procedure of warning
- Immediate action to be taken
- Training of the staffs and officials
- Plan for Casualties evacuations and medical aid.
- Fire fighting arrangements
- Command Control and communication system
- Mockdrill conductance and more practice
- List of nearby specialists, hospitals, fire fighting system, and organisations which could provide assistance.
- Reharsals of plans and awareness generation.

#### **3.5.1 Response Chart:**

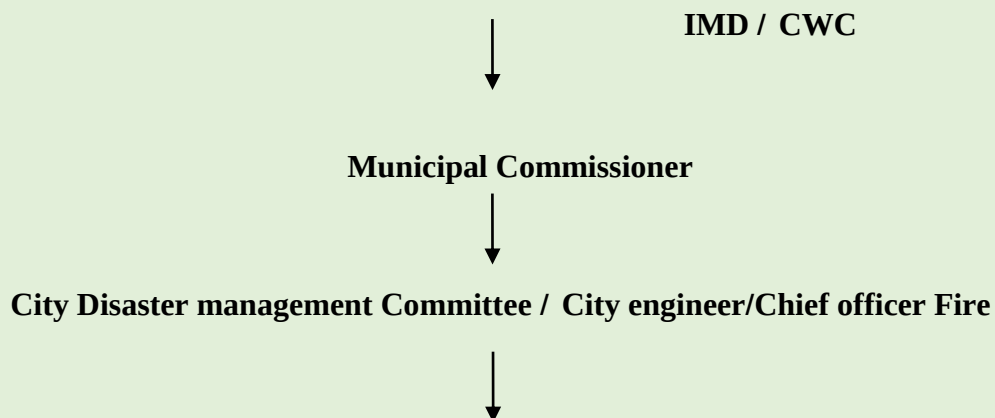




### **3.6. Cyclone action plan**

Vadodara District has no ocean but the district is nearby the Bay of Cambay and it is surrounded with two major rivers the river Mahi flows on Northwestern boundary of the district and river Narmada on the Southeastern boundary of the district; there are other rivers like Vishwamitry, Dhadhar and many other seasonal streams flows through the district, the villages and areas near these rivers can be affected at the time of cyclone.

Chain of Command during Cyclone:



**All the fire stations/ Deputy Municipal Commissioners all zones/Ward officers**



### **Other Departments and District Authorities**

- In city area, Vadodara Municipal Corporation has decided ward wise primary schools, Secondary/Higher secondary schools, Community hall, Colleges etc. as temporary shelter for flood affected persons and incorporated the same with their DM Plan which is used at the time of floods. Sasnadhikari is the focal person for temporary shelter for corporation area.
- Primary/Secondary/Higher secondary schools, Colleges, Community hall etc. of taluka and villages are used as temporary shelter and the focal officer for the same is DEO and DPEO.

### **3.7. Earthquake action plan**

Vadodara falls under zone-III according to the zoning map, that's why it can be possible that an earthquake between magnitudes of 4-5 can strike Vadodara. But as there is fault line going through the District, earthquake of magnitude up to 7 can also strike. And very high possibility of failure of various infrastructures and very high chances of risk of loss of live properties too in certain highly populated areas of the district.

The response mechanism would be the same as describes with the general response mechanism chapter, here the focus will be on well-populated areas in particular city areas and the District disaster response group.

- As disaster declares the response managed and monitored through DEOC.
- All concerned DDMC members with Liaison officers and response group members are intimated to respond the situation as described in the below chart.

- As per the impact of disaster it will manage through DEOC / TEOC and if needed support of State or Central departments will be requested to deal with the situation.
- Departmental DM Plan of all concerned departments, TDMP, CDMP and other DM Plan will be referred as an when it is required to respond in case of Earth quake.
- Database of SDRN and IDRN (Manually and Electronic) will be referred for flood response.

| <b>ZONES</b>      | <b>MAGNITUDE</b>                               |
|-------------------|------------------------------------------------|
| <b>Zone - V</b>   | <b>Greater than 7</b>                          |
| <b>Zone - IV</b>  | <b>Greater than 5, Less than or equal to 7</b> |
| <b>Zone - III</b> | <b>Greater than 4, Less than or equal to 5</b> |
| <b>Zone - II</b>  | <b>Greater than 3, Less than or equal to 4</b> |
| <b>Zone - I</b>   | <b>Less than 3</b>                             |

### **3.8. Biological Disaster Action plan**

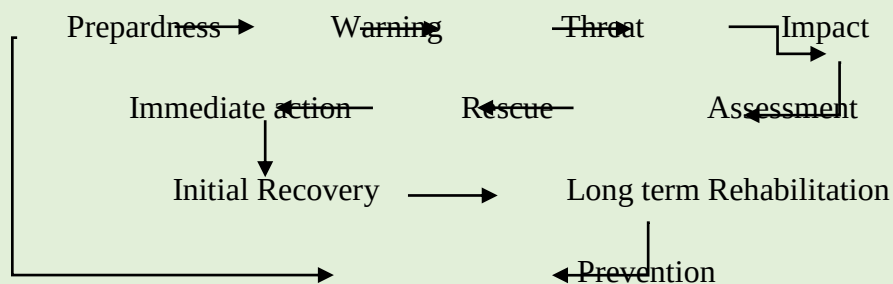
Biological Disaster has coexisted with human society since primitive days as it's a part of disaster which causes sickness and fatalities in human being, when they contact with biological hazard. Recently the pandemic Covid-19 outbreak has spread all over the world which resultant maximum human loss in many countries.

## Differences between Epidemic, Pandemic, Endemic and Outbreak:

- **Epidemic:** It is a disease that affects a large number of people within a community, population, or region.
- **Pandemic:** It is an epidemic that's spread over multiple countries or continents.
- **Endemic:** It is something that belongs to a particular people or country.
- **Outbreak:** It is a greater-than-anticipated increase in the number of endemic cases. It can also be a single case in a new area. If it's not quickly controlled, an outbreak can become an epidemic

## Below aspects are to help in biological disaster management.

- Evaluation of public health impact on Disaster
- Natural History of disaster and timely monitoring.
- Analytic study of risk factors for adverse health effects.
- Clinical Investigation and effectiveness of particular approaches to diagnosis and treatment.
- Population based studies of long term effect on the relief aid on restoring public health to pre disaster conditions.



Pre Disaster depends upon the Hazard and Vulnerability analysis which involves the data pertaining to the nature eg: sources, incidence, distribution and consequences of past disasters as to make prediction about their probable effects in future and also to prepare for the safety of vulnerable people. During

Disaster, an epidemiological study helps in defining the affected population, identifying and anticipating needs and potential secondary risk to health.

- Control room should be activated as per authorized declaration interms of District level, health officials and ambulance system.
- Establishing a surveillane system
- Conducting hazard and vulnerability analysis.
- District as well as Corporation authority to jointly deal the disaster by collecting each and every base data from all possible soures.
- Shelter places to be different from normal shelter places being utilizing for various other disasters.
- Health check up should be maximizing and timely monitored should be done by health officials.
- Awareness campaign should be done at local level to make them aware and understand.

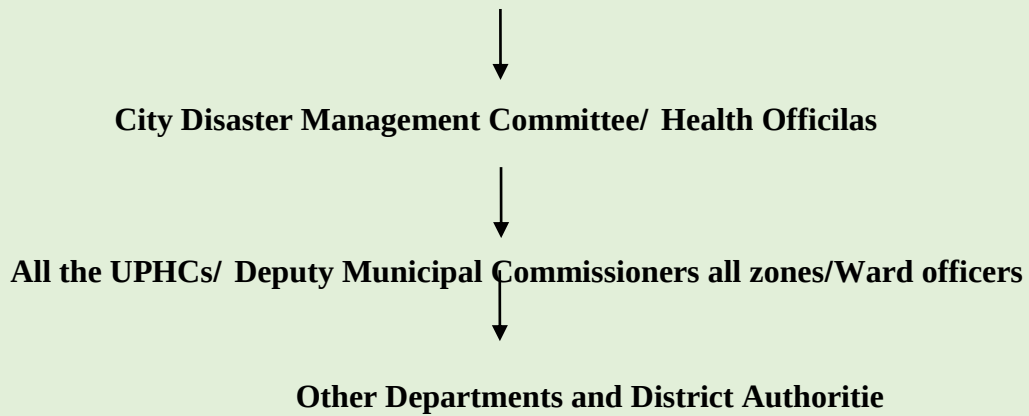
### **3.8.1 Response plan:**

As biological disaster can be worst case scenario interms to maximum detah in humans as well as animals. Both District as well as corporation health officials to take care of their own set of epidemics team and task force to respond in such kind of disaster, for sampling of the water, grains, food sample etc done by Laboratory of Food & Drug, Near M.S. University, Vishwamitri Bridge, Vadodara. All CHC, PHC and UPHC should be worked in such a manner to avoid any neglegance during such period.

**Information and Broad casting, Outer sources**



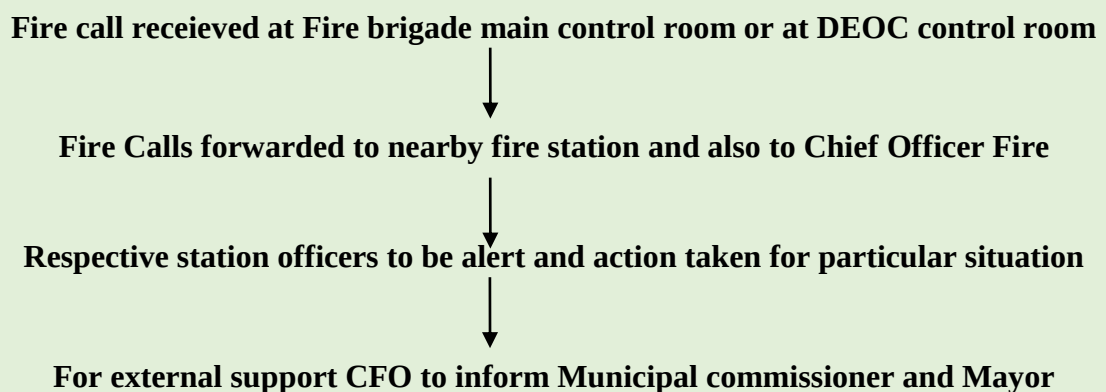
**Municipal Commissioner**



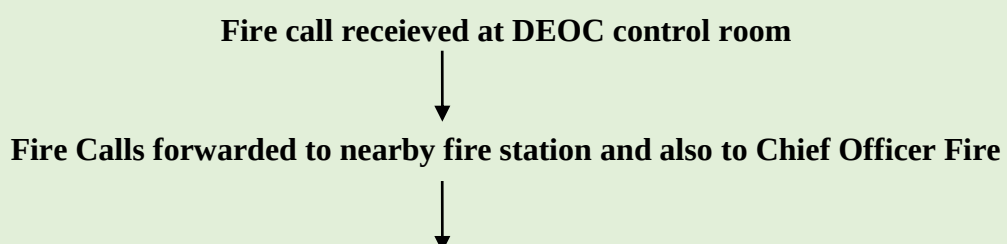
### **3.9 Fire Management Plan**

Vadodara city is surrounded by industrial sectors, high rise buildings, multi and superspeciality hospitals and educational institutions. Fire Hazard is mainly occurred due to electrical short circuit or mainly any chemical leakage or spillage in industrial sectors. With a team of 250 plus members Vadodara fire and emeregency services works efficienently for fire control and rescue operation. Vadodara Fire brigade is having 7 fire stations and one ERC (GSDMA) for the whole district.

#### **Chain of command uner VMC/ Juridiction limit:**



#### **Chain of command outer VMC / Juridiction limit:**



**Respective station officers to be alert and action to be taken with help of local taluka officials  
(Chief Officers of taluka and local fire team)**

### **3.10 Roles and Responsibilities of officials and departments:**

#### **3.10.1 MUNICIPAL COMMISSIONER**

On receiving the information from the Collector, the Vadodara Municipal Corporation will help by planning like:

- To receive casualties during an emergency in the corporation run Hospitals.
- To mobilize the firefighting equipment for the Civil Hospital.
- To check for expected effected effects to the citizens of Vadodara and to take actions accordingly.
- To make schools available for shelters.
- To inform the concerned department heads such as water and sewage supply, electricity section, hospitals, education department etc. about their plans and their functions and preparedness during emergencies.
- To have sanitization facility at central offices and to follow all the official precautionary measures during daily work done.

#### **3.10.2 DISTRICT MAGISTRATE & COLLECTOR**

Being chairperson and Incident commander of the district for Disaster Management, he will be in overall command & emergency action to control a kind of emergency effectively for the district.

The Chair person has to perform the role as follows:

- Preparation and updating of District Disaster Management Plan for the District.
- To ensure that everyone is able to perform the role involved in emergency service effectively.



- To activate and maintain the District Control Room round the clock. To provide essential facilities with the District control room.
- To access emergency situation and have to declare the emergency, call and direct the emergency services to respond the emergency by providing reinforcement and support by pooling the resources form the District and if required from the State.
- The arrangement for rescue, evacuation, shelter, food, water, clothing, and transportation to affected area, announcement to the public.
- To keep inform to the higher authority time to time to declare the withdrawal or termination of emergency.
- Rehabilitation, Restoration, Cleaning, etc. on post emergency actions.
- To submit the reports on emergency. To conduct the meetings.
- To conduct the mock drill.

### **3.10.3 COMMISSIONER OF POLICE**

- To prepare action plan for Disaster Management for the city.
- To maintain the law and order inside the city
- Cordon the area and road for movement of unnecessary people.
- To access the situation and report immediately.
- To evacuate, rehabilitate and observe the shelter & transportation work during the emergency as per situation.
- To support health care facilities to maintain the area announced for containment plan.
- To actively present in all mock exercises/ Training and other departmental activities.

### **3.10.4 Role of Health Department**

As the Health and medical services are comes under essential services and they play vital roles in any kind of Disaster and in serious pandemic condition.

- To prepare an action plan on Disaster for Local authority and hospitals.
- To educate the departmental staff specially Para medical staff and pharmacist about safety and all precautionary measures.
- To educate about public health seriousness and basic safety practices.
- They should have all equipped instruments and other medical appliances.
- To distribute the IEC Material as an awareness campaign.
- To focus on ongoing OPD Cases and their less chances of contamination and observe serious cases during flood or major injury in any accidental cases.
- To sterilised the equipment and medical essentials after every uses.
- To instruct the entire primary health officer about inspection, medical check-up, awareness campaign and hygiene maintain at their UPHCs and also routine check-up of all the doctors, nursing staffs and Para medical staffs.
- To have a keen surveillance on control of any epidemic.
- To ensure the arrangement & preparedness for medical treatment.
- The Epidemiologist have to keep their eye on all primary functionalities and activities of UPHCs and other Hospitals
- To keep all the emergency vehicles like ambulance and other instruments to face any kind of emergency situation.
- To keep all the emergency contact details updated of the Municipal Corporation and district authority officials.
- To actively present in all mock exercises/ Training and other departmental activities.
- To focus on areas prone to this epidemics and assessment of requirements to control and ultimately eradicate the epidemic.

- To have sanitization facility at all the health care centres especially to prevent contamination during any kind of disease spread.

### **3.10.5 Role of Education department**

- To educate students as well as their parents about any kind of and basic precautionary steps.
- Availability of Personal protective equipment like Hand wash, Soap and Sanitizer etc.
- To Distribute of IEC Materials to all the students as awareness campaign.

### **3.10.6 Role of Civil Defence**

- To keep their eye on shelter places for people, migrant, labour workers and poor people as to arrange food, shelter and proper hygiene condition.
- To Stock piling of food and essential commodities.
- To ensure availability of sufficient food ready for distributaries at various locations.
- To manage the procurement of Food, material movement and inventory management.
- To Take appropriate preservative methods to ensure that food and other relief stock are not damaged during storage,
- To prepare own detailed action plan to ensure effective handling of emergency.
- To have the entire emergency vehicle and contact details updated.

### **3.10.7 Role of Transportation Department**

- To respond to collector and police instructions in different kinds of emergency
- To provide adequate requirements for both persons and material.
- To arrange for deployment of vehicles with full fuel levels.
- To streamline traffic flow and parking yard movement.
- To co-ordinate in deployment of vehicles, if required.
- To participated meeting, mock drills & training.

- To prepare own detailed action plan to ensure effective handing at the time of actual emergency.

### **3.10.8 Role of Fire & Emergency service Department**

- Inspection, survey & assess the situation where incident occur & give the report.
- To decide the proper & effective actions and immediate response actions to control the emergency, under intimation to Central Control Room or Chair Person.
- Proper training to fight against different hazards
- Rescue, Evacuation, remove of debris, and other emergency work as directed or instructed.
- To maintain the proper and adequate firefighting, equipments, neutralizing media, self-breathing apparatus, emergency equipments, and personal protective equipments with keeping in working order.
- The knowledge & information on different type of alternative resources, various types of extinguishing media, neutralizing media, chemical properties and their hazards with safe handling procedure.
- To participate the meetings Mock Drill / Rehearsal & training.
- To liaison with Central Control Room and other emergency services.
- To prepare their own details action plan & to ensure the provisions to handle the emergency.
- Other duties as required during actual emergency.
- As a part of essential services they took part in sanitization activities as an when order received from higher authorities for containment zone. While dong the task they must have all PPEs for their wellbeing and without any direct contact.

### **3.10.9 Role of E-Gov. & Media**

- Display information in each wards and public gathering places in Nagarpalika and in their official website too.

- To circulate awareness campaign messages via Mass SMS system if required.
- To circulate official notifications as well as for video advertisement in Local TV channels.

#### **3.10.10 Role of MGVL**

- To arrange for un-interrupted power supply, if needed.
- To arrange for lighting at temporary medical camps, rallying points and parking yards.
- To take care of electrical equipment within affected zone.
- Arrange for switching off power supply if requested by authority.
- To participate in the meeting, mock drills & training
- To prepare own detailed action plan to ensure effective handling of emergency

#### **3.10.11 Role of NGOs**

- Voluntary organizations or NGOs are playing a vital role during any kind of emergency or serious disaster condition. Being a part of voluntary service providers, they can take part in food, water, shelter as well as rescue operations.
- To keep in touch with local govt. authority to get notified regarding seriousness of outbreak and how to take precautionary measures for the same.
- To local people aware by daily meeting while keeping distances and use of proper safety precautions.

#### **3.10.12 Role of Railway Authority**

- To issue the standing instruction to all railway gates to take actions on receiving the message from the Station Master.
- To decide authority level of railway staff to take actions.

- To carry out evacuation by railway, if required.
- To take care of floating population at railway stations and on board travelers.
- To issue the standing instruction to station Masters on up and down railway stations to stop the train as soon as emergency message is received from DEOC and CCR.

### **3.10.13 IEC Activities**

- News Paper advertisement for any disaster in Gujarati language.
- FM Radio channel and multiplex theatre advertisement for Disaster and its effect.
- Poster advertisement in Buses and Auto-rickshaw.
- Pamphlets and Flyer Distribution in Public Place guidelines given from local govt., and Gujarat state disaster management authority.

## **3.11 Roles and Responsibilities: Municipal Corporation Officers**

### **3.11.1 Role of City Engineer**

- To check whether river bed level arises up to 24 ft., then with in touch with all officials including fire brigade and announces alert condition.
- To inspect all the Living center/ Shelter places.
- To monitor water inflow and discharge rate and alert the team if danger level occurs at Ajwa, Pratapnagar, Raika, and Dodka.
- To check on low lying areas and if flood conditions arise then prior surveying to be done.

### **3.11.2 Chief Officer Fire**

- To conduct a pre-meeting with respect to emergency situation with all station officers and make them alert for any trigger mechanism of flood and cyclogenesis condition.

- To inspect all the emergency and rescue vehicle, equipment and maintenance to be done priory.
- Boat inspection to be done in such a manner before flood condition arises.
- Preparation of rescue and operation priors in throughout the city.
- To announce and ware general public about the water level at 22 ft via T.V, media, FM radio, doordarshan etc. so that people get shifted priorly.
- Wireless set work done: Ajwa, Asoj, pratap pura, centre fire station dandia bazar. If requires then install wireless system at Vishwamitri river sewage pumping station kalaghoda kahnderao market.
- To send all report of water level to centre fire station, flood control cell, city engineer and state Govt. focal officer.
- To inform about early communication of probable rainfall/flood condition to District Collector and Municipal Commissioner of Vadodara.
- To send 10 buoy, 10 jacket, 2 ropes to all the ward offices (Each).
- To check on staff BPAT, lower lying area survey, and area wise boat details, training centre detail, extra staff details, announcement strategies via TV, media and FM, if more boats required then to ask from NDRF, SDRF Army officials etc.

#### **Siren warning**

- Siren warning system to be paced at Planetarium, Navyug Vidhyalaya, Akota electric substation , Vadsar sewage substation, city command control Centre, all fire station, Municipal corporation office khanderao market, Vijay nagar community hall central flood control centre.
- All lower lying areas people to be removed if water level rises to be announced by CFO.

#### **3.11.3 Executive Engineer (Water works)**

- To actively work at Sayaji sarovar and pratap pura during flood condition.
- To open and close the gates of Ajwa sarovar to be done with taking proper actions.

- To inspect the area from Pratap Pura to Ajwa and to check all greasing must be done at the gates.

#### **3.11.4 Executive Engineer (Boards and Display)**

- If any work going on in corporation related to road or bridge then to send work stop notice and barricade the locations with warning boards.

#### **3.11.5 Zoo Curator**

- To shift all the zoo animals to safer places during flood or cyclonic condition and report should be submitted to Dy. Municipal commissioner
- If any animal gets injured or anything happens due to flood condition, details to be forwarded to flood control cell.

#### **3.11.6 Director (Encroachment)**

- To work as per order from Dy. Municipal commissioner during flood and to look after liaisoning with police department.
- If Vishwamitri water level rises up to 28 ft. near Kalaghoda circle, then closure of bridge must with keeping securities for round check-up.

#### **3.11.7 Executive Engineer (Mechanical)**

- To present at workshop and supply necessary equipment during flood.
- To keep operator for pump operation of all locations and maintenance should must.

#### **3.11.8 Director (Parks and Garden)**

- To have a helping hand during flood with fire brigade officials.
- If requires maintain contractor list during tree deprived condition.

#### **3.11.9 Executive Engineer (Ward)**

- To keep warning boards and barricading must as required.



- To remove excess water from roads and buildings while flooded.
- To maintain status of HFL level and gather all the documented report with photographs.

### 3.11.10 Executive Engineer (Water distribution)

- To arrange alternatives water pumps if it's not working during flood from nearby areas.
- During flood pump/motors should available in each zone/wards.

### 3.11.11 Vehicle Storage

- To check Diesel and petrol condition/ availability of each emergency vehicle.
- To have proper availability of driver cum operator and assistant.
- To arrange of Jeep, truck, hydra, crane and dumpers if required.
- If requires, talk to executive engineers while emergency repairing situation of vehicles appears.
- Use walkie-talkie if telephone is not available.

## 3.12 List of Shelter Places:

| Sr. No | Ward No | Lowerline Area                                                                                                         | Shelter Place Details    | Approximate Nos to Be at Shelter Places |
|--------|---------|------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------|
| 01     | Ward 01 | 1. Rama Kaka Dairy<br>2. Sitaram Super Market<br>3. Navayard<br>4. Kodiya nagar<br>5. Sama Canal<br>6. Prajapati Nagar | 1. Chhani Primary School |                                         |

|    |         |                                                                                                                                                                                                                                                                                        |                       |  |
|----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|
|    |         | 7. Deluxe Society<br><br>8. Taskand Society<br><br>9. Pension Pura                                                                                                                                                                                                                     |                       |  |
| 02 | Ward 02 | 1. Narmada Colony<br><br>2. Bhagirath Society<br><br>3.Sainik Hostel<br><br>4. Natasha Park<br><br>5.Fatehgunj Navyug Vidhyalaya                                                                                                                                                       | 1. Corporation School |  |
| 03 | Ward 03 | 1. Vemali Village<br><br>2. beside Ambe Vidhyalaya<br><br>3. Motnath Mahadev<br><br>4. Area Infront of Airport<br><br>5. Urmi School<br><br>6. Siddharth Bungalow<br><br>7. Sama Village<br><br>8. Sanjaynagar Slum<br><br>9.Harni village<br><br>10. Sayajibaug<br><br>11. Jyoti park | 1. Corporation School |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                 |  |
|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |         | 12.P&T Quarters<br>13.Amit Nagar<br>14. Jalaram Nagar slum<br>15.Ajita Nagar<br>16. Adinath Society<br>17.Buddhdev quarters<br>18. Pratap Ganj<br>19. Railway station                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                 |  |
| 04 | Ward 04 | 1. Pratap nagar Sindvaimata road<br>2. Danteshwar santosh vadi<br>3. Vanleela society, railway track road<br>4. Manjalpur Kabir Temple To gidc Road uto alwanaka, near somnath nagar, near Deal wafer, Near Jupiter Char rasta<br>5. Godi Ground back side area<br>6. Gokul nagar Sonal vatika, ramnagar, Nilkanth nagar, Kalai fatak<br>7. Manjalpur Village bhagodthi graveyard, Sarawati char rasta and petrol pump area to alwanaka | 1. Sindhvaimata Govt. School<br>2. Danteshwar corporation school<br>3.NIL<br>4. GIDC Corporation School<br>5. Nil<br>6. Saibaba Govt. School Kalali<br>7. Kuveshwar School Manjalpur<br>8. Atithi gruh Manjalpur<br>9.Vadsar Corporation School |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                            |  |
|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |         | <p>8. Surya Darshan township to Suffle icon</p> <p>9. Fatak 232 to Vadsar, railway samanatar road</p> <p>10. Tarsali Gurudwara, Hightension line road</p> <p>11. Vishalnagar Main road</p> <p>12. Near harinagar, Tarsali ring Road</p>                                                                                                                                                           | <p>10. Nil</p> <p>11. Atithi Gruh Tarsali</p> <p>12. Saradnagar Corporation School</p>                                                     |  |
| 05 | Ward 05 | <p>1. From bhaucha vad to old ward Office</p> <p>2. Bhauch vad</p> <p>3. Govind rao park to dena park</p> <p>4. Salimar Society</p> <p>5. Jhala na dera to Common Bin Box</p> <p>6. Ajavadimel road</p> <p>7. Jhanda Chowk, near lal Marathi house</p> <p>8. Jai mahakali Society</p> <p>9. Arihant Society</p> <p>10. Omkar Society Ground</p> <p>11. Sonalika Apartment, parivar Char rasta</p> | <p>1. Ektanagar Primary school, Ajwa Road- 6351130919 ( Smt. Ketu ben)</p> <p>2. Kadam school, waghodia road- 9925251841( Dillip Bhai)</p> |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                    |  |
|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |         | <p>12. Riddhi Society</p> <p>13. Vihang Complex</p> <p>14. Akand Anand Society</p> <p>15. Gujarat Housing Board</p> <p>16. Tilak Nagar Society</p> <p>17. Jadhav ami sradhha society</p> <p>18. Jalaram Chowk</p> <p>19. Bhar Colony</p> <p>20. Krushna Mohallo</p> <p>21. 144- Quarters, water tank road, satar taluka</p> <p>22. Sabina Park Society</p> <p>23. Niharika Sarita Park</p> <p>24. Sant Rohitdas Mohallo</p> |                                                                                                                                                                    |  |
| 06 | Ward 06 | <p>1. Saibaba nagar, Old RTO</p> <p>2. Mathur Nagar, Gadheda Market</p> <p>3. Patel Park Warasiya</p> <p>4. Khari talavadi Warasiya</p> <p>5. Kumbharwada Fatehpura</p> <p>6. Mangleshar slum Vistar</p>                                                                                                                                                                                                                    | <p>1.Veer Bhagatsinh Primary School, Fatehpura- 6351130919(ketuben)</p> <p>2. Narmada khushalchand Primary school, Champaner gate- 903396810(Nigambhai Pithva)</p> |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                      |  |
|----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--|
|    |         | 7. Harijanvas warasiya<br>8. Ramdev peer mohalla, warasiya<br>9. Vasvani Colony Warasia<br>10. Sudama nagar, warasiya<br>11. Hirashakti mohallo Warasiya<br>12. Madar Mohallo<br>13. Pitambar pol, lal akhada<br>14. Satar taluka<br>15. Ashirvad Park<br>16. Niharika Sarita Park<br>17. Sant Rohitdas Mohallo<br>18. Noorm Vasahat<br>19. Veer Bhagatsinh road<br>20. kishanvadi<br>21. New Community hall | 3. Kavi dulakagaPrimary School, warasiya road<br>4. Indulal Yagnik Primary school, warasiya- 9825315195(Hiren Gohil) |  |
| 07 | Ward 07 | 1. Muktanand Teen rasta to water tank road<br>2. Behind bahuchraji temple<br>3. Tulsivadi behra, near moonga school ground<br>4. Kalakunj Society                                                                                                                                                                                                                                                            | 1. Maa Virvayi Primary School Raopura- 9726001264<br>2. Baba sahib Ambedkar Primary school, Tulsivadi- 9998771167    |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                    |  |
|----|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|    |         | 5. Hastinapur society<br>6. Swastik Society<br>7. Chepirog Hospital<br>8. RBG complex<br>9. VIP view Complex<br>10. Chitamani Society<br>11. Bhavani society near water tank road<br>12. From water tak to sanagam char rasta<br>13. Divyalok soc TP road<br>14. Khasvadi Samshan road<br>15. Salatvada Sarda temple<br>16. Salatvada tulsivai ni chawl, ravari vas<br>17. Nagarvada ad. ward office 08<br>18. kaluoura main road near central store | 3. Jalaram Primary school No 10, mehtavadi , nagarwada- 8141921316 |  |
| 08 | Ward 08 | 1. Jetalpur village<br>2. Subhanpura Village<br>3. PWD Workshop<br>4. Madhunagar, karodiya road                                                                                                                                                                                                                                                                                                                                                      | 1. Corporation School                                              |  |

|    |         |                                                                                                                                                                                                                                                                                                                                       |                                 |  |
|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--|
|    |         | <p>5. ITI</p> <p>6. Old panchvati behind jakatnaka area</p> <p>7. Boriya tadav</p> <p>8. Sofiya School</p> <p>9. Pragati nagar Housing Board</p> <p>10. Laxmipura Road</p>                                                                                                                                                            |                                 |  |
| 09 | Ward 09 | <p>1. Ganga Nagar</p> <p>2. Infront of ITI</p> <p>3. Satyam Apartment</p> <p>4. Sahyog Society</p> <p>5. CK Prajapati Vidhyalaya Panchvati</p> <p>6. Laxmipura Road</p> <p>7. Vijaynagar</p> <p>8. Vuda Flat</p> <p>9. Swatrantaseanani Nagar</p> <p>10. Laxmipura Village</p> <p>11. Narayan garden road</p> <p>12. Priya Takies</p> | <p>1. Undera Primary School</p> |  |



|    |         |                                                                                                                                                           |                                                                                                                                                                                                                                                                                             |                                                          |
|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 10 | Ward 10 | 1. Bhayli Village<br>2. Gotri lake, Tandalja Lake, Vasna Lake                                                                                             | 1. Bhayli kumar Kanya Shada                                                                                                                                                                                                                                                                 | 1. 350                                                   |
| 11 | Ward 11 | 1. Sahkar nagar<br>2. Partrkar Colony<br>3. Mukti nagar<br>4. Manisha Chowkdi<br>5. Bina Nagar<br>6. Mathurnagari<br>7. Akshar Chowk<br>8. Sunpharma Road | Due to flooding of Dasama Pond                                                                                                                                                                                                                                                              |                                                          |
| 12 | Ward 12 | 1. Parshuram Bhatto Sayajiganj<br>2. Jamwadi<br>3. Railway track slum<br>4. Mujmahuda village<br>5. Kalumiya Bhatto<br>6. Kalali Village                  | 1. Maganbhai shankarbhar Primary School Near parsi agyari ground, sayajiganj<br>2. Maganbhai shankarbhar Primary School Near parsi agyari ground, sayajiganj<br>3. Maganbhai shankarbhar Primary School Near parsi agyari ground, sayajiganj<br>Dr. Head govar Primary school Akota Village | 1. 500<br>2. 200<br>3. 500<br>4. 300<br>5. 300<br>6. 100 |

|    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                        |  |
|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p>4. Dr. Shaym Prashad Mukherji Primary school. Atladra</p> <p>5. Maganbhai shankarbhar Primary School Near parsi agyari ground, sayajiganj</p> <p>6. Kalali Road</p> |  |
| 13 | Ward 13 | <p>1. Rajstambh Society Bagikhana</p> <p>2. Bagikhana Road</p> <p>3. Near Farsan, Bagikhana Road</p> <p>4. Dandia bazar</p> <p>5. Snehkunj Society, Bagikhana</p> <p>6. Bhoivada Navapura</p> <p>7. Bima Hospital, Navapura</p> <p>8. 56 Quarters, Navapura</p> <p>9. Bhat faliyu, navapura</p> <p>10. Godadiavas, No 01</p> <p>11. Godadaiya vas No 02</p> <p>12. Khatkivad, Navapura</p> <p>13. Vitthal Society</p> <p>14. Ravarivas Navapura</p> | <p>1. Pu. Dongrej maharaj Primary school<br/>Near Jayratna Char rasta</p> <p>2. Mdhyavarti High school-Near Khanderao market</p>                                       |  |

|  |  |                                          |  |  |
|--|--|------------------------------------------|--|--|
|  |  | 15. Navapura harijanvas                  |  |  |
|  |  | 16. Navapura Vankarvas                   |  |  |
|  |  | 17. Nvapura mehboob pura                 |  |  |
|  |  | 18. Pomli Faliyu                         |  |  |
|  |  | 19. Jain temple road                     |  |  |
|  |  | 20. Jvahar society                       |  |  |
|  |  | 21. RV Desai road                        |  |  |
|  |  | 22. Cambeyso mill, bakravadi             |  |  |
|  |  | 23. Bakravadi harijan vas                |  |  |
|  |  | 24. Bharanpura Petrol pump               |  |  |
|  |  | 25.Near Dr. Ambedkar Chowk,<br>Bakrawadi |  |  |
|  |  | 26. Pathargate road                      |  |  |
|  |  | 27. Madanjhampa Road                     |  |  |
|  |  | 28. Verai mata chowk, rajmahal road      |  |  |
|  |  | 29. Kachhiyapod, rajmahal road           |  |  |
|  |  | 30. Jayratna building road               |  |  |
|  |  | 31. Pepsi road                           |  |  |
|  |  | 32. Mhakalinagar Vishwamitry road        |  |  |
|  |  | 33.Subhashnagar Vishwamitry Road         |  |  |

|    |         |                                                                                                                                                                                                                                                                                     |                                                                                                                                  |                        |
|----|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    |         | 34. Vishwamitry road<br>35 Kashvishwanath Temple<br>36 Hockey ground rajmahal road<br>37. Kirti stambh<br>38. Gangabai Takiyo, Pratap Nagar<br>39. Chhiknivada ni chawol                                                                                                            |                                                                                                                                  |                        |
| 14 | Ward 14 | 1. Lehripura Gate<br>2. MG Road<br>3. Gendigate Road<br>4. Navabazar<br>5. Kothi Char rasta<br>6. Kalupura ward 14 office<br>7. Dutt nagar<br>8. Viharkunj Society<br>9. Ranmukteshwar road<br>10. Tejab Mill<br>11. Patel Estate Road<br>12.Vihar Urinal to Ramnath Graveyard Road | 1.Narmada Prathmik Shada(8264105535)<br>2. Manjulaben Khushalchand Primary School<br>3. Ramanlal shah Primary School- 9662413340 |                        |
| 15 | Ward 15 | NIL                                                                                                                                                                                                                                                                                 | 1. Kavi premanand Primary School                                                                                                 | 1. 10 Room (50 person) |

|    |         |                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                   |                                                               |
|----|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
|    |         |                                                                                                                                                                                                                                                                                                                                                 | <p>9723508401(Geetaben)</p> <p>2. Aryabhata Primary School-</p> <p>9726443843(Dipesh Bhai)</p> <p>3. Baroda Public School</p> <p>1-8511197764(Gaytriben Vyas)</p> | <p>2. 6 Rooms (30 Person)</p> <p>3. 15 Rooms (75 Persons)</p> |
| 16 | Ward 16 | <p>1. Parnakutir 1</p> <p>2.Shreeji Township</p> <p>3. Umiya nagar</p> <p>4.Yogiraj</p> <p>5. Waghodia Dabhoi Ring Road</p> <p>6.Navgrah Temple</p> <p>7. Gajrawadi</p> <p>8.Sewage Pumping Station</p> <p>9. Hanuman Nagar</p> <p>10. Zenith School</p> <p>11.Pratap Nagar railway ststion</p> <p>12.Ambica nagar</p> <p>13. Bajrang Nagar</p> | <p>1. Corporation School</p>                                                                                                                                      |                                                               |

|    |         |                                                                                                                                                                                                                                                                                                  |                                    |  |
|----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--|
|    |         | 14. Pratat nagar railway colony<br>15. Duttnagar<br>16. Mahanagar<br>17. Mahanagar<br>18. Heavy water quarters<br>19. Santoshwadi<br>20. Railway quarters<br>21. Kapurai<br>22. Motinagar 1<br>23. Amar Sraddhha ociety<br>24. Gurunanak Vidhyalaya<br>25. Diwalipura slum quarters tarsal tadav |                                    |  |
| 17 | Ward 17 | 1. Sindvaimata Road<br>2. Shreyas Vidhyalaya<br>3. Vishal Nagar<br>4. Sharad Nagar<br>5. ITI<br>6. Shanti nagar                                                                                                                                                                                  | 1. Corporation School              |  |
| 18 | Ward 18 | 1. Jupiter Chowkdi                                                                                                                                                                                                                                                                               | 1. Vadsar Village and near by area |  |

|    |         |                                                                                                                                                                                                                                                                                                                                                       |                                               |  |
|----|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|
|    |         | <p>2. Near Navasur Bus stand</p> <p>3. Ward no 18 office road</p> <p>4. Vadsar village Koteswar mahadev temple, Vadsar new road and nearby society</p> <p>5. Alwanaka kotar, tadav road GIDC area</p> <p>6. Manjalpur Village, Manjalpur graveyard, Darbar chowkdi to saraswati char rasta</p> <p>7. From Vishwamitry fatak to Van leela society.</p> | <p>2. Koteswar village and Mahadev temple</p> |  |
| 19 | Ward 19 | <p>1. Yasoda colony</p> <p>2. Jambua Village</p> <p>3. Tarsali Village</p> <p>4. Behind Makarpura Depo</p> <p>5. New Era School</p> <p>6. Ganga park</p> <p>7. Vaddala village</p> <p>8. Tarsalibypass</p> <p>9. Airforce</p> <p>10. Basil School Maneja</p> <p>11. Maneja</p>                                                                        | <p>1. Corporation School</p>                  |  |

# CHAPTER- 4



# EMERGENCY RESPONSE CENTRE (ERC)

## **4.1 Emergency Response Centre Vadodara**

### **4.1.1 Introduction:**

A tripartite Memorandum of Understanding between Commissioner of Relief, GSDMA Gandhinagar and Vadodara Municipal Corporation is to facilitate through the Fire and Emergency services of the Municipal Corporation, the operation and maintenance of ERC's and its associated equipment for responding to any emergency situation which are beyond the coping capacity of the district EOC's as well as the district administration. Through the MoU, the Municipal Corporation will take over the operation and maintenance of the ERC's and its associated equipments.

### **4.1.2 Jurisdiction/Geographical Area:**

All the ERCs have been established on a regional basis, the jurisdiction of each ERC i.e. the list of districts which would seek help from the respective ERC as well.

| Sr..No | District Covered | Location of ERC | Address of the ERC                           |
|--------|------------------|-----------------|----------------------------------------------|
| 1      | Vadodara         | Vadodara        | Near R.T.O office,<br><br>Darjipura Vadodara |
| 2      | Anand            |                 |                                              |
| 3      | Narmada          |                 |                                              |
| 4      | Panchmahal       |                 |                                              |
| 5      | Dahod            |                 |                                              |
| 6      | Chhotaudepur     |                 |                                              |
| 7      | Mahisagar        |                 |                                              |

#### 4.1.3 Function of ERCs during emergencies and peace time

During Emergency time, ERCs will carry out the search and rescue operation through equipment and trained personnel to the affected area and to coordinate with various departments of the state government to manage the situation.

During peace time the ERC Staff will provide practical training for search and rescue through the use of equipment. In this manner, the equipment will also be kept in “ready to use “condition and capacity building of stakeholders will also happen simultaneously through day today warm up process accordingly.

#### 4.1.4 ERC Darjipura Details.

| Sr. No. | Name of the ERC           | Address with phone<br>No./Mobile No.                                                                         | Jurisdictions/ Districts                                                                                                     |
|---------|---------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1       | ERC Darjipura<br>Vadodara | ERC Darjipura Near RTO<br>Office N.H. No. 8 Vadodara<br><br><b>0265- 2541688</b><br><br><b>0265- 2541687</b> | 1. Vadodara<br><br>2. Anand<br><br>3. Narmada<br><br>4. Panchmahal<br><br>5. Dahod<br><br>6.Chhotaudepur<br><br>7. Mahisagar |

# ANNEXURES

## INDEX

| Sr. No. | Chapter No. | Details                             | Page No |
|---------|-------------|-------------------------------------|---------|
| 01      | Annexures   | Vadodara City Profile               | 85      |
| 02      |             | Resource Inventory- Vadodara        | 99      |
| 03      |             | Important Contact Details- Vadodara | 148     |

## LIST OF TABLES

| <b>Sr. No.</b> | <b>Details</b>                                 | <b>Page No</b> |
|----------------|------------------------------------------------|----------------|
| 01             | Vadodara City Information                      | 85             |
| 02             | Vadodara City: Population Details              | 86             |
| 03             | Vadodara City: House and House hold Details    | 86             |
| 04             | Vadodara City: Temperature status: Year 2021   | 87             |
| 05             | Vadodara City: Rainfall Details                | 88             |
| 06             | Vadodara District: River Details               | 89             |
| 07             | Vadodara City: Livestock Details               | 90             |
| 08             | Vadodara City: List of Road and Railway Bridge | 91             |
| 09             | Vadodara City: List of UPHCs                   | 94             |
| 10             | Vadodara City: Solid waste Generation Status   | 95             |
| 11             | Vadodara City: List of Sewage Treatment Plant  | 97             |

## **LIST OF RESOURCES**

| <b>Sr. No.</b> | <b>Details</b>                                   | <b>Page No</b> |
|----------------|--------------------------------------------------|----------------|
| 1              | Vadodara Fire Brigade: List of Emergency Vehicle | 100            |
| 2              | Vadodara Fire Brigade: List of Equipments        | 105            |
| 3              | List of Boats, Life Jackets, Fibre Ring and Rope | 110            |

|    |                                                                 |     |
|----|-----------------------------------------------------------------|-----|
| 4  | Vadodara Fire Brigade: List of Ambulances                       | 111 |
| 5  | List of Tractors                                                | 111 |
| 6  | List of Trolleys                                                | 111 |
| 7  | List of Trucks                                                  | 112 |
| 8  | List of JCBs                                                    | 112 |
| 9  | List of Dozers and Loaders                                      | 112 |
| 10 | List of Dumpers                                                 | 113 |
| 11 | List of Cranes                                                  | 113 |
| 12 | List of Bulldozers                                              | 113 |
| 13 | List of Resources available with Vadodara Municipal Corporation | 113 |
| 14 | Vadodara District Hospitals: List of Emergency Vehicles         | 114 |
| 15 | Emergency Response Centre Vadodara: List of Emergency Vehicles  | 115 |
| 16 | Emergency Response Centre Vadodara: List of Equipment           | 116 |
| 17 | Vadodara Fire Brigade: List of Swimmers                         | 117 |
| 18 | Civil Defence: List of Swimmers                                 | 125 |
| 19 | Swimming Pool of VMC: List of Swimmers                          | 127 |

|                                        |     |
|----------------------------------------|-----|
| Vadodara City: List of Major Hospitals | 128 |
|----------------------------------------|-----|

|                                                 |     |
|-------------------------------------------------|-----|
| Vadodara District: List of NGO Hospitals        | 128 |
| Vadodara District: List of Blood Banks          | 130 |
| Vadodara City: List of Medical Officer UPHC     | 131 |
| Vadodara City: List of Major NGOs               | 137 |
| Vadodara District: List of MAH units            | 138 |
| <b>CONTACT DETAILS</b>                          |     |
| Vadodara City: Fire and Emergency Services      | 149 |
| Vadodara City: Police Brigade                   | 150 |
| State and Govt. Contact Details                 | 151 |
| Army, Airforce and Coast Guard: Contact Details | 152 |
| Vadodara City: Corporation Officers             | 153 |
| Ward officials-Contact no                       | 158 |
| Vadodara: Satellite Telephone No. Details       | 159 |
| Revenue Officers: Vadodara District             | 160 |

## **LIST OF DIAGRAMS/MAPS**

| Sr. No. | Details                                | Page No. |
|---------|----------------------------------------|----------|
| 1       | Landfill site-Vadodara City            |          |
| 2       | Sewage Treatment plant-Vadodara City   |          |
| 3       | Vadodara City Map                      |          |
| 4       | Ward Wise/Zone wise Map- Vadodara City |          |

### 1.1 Vadodara City Information:

|                     |                                                                                                                      |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| Area                | 220.33 sq.kms. (Approx.)                                                                                             |
| Coordinates         | 22.30°N 73.19°E                                                                                                      |
| Population          | 17,41,791 (2011 census) 22,40,522(Approx)                                                                            |
| <b>Altitude</b>     | 35.5 meters above sea level                                                                                          |
| <b>Seismic zone</b> | Zone-03 Moderate Damage Risk Zone                                                                                    |
| <b>Climate</b>      | <p>Summer Max. 42°C. Min. 21°C.</p> <p>Winter Max. 33°C Min. 09°C.</p> <p>Rainfall 1286 mm. (Mid. June to Sept.)</p> |
| <b>Languages</b>    | Major: Gujarati                                                                                                      |



|  |                                                                                                                      |
|--|----------------------------------------------------------------------------------------------------------------------|
|  | Other: Marathi, Hindi, Urdu, Sindhi, English, Tamil, Telugu, Kannada, Odiya, Malayalam, Bengali and other languages. |
|--|----------------------------------------------------------------------------------------------------------------------|

|                                                   |                                                                                                                                                                                                                            |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rail</b>                                       | <p>Zone: Western Railway. Main station: Vadodara Junction (BRC);</p> <p>Satellite stations: Vishwamitri (VS), Makarpura (MPR); Pratapnagar (PRTN), Chayapuri(CYI)</p> <p>Mumbai to Delhi and Mumbai to Ahmedabad line.</p> |
| <b>Road</b>                                       | <p>RTO code: GJ06.</p> <p>National Highway No. 8 with all the major cities of India.</p> <p>436 km from Mumbai and 956 km from Delhi.</p>                                                                                  |
| <b>Air</b>                                        | <p>IATA= BDQ and ICAO= VABO.</p> <p>The city has an airport connected with Ahmedabad, Mumbai, Delhi, Kolkata, Hyderabad, and Chennai; among other cities.</p>                                                              |
| <b>Bus</b>                                        | Gujarat State Road Transport Corporation, Vadodara Smart city Buses and Private operators.                                                                                                                                 |
| <b>Major waterbodies in &amp; around the City</b> | Narmada river(Canal system), Vishwamitri river, Ajwa Sarovar                                                                                                                                                               |

## 1.2 Demographical and Geographical Details:

As a part of Vadodara District, Vadodara Municipal Corporation has the largest demographical presence in the whole district. With having a population of approximately more than 16 lakhs the city sits on the banks of the Vishmaitri River in central Gujarat. The Vishwamitri frequently dries up in the summer, leaving only a small stream of water. The District is located on the fertile plain between the Mahi and Narmada Rivers.

### 1.2.1 Population Details:

The city population approximately more than 18 lakhs with 81% literacy rate according to 2011 Census.

| Sr. No                                  | Ward Details      | Total Population | Male Population | Female Population |
|-----------------------------------------|-------------------|------------------|-----------------|-------------------|
| 01                                      | Ward No<br>01- 19 | 16,70,806        | 8,69,647        | 8,01,159          |
| 02<br>(Population<br>with 0-6<br>Years) |                   | 1,65,559         | 89,402          | 76,157            |

### 1.2.2 Households and Family Details:

Vadodara is having 19 Administrative wards and 19 election wards. As per 2011 Census the details of households and family details are mentioned below. Updated data of other wards will be introducing by next census.

| Sr. No | Ward Details   | Total Houses | Total House Holds |
|--------|----------------|--------------|-------------------|
| 01     | Ward No 01- 13 | 5,54,990     | 3,77,110          |

### 1.2.3 Literacy and Sex ratio:

With 81.65% of total literacy rate Vadodara City is having total 13, 64,157 literate population out of which 7, 32,121 is male and 6,32,036 is the total female population and illiterates are having population with 306649. Vadodara having sex ratio is 921 and child sex ratio is 852.

### 1.2.4 Occupational Structure:

Among the entire population of Vadodara District, Vadodara City population is maximum in urban living and majority of the urban population are working in industrial sectors which present in the corridor of Vadodara City.

### 1.2.5 Climate:

As a part of Climatic cycle Vadodara city witnessed hot summers to cold winters and Monsoon from Mid-June to September.

### 1.2.6 Temperature:

Vadodara City is having maximum temperature up to 43°C to 45°C which every year to year as per climatic condition. Below are the temperature details of previous year which showing maximum variations from summer to winter.

| No. | Month     | Max Temp (°C) | Min Temp (°C) | Rainfall (mm) | Humidity (%) |
|-----|-----------|---------------|---------------|---------------|--------------|
| 1   | January   | 28.5          | 13.0          | 0             | 52           |
| 2   | February  | 32.5          | 16.0          | 0             | 45           |
| 3   | March     | 36.8          | 21.0          | 0             | 38           |
| 4   | April     | 40.5          | 26.0          | 1             | 32           |
| 5   | May       | 39.0          | 28.0          | 10            | 55           |
| 6   | June      | 36.5          | 27.5          | 110           | 68           |
| 7   | July      | 32.0          | 26.5          | 300           | 82           |
| 8   | August    | 31.0          | 26.0          | 276           | 80           |
| 9   | September | 32.5          | 25.5          | 150           | 75           |
| 10  | October   | 34.5          | 23.5          | 40            | 65           |
| 11  | November  | 32.5          | 19.0          | 2             | 60           |
| 12  | December  | 29.5          | 15.5          | 3             | 55           |

## Vadodara City Temperature Year 2025 (Source: IMD)

### 1.2.7 Rainfall:

Vadodara City witnessed abundant rain fall every year among which few are the result to urban flood which was in year 2005, 2020, 2024 2025. Below is the rain fall details.

| Year | Vado. | Karjan | Padra | Savli | Desar | Dabhoi | Sinor | Waghodi<br>a |
|------|-------|--------|-------|-------|-------|--------|-------|--------------|
| 2011 | 1138  | 1139   | 530   | 880   | -     | 709    | 805   | 393          |
| 2012 | 934   | 645    | 689   | 757   | -     | 695    | 889   | 466          |

|             |      |      |      |      |     |      |      |      |
|-------------|------|------|------|------|-----|------|------|------|
| <b>2013</b> | 1726 | 1662 | 1126 | 1451 | -   | 1132 | 1276 | 973  |
| <b>2014</b> | 1075 | 667  | 673  | 1303 | 719 | 649  | 485  | 725  |
| <b>2015</b> | 545  | 493  | 158  | 315  | 173 | 536  | 384  | 178  |
| <b>2016</b> | 714  | 593  | 263  | 459  | 475 | 657  | 467  | 483  |
| <b>2017</b> | 916  | 504  | 391  | 324  | 568 | 878  | 399  | 640  |
| <b>2018</b> | 941  | 669  | 291  | 408  | 493 | 709  | 382  | 452  |
| <b>2019</b> | 1978 | 1322 | 607  | 720  | 779 | 1808 | 901  | 1000 |
| <b>2020</b> | 1035 | 1032 | 728  | 854  | 843 | 999  | 734  | 780  |
| <b>2021</b> | 1069 | 795  | 849  | 483  | 470 | 892  | 532  | 563  |
| <b>2022</b> | 1112 | 1370 | 885  | 536  | 512 | 1109 | 1136 | 766  |
| <b>2023</b> | 851  | 733  | 880  | 561  | 684 | 776  | 612  | 472  |
| <b>2024</b> | 1808 | 1482 | 1394 | 795  | 830 | 1079 | 1214 | 840  |
| <b>2025</b> | 1185 | 980  | 762  | 568  | 599 | 987  | 743  | 668  |

### 1.2.8 River and Dam Details:

Vadodara City is having major river Vishwamitri flowing through out city apart from that the District has two major rivers. Mahi River flows on Northwestern boundary, Narmada on the SE boundary of the district and Dhadhar River. The major water bodies are Ajwa Reservoir, and Dev dam Vadodara.

| <b>Sr. No</b> | <b>Rivers</b>     | <b>Dams &amp; Affected Taluka</b> | <b>Reservoirs with Taluka</b> | <b>Irrigation Ponds With Taluka</b> |
|---------------|-------------------|-----------------------------------|-------------------------------|-------------------------------------|
| 1             | Mahi River        | Dev-<br>Waghodia/Dabhoi           | Ajwa - Waghodia               | Vadhvana – Dabhoi                   |
| 2             | Narmada River     |                                   | Pratap pura - Waghodia        | Dhanora - Savli                     |
| 3             | Vishwamitri River | Vadodara City                     |                               | Vadadala - Savli                    |

### 1.2.9 Soil:

The soil found in the District may broadly be classified as alluvial, black, light brown and alkaline.

The major types of soil present in the district are alluvial soil, black cotton soil and mixed types.

Alluvial soil is found in five talukas viz. Savli, Vadodara, Waghodhia, Padra, and Dabhoi in western part of District. The Black soil is found on southwestern talukas of Karjan, Shinor and Dabhoi. In rest of the district, varieties of soils are being found.

### **1.3 Infrastructure details**

#### **1.3.1 Education:**

Baroda is synonymous with education. The patronage of education started with Maharaja Sayajirao and the city has built further on the academic infrastructure established by him. The present educational foundation rests on over more than 20 public schools and over 100 private schools at the district place. Towering benevolently over all is the Maharaja Sayajirao University, the jewel in the Baroda crown, so to speak: MSU. It has 13 faculties and 17 residential hostels, 4 of them for women students. The university caters to over 30,000 students.

M.S. University - Vadodara is the main university in district. There are different Colleges in different blocks Dabhoi, Sadhli, Karjan, Limda- Waghodia and Savli has colleges affiliated with Gujarat University.

#### **1.3.2 Other Educational Institutions:**

- Technology/Pharmacy/Medical - Vadodara, Limda-Waghodia.
- P. T. C. College 1. Vadodara. 2. Dabka-Padra 3. Waghodia
- S. N. D. T, College, Vadodara
- Medical College, M. S. Uni. Vadodara.

- Homeopathic College, Savli, Vadodara
- Dental College, Vadodara, Pipalia-Waghodia
- Ayurvedic College, Vadodara

### 1.3.3 Schools:

Vadodara City is having Granted primary school 10 and secondary school 97 and Non-granted primary school 346 and Non granted secondary school 246.

Nagar Prathmik Shikshan samiti is having 121 Primary school in which 40025 students and 1125 teachers are there. Similarly, Vadodara municipality is having total govt. 76 play schools in which 3,815 students and 65 teachers are there.

### 1.3.4 Live Stock:

Cattle wealth occupies pivotal place in the rural economy of the corporation, the Livestock position is as below:

| Sr. No. | Types of Live Stock | Male | Female | Total |
|---------|---------------------|------|--------|-------|
| 1       | Cow                 | 373  | 7622   | 7995  |
| 2       | Buffaloes           | 112  | 1938   | 2050  |
| 3       | Sheep               | 95   | 15     | 110   |
| 4       | Goat                | 565  | 1319   | 1884  |
| 5       | Pig                 | 0    | 0      | 0     |

Livestock details (Source: *livestock census*)

There are 1 Veterinary hospital and 14 Dispensaries in whole Vadodara district.

### 1.3.5 Industries:

There are number of factories registered under the Indian Factories Act. Approximately 786 small scale industries have been functioning in the District. Total 6 GIDC functioning in the Vadodara district.

There are several major factories like petrochemicals and Refinery or GSFC, Gujarat refinery, IOCL, IPCL, GACL, GIPCL functioning in the District. Other than these Deepak Nitrate, Apollo Tire, Philips India, JCT, Munjal Auto, Nirma, GAIL - India, Alembic are the few large scale companies whose working plants are situated in the Vadodara city or district.

Many Chemical Industries has been their own establishments in Nandesari Industrial area and some of the Chemical industries are situated in different GIDC's of the District.

Industries have their own Onsite Emergency Management Plans to deal with onsite emergencies and the other major units like IOCL, BPCL etc. has developed their Disaster Management Plans.

### 1.3.6 Roads & Railway:

The district has 3191 Kms length of pakka roads connecting to 426 villages/towns in the district. 249 villages are connected by kachha roads and 43 villages accessible only in fair weather. Out of the total 694 inhabited villages, 633 villages are connected by state road transport facilities.

Total length of railway track is 557 kms in the District, out of that Broad Gauge length is 557 Kms and remaining is Meter gauge.

### 1.3.7 Road and Railway Bridge Details:

| Sr No.                     | Name Of the Bridge                 | Approx Length in Meter |
|----------------------------|------------------------------------|------------------------|
| <b>RAILWAY OVER BRIDGE</b> |                                    |                        |
| 1                          | Vishwamitri ROB at Gujarat Tractor | 670                    |



|                                                 |                                                        |      |
|-------------------------------------------------|--------------------------------------------------------|------|
| 2                                               | Jetalpur ROB near jetalpur Underpass                   | 760  |
| 3                                               | Shastri Bridge ROB near Polytechnic                    | 506  |
| 4                                               | D- Cabin Navayard ROB                                  | 554  |
| 5                                               | Vadsar Rob ( GIDC - vadsar)                            | 622  |
| 6                                               | Pratapnagar ROB ( Pratapnagar - Chotaudepur B.G. Line) | 450  |
| 7                                               | Lalbaug ROB ( pratapnagar - jambusar N.G. Line)        | 1643 |
| 8                                               | Somatalav Railway over bridge                          | 840  |
| 9                                               | Kalali Railway over bridge,                            | 1100 |
| 10                                              | Akota - dandiyabazar Railway over bridge,              | 700  |
| <b>FLY OVER BRIDGE</b>                          |                                                        |      |
| 1                                               | Amitnagar Fly Over Bridge                              | 643  |
| 2                                               | IPCL flyover bridge at fatehgunj                       | 1072 |
| 3                                               | Harinagar Flyover bridge at harinagar junction         | 740  |
| 4                                               | Genda circle to Manishachokadi fly over Bridge         | 3500 |
| 5                                               | Bullet Train Bridge over Flyover (Gorwa–Madhunagar     | 40   |
| <b>RIVER BRIDGES ( Over Vishwamitri River )</b> |                                                        |      |
| 1                                               | Sama Near Urmi School River over Bridge                | 590  |
| 2                                               | Fatehgunj EME law level bridge                         | 80   |

|    |                                                                      |     |
|----|----------------------------------------------------------------------|-----|
| 3  | Mangalpandey River over bridge near L & T circle                     | 90  |
| 4  | Narhari River over Bridge                                            | 85  |
| 5  | kalaghoda River over Bridge near Kamatibaug                          | 60  |
| 6  | Jetalpur Near DineshmillBhimnath Bridge                              | 70  |
| 7  | Balbhavan Bridge Near kashiba Children Hospital                      | 50  |
| 8  | Munjamahuda River over bridge                                        | 95  |
| 9  | Near KasamwalaKabrastan River over bridge                            | 110 |
| 10 | Aradhana Theater bridge                                              | 80  |
| 11 | Nagarwada to bahucharaji River over bridge                           | 85  |
| 12 | Shreenath petrol pump to Amitnagar River over Bridge                 | 60  |
| 13 | Near Mangleshwar River over bridge                                   | 60  |
| 14 | TulsiwadiKhadi Minor bridge -1                                       | 50  |
| 15 | TulsiwadiKhadi Minor bridge -2                                       | 50  |
| 16 | Atladra to manjalpur bridge                                          | 75  |
| 17 | Vishwamitry river over bridge on 30.0 m road line from Sama to harni | 100 |
| 18 | Vadsar Landfill River Bridge Widening                                | 110 |
| 19 | Bullet Train River Bridg                                             | 80  |

### 1.3.8 Health Facilities:

Major hospitals are SSG Hospital (1513 Bed Capacity), Jamanabai Hospital (213 Bed Capacity), GMERS General Hospital Gotri (890 Bed Capacity), Baroda Heart Institute, Bhailal Amin Hospital, Bankers Heart Institute, etc. located in Vadodara city area.

Vadodara is having CHC and PHC in the city area i.e. SSG, GMERS Gotri Hospital and Jamanabai Hospital. Vadodara Municipal Corporation is having one central and four zonal drug stores also 45 ILR and 41 Deep Freezer for Refrigeration and other vital equipment for storage. As per this year record total 922 hospitals are working under VMC limit among which 224 are currently working as Covid-19 hospitals during Pandemic.

**Below are the lists of U-PHCs/C-PHC in the Municipal Corporation:**

| SR NO | ZONE | U-PHC    | ADDRESS                                                                      | NAME OF DOCTOR     | CONATCT DETAILS | DYHO/PHM NAME&CONTACT NO |
|-------|------|----------|------------------------------------------------------------------------------|--------------------|-----------------|--------------------------|
| 1     | EAST | Bapod    | Opp. Radhe Ratnam Flat, Vaikunth Cross Road, Waghodiya Road, Vadodara-390019 | DR. Sama Mansuri   | 63579773 55     |                          |
| 2     | EAST | Panigate | Opp. Panigate Juni Shak Market, Old Bavchavad390019                          | DR .Saiyad Mansuri | 63579773 66     |                          |

|    |      |               |                                                                                                   |                      |                |                                                                                                       |
|----|------|---------------|---------------------------------------------------------------------------------------------------|----------------------|----------------|-------------------------------------------------------------------------------------------------------|
| 3  | EAST | Kishanwadi    | Near Comunity Hall, Near Gujarat Housing Board390019                                              | Dr.Ashish Rathwa     | 63579773<br>13 | Dr.<br>Seema<br>Tripathi<br><br>982507<br>6369<br><br>Dr.<br>Arvind<br>Paraskar<br><br>823801<br>8706 |
| 4  | EAST | Ramdevnagar   | B/12. Panchal Nagar,Ajwa Road, Vadodara -390019                                                   | Dr.Manisha Parmar    | 63579773<br>88 |                                                                                                       |
| 5  | EAST | Sawad         | Aman Society, Near Rubi Complex, Opp. Varsha Society, Navjivan, Ajwa Road, Vadodara -390019       | Dr.Jyoti Gadkari     | 63579773<br>99 |                                                                                                       |
| 6  | EAST | Sudamapuri    | Near Paras Society, Old RTO Road, Warasiya, Vadodara-390006                                       | Dr.Krishna Patel     | 63579774<br>00 |                                                                                                       |
| 7  | EAST | Sawad         | Aman Society, Near Rubi Complex, Opp. Varsha Society, Navjivan, Ajwa Road, Vadodara -390019       | Dr. Jyoti Gadkari    | 63579773<br>99 |                                                                                                       |
| 8  | EAST | Sudamapuri    | Near Paras Society, Old RTO Road, Warasiya, Vadodara-390006                                       | Dr. Krishna Patel    | 63579774<br>00 |                                                                                                       |
| 9  | EAST | Gajrawadi     | Ramvatika Society, Nr. Prakruti Tenament, Mahadev Talav, Vadodara-390017                          | Dr.Bhavna Mayavanshi | 63579773<br>52 |                                                                                                       |
| 10 | EAST | Khodiyarnagar | House no-5, Sangam Park Society, Opp. Vallabh Villa, Khodiyarnagar, New Vip Road, Vadodara-390019 | Dr. Nevil Katariya   | 63579773<br>53 |                                                                                                       |
| 11 | WEST | Diwalipura    | Diwalipura UPHC.Opp.Word-11, Makrand Desal Road, Vadodara-390007                                  | Dr. Adityendra Arya  | 63579773<br>54 |                                                                                                       |

|    |      |            |                                                                                                                                      |                          |            |                                                                           |
|----|------|------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------|---------------------------------------------------------------------------|
| 12 | WEST | Atladara   | Atladara Urban Health Center, Behind BAPS Mandir, Vasava Mahollo, Vadodara-390012 Patrakar Colony, Behind Water Tank Vadodara-390005 | Dr. Sweta Patel          | 9978400231 | Dr. Roma Shah<br>9909927416<br>Dr.Pinal Shah<br>8320099331/<br>8238018683 |
| 13 | WEST | Tandalja   | Patrakar Colony, Behind Water Tank Vadodara-390005                                                                                   | Dr. Arman Vora           | 6357977357 |                                                                           |
| 14 | WEST | Mujmahuda  | Mujmahuda Uphe, Near Zydus Hospital, Akshar Chowk Vadodara-390020                                                                    | Dr.Krupal Patel          | 9227735353 |                                                                           |
| 15 | WEST | Akota      | Akota Shivajipuri, Near Sudhrai Colony.<br><br>Opp.Register Office, Vadodara-390020                                                  | Dr Nirmal Gohel          | 6357977359 |                                                                           |
| 16 | WEST | Subhanpura | Subhanpura UPHC, Near Reliance Petro Pump. High Tension Road Subhanpura-390023                                                       | Dr. Bhupendrasinh Rathod | 6357977360 |                                                                           |
| 17 | WEST | Gorwa      | Gorwa Urban Health Center, Near Vegetable Mariset, Vadodara-390016                                                                   | Dr.Ronak Patel           | 6357977361 |                                                                           |
| 18 | WEST | Gotri      | Near Ratnakar Tenament, New Alkapuri, Laxmipura, Gotri-390021                                                                        | Dr.Shashank Suthar       | 6357977362 |                                                                           |
| 19 | WEST | Gokulnagar | Golilnagar UPHC, Opposite Bhel Township, Cotri                                                                                       | Dr. Shivani Imandar      | 6357977363 |                                                                           |
| 20 | WEST | Undera     | Road, Vadodara-390021 Undera UPHC, Old Undera Sub Center Building,                                                                   | Dr.Akshay Patel          | 6357977365 |                                                                           |

|    |       |            |                                                                                                                   |                                         |                |                                                 |
|----|-------|------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------|-------------------------------------------------|
|    |       |            | Besides Undera<br>GramVadodara-391330                                                                             |                                         |                |                                                 |
| 21 | WEST  | Bhayli     | Panchayat, Undera,<br>Vadodara-391330 UPHC<br><br>Bhayli, Near Bhayli D-Mart,<br>Bhayil Road, Vadodara-<br>391410 | Dr.Marvel<br>Dave                       | 91069438<br>63 |                                                 |
| 22 | WEST  | Bil        | Bill UPHC. Opp. Bill Gram<br>Panchayat Office, lill<br>Vadodara-391014                                            | Dr.Mahamme<br>d Issraralli M<br>.Saiyed | 63579773<br>67 |                                                 |
| 23 | NORTH | Ektangar   | Ektanagar UPHC,TP 13<br>Near Ding Dong Chokdi,<br>Near Satyanarayan<br>Society-390024                             | Dr Deepak<br>Solanki                    | 63579773<br>68 | Dr.<br>Chetan<br>Patel                          |
| 24 | NORTH | Navayard   | Navayard UPIHC, Next to<br>Ren Basera, D-Cabin, B/h<br>Deep Theater, Vadodara-<br>390024                          | Dr.Soham<br>Patel                       | 63579773<br>69 | 635797<br>7385<br><br>Dr.Shan<br>tosh<br>Machhi |
| 25 | NORTH | Navidharti | Opp. Bhathiji Temple, Near<br>Old Ward No-8,<br>Nagarwada, Vadodara-<br>390008                                    | Dr. Vipul<br>Shrimali                   | 63579773<br>70 | 997989<br>6869                                  |
| 26 | NORTH | Chhani     | Old ward office 1 opp<br>masjid chhani gam Chhani,<br>Vadodara-391740                                             | Dr.Pooja<br>kharawad                    | 63579771<br>73 |                                                 |
| 27 | NORTH | Siyabagh   | Siyabaug UPHC, Opp.Shri<br>Vanta Appartment,<br>Siyabaug Main Road,<br>Vadodara-390001                            | Dr.Purvika<br>Patel                     | 63579773<br>72 |                                                 |
| 28 | NORTH | Navapura   | Navapura UPHC Opp.<br>Deepak Open theatre, Azad                                                                   | Dr. Hiral Rana                          | 63579773<br>74 |                                                 |

|    |       |            |                                                                                  |                         |            |                             |
|----|-------|------------|----------------------------------------------------------------------------------|-------------------------|------------|-----------------------------|
|    |       |            | Maidan, Madan Zampa Road, Vadodara                                               |                         |            |                             |
| 29 | NORTH | Sama       | Sama UPHC, Opp.Ayyappa Ground, Near Abhilasha Chokdi, Sama, Vadodara-390008      | Dr.Shakshi Kulkarni     | 6357977370 |                             |
| 30 | NORTH | Fatehpura  | Opp. Bhathiji Temple, Near Old Ward No-8, Nagarwada, Vadodara-390000             | Dr.Mohit Maurya         | 6357977376 |                             |
| 31 | NORTH | Harni      | B/h Sashwat Flat, Nr.Gada Circle, Harni Road, Vadodara-39002                     | Dr.Nilam Patel          | 6357977378 |                             |
| 32 | NORTH | Fatehganj  | 12, Jayesh Colony, Near Navyug School, Fatehganj Main Road, Fatehganj), Vadodara | Dr.Rajeshri Devmurari   | 6357977379 |                             |
| 33 | SOUTH | Kapurai    | Old Octroi Naka Building Near Kapurat Bypass, Dabhol Road, Vadodara-390025       | Dr. Ashish Gamit        | 6357977380 | Dr Sejal Soni<br>9909927418 |
| 34 | SOUTH | Danteshwar | Vambay Housing, Near Danteshwar Muktidham, Vadodara, Gujarat 390004              | Dr. Dahavl Patel        | 6357977381 | Dr. Kashyap Patel           |
| 35 | SOUTH | Tarsali    | Tarsali UPHC, Vijaynagar, Beside Mahakall Temple, Tarsall, Vadodara-390009       | Dr Abhishekkumar Charel | 6357977382 | 7096849368                  |
| 36 | SOUTH | Maneja     | Near Swaminarayan Mandir, Maneja gam, Vadodara-390013                            | Dr.Hiral Kharva         | 6357977383 |                             |

|    |       |              |                                                                                           |                       |                 |  |
|----|-------|--------------|-------------------------------------------------------------------------------------------|-----------------------|-----------------|--|
| 37 | SOUTH | Makarpura    | Makarpura UPHC,<br>Opp.Mkorpura Garden.<br>Makarpura Gam,<br>Vadodara-390014              | Dr. Anand<br>Popat    | 63579773<br>84  |  |
| 38 | SOUTH | Manjalpur    | Manjalpur UPIIC, Gajanand<br>Society, Nr.Mahatma<br>Gandhi School, Manjalpur,<br>Vadodara | Dr. Umesh<br>Dangar   | 97273476<br>94  |  |
| 39 | SOUTH | Vadsar       | Prior To vadsar Bridge,<br>Makarpura GIDC, Opp.<br><br>Yugdharm store.<br>Vadodara        | Dr Dipti<br>Chaudhary | 63579773<br>86  |  |
| 40 | SOUTH | Adarshnahgar | A1-Shivam Residency, Near<br>Reva Party Plot, Tarsall<br>Bypass, Vadodara-39000           | Dr. Anjali<br>Makwana | 63579777<br>387 |  |

| SR<br>NO | ZONE  | U-CHC                  | ADDRESS                                                                                             | NAME OF<br>DOCTOR                                                                                                        | CONATCT<br>DETAILS                                                                                                                       | DYHO/PHM<br>NAME&CONTACT<br>NO                                                      |
|----------|-------|------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1        | South | Manjalpur<br><br>U-CHC | Opp.Panchal Wadi Ranjit<br>Oetrol Pump line<br>Saraswati cross road<br>Manjalpur Vadodara<br>390011 | Dr Parth Vyas<br><br>Dr Akash Patel<br><br>Dr. Mausmi<br>Kothari<br><br>Dr Khushbu<br>Parmar<br><br>Dr.Manisha<br>Rathwa | 9227735372<br><br>8160390451<br><br>9825856172<br><br>9227735376<br><br>9227735375<br><br>9227735378<br><br>9227735377<br><br>6355334913 | Dr. Sejal Soni<br><br>9909927418<br><br><br><br>Dr. Kashyap Patel<br><br>7096849368 |



|   |       |                       |                                                                                                                    |                                                                                                                                                                                                   |                                                                                                                            |                                                                                 |
|---|-------|-----------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|   |       |                       |                                                                                                                    | Dr Kamaxi<br>Zonwal<br><br>Dr Mansi Sing<br><br>Dr.Dhaval<br>Parmar                                                                                                                               |                                                                                                                            |                                                                                 |
| 2 | WEST  | Atladara<br><br>U-CHC | In front of Atladara<br>Gardan b/h Jupiter<br>Hospital, Near<br>Bhramakumari<br>Sunpharma Road<br>Vadodara -390012 | Dr Zheel Patel<br><br>Dr. Neetal<br>Thakker<br><br>Dr. Parul Atnk<br><br>Dr Namrata<br>Chauhan<br><br>Dr. Dipen<br>Chaudhary<br><br>Dr Moibkhan<br>Pathan<br><br>Dr Urvashi<br>Machhi             | 9427349563<br><br>9909927436<br>9909927426<br>9824021956<br>9408781344<br>9898290079<br>7698877512                         | Dr Roma Shah<br><br>9909927416<br><br>Dr Pinal Shah<br><br>832009933            |
| 3 | NORTH | Chhani U-<br>CHC      | Opp.Gurudwara, Chhani<br>Jakatnaka. Vadodara<br>391740                                                             | Dr. Vinay<br>Bhabhor<br><br>Dr. Bhumi<br>Vasentia<br><br>Dr. Bhavini<br>Rathwa<br><br>Dr. Yesha<br>Rajput<br><br>Dr. Mahendra<br>Mokani<br><br>Dr Abhishek<br>Rathod<br><br>Dr. Vallari<br>Parmar | 8238022731<br>9978445615<br>9913502135<br>9016428119<br>9727767333<br>9924038613<br>9601086155<br>7874578248<br>9725346372 | Dr Chetna Patel<br><br>6357977385<br><br>Dr Santosh<br>Machhi<br><br>9979896869 |

|   |      |                         |                                                                                                                         |                                                                                                                                                                         |                                                                                                                        |                                                                                 |
|---|------|-------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|   |      |                         |                                                                                                                         | Dr Piyush Rathod<br><br>Dr Janvi Chaudhary                                                                                                                              |                                                                                                                        |                                                                                 |
| 4 | EAST | Kishanwadi<br><br>U-CHC | B/H Kishanwadi,<br><br>UPHC,opp.vuda<br><br>Makan, Near Community Hall Gadheda Market<br><br>Cross,Road Vadodara-390019 | Dr Priyankl Trivedi<br><br>Dr Ekta Shah<br><br>Dr Parthiv Shah<br><br>Dr. Prakash Prajapati<br><br>Dr Ashok Rajpuraohiot<br><br>Dr. Snehal Suthar<br><br>Dr. Ruchi More | 9265136709<br><br>9909927430<br><br>9909927425<br><br>9909911719<br><br>7567557625<br><br>9913153775<br><br>7698887647 | Dr Seema Tripathi<br><br>9825076369<br><br>Dr Arvind Paraskar<br><br>8238018706 |

### 1.3.9 Solid waste Generation:

| NO. | Name                 | Particulars            | Contact No |
|-----|----------------------|------------------------|------------|
| 1   | Mr. Swapnil Shukla   | Executive Enginner     | 8238048495 |
| 2   | Mr. Kashyap R Shah   | Environmental Engineer | 9879505255 |
| 3   | Mr. Hardik P. Gamdha | Environmental Engineer | 9998242523 |
| 4   | Mr. Ramji Rabari     | Deputy Engineer        | 9909008307 |

#### Door to Door Collection Report

|                          |      |             |           |         |
|--------------------------|------|-------------|-----------|---------|
| April-2025 to March-2026 |      |             |           |         |
| Zone                     | East | West        | North     | South   |
| Agenc<br>y               | CDC  | Om Swachata | Swachhata | Western |

|  | DD/O<br>S | Door to<br>Door | Open<br>Spot | Door to<br>Door | Open<br>Spot | Door to<br>Door | Open<br>Spot | Door to<br>Door | Open<br>Spot |
|--|-----------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
|  | Apr-25    | 5753.970        | 2935.610     | 6862.870        | 2493.050     | 7408.670        | 2113.680     | 7299.250        | 1835.970     |
|  | May-25    | 6080.230        | 2805.800     | 6700.220        | 3424.890     | 7062.420        | 2747.650     | 7289.430        | 2411.720     |
|  | Jun-25    | 5377.600        | 2573.720     | 6958.580        | 2756.010     | 6502.870        | 2345.100     | 6356.320        | 2328.100     |
|  | Jul-25    | 6008.610        | 2299.340     | 11600.220       | 3913.410     | 7893.460        | 2733.400     | 7573.760        | 2047.990     |
|  | Aug-25    | 6444.380        | 963.030      | 9210.180        | 3785.770     | 7154.190        | 2584.170     | 7333.340        | 2082.590     |
|  | Sep-25    | 9084.010        | 0.000        | 5918.450        | 3029.550     | 6581.240        | 2273.190     | 6646.960        | 2156.440     |
|  | Oct-25    | 10470.520       | 0.000        | 6843.870        | 3789.820     | 7228.940        | 2496.720     | 11189.360       | 125.020      |
|  | Nov-25    | 10321.220       | 0.000        | 11353.930       | 5111.890     | 7851.820        | 2302.200     | 10476.040       | 0.000        |
|  | Dec-25    | 10298.450       | 0.000        | 14174.490       | 2945.610     | 7473.170        | 2084.810     | 9790.880        | 0.000        |
|  | Jan-26    | 9985.220        | 0.000        | 16716.560       | 0.000        | 7984.430        | 2218.370     | 9734.520        | 0.000        |
|  | Feb-26    | 9249.400        | 0.000        | 15186.960       | 0.000        | 7176.380        | 1798.500     | 8899.710        | 0.000        |
|  | Mar-26    | 10255.430       | 0.000        | 16230.430       | 0.000        | 7405.660        | 2270.310     | 9822.250        | 0.000        |
|  |           | 99329.040       | 11577.500    | 127756.760      | 31250.000    | 87723.250       | 27968.100    | 102411.820      | 12987.830    |
|  |           | 110906.540      |              | 159006.760      |              | 115691.350      |              | 115399.650      |              |
|  | Total     | 501004.300      |              |                 |              |                 |              |                 |              |



## વડોદરા મહાનગર પાલિકા

### સોલિડ વેસ્ટ મેનેજમેન્ટ

R.S. 346.મકરપુરા લેન્ડફિલ સાઇટ વ્હીકલ રીપોર્ટ ( વાહન રિપોર્ટ )



22-04-2026

|                        |       |                                      |                           |                           |                  | ઓપન સ્પોટના વાહનો |                      |          |            |            |       |              |     |                                      |
|------------------------|-------|--------------------------------------|---------------------------|---------------------------|------------------|-------------------|----------------------|----------|------------|------------|-------|--------------|-----|--------------------------------------|
| ઝોન                    | વોર્ડ | વોર્ડની જરૂરિયાત મુજબ વાહનોની સંખ્યા | જરૂરિયાત મુજબના કુલ વાહનો | ફાળવેલ વાહનોની કુલ સંખ્યા | ફાળવેલ કુલ વાહનો | ટ્રેકટર           | ટાટા એસ/ટેમ્પલ વેસ્ટ | ઇ-રિક્ષા | આઇસર / ૪૦૭ | કિચન વેસ્ટ | ડમ્પર | લોડર/ જેસીબી | કુલ | કોર ટુ કોર અને ઓપન સ્પોટના કુલ વાહનો |
| ઉત્તર ઝોન              | ૧     | ૧૬                                   | ૭૬                        | ૧૬                        | ૭૬               | ૫                 | ૨                    | ૦        | ૦          | ૦          | ૦     | ૧            | ૩૭  | ૧૧૩                                  |
|                        | ૨     | ૧૬                                   |                           | ૧૬                        |                  | ૪                 | ૦                    | ૦        | ૦          | ૦          | ૧     |              |     |                                      |
|                        | ૩     | ૨૦                                   |                           | ૨૦                        |                  | ૩                 | ૧                    | ૦        | ૦          | ૦          | ૦     | ૧            |     |                                      |
|                        | ૭     | ૧૩                                   |                           | ૧૩                        |                  | ૬                 | ૧                    | ૦        | ૦          | ૦          | ૦     | ૧            |     |                                      |
|                        | ૧૩    | ૧૧                                   |                           | ૧૧                        |                  | ૭                 | ૧                    | ૦        | ૧          | ૦          | ૦     | ૨            |     |                                      |
| પૂર્વ ઝોન              | ૪     | ૪૩                                   | ૧૬૧                       | ૪૩                        | ૧૬૧              | ૦                 | ૧                    | ૫        | ૦          | ૧          | ૧     | ૧            | ૪૪  | ૨૦૫                                  |
|                        | ૫     | ૩૪                                   |                           | ૩૪                        |                  | ૦                 |                      | ૫        | ૦          | ૧          | ૧     | ૧            |     |                                      |
|                        | ૬     | ૨૫                                   |                           | ૨૫                        |                  | ૦                 |                      | ૬        | ૦          | ૧          | ૧     | ૦            |     |                                      |
|                        | ૧૪    | ૨૮                                   |                           | ૨૮                        |                  | ૦                 |                      | ૭        | ૦          | ૧          | ૧     | ૧            |     |                                      |
|                        | ૧૫    | ૩૧                                   |                           | ૩૧                        |                  | ૦                 |                      | ૭        | ૦          | ૧          | ૧     | ૦            |     |                                      |
| પશ્ચિમ ઝોન             | ૮     | ૫૦                                   | ૨૬૬                       | ૫૦                        | ૨૬૬              | ૦                 | ૧                    | ૦        | ૦          | ૧          | ૨     | ૧            | ૨૧  | ૨૮૭                                  |
|                        | ૯     | ૫૧                                   |                           | ૫૧                        |                  | ૦                 |                      | ૦        | ૦          | ૧          | ૨     | ૧            |     |                                      |
|                        | ૧૦    | ૬૬                                   |                           | ૬૬                        |                  | ૦                 |                      | ૦        | ૦          | ૧          | ૨     | ૧            |     |                                      |
|                        | ૧૧    | ૩૯                                   |                           | ૩૯                        |                  | ૦                 |                      | ૦        | ૦          | ૧          | ૨     | ૧            |     |                                      |
|                        | ૧૨    | ૬૦                                   |                           | ૬૦                        |                  | ૦                 |                      | ૦        | ૦          | ૧          | ૨     | ૧            |     |                                      |
| દક્ષિણ ઝોન             | ૧૬    | ૪૮                                   | ૧૬૯                       | ૪૯                        | ૧૭૦              | ૦                 | ૨                    | ૩        | ૦          | ૧          | ૨     | ૧            | ૩૩  | ૨૦૩                                  |
|                        | ૧૭    | ૩૧                                   |                           | ૩૧                        |                  | ૦                 |                      | ૩        | ૦          | ૨          | ૨     | ૧            |     |                                      |
|                        | ૧૮    | ૪૨                                   |                           | ૪૨                        |                  | ૦                 |                      | ૫        | ૦          | ૧          | ૨     | ૧            |     |                                      |
|                        | ૧૯    | ૪૮                                   |                           | ૪૮                        |                  | ૦                 |                      | ૩        | ૦          | ૧          | ૨     | ૧            |     |                                      |
| કોર ટુ કોરના કુલ વાહનો |       |                                      | ૬૭૨                       |                           | ૬૭૩              | ઓપન સ્પોટના વાહનો |                      |          |            |            |       |              | ૧૩૫ | ૮૦૮                                  |



### 1.3.10 Zoo Details:

Vadodara is having amusement park as well as small zoo called Kamatibaug in the corporation limit.

### 1.3.11 Sewage Treatment Plant:

Vadodara Municipal Corporation has prepared a Master Plan for comprehensive sewerage system (more than 1425 K.M. of sewers and 9 Sewage Treatment Works) to serve the domestics and commercial but also the industrial developments for the year 2022. Wastewater generated from all this development is collected by an underground Drainage Network and Sewage Pumping Stations (APS) and conveyed to Sewerage Treatment Plants (STP) for Physical and Biological Treatment to meet the parameters prescribed by the Gujarat Pollution Control Board before discharge into nearest water course.

| Drainage Zones               | Collection Area                                                                     | Sewage Treatment Plant                  | Sewage Treated in (MLD)     |
|------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|
| Zone - I Ward (4,12)         | All the area to the south of meter gauge railway line and east of river Vishwamitri | Tarsali                                 | 52                          |
| Zone - II Ward (1,2,3,5,8,9) | All the area to the north of meter gauge railway line and east of river Vishwamitri | Gajarawadi & Kapurai                    | 66 + 43 = 109               |
| Zone - III Ward (6,7,10,11)  | All the area to the west of river Vishwamitri                                       | Atladra, Chhani Village & Sayaji Garden | 43 + 43 + 21 + 8.5 = 115.50 |
| <b>TOTAL</b>                 |                                                                                     |                                         | <b>276.50 MLD</b>           |



# **RESOURCES DETAILS**

## **VADODARA MUNICIPAL CORPORATION**



## 2.1 Emergency Vehicle List: Vadodara Fire Brigade

| SR NO | MAKE          | MODEL | TYPE OF BODY               | WATER CAPACITY  |
|-------|---------------|-------|----------------------------|-----------------|
| 1     | GJ-06-GA-3784 | 2025  | Tata MINI FIRE TENDER      | 3000            |
| 2     | GJ-06-G-6648  | 2012  | Ashok Leyland WATER TENDER | 6000            |
| 3     | GJ-06-GA-2582 | 2018  | Bhart benz FIRE ENGINE     | 6000            |
| 4     | GJ-06-GA-2659 | 2018  | Bhart Benz FIRE ENGINE     | 6000            |
| 5     | GJ-06-G-6641  | 2012  | Ashok Leyland Rescue Van   | Rescue vehicles |
| 6     | GJ-06-GA-0374 | 2016  | Eicher Water Tanker        | 10000           |
| 7     | GJ-06-GA-0326 | 2016  | Eicher W T with Pump       | 3000            |
| 8     | GJ-06-GA-2959 | 2020  | LGV BOL CAMPER GOLD        | Bolero          |
| 9     | GJ-06-GA-3258 | 2021  | Tata Winger                | Ambulance       |
| 10    | GJ-06-GA-3380 | 2021  | Tata Motors                | Ambulance       |
| 11    | GJ-06-G-6733  | 2014  | Tata Winger                | Ambulance       |
| 12    | GJ-06-G-6363  | 2006  | Tata Fire Engine           | 3000            |
| 13    | GJ-06-G-1891  | 2013  | Royal Enfield              | Bullet          |
| 14    | GJ-06-G-3002  | 2021  | EECHO                      | Ambulance       |
| 15    | GJ-06-GA-2511 | 2017  | BHARATBENZ Fire Engine     | 6000            |
| 16    | GJ-06-GA-2682 | 2017  | BHARATBENZ FIRE ENGINE     | 6000            |
| 17    | GJ-06-GA-2823 | 2020  | BHARATBENZ FIRE TENDER     | 16500           |
| 18    | GJ-06-GA-3662 | ##### | VOLVO                      | AIRAVAT 81MTR   |
| 19    | GJ-06-GA-2973 | 2020  | MAHINDRA                   | LGV 500         |



|    |               |       |                        |                                            |
|----|---------------|-------|------------------------|--------------------------------------------|
| 20 | GJ-06-GA-3009 | 2021  | MAHINDRA               | JEEP                                       |
| 21 | GJ-06-GA-3662 | ##### | VINGER                 | AIRAVAT FIRE FIGHTERS                      |
| 22 | GJ-06-GA-3857 | 2023  | FORCE                  | AMBULANCE                                  |
| 23 | GJ-06-GA-0414 | 2016  | EICHER                 | 10000 WATER TANKER                         |
| 24 | GJ-06-GA-0481 | 2016  | EICHER                 | 10000 WATER TANKER                         |
| 25 | GJ-06-GA-0190 | 2016  | EICHER                 | 10000 WATER TANKER                         |
| 26 | GJ-06-GA-0185 | 2014  | TATA                   | RESQUE TENDER                              |
| 27 | GJ-06-GA-2900 | 2017  | BHARATBENZ             | 6000 ltr FIRE ENGINE                       |
| 28 | GJ-06-GA-2563 | 2018  | EICHER                 | 12000 ltr SPECIAL RESPONSE<br>FIRE VEHICLE |
| 29 | GQB-4849      | 1987  | LAYLAND 411            | SNORKEL FIRE ENGINE                        |
| 30 | GJ-27-TD-0422 | 2022  | MAHINDRA               | Robote                                     |
| 31 | GJ-06-GA-2550 | 2020  | MAHINDRA               | Red Bolero                                 |
| 32 | GJ-06-GA-3213 | 2021  | TATA                   | AMBULANCE                                  |
| 33 | GJ-06-G-6735  | 2013  | TATA                   | AMBULANCE                                  |
| 34 | GJ-06-G-6646  | 2011  | ASHOK LAYLAND          | 9000 ltr                                   |
| 35 | GJ-06-GA-0352 | 2016  | EICHER WATER TANKER    | 10000 ltr                                  |
| 36 | GJ-06-GA-0132 | 2014  | EICHER WATER W T PUMP  | 3000 ltr                                   |
| 37 | GJ-06-GA-0230 | 2016  | EICHER WATER TANKER    | 10000 ltr                                  |
| 38 | GJ-06-GA-0270 | 2013  | TATA FOAM TENDER       | 4000 Water 1000 Foam                       |
| 39 | GJ-06-GA-3480 | 2021  | MAHINDRA JEEP          | White Bolero                               |
| 40 | GJ-06-GA-2766 | 2017  | BHARATBENZ FIRE ENGINE | 6000                                       |

|    |               |       |                             |                        |
|----|---------------|-------|-----------------------------|------------------------|
| 41 | GJ-06-GA-0125 | 2014  | EICHER/EMERGENCY EESCUE VAN | 10000                  |
| 42 | GJ-06-GA-0331 | 2014  | EICHER W T PUMP             | 3000                   |
| 43 | GJ-06-GA-3205 | 2021  | TATA WINGER                 | #####                  |
| 44 | GJ-06-GA-2845 | 2020  | MAHINDRA BOL.               | 500                    |
| 45 | GJ-06-GA-6647 | 2012  | Ashok leyland               | 6000                   |
| 46 | GJ-06-GA-2904 | 2018  | Bhart benzWATER TENDER      | 6000                   |
| 47 | GJ-06-GA-0487 | 2014  | Tata FOAM TENDER            | 6000                   |
| 48 | GJ-06-GA-3182 | 2021  | Tata WINGERS                | #####                  |
| 49 | GJ-06-GA-4288 | 2025  | Tata                        | #####                  |
| 50 | GJ-06-GA-3998 | 2024  | Tata                        | #####                  |
| 51 | GJ-06-G-5883  | ##### | Tata                        | #####                  |
| 52 | GJ-06-GA-0245 | 2013  | Fire Form Tender            | 4000 Water + 3000 Form |
| 53 | GJ-06-T-5102  | 1988  | Rescue Van                  | #####                  |
| 54 | GJ-06-GA-2842 | 2018  | Water Boom Bouzer           | #####                  |
| 55 | GJ-06-GA-2585 | 2017  | Advance Water Tender        | 5000                   |
| 56 | GJ-06-G-6519  | 2016  | High PRSPR Pump             | Sucstion               |
| 57 | GJ-06-GA-2521 | 2019  | Mini Fire Tender            | 300                    |
| 58 | GJ-06-GA-0346 | 2016  | Water Tanker                | 10000                  |
| 59 | GJ-06-GA-0421 | 2015  | Ambulance                   | #####                  |
| 60 | GJ-06-GA-0402 | 2015  | Ambulance                   | #####                  |
| 61 | GJ-06-GA-2999 | 2017  | Fire Engine                 | #####                  |

|    |               |       |                               |       |
|----|---------------|-------|-------------------------------|-------|
| 62 | GJ-06-GA-2779 | 2019  | Special Response Fire Vehical | ##### |
| 63 | GJ-06-GA-2748 | 2019  | Special Response Fire Vehical | ##### |
| 64 | GJ-06-GA-2586 | 2020  | LGV                           | ##### |
| 65 | GJ-06-GA-3075 | 2021  | Ambulance                     | ##### |
| 66 | GJ-06-GA-2755 | 2020  | Fire Tender                   | ##### |
| 67 | GJ-06-GA-2805 | 2020  | Fire Tender                   | ##### |
| 68 | GJ-06-GA-0190 | 2016  | Water Tanker                  | ##### |
| 69 | GJ-06-GA-3138 | 2021  | Jeep                          | ##### |
| 70 | GJ-06-GA-0322 | 2016  | Water Tanker                  | ##### |
| 71 | GJ-06-GA-2598 | 2017  | Fire Engine                   | ##### |
| 72 | GJ-06-GA-6737 | 2013  | Ambulance                     | ##### |
| 74 | GJ-06-GA-3857 | 2023  | Ambulance                     | ##### |
| 75 | GJ-06-GA-3700 | 2013  | Fire Engine                   | ##### |
| 76 | GJ06-GA-2755  | ##### | BHARATBENZ                    | 6000  |
| 77 | GJ06-G-6376   | ##### | ASHOK LAYLAND                 | ##### |
| 78 | GJ06-GA-0005  | ##### | EICHER                        | 10000 |
| 79 | GJ06-GA-0130  | ##### | EICHER                        | 10000 |
| 80 | GJ06-GA-3495  | ##### | FORCE                         | ##### |

## 2.2 Vadodara Fire Brigade: List of Equipments

| Sr.<br>No | Item code<br>Details                              | Name of the Fire stations |                 |              |          |               |       |       |     |
|-----------|---------------------------------------------------|---------------------------|-----------------|--------------|----------|---------------|-------|-------|-----|
|           |                                                   | Vadi<br>wadi              | Dandia<br>bazar | Pani<br>gate | GID<br>C | Gajra<br>wadi | TP 13 | Vasna | ERC |
| 1         | Gas Cutters                                       | 0                         | 1               | 1            | 4        | 0             | 0     | 0     | 1   |
| 2         | Cold Cutters                                      | 0                         | -               | 0            |          | 0             | 0     | 0     | 1   |
| 3         | Bolt cutters(Shears<br>)                          | 3                         | 5               | 9            | 1        | 3             | 5     | 3     | 4   |
| 4         | Electric Drill                                    | 0                         | -               | 0            |          | 0             | 0     | 0     | 1   |
| 5         | Circular Saw with<br>Diamond Blade<br>(Electric)  | 7                         | -               | 0            |          | 5             | 1     | 0     | 0   |
| 6         | Chipping Hammer                                   | 0                         | 2               | 0            |          | 0             | 0     | 0     | 0   |
| 7         | Chain Saw<br>Diamond                              | 2                         | -               | 0            | 5        | 0             | 0     | 0     | 2   |
| 8         | Chain Saw Bullet                                  | 0                         | -               | 0            |          | 0             | 0     | 0     | 0   |
| 9         | Cutters Hydraulic                                 | 1                         | 2               | 2            | 2        | 1             | 2     | 1     | 1   |
| 10        | Cutters Battery                                   | 1                         | 2               | 0            |          | 0             | 0     | 0     | 0   |
| 11        | Spreaders<br>Hydraulic                            | 2                         | 2               | 2            | 4        | 2             | 4     | 1     | 2   |
| 12        | Spreaders Battery                                 | 1                         | 2               | 0            | 2        | 2             | 1     | 0     | 0   |
| 13        | Air Lifting bags<br>(Different<br>capacity)/Tools | 1                         | 3               | 2            | 6        | 0             | 4     | 0     | 1   |
| 14        | Jack with 5 ton lift                              | 3                         | 2               |              | 2        | 0             | 4     | 0     | 1   |

|    |                                          |    |   |   |   |   |   |   |           |
|----|------------------------------------------|----|---|---|---|---|---|---|-----------|
| 15 | Gas Cutters                              | 0  | - | 0 |   | 0 | 0 | 0 | 1         |
| 16 | Iron shod levers, 10 ft. Long            | 0  | - |   | 8 | 0 | 0 | 0 | 0         |
| 17 | Sledge hammer                            | 2  | - | 6 | 3 | 4 | 2 | 3 |           |
| 18 | Heavy Axe                                | 0  | - | 5 | 6 | 1 | 0 | 0 | 2         |
| 19 | Smoke Blower and Exhauster               | 1  | - | 1 | 1 | 1 | 1 | 0 | 1         |
| 20 | Set of rope tackle ( 3 sheave 2 sheave)  | 00 | - | 0 | 1 | 0 | 3 | 0 | 0         |
| 21 | Gloves Rubber, Tested up to 25, 000 volt | 4  | - | 3 | 2 | 0 | 2 | 2 | 3 nos per |
| 22 | Stretcher harness (set)                  | 0  | - | 2 | 1 | 0 | 1 | 0 | 1         |
| 23 | Jumping Cushions                         | 1  | - | 0 |   | 0 | 0 | 0 | 0         |
| 24 | Rescue Rams                              | 2  | 2 | 1 | 3 | 0 | 0 | 1 | 1         |
| 25 | Blankets                                 | 0  | - | 0 |   | 1 | 0 | 0 | 0         |
| 26 | Lifting tackle 3 ton                     | 0  | - | 0 |   | 0 | 0 | 0 | 0         |
| 27 | Chains 6 feet (3-ton lift)               | 0  | - | 1 | 2 | 1 | 1 | 0 | 0         |
| 28 | Inflatable Light Tower                   | 1  | - | 0 |   | 0 | 1 | 0 | 0         |
| 29 | Light Mast                               | 1  | 4 | 4 | 2 | 1 | 0 | 1 | 1         |
| 30 | Search light                             | 5  | - | 4 | 5 | 2 | 4 | 0 | 4         |
| 31 | Electric Generator (10 kv)               | 0  | 2 | 3 |   | 0 | 3 | 1 | 1         |

|    |                                                           |   |    |    |    |    |    |    |    |
|----|-----------------------------------------------------------|---|----|----|----|----|----|----|----|
| 32 | Cranes Heavy Duty,<br>Fork type                           | 0 | -  | 0  |    | 0  | 0  | 0  | 0  |
| 33 | Search and Rescue<br>Teams for<br>Collapsed<br>Structures | 0 |    | 3  |    | 0  | 0  | 0  | 0  |
| 34 | Rescue back<br>boards                                     | 0 | -  | 2  |    | 3  | 0  | 3  | 1  |
| 35 | Diving suit                                               | 0 | -  | 0  |    |    | 0  | 0  | 0  |
| 36 | Under water BA set                                        | 0 | -  | 0  |    |    | 0  | 0  | 0  |
| 37 | Lifebuoy                                                  | 8 | 20 | 14 | 4  | 10 | 7  | 10 | 25 |
| 38 | Life Jackets                                              | 8 | 10 | 25 |    | 14 | 1  | 13 | 24 |
| 39 | Basket Stretcher                                          | 0 | 1  | 0  |    |    | 1  | 0  | 1  |
| 40 | Pneumatic Rope<br>Launcher                                | 0 | -  | 0  |    |    | 0  | 0  | 0  |
| 41 | Inflatable boat (12<br>persons)                           | 1 | 2  | 2  |    |    | 0  | 3  |    |
| 42 | Motorboats                                                | 0 | -  | 5  |    |    | 0  | 0  | 0  |
| 43 | Search and Rescue<br>Teams for Flood                      | 0 | -  | 3  |    |    | 0  | -  | 0  |
| 44 | Suit fire entry                                           | 0 | 6  | 0  |    |    | 0  | 1  | 0  |
| 45 | Clothing Chemical<br>protective (A, B, C)                 | 0 | -  | 1  |    | 2  | 1  | 2  | 0  |
| 46 | Breathing<br>apparatus self<br>contained                  | 0 | 15 | 0  | 10 | 9  | 13 | -  | 4  |

|    |                                |   |       |    |    |    |   |       |   |
|----|--------------------------------|---|-------|----|----|----|---|-------|---|
| 47 | Breathing Apparatus Compressor | 0 | -     | 0  |    |    | 0 | 0     | 0 |
| 48 | Pump high pressure, portable   | 0 | -     | 0  |    |    | 0 | 0     | 0 |
| 49 | Pump floating                  | 0 | -     | 0  |    |    | 0 | 0     | 0 |
| 50 | Extension Ladder               | 3 | 4     | 7  | 3  | 2  | 4 | 2     | 1 |
| 51 | Foam Type                      | 0 | -     | 0  |    |    | 0 | 0     | 0 |
| 52 | Halons Type                    | 0 | -     | 0  |    |    | 0 | 0     | 0 |
| 53 | Fire Tender                    | 2 | 3     | 2  |    | 1  | 3 | 3     | 1 |
| 54 | Foam Tender                    | 1 | 1     | 1  |    | 0  | 1 | 0     | 0 |
| 55 | Rescue Tender                  | 0 | 1     | 1  |    | 0  | 1 | 0     | 1 |
| 56 | Hydraulic Platform             | 0 | -     | 1  |    | 0  | 0 | 1     | 0 |
| 57 | DCP Tender                     | 0 | -     | 0  |    | 0  | 0 | 0     | 0 |
| 58 | Fire Fighting Foam Compound    | 0 | 15X20 | 96 | 20 | 0  | 0 | 20×23 | 0 |
| 59 | Dry Chemical Powder            | 0 | -     | 0  |    | 18 | 0 | 0     | 4 |
| 60 | Spine boards                   | 0 | -     | 0  |    | 0  | 0 | 0     | 0 |
| 61 | Stretcher normal               | 0 | 2     | 0  | 1  | 0  | 1 | 1     | 0 |
| 62 | First aid kits                 | 4 |       | 5  |    | 2  | 3 | 4     | 0 |
| 63 | Mechanical ventilators         | 0 | -     | 0  |    | 0  | 0 | 0     | 0 |
| 64 | Water filter                   | 0 | -     | 0  |    | 0  | 0 | 0     | 0 |
| 65 | Water tank                     | 0 | 2     | 0  |    | 0  | 1 | 0     | 1 |
| 66 | 4 wheel drive vehicle          | 2 | 1     | 0  |    | 8  | 4 | 2     | 0 |

|    |                              |   |   |   |   |   |   |   |   |
|----|------------------------------|---|---|---|---|---|---|---|---|
| 67 | Light Ambulance Van          | 2 | 3 | 0 |   | 0 | 0 | 1 | 1 |
| 68 | Medium Ambulance Van         | 0 | - | 2 |   | 1 | 1 | 1 | 0 |
| 69 | Water Tanker Medium capacity | 0 | 1 | 1 |   | 1 | 0 | 0 | 0 |
| 70 | Water Tanker Large capacity  | 2 | 1 | 3 |   | 1 | 1 | 3 | 0 |
| 71 | VHF Sets Static              | 1 | 2 | 1 |   | 1 | 0 | 1 | 0 |
| 72 | VHF Sets Mobile              | 0 | 4 |   |   | 1 | 3 | 0 | 0 |
| 73 | UHF Sets Static              | 0 | - | 0 |   | 1 | 0 | 0 | 0 |
| 74 | UHF Sets Mobile              | 0 | - | 0 |   | 0 | 1 | 0 | 0 |
| 75 | Walkie Talkie Sets           | 1 | 1 | 1 |   | 1 | 0 | 2 | 1 |
| 76 | HF Sets Static               | 0 | - | 0 |   | 0 | 0 | 0 | 0 |
| 77 | Mobile Phone GSM             | 0 | - | 0 |   | 0 | 0 | 0 | 0 |
| 78 | Video Camera Digital         | 0 | - | 0 |   | 0 | 0 | 0 | 0 |
| 79 | Emergency response guidebook | 0 | - | 0 |   | 0 | 0 | 0 | 0 |
| 80 | Leak storing device          | 0 | - | 0 |   | 0 | 0 | 0 | 0 |
| 81 | Traffic cones                | 0 | - | 6 |   | 0 | 4 | 0 | 0 |
| 82 | Rope ladder                  | 1 | 2 | 1 | 3 | 0 | 0 | 0 | 0 |
| 83 | Aluminum ladder              | 3 | - | 1 | 3 | 2 | 2 | 0 | 1 |
| 84 | Shovel                       | 5 | 6 | 5 | 8 | 2 | 6 | 4 | 4 |
| 85 | Spade                        | 4 | 6 | 6 | 3 | 1 | 4 | 3 | 2 |
| 86 | Crowbar                      | 5 | - | 5 | 7 | 7 | 3 | 4 | 1 |



|     |                                   |    |       |     |    |    |    |       |    |
|-----|-----------------------------------|----|-------|-----|----|----|----|-------|----|
| 87  | Helmet                            | 10 | 6     | 16  | 6  | 6  | 12 | 10    | 10 |
| 88  | Pick axe                          | 5  | 8     | 13  | 4  | 5  | 4  | 2     | 2  |
| 89  | Axe                               | 3  | 6     |     | 7  | 4  | 4  | 2     | 2  |
| 90  | Hacksaw                           | 0  | 4     | 2   |    | 1  | 1  | 0     | 0  |
| 91  | Ceiling hook                      | 4  | -     | 1   | 3  | 0  | 1  | 0     | 0  |
| 92  | Pump                              | 1  | -     | 5   |    | 0  | 0  | 0     | 0  |
| 93  | Public Address System             | 0  | 2     | 3   |    | 0  | 2  | 0     | 0  |
| 94  | Electric Torch                    | 0  | 12    | 12  | 4  | 0  | 0  | 0     | 0  |
| 95  | Telescopic Pneumatic Mast (Light) | 1  | 1     | 1   |    | 1  | 0  | 1     | 0  |
| 96  | Office building                   | 0  | 1     | 1   |    | 2  | 1  | -     | 1  |
| 97  | Hand Tool Set                     | 1  | 2     | 1   | 5  | 2  | 1  | 1     | 1  |
| 98  | B.A.Set                           | 9  | -     | 7   | 4  | 9  | 13 | 9     | 4  |
| 99  | Rope                              | 2  | 7     | 14  | 13 | 3  | 1  | 6     | 2  |
| 100 | Bucket                            | 3  | 5     | 5   |    | 1  | 2  | 1     | 0  |
| 101 | Hose/hose fitting                 | 30 | 30/10 | 120 | 51 | 20 | 1  | 30/20 | 0  |
| 102 | Air Compressor                    | 0  | -     | 1   |    | 0  | 0  | 0     | 0  |

### **2.3 List of Boats, life Jacket, Fiber Ring, and Rope:**

| Sr. No. | Type of Boat | Vadodara Fire and Emergency Services     | Emergency Response Centre(ERC), Vadodara |
|---------|--------------|------------------------------------------|------------------------------------------|
| 1       | Rubber Boat  | 11 Boat Six Seater                       | -                                        |
| 2       | Fiber Boat   | 07(05 Singl engine and 2 double engine ) | 06(Single engine )                       |
| 3       | Life Jacket  | 130+ (128 new order given)               | -                                        |
| 4       | Fibre Ring   | 84+ (64 New Order given)                 | -                                        |
| 5       | Rope         | 50 kg(16 Nos.-30mt, New order given)     |                                          |
| 6       | Machine boat |                                          |                                          |

### **2.4 List of dewatering pump**

Vadodara Municipal Corporation is having 01 dewatering pump which is given by GSDMA to ERC Vadodara which is in working condition.

### **2.5 List of Ambulances**

Vadodara Fire brigade is having 18 Ambulances.

| Sr. No | Ambulance No | Sr. No | Ambulance No | Sr. No | Ambulance No |
|--------|--------------|--------|--------------|--------|--------------|
| 1      | GJ6-G-6367   | 8      | GJ6-GA-0421  | 15     | GJ6-G-6737   |
| 2      | GJ6-G-6382   | 9      | GJ6-G-6736   | 16     | GJ6-G-673    |
| 3      | GJ6-G-6383   | 10     | GJ6-X-269    | 17     | GJ6-X-1820   |
| 4      | GJ6-G-6733   | 11     | GJ6-G-6384   | 18     | GJ6-GA-0402  |
| 5      | GJ6-X-675    | 12     | GJ6-G-6735   |        |              |
| 6      | GJ6-X-677    | 13     | GJ6-U-1760   |        |              |
| 7      | GJ6-G-6385   | 14     | GJ6-G-6482   |        |              |

## **2.6 List of Tractors:**

| <b>Sr. No</b> | <b>Location</b> | <b>Concerned person Name</b>   | <b>Contact Details</b> |
|---------------|-----------------|--------------------------------|------------------------|
| 1             | Gotri           | Patel Rames hbhai Becharbhi    | 9913222444             |
| 2             | Gotri           | Patel Bhogilal Punjabhai       | 9825025433             |
| 3             | Gotri           | Bharvad Hirabhai Melabhai      | 9924251011             |
| 4             | Gotri           | Ashokbhai Ishvarbhai Prajapati | 9825977382             |
| 5             | Gotri           | Vikrambhai Khengarbhai Bharvad | 9825022397             |
| 6             | Akota           | Patel ahmadbhai adambhai       | 9824097781             |
| 7             | Tandalja        | Ansari shadap abdulgani        | 9825084421             |
| 8             | Jetalpur        | Prajapati mahijibhai somabhai  |                        |
| 9             | Subhanpura      | Vaghjibhai bhayabhai bharvad   | 9879033089             |
| 10            | Atladara        | Vaghjibhai bhayabhai bharvad   | 9879033089             |
| 11            | Vadivadi        | Vaghjibhai bhayabhai bharvad   | 9879033089             |
| 12            | Sayajipura      | Kaushik Bhai Patel             | 9979897491             |

## **2.7 List of Trolley:**

| <b>Sr. No.</b> | <b>Location</b> | <b>Concerned Person Name</b>   | <b>Contact Details</b> |
|----------------|-----------------|--------------------------------|------------------------|
| 1              | Gotri           | Patel Rameshbhai Becharbha     | 9913222444             |
| 2              | Gotri           | Patel Bhogilal Punjabhai       | 9825025433             |
| 3              | Gotri           | Bharvad Hirabhai Melabhai      | 9924251011             |
| 4              | Gotri           | Ashokbhai Ishvarbhai Prajapati | 9825977382             |
| 5              | Gotri           | Vikrambhai Khengarbhai Bharvad | 9825022397             |
| 6              | Tandalja        | Patel Ahmadbhai Adambhai       | 9824097781             |
| 7              | Vadodara        | M P Enterprise                 | 9825178710             |
| 8              | Vadodara        | V S Shah & Co.                 | 9825034969             |

## **2.8 List of Truck**

| Sr. No. | Location | Concerned Person Name               | Contact Details |
|---------|----------|-------------------------------------|-----------------|
| 1       | Kapurai  | Rabari Maheshbhai Naranbhai         | 9825031118      |
| 2       | Gotri    | Bharvad khengarbhai ranabhai        | 9825022397      |
| 3       |          | Lakhabhai kavabhai bharvad          | 9913560976      |
| 4       | Akota    | Patel amirbhai                      | 9825413163      |
| 5       | Tandala  | Patel mahebubhai                    | 9904595024      |
| 6       | Jetulpur | Patel imiyazbhai                    | 9824433077      |
| 7       | Vadodara | Shiwalaya Infra. Projects Pvt. Ltd. | 9898665146      |
| 8       | Vadodara | V S Shah & Co.                      | 9825034969      |
| 9       | Vadodara | Vinod Construction                  | 9909904727      |
| 10      | Vadodara | Shivam Construction                 | 9725026214      |

## **2.9 List of JCBs**

| Sr. No. | Location | Concerned Person Name     | Contact Details |
|---------|----------|---------------------------|-----------------|
| 1       | Gotri    | Kanubhai n bharvad        | 9727073720      |
| 2       | Akota    | Patel bashirbhai ayubbhai | 9825413166      |

## **2.10 List of Dozers and Loaders**

| Sr. No. | Location | Concerned Person Name              | Contact Details |
|---------|----------|------------------------------------|-----------------|
| 1       | Vadodara | Shiwalay Infra. Projects Pvt. Ltd. | 9898665146      |
| 2       | Vadodara | V S Shah & Co.                     | 9825034969      |
| 3       | Vadodara | Vinod Construction                 | 9909904727      |
| 4       | Vadodara | Shivam Construction                | 9725026214      |

### **2.11 List of Dumper**

| Sr. No. | Location | Concerned Person Name                      | Contact Details |
|---------|----------|--------------------------------------------|-----------------|
| 1       | Vadodara | Dy. Executive Eng M S SubDivision Vadodara | 9904053040      |
| 2       | Vadodara | Shiwalaya Infra. Projects Pvt. Ltd.        | 9898665146      |
| 3       | Vadodara | V S Shah & Co.                             | 9825034969      |
| 4       | Vadodara | Vinod Construction                         | 9909904727      |
| 5       | Vadodara | Shivam Construction                        | 9725026214      |

### **2.12 List of Crain**

| Sr. No. | Location | Concerned Person Name    | Contact Details |
|---------|----------|--------------------------|-----------------|
| 1       | Vadodara | Mali Arjunbhai Laljibhai | 9824084356      |
| 2       | Vadodara | M P Enterprise           | 9825178710      |

### **2.13 List of Bulldozer**

| Sr. No. | Location | Concerned Person Name | Contact Details |
|---------|----------|-----------------------|-----------------|
| 1       | Vadodara | Vinod Construction    | 9909904727      |

### **2.14 List of resources available with Vadodara Municipal Corporation:**

| Sr. No. | Name of the Resources | Total In Nos. | Concerned person Name and No. |
|---------|-----------------------|---------------|-------------------------------|
| 01      | De silting machine    | 29            |                               |
| 02      | Jetting machine       | 12            |                               |
| 03      | Suction Machine       | 08            |                               |
| 04      | Deep suction Machine  | 04            |                               |
| 05      | Super Sucker Machine  | 10            |                               |
| 06      | Hyva Dumper           | 18            |                               |

|    |                           |    |                                                                                     |
|----|---------------------------|----|-------------------------------------------------------------------------------------|
| 07 | Dumper Placer             | 40 | Shri Dharmesh Rana-9825801942<br><br>Dy. Executive Engineer (Mechanical Department) |
| 08 | Excavator Loader          | 20 |                                                                                     |
| 09 | Wheel Dozer               | 04 |                                                                                     |
| 10 | Chain Dozer               | 01 |                                                                                     |
| 11 | Bolero Camper             | 18 |                                                                                     |
| 12 | Dumper                    | 13 |                                                                                     |
| 13 | Tractor                   | 10 |                                                                                     |
| 14 | Hydra make                | 01 |                                                                                     |
| 15 | Garbage Compactor Machine | 16 |                                                                                     |
| 16 | Road Sweeper Machine      | 08 |                                                                                     |
| 17 | Truck                     | 08 |                                                                                     |
| 18 | Low Bed Trailer           | 08 |                                                                                     |

## 2.15 List of Emergency Vehicle: Vadodara District Hospitals

| No | Centre                  | Ambulance             | Dead body van | Bus type | Vehicle No               |
|----|-------------------------|-----------------------|---------------|----------|--------------------------|
| 1  | S.S.G.Hospital          | 06                    | 02            | 03       | -                        |
| 2  | Fire brigade            | 10                    | 08            | -        | -                        |
| 3  | Jamnabai hospital       | 02                    | -             | -        | GJ18G 6763<br>GJ18G 6875 |
| 4  | I.D hospital            | 01                    | -             | -        | GJ18G 6140               |
| 5  | District leprosy        |                       | -             | 02       | -                        |
| 6  | 108- ambulance          | 07 (city), 20 (rural) | -             | -        | -                        |
| 7  | Arvindlal vaisnav Trust | 03                    | -             | -        | -                        |
| 8  | Bhailal Amin Hosp.      | 03                    | 01            | -        | -                        |

|    |                    |    |    |    |         |
|----|--------------------|----|----|----|---------|
| 9  | Narhari hospital   | 01 | 01 | -  | -       |
| 10 | Baroda heart inst. | 01 | -  | 01 | ICU VAN |
| 11 | Banker hearat      | 02 | -  | -  | -       |
| 12 | KGP children hosp  | 02 | -  | -  | -       |

## **2.16 List of Vehicle: Emergency Response Centre, Vadodara**

| Worki<br>ng or<br>Not. | Vehicle No. | Make      | Type of Body                             | Model | Engine No.    | Horse Power<br>CC |
|------------------------|-------------|-----------|------------------------------------------|-------|---------------|-------------------|
| NW                     | GJ6G-6510   | Man Force | Multifunctional Rescue<br>Van with Crain | 2008  | D5400115<br>7 | BHP 280           |
| NW                     | GJ6G-6511   | Man Force | Multifunctional Rescue<br>Van with Crain | 2008  | D5400116<br>8 | BHP 280           |
| NW                     | GJ6G-6512   | Man Force | Water Tanker                             | 2008  | D5400138<br>7 | BHP 280           |
| NW                     | GJ6G-6513   | Man Force | Water Tanker                             | 2008  | D5400135<br>8 | BHP 280           |
| NW                     | GJ6G-6514   | Man Force | Water Tanker                             | 2008  | D5400142<br>2 | BHP 280           |
| NW                     | GJ6G-6515   | Man Force | Water Tanker                             | 2008  | D5400139<br>4 | BHP 280           |
| NW                     | GJ6G-6516   | Man Force | Foam Nurser                              | 2008  | D5400130<br>4 | BHP 280           |
| NW                     | GJ6G-6517   | Man Force | Foam Nurser                              | 2008  | D5400123<br>3 | BHP 280           |
| NW                     | GJ6G-6518   | Tata      | High Capacity Pump                       | 2008  | FRZ<br>831993 | 3783CC            |
| NW                     | GJ6G-6519   | Tata      | High Capacity Pump                       | 2008  | FRZ<br>835717 | 3783CC            |

|    |             |                            |                              |      |                |                        |
|----|-------------|----------------------------|------------------------------|------|----------------|------------------------|
| NW | GJ6G-6520   | Tata                       | High Capacity Pump           | 2008 | FRZ<br>835821  | 3783CC                 |
| NW | GJ6G-6521   | Tata                       | High Capacity Pump           | 2008 | GRZ<br>839439  | 3783CC                 |
| NW | GJ-6-G-6531 | Ashok Ley                  | Mini Rescue Tender           | 2008 | KNH<br>533862  | 88CC                   |
| NW | GJ-6-G-6532 | Ashok Ley                  | Mini Rescue Tender           | 2008 | CNH<br>559827  | 88CC                   |
| NW | GJ-6-G-6538 | Tata                       | Small Pickup Truck           | 2009 | HQZ71151<br>1  | 1948CC                 |
| NW | GJ-6-G-1560 | M & M                      | Scorpio<br>“Command Vehicle” | 2010 | HAA4C149<br>53 | 2179CC                 |
| NW | GJ-6-G-6642 | Ashok Ley                  | Truck Mounted Hook<br>loader | 2011 | VBH<br>691643  | 118KW                  |
| NW | GJ-6-G-6643 | Ashok Ley                  | Truck Mounted Hook<br>loader | 2011 | VBH<br>691668  | 118KW                  |
| NW | GJ-6-G-6652 | Man Force                  | Fire Water Browser           | 2012 | 4DCG0025<br>2  | 180HP                  |
| W  | GJ-6-G-1890 | Royal<br>Enfield<br>Bullet | Motor Cycle With Gear        | 2013 | 230754         | 19.8 BHP<br><br>350 cc |
| W  | GJ-6-G-1891 | Royal<br>Enfield<br>Bullet | Motor Cycle With Gear        | 2013 | 232271         | 19.8 BHP<br><br>350 cc |

## **2.17 List of Equipment: Emergency Response Centre, Vadodara**

| Sr.<br>No. | Name of Equipment                            | Total No |
|------------|----------------------------------------------|----------|
| 01         | USAR Container                               | 1        |
| 02         | Medical mass causality container             | 1        |
| 03         | Self-contained clean air breathing apparatus | 6        |



|    |                                   |    |
|----|-----------------------------------|----|
| 04 | Personal protection suite         | 12 |
| 05 | Spare Cylinders                   | 1  |
| 06 | Airline Equipment                 | 1  |
| 07 | Positive pressure Ventilator      | 1  |
| 08 | Gas Light Suites                  | 9  |
| 09 | Inflatable Decontamination System | 1  |
| 10 | Leak sealing equipment            | 2  |
| 11 | Non- Sparking Tools               | 1  |
| 12 | Multi Gas Detector                | 2  |
| 13 | Emergency Lightening System       | 2  |
| 14 | Under water search camera         | 1  |

## **2.18 List of Swimmers: Vadodara Fire Brigade**

| <b>Sr. No.</b> | <b>Name</b>               | <b>Designation</b> | <b>Fire station</b> |
|----------------|---------------------------|--------------------|---------------------|
| 01             | I/C Shri Harendra Chauhan | Chief Fire Officer | Badamdibaug         |
| 02             | I/C Shri Amit Chaudhary   | Dy Chief officer   | Badamdibaug         |
| 03             | Shri Harendra Chauhan     | Divisional Fire    | Badamdibaug         |
| 04             | Nikunj P Azad             | Station Officer    | GIDC,Makarpura      |
| 05             | Harshvardhan Puvar        | Station Officer    | ERC                 |
| 06             | M M Vasava                | Sub Officer        | Gajarawadi          |
| 07             | A C Tadv                  | Sub Officer        | Gajarawadi          |
| 08             | G N Zalaiya               | Sub Officer        | Panigate            |

|    |              |              |                |
|----|--------------|--------------|----------------|
| 09 | Y R Gadhavi  | Sub Officer  | TP 13          |
| 10 | H K Gadhavi  | Sub Officer  | Panigate       |
| 11 | D S Kothari  | Sub Officer  | GIDC,Makarpura |
| 12 | M G Sitapara | Sub Officer  | Dandia Bazar   |
| 13 | D J Parmar   | Sub Officer  | Dandia Bazar   |
| 14 | A B Gadhavi  | Sub Officer  | ERC            |
| 15 | R A Vigora   | Sub Officer  | TP 13          |
| 16 | K R Bariya   | Sub Officer  | TP 13          |
| 17 | A R Padhiyar | Sub Officer  | GIDC,Makarpura |
| 18 | J V Vaghela  | Sub Officer  | ERC            |
| 19 | A V Rohit    | Sub Officer  | ERC            |
| 20 | K V Vasava   | Sub Officer  | Panigate       |
| 21 | N M Rathodia | Lead Fireman | TP 13          |
| 22 | J R Damor    | Lead Fireman | Dandia Bazar   |
| 23 | J R Patel    | Lead Fireman | Dandia Bazar   |
| 24 | V M Varia    | Lead Fireman | TP 13          |
| 25 | B K Patel    | Lead Fireman | Vadiwadi       |
| 26 | S M Varule   | Lead Fireman | Vadiwadi       |
| 27 | P G Sisodiya | Lead Fireman | Vadiwadi       |
| 28 | G B Naik     | Lead Fireman | Dandia Bazar   |
| 29 | B C Zala     | Lead Fireman | Panigate       |
| 30 | V J More     | Lead Fireman | TP 13          |

|    |             |              |                |
|----|-------------|--------------|----------------|
| 31 | B F Makwana | Lead Fireman | Dandia Bazar   |
| 32 | R R Rajput  | Lead Fireman | Vadiwadi       |
| 33 | V B Mohite  | Lead Fireman | Dandia Bazar   |
| 34 | P M Patel   | Lead Fireman | GIDC,Makarpura |
| 35 | H J Patel   | Lead Fireman | GIDC,Makarpura |
| 36 | H N Raj     | Lead Fireman | Dandia Bazar   |
| 37 | J H Patel   | Lead Fireman | GIDC,Makarpura |
| 38 | M P Patel   | Lead Fireman | TP 13          |
| 39 | S M Mulla   | Lead Fireman | GIDC,Makarpura |
| 40 | R V Deore   | Lead Fireman | TP 13          |
| 41 | R S Kadam   | Lead Fireman | Dandia Bazar   |
| 42 | P B Damor   | Lead Fireman | Dandia Bazar   |
| 43 | D J Parmar  | Driver       | Dandia Bazar   |
| 44 | D C Vasava  | Driver       | GIDC,Makarpura |
| 45 | B I Rathava | Driver       | Vadiwadi       |
| 46 | C M Nayaka  | Driver       | Vadiwadi       |
| 47 | J D Rathava | Driver       | Panigate       |
| 48 | G M Kahar   | Driver       | TP 13          |
| 49 | M B Mali    | Driver       | Vadiwadi       |
| 50 | D N Jadav   | Driver       | GIDC,Makarpura |
| 51 | D H Parmar  | Driver       | Panigate       |
| 52 | G B Pawar   | Driver       | Vadiwadi       |

|    |             |          |                |
|----|-------------|----------|----------------|
| 53 | G C Rothod  | Driver   | GIDC,Makarpura |
| 54 | P D Jadeja  | Driver   | ERC            |
| 55 | A M Patel   | Driver   | Dandia Bazar   |
| 56 | S A Gaekwad | Driver   | Vadiwadi       |
| 57 | N T Ahire   | Driver   | GIDC,Makarpura |
| 58 | M S Pathan  | Driver   | ERC            |
| 59 | A M Makrani | Driver   | ERC            |
| 60 | G C Pawale  | Driver   | Dandia Bazar   |
| 61 | N D Rathava | Driver   | Vadiwadi       |
| 62 | S J Parmar  | Driver   | Dandia Bazar   |
| 63 | D D Rajput  | Driver   | Vadiwadi       |
| 64 | S H Raval   | Driver   | Dandia Bazar   |
| 65 | C P Rajput  | Fire Man | Panigate       |
| 66 | J V Jadhav  | Fire Man | Gajarawadi     |
| 67 | K R Rajput  | Fire Man | TP 13          |
| 68 | P S Patil   | Fire Man | Vadiwadi       |
| 69 | S K Pawar   | Fire Man | Dandia Bazar   |
| 70 | S N Pandya  | Fire Man | Dandia Bazar   |
| 71 | T T Rathod  | Fire Man | Dandia Bazar   |
| 72 | J J Chunara | Fire Man | Dandia Bazar   |
| 73 | M R Kahar   | Fire Man | TP 13          |
| 74 | V V Shinde  | Fire Man | Dandia Bazar   |

|    |             |          |                |
|----|-------------|----------|----------------|
| 75 | J G Parmar  | Fire Man | Dandia Bazar   |
| 76 | H R Vasava  | Fire Man | Dandia Bazar   |
| 77 | G L Vasava  | Fire Man | Gajarawadi     |
| 78 | N H Modi    | Fire Man | TP 13          |
| 79 | N N Rathava | Fire Man | GIDC,Makarpura |
| 80 | H V Mahadik | Fire Man | Dandia Bazar   |
| 81 | S B Mohite  | Fire Man | Dandia Bazar   |
| 82 | D M Raj     | Fire Man | TP 13          |
| 83 | G P Rathod  | Fire Man | ERC            |
| 84 | K S Nikam   | Fire Man | Gajarawadi     |
| 85 | S C Mohite  | Fire Man | Dandia Bazar   |
| 86 | N P Bhalia  | Fire Man | TP 13          |
| 87 | P R Rohit   | Fire Man | Dandia Bazar   |
| 88 | N J Solanki | Fire Man | TP 13          |
| 89 | K C Bhaliya | Fire Man | TP 13          |
| 90 | S M Shaikh  | Fire Man | Dandia Bazar   |
| 91 | K K Charel  | Fire Man | TP 13          |
| 92 | B C Rathava | Fire Man | GIDC,Makarpura |
| 93 | G B Kahar   | Fire Man | TP 13          |
| 94 | H B Patel   | Fire Man | TP 13          |
| 95 | J J Bhalia  | Fire Man | Panigate       |
| 96 | M M Dangi   | Fire Man | GIDC,Makarpura |

|     |              |          |                |
|-----|--------------|----------|----------------|
| 97  | B R Hathila  | Fire Man | Gajarawadi     |
| 98  | D G Parmar   | Fire Man | Dandia Bazar   |
| 99  | H S Savarkar | Fire Man | ERC            |
| 100 | M S Kahar    | Fire Man | Vadiwadi       |
| 101 | J R Suthar   | Fire Man | Gajarawadi     |
| 102 | A M Variya   | Fire Man | Panigate       |
| 103 | G G Charel   | Fire Man | Vadiwadi       |
| 104 | D D Parmar   | Fire Man | Vadiwadi       |
| 105 | J N Rohit    | Fire Man | Gajarawadi     |
| 106 | S B Rana     | Fire Man | TP 13          |
| 107 | S S Bhalia   | Fire Man | Panigate       |
| 108 | N A Mali     | Fire Man | GIDC,Makarpura |
| 109 | D N Jadhav   | Fire Man | Vadiwadi       |
| 110 | D A Gadhvi   | Fire Man | Vadiwadi       |
| 111 | P D Rathva   | Fire Man | Vadiwadi       |
| 112 | K K Kahar    | Fire Man | ERC            |
| 113 | M V Khonde   | Fire Man | ERC            |
| 114 | M H Katara   | Fire Man | GIDC,Makarpura |
| 115 | G A Kahar    | Fire Man | Dandia Bazar   |
| 116 | A A Thakor   | Fire Man | GIDC,Makarpura |
| 117 | H B Patel    | Fire Man | GIDC,Makarpura |
| 118 | G T Rathva   | Fire Man | GIDC,Makarpura |

|     |                |          |                |
|-----|----------------|----------|----------------|
| 119 | V R Sadhu      | Fire Man | GIDC,Makarpura |
| 120 | A V Gondaliya  | Fire Man | GIDC,Makarpura |
| 121 | S G Brahmbhatt | Fire Man | Dandia Bazar   |
| 122 | K L Gohil      | Fire Man | Vadiwadi       |
| 123 | J N Panchal    | Fire Man | GIDC,Makarpura |
| 124 | A S Gadhvi     | Fire Man | Panigate       |
| 125 | A R Rao        | Fire Man | GIDC,Makarpura |
| 126 | K P Patil      | Fire Man | Dandia Bazar   |
| 127 | M D Patel      | Fire Man | GIDC,Makarpura |
| 128 | A B Rathva     | Fire Man | Panigate       |
| 129 | K J Parmar     | Fire Man | Panigate       |
| 130 | B R Dodia      | Fire Man | ERC            |
| 131 | P S Pandya     | Fire Man | Dandia Bazar   |
| 132 | J D Chavada    | Fire Man | Dandia Bazar   |
| 133 | S P Poojary    | Fire Man | Panigate       |
| 134 | T G Devare     | Fire Man | Vadiwadi       |
| 135 | M K Patel      | Fire Man | Panigate       |
| 136 | A C Parmar     | Fire Man | GIDC,Makarpura |
| 137 | K V Geete      | Fire Man | Panigate       |
| 138 | J K Rohit      | Fire Man | Gajarawadi     |
| 139 | D J Mohite     | Fire Man | Dandia Bazar   |
| 140 | B H Raj        | Fire Man | Dandia Bazar   |

|     |               |          |                |
|-----|---------------|----------|----------------|
| 141 | S R Torawane  | Fire Man | Dandia Bazar   |
| 142 | R D Bharvad   | Fire Man | Panigate       |
| 143 | S S Damor     | Fire Man | Gajarawadi     |
| 144 | V I Chaudhari | Fire Man | Vadiwadi       |
| 145 | J H Bhabhor   | Fire Man | Dandia Bazar   |
| 146 | R D Patel     | Fire Man | Dandia Bazar   |
| 147 | R R Zala      | Fire Man | Vadiwadi       |
| 148 | B M Gadhavi   | Fire Man | Vadiwadi       |
| 149 | H J Patel     | Fire Man | GIDC,Makarpura |
| 150 | H K Vaghela   | Fire Man | Dandia Bazar   |
| 151 | S R Shaikh    | Fire Man | Dandia Bazar   |
| 152 | A S Mishra    | Fire Man | Panigate       |
| 153 | D P Patel     | Fire Man | ERC            |
| 154 | R A Mulla     | Fire Man | GIDC,Makarpura |
| 155 | P B Dodia     | Fire Man | ERC            |
| 156 | R D Ninama    | Fire Man | TP 13          |
| 157 | S V Gadhavi   | Fire Man | ERC            |
| 158 | V A Kahar     | Fire Man | Dandia Bazar   |
| 159 | D N Pawar     | Fire Man | Gajarawadi     |
| 160 | D J Bhaliya   | Fire Man | Panigate       |
| 161 | T U Shaikh    | Fire Man | Vadiwadi       |
| 162 | D S Gohil     | Fire Man | Vadiwadi       |



|     |                |          |                |
|-----|----------------|----------|----------------|
| 163 | P P Valamkar   | Fire Man | ERC            |
| 164 | B C Chaudhari  | Fire Man | ERC            |
| 165 | C D Parmar     | Fire Man | ERC            |
| 166 | C K Dave       | Fire Man | Dandia Bazar   |
| 167 | R R Vanzara    | Fire Man | Dandia Bazar   |
| 168 | N K Prajapati  | Fire Man | Dandia Bazar   |
| 169 | S D Garasiya   | Fire Man | Panigate       |
| 170 | D D Vala       | Fire Man | Vadiwadi       |
| 171 | J H Khade      | Fire Man | Vadiwadi       |
| 172 | S N Rathva     | Fire Man | Vadiwadi       |
| 173 | V S Gayakwad   | Fire Man | Panigate       |
| 174 | S C Shinde     | Fire Man | Vadiwadi       |
| 175 | K G Rathod     | Fire Man | Panigate       |
| 176 | R R Padhiyar   | Fire Man | GIDC,Makarpura |
| 177 | Y J Bamaniya   | Fire Man | GIDC,Makarpura |
| 178 | K K Rathod     | Fire Man | GIDC,Makarpura |
| 179 | S V Pawar      | Fire Man | Gajarawadi     |
| 180 | A R Patel      | Fire Man | Dandia Bazar   |
| 181 | M G Devare     | Fire Man | Dandia Bazar   |
| 182 | Y P Gohil      | Fire Man | ERC            |
| 183 | V V Chauhan    | Fire Man | ERC            |
| 184 | J D Bambhaniya | Fire Man | ERC            |

|     |               |          |                |
|-----|---------------|----------|----------------|
| 185 | M M Solanki   | Fire Man | ERC            |
| 186 | S V Bamba     | Fire Man | Panigate       |
| 187 | M B Khant     | Fire Man | Dandia Bazar   |
| 188 | R P Sosa      | Fire Man | Vadiwadi       |
| 189 | J R Vaghela   | Fire Man | ERC            |
| 190 | N H Patel     | Fire Man | ERC            |
| 191 | A S Shirke    | Fire Man | Panigate       |
| 192 | K M Damor     | Fire Man | Dandia Bazar   |
| 193 | S J Dongala   | Fire Man | ERC            |
| 194 | V V Rathava   | Fire Man | Vadiwadi       |
| 195 | A S Damor     | Fire Man | Vadiwadi       |
| 196 | M S Kayastha  | Fire Man | Dandia Bazar   |
| 197 | K B Gohil     | Fire Man | ERC            |
| 198 | N J Pampaniya | Fire Man | GIDC,Makarpura |
| 199 | B R Bamaniya  | Fire Man | Panigate       |
| 200 | D P Chauhan   | Fire Man | Panigate       |
| 201 | H C Uttekar   | Fire Man | TP 13          |
| 202 | A A Ambawale  | Fire Man | Vadiwadi       |
| 203 | R D Patel     | Fire Man | Dandia Bazar   |
| 204 | M S Gayakvad  | Fire Man | Dandia Bazar   |
| 205 | K M Rathwa    | Fire Man | Gajarawadi     |
| 206 | R J Damor     | Fire Man | Dandia Bazar   |

|     |               |          |                |
|-----|---------------|----------|----------------|
| 207 | K T Rohit     | Fire Man | Vadivadi       |
| 208 | P J Rathod    | Fire Man | TP 13          |
| 209 | M D Sosa      | Fire Man | Vadiwadi       |
| 210 | P M Rathva    | Fire Man | Panigate       |
| 211 | R J Pawar     | Fire Man | GIDC,Makarpura |
| 212 | S G Chaudhari | Fire Man | TP 13          |
| 213 | R B Baraiya   | Fire Man | Dandia Bazar   |
| 214 | R C Malakiya  | Fire Man | Panigate       |
| 215 | N B Zala      | Fire Man | Gajarawadi     |
| 216 | I N Patel     | Fire Man | TP 13          |
| 217 | S P Baria     | Fire Man | Dandia Bazar   |
| 218 | V K Baraiya   | Fire Man | Vadiwadi       |
| 219 | D H Rana      | Fire Man | Vadiwadi       |
| 220 | D S Patel     | Fire Man | Vadiwadi       |
| 221 | M M Mansuri   | Fire Man | Dandia Bazar   |
| 222 | N A Zala      | Fire Man | Gajarawadi     |
| 223 | D N Rathva    | Fire Man | GIDC,Makarpura |
| 224 | C N Baria     | Fire Man | Dandia Bazar   |
| 225 | J A Gohel     | Fire Man | TP 13          |
| 226 | V L Rajput    | Fire Man | Panigate       |
| 227 | S C Singh     | Fire Man | Gajarawadi     |
| 228 | G B Jadeja    | Fire Man | Vadiwadi       |

|     |               |                |                |
|-----|---------------|----------------|----------------|
| 229 | M M Shelar    | Fire Man       | GIDC,Makarpura |
| 230 | D H Singh     | Fire Man       | Dandia Bazar   |
| 231 | K R Solanki   | Fire Man       | TP 13          |
| 232 | V D Chauhan   | Fire Man       | TP 13          |
| 233 | A B Vasava    | Fire Man       | Panigate       |
| 234 | Randhir I Raj | Radio Mechanic | Dandia Bazar   |
| 235 | M M Chavada   | Sub Officer    | Gajarawadi     |

## **2.19 List of Swimmers: Civil Defence**

| Sr. No.               | Name               | Phone no.  |
|-----------------------|--------------------|------------|
| <b>BAPOD DIVISION</b> |                    |            |
| 1.                    | Agrval Induben     | 9510003212 |
| 2.                    | Ruturaj Patel      | 9712073070 |
| 3.                    | Panchal Rajeshbhai | 9879922122 |
| 4.                    | Parmar Rajnikant   | 9725672389 |
| 5.                    | Kharadi Atul       | 9228479647 |
| 6.                    | Chauhan Ranjit     | 9724159946 |
| 7.                    | Patel Umeshbhai    | 9327598899 |
| 8.                    | Patel Pareshbhai   | 9558662933 |
| 9.                    | Patel Dharmeshbhai | 940973656  |
| 10.                   | Patel Gaurangbhai  | 9913212924 |
| 11.                   | Parmar Rakeshbhai  | 9724697838 |

| <b>CHHANI DIVISION</b> |                              |            |
|------------------------|------------------------------|------------|
| 12.                    | Mukeshbhai Bhikhabhai Savani | 9898728797 |
| 13.                    | Naresh S Savani              | 7984060255 |
| 14.                    | Kantibhai Bhimjibhai         | 9998237453 |
| 15.                    | Sureshbhai B.Savani          | 9898857075 |
| 16.                    | Vishal.K Savani              | 9998237453 |
| 17.                    | Chetanbhai B.Savani          | 9824428853 |
| <b>GORWA DIVISION</b>  |                              |            |
| 18.                    | Rathod Anvarbhai Knubhai     | 9265969291 |
| 19.                    | Kaka Chetankumar B.          | 9724554433 |
| 20.                    | Rathod Irfan J.              | 9979896452 |
| 21.                    | Rana Mahmadhanif D.          | 9662549120 |
| 22.                    | Dave Jaykumar C.             | 8849838267 |
| 23.                    | Belim Kadarbhai G.           | 9723791179 |
| 24.                    | Mistri Samirbhai J.          | 9998361198 |
| 25.                    | Belim Sajid U.               | 9327236884 |
| 26.                    | Mali Rakeshbhai              | 8347734870 |
| 27.                    | Vaghela Habibbhai F.         | 9737112665 |

|                            |                           |            |
|----------------------------|---------------------------|------------|
| 28.                        | Pathan Firojkhan B.       | 6352226182 |
| 29.                        | Rathod Akbarbhai M.       | 9924937161 |
| 30.                        | Rana Smutbhai M.          | 9825725712 |
| <b>KARELIBAUG DIVISION</b> |                           |            |
| 31.                        | Maheshvari Shantilal R.   | 7802811316 |
| 32.                        | Budheliya Shaileshbhai H. | 9426321525 |
| 33.                        | Chudasma Rajeshbhai D.    | 9898028045 |
| 34.                        | Chauhan Hitendrbhai M.    | 9879173777 |
| 35.                        | Parmar Maheshbhai D.      | 9824077383 |
| 36.                        | Patel Rakeshbhai S.       | 9825019655 |
| 37.                        | Patel Tejalben R.         | 9878619655 |
| 38.                        | Parekh Ravindrbhai P.     | 9904223908 |
| 39.                        | Patni Sanjaybhai N.       | 9601282934 |
| 40.                        | Jadhav Rajeshbhai         | 9979340333 |
| 41.                        | Rajput Sureshbhai         | 9979244131 |
| 42.                        | Kotalkar Bhaveshbhai      | 9998467798 |
| 43.                        | Parmar Rahulbhai          | 9586374527 |

|     |                     |            |
|-----|---------------------|------------|
| 44. | Raval Sunilkumar    | 9427341290 |
| 45. | Solanki Anilbhai    | 9904359850 |
| 46. | Parmar Alpeshbhai   | 9998741502 |
| 47. | Bariya Bhaveshbhai  | 9904351440 |
| 48. | Lad Ravi Shyamlal   | 7779049938 |
| 49. | Chauhan Dhavalbhai  | 9601502776 |
| 50. | Zala Gajendrsinh    | 8672034346 |
| 51. | Valand Hemendrbhai  | 9898088274 |
| 52. | Thakor Mohitbhai    | 9173910389 |
| 53. | Raval Maheshbhai    | 9825404143 |
| 54. | Barot Amitbhai      | 9825146760 |
| 55. | Sagthiya Girishbhai | 7203939690 |
| 56. | Pandya Jyotiben     | 8849832307 |

## **2.20 List of swimmers: Swimming pools of VMC**

| Sr. No | Name                  | Contact Details |
|--------|-----------------------|-----------------|
| 01     | Aakash R.Modi         | 9824303112      |
| 02     | Viki G Chauhan        | 8140307117      |
| 03     | Piyushkumar J.Vyas    | 9429112707      |
| 04     | Jagdishbhai G.Chauhan | 9408347407      |

|    |                           |            |
|----|---------------------------|------------|
| 05 | Vikas A. Solanki          | 9898418020 |
| 06 | Pranali Tailor            | 9173560429 |
| 07 | Govind Valsing Suvar      | 9537874977 |
| 08 | Govind.S Kahar            | 9909117779 |
| 09 | Karan.R.Patel             | 9558854511 |
| 10 | Vaibhavsinh.S.Borliya     | 9713903920 |
| 11 | Parth J.Chauhan           | 9714848871 |
| 12 | Vijendrasingh. R. Kushvah | 9979943429 |
| 13 | Rakesh M Chauhan          | 9879022967 |
| 14 | Rajesh R Valand           | 9925294905 |

| Sr. No. | Name of the Hospital<br>(Including Private) | Location                        | Contact Number        |
|---------|---------------------------------------------|---------------------------------|-----------------------|
| 01      | Sir Sayajirao Gaekwad Hospital              | Vinoba Bhawe Road,<br>Anandpura | 0265-2424848          |
| 02      | Jamanabai Hospital                          | Panigate Road, Mandvi           | 0265-2517400          |
| 03      | GMERS General Hospital                      | Gotri                           | 0265-2397009, 2397011 |
| 04      | Baroda Heart Institute                      | Old Padra Road                  | 0265-2325444          |



|    |                                     |                |                      |
|----|-------------------------------------|----------------|----------------------|
| 05 | Bhailal Amin Hospital               | Gorwa          | 0265-2281301         |
| 06 | Bankers Heart Institute             | Old Padra Road | 0265-2324004         |
| 07 | Sterling Hospital                   | Race Course    | 0265-2354455/66/88   |
| 08 | Metro Hospital & Research Institute | Sama           | 0265-2491414,2492525 |
| 09 | Global Baroda Hospital              | Manjalpur      | 0265-3300400         |
| 10 | Spandan Multispecialty Hospital     | Manjalpur      | 0265-2631300/2633722 |

## **2.21 List of Major Hospitals:**

## **2.22 List of NGO Hospitals:**

| Sr No. | NGO Hospital Name                | Location                        | Contact Number |
|--------|----------------------------------|---------------------------------|----------------|
| 01     | Premdas Jalaram Hospital         | R.T.O. Harni Po.Vadodara        | 0265 256 4785  |
| 02     | Pramukh Swami Hospital           | Pramukh Swami Chowk, Po.Dabhoi, | 099989 91018   |
| 03     | Shri Chotubhai A. Patel Hospital | Po.Motafofaliya, Ta-Shinor      | 02666 275 281  |
| 04     | K.G.Children Hospital            | Karelibaug, Vadodara            | 0265 246 2404  |
| 05     | JanmotriCharitabal Trust         | SavliDist-Vadodara              | NA             |
| 06     | M.H. Vaduvala Eye Hospital       | Salatvada, Vadodara             | 0265 241 3225  |
| 07     | Narhari Health Center            | Fatehgunj, Vadodara             | 0265 279 4413  |
| 08     | Bhailal Amin Hospital            | Gorva, Vadodara                 | 0265 677 6222  |

|    |                              |                             |               |
|----|------------------------------|-----------------------------|---------------|
| 09 | K.B. Dasalad Public Hospital | Dabhoi                      | NA            |
| 10 | Mahavir General Hospital     | Near Pani Gate              | 0265 251 0061 |
| 11 | Kadam Eye Hospital           | Productivity Road, Vadodara | NA            |
| 12 | KalolNagarpalika Hospital    | Kalol                       | NA            |
| 13 | Lions Hospital               | Kalol                       | NA            |
| 14 | Halol MahajanSarvajnik       | Halol                       | 099090 07791  |
| 15 | N.M.G. Sarvajnik Hospital    | Halol                       | 02646 248 526 |
| 16 | P.M. Parikh General Hospital | Halol                       | NA            |

### **2.23 List of Blood Banks:**

| <b>Sr.<br/>No.</b> | <b>Reporting Unit Name</b>                                   | <b>Type of<br/>Blood Bank</b> | <b>NACO/Non<br/>NACO</b> | <b>Contact No.</b>              |
|--------------------|--------------------------------------------------------------|-------------------------------|--------------------------|---------------------------------|
| 01                 | GMERS Medical Collage &<br>General Hospital, Gotri<br>(DLBB) | Government                    | NACO                     | 9925017767                      |
| 02                 | Jamanabai Blood Bank,<br>Vadodara (DLBB)                     | Government                    | NACO                     | 98984 50765<br>2517400, 2462560 |
| 03                 | S.S.G Hospital, Vadodara<br>(BCSU)                           | Government                    | NACO                     | 2424848, 2424351                |

|    |                                                         |                          |          |                                               |
|----|---------------------------------------------------------|--------------------------|----------|-----------------------------------------------|
| 04 | Dhiraj Blood Bank,<br>Vadodara(BCSU)                    | Voluntary/<br>Charitable | Non-NACO | 9723065840                                    |
| 05 | Kailash Cancer Hospital &<br>Research Center (BCSU)     | Voluntary/<br>Charitable | Non-NACO | 99982-74460<br>97254-21342<br>99099- 28906    |
| 06 | Bhailal Amin, Vadodara<br>(BCSU)                        | Voluntary/<br>Charitable | Non-NACO | 2307038, 2307039<br>2286666                   |
| 07 | Indu Blood Bank, Vadodara<br>(BCSU)                     | Voluntary/<br>Charitable | Non-NACO | 9925627186<br>98250 17334<br>2437676, 2411477 |
| 08 | Medical Care Centre,<br>Vadodara (DLBB)<br>(BCSU)-(BSC) | Voluntary/<br>Charitable | NACO     | 9825335065<br>9979576507<br>2462404, 2438130  |
| 09 | Suraktam Blood Bank,<br>Vadodara (BCSU)                 | Voluntary/Charit<br>able | Non-NACO | 98250 44906<br>2363660, 2225903               |

# **IMPORTANT CONTACT DETAILS**

## **VADODARA MUNICIPAL CORPORATION**

### **3.1 Fire and Emergency Services: Vadodara Municipal Corporations**

| <b>Sr. No.</b> | <b>Name of the Officer</b> | <b>Designation</b>      | <b>Office Address</b>                                     | <b>Office Number</b>                     | <b>Mobile Number</b> | <b>E-mail ID</b> |
|----------------|----------------------------|-------------------------|-----------------------------------------------------------|------------------------------------------|----------------------|------------------|
| 1              | Shri Manoj Patil           | Chief Officer (Fire)    | City command and control centre, Fire brigade Head office | 2420881<br>2413635<br>2413753<br>2413754 | 982549<br>2607       | cfo@vmc.gov.in   |
| 2              | Shri Naitik Bhatt          | Dy. Chief Fire Officer  | City command and control centre, Fire brigade Head office | -                                        | 982578<br>9907       | -                |
| 3              | Shri Harendrasinh Chauhan  | Divisional Fire Officer | City command and control centre, Fire brigade Head office | -                                        | 951092<br>2360       | -                |
| 4              |                            | Station Officer (Fire)  | Dandiya Bazar Fire Station, VMSS, Vadodara                | 2420881                                  |                      |                  |
| 5              |                            | Station Officer (Fire)  | G.I.D.C. Fire Station, Makarpura                          | 2631444                                  |                      |                  |
| 6              | Shri Nikunj P Azad         | Station Officer (Fire)  | Gajrawadi Fire Station, Gajrawadi, Vadodara               | 2580908                                  | 971292<br>8101       |                  |
| 7              |                            | Station Officer (Fire)  | Panigate Fire Station, Waghodiya Road, Vadodara           | 2513014                                  |                      |                  |
| 8              |                            | Station Officer (Fire)  | I/c. Darjipura, Near RTO ERC                              | 2541688<br>2541687                       |                      |                  |

|    |                                |                              |                                                                                                      |                                   |                |  |
|----|--------------------------------|------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------|----------------|--|
| 9  | Shri<br>Harshvardha<br>n Puvar | Station<br>Officer<br>(Fire) | Vadiwadi Fire Station,<br>Vadodara<br><br>&<br><br>I/c. T.P 13 Fire<br>station, Chhani ,<br>Vadodara | 2343545<br><br>2772503<br>2772504 | 814143<br>8666 |  |
| 10 | Shri Jaydeep<br>Gadhvi         | Sub Officer<br>Fire          | Bhayli Fire Station                                                                                  |                                   | 800076<br>5220 |  |