



# **CITY DISASTER MANAGEMENT PLAN**

**YEAR: 2021-22**

**VADODARA MUNICIPAL CORPORATION**

**FIRE AND EMERGENCY SERVICES**

**GUJARAT STATE DISASTER MANAGEMENT AUTHORITY**

## **MAYOR, VADODARA**

### **MESSAGE**



Vadodara city is one of the fastest growing and developing cities of the nation. The citizens are disciplined, progressive, and hardworking. There are ample of resources in and around the city for human's social and health well-being. But when disaster struck the daily work of the citizen not only hinders the progress of a city but a state and a nation. Due to climate change and global warming, India is more prone to disasters. Cyclones, heavy rainfall and floods are the ones which affect Vadodara city the most. Among other risks are of earthquake, heat waves and Industrial Chemical Disasters. Every available and possible resource is allocated for the best of disaster management by the Vadodara Municipal Corporation. The more emphasis is given on planning, prepared and training activities of the citizens, as prevention is better than cure! Help from every citizen and organization is expected in terms of disaster management activities. The emergency response teams, fire brigade, police, health department, sanitation department play an important role in fighting any mishap which strikes the city. It is the perseverance of the citizens which leads to the betterment of life in Vadodara city. I am thankful to the creators of this document which will provide clear plan and information for overcoming disasters.

*Dahadi Chhaya*  
Mayor, Vadodara



## **MUNICIPAL COMMISSIONER**

### **MESSAGE**



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 the 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 rain water and stores in them, but excess of it can lead to flooding. Other 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. Public health emergencies such as COVID-19 require quarantine of the densely populated areas which very well coordinated. 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 a challenge of administrating the 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 the 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, Analyse 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 this will facilitate the stakeholders involving while preparing this document by providing insight into various aspect of Disaster and its preparatory strategies at the grassroot level and necessary mitigatory and response action steps to be undertaken. Again it will be fruitful to many department 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 the society and people.

## **ACKNOWLEDGEMENT**

The process of updating this City disaster management started in April, 2021 and was having a consolidated team management for data collection from all departments/officials as well as stakeholders followed by series of consultation from senior officials and members of disaster management committee of Vadodara Municipal Corporation. As various department suggested about updating numerous thing happened past years and previous year eye witnessed live scenario.

We thank departmental authority who was associated while preparing 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 involved in such handful exercise for updating such a plan for any future seriousness and agencies for providing all necessary elements for perfect documentation.

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## **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 Developemnt Corporation  
GEB: Gujarat Electtricity 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: Hzarad 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 meterological Department  
MAH: Major Accident Hazard

NGO-Non Governmental Organization  
NOC: No Objection Certificate  
OPD: Out patient 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: 2021-22**

contains Chapters-. The sections provide detailed information of 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.

- i. 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.
- ii. 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.

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

### **1.3 Brief Introduction about Vadodara city**

Vadodara city is prone to multiple hazards such as Floods, Cyclone, Heavy Rain, Lightening, Earthquake, Fires and Epidemics/Pandemics and have experienced & witnessed too on several occasions in the past. Vadodara city have 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 dealt 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 human made disasters. The present plan is not intended to provide comprehensive explanations and background information about a disaster, or serve as a training manual on how to respond to a disaster or conduct a disaster related task. This is simply a Multi Hazard Management Plan consisting details regarding different hazards that affect the Vadodara City along with the response structure to deal with such hazards, and having linkages of subsidiary DM plans of all levels and of sectors with this Plan.

#### **1.3.1 Followings is 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 the disaster management concerns into the developmental planning process.
7. To minimize the damages and losses that occurs 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 and recover from disaster impacts.
13. To prepare resilience for poor community or lower line areas to prevent disasters aggravating poverty and to protect livelihoods.

## **1.4 Introduction to Hazard and Disaster**

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

### **1.4.1 Hazard**

It is natural or manmade phenomenons which may causes physical damage, loss or threaten human life and wellbeing if it occurs in an area of human settlement, agricultural of 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, earthquake and volcanic eruption 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, landslide 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

#### **1.4.2 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 event occurs. The probability of the loss will occur as the result of an adverse event, given the hazard and vulnerability.

### **1.4.3. 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 event. 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.

### **1.4.4 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.

### **1.4.5 Disaster management**

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

1. Prevention of 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.

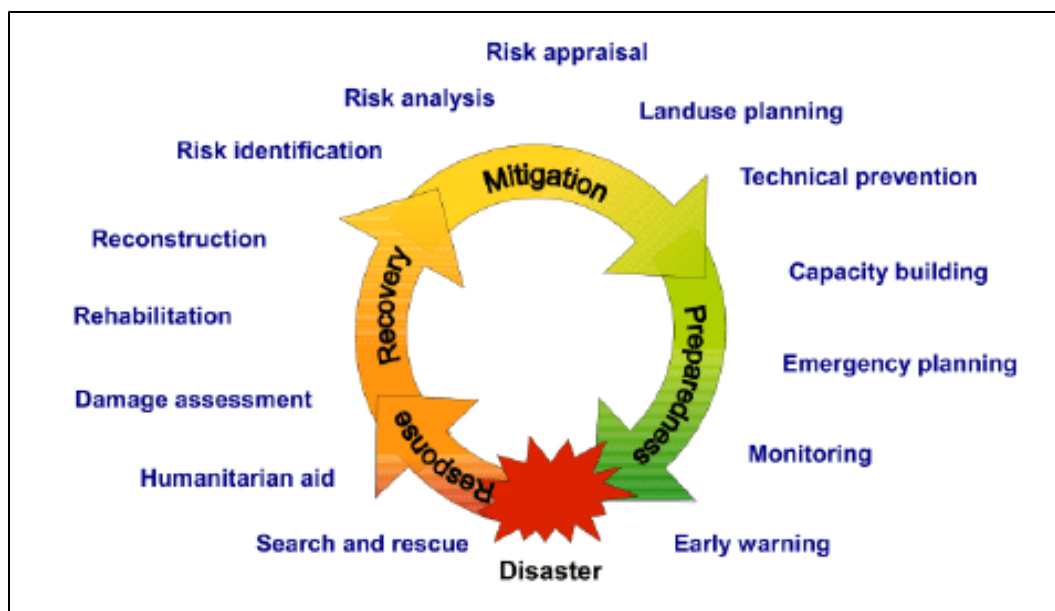


Figure- Disaster Management Cycle

#### 1.4.6 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 each individual 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 the disasters to occur. Reinforcement of the 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 panchayati raj institutions, municipalities, a district board, cantonment board, town planning authority or ZilaParishad 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.**

### **1.4.7 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.

### **1.4.8 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.

### **1.4.9 Warning, Relief and Recovery**

Warning, Relief and Recovery actions are intended to eliminate the loss of life and property and reduce hardship as a result 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 neighbouring districts and with the GSDMA and Revenue Department.

The Collector is further responsible for developing long term relief, recovery and rehabilitation plans during the course of 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.

#### **1.4.10 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 the nature of 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.

#### **1.4.11 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 guide lines 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.

#### **1.4.12 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 elaborative inventory of resources has also been formalized.

### 1.4.13 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 in order to facilitate the 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 a number of 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 operation

# **CHAPTER-2**

## **HAZARD, RISK AND**

### **VULNERABILITY ANALYSIS**

## CHAPTER-2: HAZARD, RISK AND VULNERABILITY ANALYSIS

### 2.1 Ward-wise composition of Vadodara City

Ward No.	Zone	Area names
1,2,9	East	Bapod, Jubelibaug, Kishanvadi, Ramdev Nagar, Savad, Sudamapuri, Warasia Newly added Village: Vemali
6,10,11	West	Diwalipura, Atladara, Tandalja, Jetalpur, Akota. Subhanpura, Gorwa, Gotri, Gokulnagar Newly added village: Bill, bhayli, sevasi, undera, Karodiya
5,7,8	North	Ektanagar, Navyard, Navidharti, Karelibaug, Chhani, Siyabaug, Navapura, Sama, Fatehpura
3,4,12	South	Yamunamill, Gajrawadi, Kapurai, Danteshwar, Tarsali, Maneja, Makarpura, Manjalpur, Vadsar

### 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 which 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.

<b>Hazards</b>	<b>Probability Rating</b>	<b>Impact Rating</b>	<b>Vulnerability Ranking</b>	<b>Vulnerable Areas/Talukas</b>	<b>Vulnerable Population</b>
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	Whole District	Population residing in poor water supply areas
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 Cyber 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	
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## **2.3 Multi-Hazard Profile of Vadodara**

Vadodara city is prone to multi hazards and experienced & witnessed too on several occasions in past. Past few decades Vadodara city faces number of hazards due to which normal life style has been disturbed during that time period. 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 have experienced the effects of cyclone in 1998 due to which most of area has been affected, mainly temporary establishments like slums, low lying areas, tree uprooting, etc. which hindered routine life.

Due to the effects of devastating earthquake of the year 2001, panic condition has been seen throughout the city, majorly the residents of the high rise buildings has experienced the jolt of the quake, minor cracks has been notified in buildings and other structural establishments.

The city faces the impact of major floods once in every three year time period. Majorly the city was severely affected by the floods of 1978, 1994, 2005, 2006, 2013 and 2014; almost the whole Vadodara district was affected due to these hazards. Due to road and rail accidents, major life losses has 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 year's history of events):**

<b>Sr.No</b>	<b>List of Hazards</b>	<b>Areas under risk</b>
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



## **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 water logged in the city. The list of water logged 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 be 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 life, 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. have 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.
- Mobilisation of resources from internal and external sources.
- Taking organizational and administrative setps, including disaster action plans, regular and updatingof plans and project securing institutional where withal to implement it, providing for a horizontal and vertical co-ordination through a network of official and non-official agencies involved like govt. departments, civil defence 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, transporation 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 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

### 2.6.1 Summary of Capacity against Flood (Whole District):

Details	No.
Villages at risk	184
Swimmer	1222
Emergency / Rescue Shelters	159
Govt medical practitioners	58
Nurses	267
Cattle shed (Panjrapol)	3
Machine boats	12
Simple Boats	29
Fiber Boat	26
Rubber Boat	29
Life Jackets	636
Rings	1171
Villages at risk	184
Rope 200 ft	245
Rope 100 ft	262
Life Buoy	400

### 2.6.2 Summary of Capacity against earthquake:

Details	No.
Emergency / Rescue Shelters	159
Govt Doctors	58
Nurses	267
Dumpers	35

### 2.6.3 Capacity against industrial and chemical disaster:

Particular		Unit (no.)
Special Response Teams (SRTs) readily available for Industries		Yes
Trained personnel at District level		164
Fire Fighters (Private) & (Govt)		50
Govt doctors		58
Antidotes	1. Yes details covered in	Ref Annexure

# **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 on the job training, mentor training and workshops.
- Developement 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 resouces book, schools, shleter places, communication network, key economic asset etc.
- Developing and Implementing disaster mitigation measures is a demanding task in developing nations because such measures are retaively high investments inputs such as flood response and mitigation system, early warning system etc.
- Organising community vulnerability reduction programmes to aware and prepare measures through public education system like radio, news paper 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	23251914, 23251916, 23251906, 23251900 23251912 (F), 23251916 (F)
2	Relief Commissioner	23251509, 26301728 (R)
3	CEO-GSDMA	2325902,23259275(F)
4.	Director of Relief	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 (DEOC)	0265-2427592 1077
8	Law & Order (CP)  (DSP)	100 0265-2431515 99784 06290 0265-2412255 99784 06094
9	Search & Rescue (Civil Defence) (Chief fire Officer )  For Whole District with support of DSP and Liaison officer	0265-2431410 (CD) 98796 15036 (CFO) 0265-2420881 (CFO) 0265-2420882 (CFO) 101 (CFO) 0265-2427592 (DEOC) 1077 (DEOC) 0265-2412255 99784 06094
10	Public Works (Ex. Eng, R&B)	6554306 (D) , 6554308 ( C ) 98792 75036 (D) 98792 75036 ( C )



11	Shelter (Dist. Pri. Edu. Officer)	0265-2436411 99099 87576
12	Water Supply (Ex. Eng. GWSSB)	0265-2411905 99784 06614/ 16
13	Food & Relief supplies (District Supply Officer)	0265-2416190 , 2433201 75670 22247
14	Public Health & Sanitation (CDHO)	0265-2432383 8980039102
15	Power (Supt. Engr. GEB)	0265-2436121-33, 2416270 99252 08224
16	Logistics (DDO)	0265-2432027 99784 06249
17	Animal Health & Welfare (Asst. Director, A&H)	0265-2426949 9712668399
18	Damage assessment/Survey (Dy.DDO Panchayat & Revenue)	0265-2431037,2431770 7567017954, 7567017977
19	Media/public Information (Sr.Sub Editor - Info)	0265-2458760 ,2423358 9426333748
20	Planning and coordination (Collector)	0265-2433000, 99784 06224
21	Finance/ Administration/ protocol (Resident Additional Collector)	0265-2419700 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

	Shinor	[02666] 264272
29	Offsite Control Room	2230342,2232327,2230556 6696471, 9998953963, 9979853450
30	PCR - City	100 2241430, 2431414,2415111
31	PCR - R	2459777, 2412255
32	Fire brigade and VMSS CR	101 2413753/54,2413635,2420881 2413436/39
33	Telephones	198,2422000 2433333,2467540
34	Railways CR DRM	2638377,2632600, 2638081 9724091000, 9033534339
35	SSG Hospital	2459641,2424848
36	Jamanabai Hospital	2517400,8238012039 2517915,2517916,2517919,2517920
37	IMD (Harni) Nodal Officer	2482228 9426749506
38	VIC control room	2415376, 2431291, 9978405572
39	Forest Department	2431128, 99782 33747
40	MGVCL	2290572-73, 2416270, 99252 08224, 9825407971

## **3.2List 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(Incharge)

<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 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. b. Officer incharge of Ajwa Station under V.M.C. Vadodara
(B) Deputy Executive Engineer, Goma 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 Ghansarvav Wireless station under Executive Engineer, Vadodara Irrigation Division.	4. Messages about rainfall gauge levels, outflow of Ghansarvav 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 conveyed to the officer at Sr.No.(c) in Col.No.3.	
(F) Chief Officer (Fire) Central Wireless Station, V.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, Vadodara.

### 3.2.2 Flood in Vishwamitri and Vadodara city

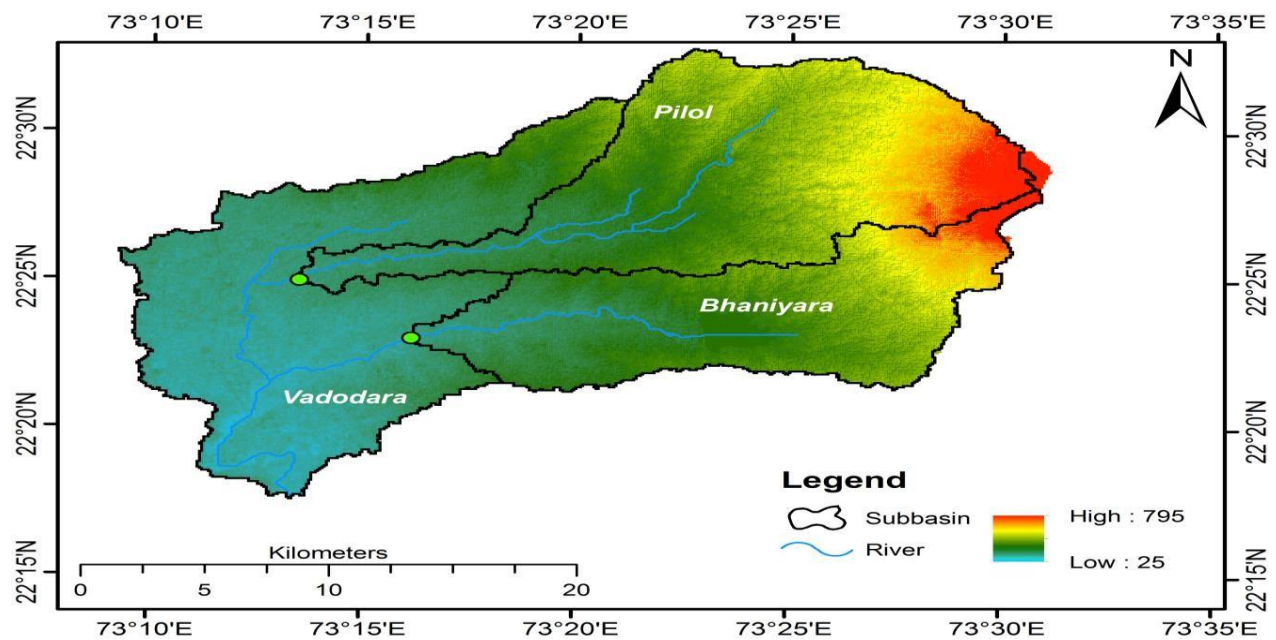
Past floods which has occurred in Vadodara has been developed due to rainfall in three sub basin as mentioned below of Vishwamitri River.

- Vishwamitri river ( Pilol G-D site)
- Surya river (Bhaniyara G-D site)
- Free catchment area of Vadodara City

#### Sub basin Characteristics:

Sr. No.	Parameters & Relationship	Values		
		Pilol	Bhaniyara	Vadodara
01	Length of main stream (L) (km)	34.45	192.1	45.5
02	Centoridal longest flow path ( $L_c$ ) km	14.45	66.25	18.06
03	Equivalent slope (S) (m/km)	15.95	20.07	1.1
04	Area (A) ( $\text{km}^2$ )	214.5	156.5	219

The figure below shows schematic representation of these sub basins



As per NIH, Roorkee studies the effect of individual sub basin flood when routed with time lag to 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

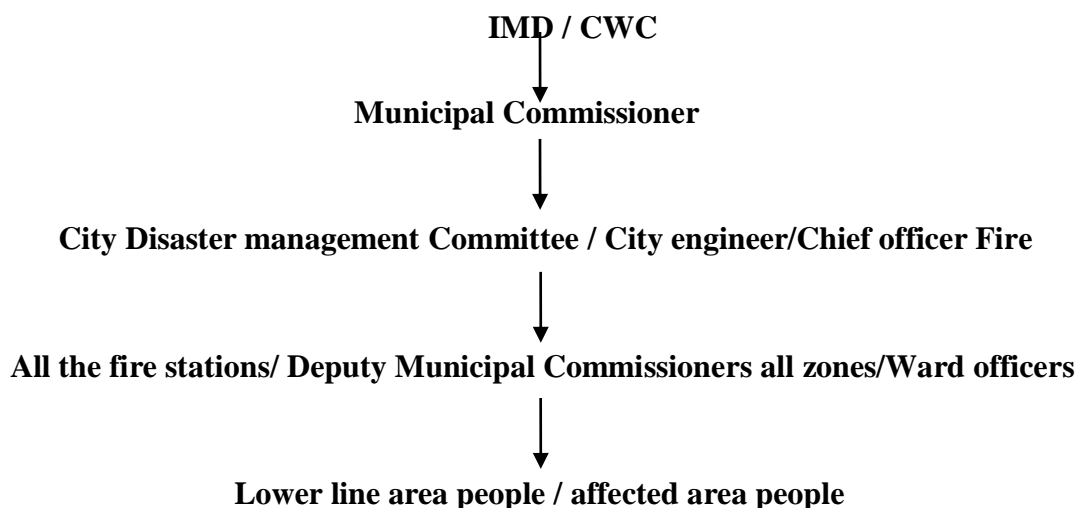
## **(D) Evacuation**

- (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 Ward Wise Vishwamitri River affected Places**

Sr. No	Ward Details	Area Details
1	1	Nil
2	2	<ul style="list-style-type: none"> <li>➤ R.TO drainage lane to Sai baba temple</li> <li>➤ Gaytrinagar playground</li> <li>➤ Warasia mainroad</li> <li>➤ Near J.K Corner</li> <li>➤ Near Vijaynagar bharwad lane</li> <li>➤ Near savad quarter room no 250</li> <li>➤ Near Savad Quarters Charmandir</li> <li>➤ Behind 10 dukan</li> <li>➤ Savad quarters Knachankeval wada house</li> <li>➤ Bhandwada lane</li> <li>➤ From kesariya to kalpana nagar</li> <li>➤ Revadia mahadev</li> <li>➤ New VIP road</li> <li>➤ Sama sanjay nagar</li> <li>➤ Navinagari sama</li> <li>➤ Rathdiyavas Harni</li> <li>➤ Sidhhrath Bunglows, Sama savli road</li> </ul>
3	3	<ul style="list-style-type: none"> <li>➤ Near Mohammad pond, Insurance hospital</li> <li>➤ Ranmukteswar bavri,kumbharwada back side</li> <li>➤ From Yamuna Mill to slum workers</li> </ul>
4	4	<ul style="list-style-type: none"> <li>➤ Near Danteswar santosh wadi</li> <li>➤ Near Satyanarayan Society, slum area</li> <li>➤ Near Tensile steel slum</li> </ul>
5	5	<ul style="list-style-type: none"> <li>➤ SRP ,Kumabharwada</li> <li>➤ Jayratna buiding</li> <li>➤ Siyabaug</li> <li>➤ Dandiabazar madhyavarti school</li> </ul>
6	6	<ul style="list-style-type: none"> <li>➤ Near Parshuram bhatta</li> <li>➤ Near Bhimnath mahadev</li> <li>➤ Near Akota railway lowerline</li> <li>➤ Near Mujhmahuda, Atladra</li> <li>➤ Near Vasava Mohallo</li> <li>➤ Near Tandalja Pond</li> <li>➤ Near Alankar Cinema hall</li> <li>➤ Railway bridge</li> <li>➤ Near Ambica Mill, Driange line</li> <li>➤ Near Tandalja gam, Slum area</li> </ul>

		<ul style="list-style-type: none"> <li>➤ Near Vasna gam, Saiyed Primary school slum</li> <li>➤ Akota gam slum</li> <li>➤ Akota Crossing slum</li> </ul>
7	7	<ul style="list-style-type: none"> <li>➤ Near Fatehgunj Camp</li> <li>➤ Near Harijanbas</li> <li>➤ Near Ranchhod ji Temple</li> <li>➤ Near Kamatipura</li> <li>➤ Near Modikhana Methodist church</li> <li>➤ Near Chhani Road</li> <li>➤ Near Sardarnagr slum, navayard lalapura</li> <li>➤ Near Ramwadi</li> <li>➤ Near pension pura tadav</li> <li>➤ Near harijan vas</li> <li>➤ Near bhatujinagar slum</li> <li>➤ Near purnima society</li> <li>➤ Near sanjay nagar slum</li> <li>➤ Near East side of E.M.E</li> <li>➤ Near Sankarnagar slum</li> <li>➤ Near Ekta nagar housing board slum</li> </ul>
8	8	<ul style="list-style-type: none"> <li>➤ Near Bhairav nath Temple</li> <li>➤ Near Kasham hala graveyard</li> <li>➤ Near arya kanya school back side, karelibaug jalaaram nagar lowerline</li> </ul>
9	9	<ul style="list-style-type: none"> <li>➤ Near Bavchavad lane to ward office</li> <li>➤ Near Bavchavad</li> <li>➤ Near govind park to dena park</li> </ul>
10	10	<ul style="list-style-type: none"> <li>➤ Near kaveri triveni road</li> <li>➤ Near ITI Gorwa</li> <li>➤ Near Genda Circle, gorwa road</li> <li>➤ Near alembic colony, gorwa road</li> <li>➤ Near subhanpura gam slum</li> <li>➤ Near Alkapuri under pas</li> </ul>
11	11	<ul style="list-style-type: none"> <li>➤ Near Vasna road</li> <li>➤ Near makramdesai road</li> <li>➤ Near devnagar vashat</li> <li>➤ Near tube company</li> <li>➤ Near ramdev nagar</li> <li>➤ Near Gotri road, Sudama nagar</li> </ul>
12	12	<ul style="list-style-type: none"> <li>➤ Near Vadsarrathdiya vas pond</li> <li>➤ Behind GIDC Colony Slum</li> <li>➤ Near Jambua vajaniya vas</li> </ul>

### **3.2.7 Vishwamitri Basin affected Places**

Sr. No.	Area Name	Vadodara city/Vadodara Taluka Name	Bridge level	Signal
1	Sayajiganj	Parshurambhatto	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
2		Near Bhimnath mahadev temple	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
3		1.Camp fatehgunj harjanwas ranchhod ji 2. Moffusil Kamatipura, Modikhana, Area Near Methodist Church	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
4		1.Chhani road sardar nagar, sardarnagar, kans, lalpur, ramwadi 2.Pensionpura 3.Akota 4.manenagar	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
1	Wadi	Lowerline area of panigate	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
2		Mahemad talav area	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
3		Marial wada malibas mandir	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
4		Gujarat Housing board behind ranmukteswar barvi	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red

5		Road beyond Yamuna Mill	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
6		Hakim's Palace Nr. Sindwai Mata	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
7		Behind Godi & Navagam Mandir	96.68ft(29.34 mts) 98.25 ft.( 29.95mts) 100.28 ft.(30.57 mts)	white Blue Red
8		From Jawaha Society to Simodwali Talawadi place near Satyadev Chemicals	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
9		Warasia new colony surrounding society	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
10		Mangleshwar area	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
11		Harai marg society area	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
1	Babjiipura	Behind navapura tank khanderao Mahavir mohalla	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
2		Kumbharwado near SRP Mangal park	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
3		Sindhwai road	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red

4		dandiabazar	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
1	raopura	North of binoba bhav marg,tulsibais chal, bhavman chall, ravari faliya	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
2		Lowerline area of kasmahalla camp	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
3		North side of societies in kareibaug	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
4		Naya dharti area	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
5		Portion Nr. Ajabadi mill, Taraknath. Mahadev	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
6		Surrounding areas of Sarasia Tank and new Societies area	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
1		Dumad	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
2		Ganpatpura	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
3		Harni	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red

4	Vadodara Taluka	Sama	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
5		Ambaliara	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
6		Sukalipura	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
7		dena	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
8		virod	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
9		kotali	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
10		vemali	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
11		chapad	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
12		Kalali	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red
13		Vadsar	96.68mts. (29.34 ft.) 98.25 mts. (29.95 ft.) 100.28 mts. (30.57 ft.)	white Blue Red

### **3.2.8 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>1 For every Work Asst/Karkoon<br>1 For every A.E./A.A.E./Overseer<br>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>1 No. for Dy. Executive Engineer<br>1 No. for every A.E./A.A.E./Overseer<br>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 Needless 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 Groyne 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 | <ol style="list-style-type: none"> <li>a) Where High Flood Depth is less than 1.80 m and the embankment is generally safe then 65 Bags per Kilometer.</li> <li>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.</li> </ol> |
| ii)  | Stakes     | 65 to 130 Stakes per Kilometer  |
| iii) | Baskets    | <p>1 Basket of Toot per labour or</p> <p>1 Basket of lai per labour</p> <p>And One Spare</p>  |

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.

#### 4. 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 Sal Ballies or Bamboos	For Horizontal bracing of Vertical bulies – 3.0 m long each for the entire length
iii)	Split Sal Ballies or Bamboos	For Cross bracing of Vertical ballies – 3.0 m long One for each vertical ballies
iv)	Mattresses of split bamboos or “Pilchi” or other locally Available Material	For sufficient Length
v)	Brushwood of 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. for Sub Divisions with  
Dangerous Embankments

### **3.2.9 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.

### **3.2.10 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.

**3.2.11 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 buying 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.

<b>Heat Disorder</b>	<b>Symptoms</b>	<b>First Aid</b>
<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	Move to cool or shaded place. Apply firm pressure on cramping muscles or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue.
<b>Heat Exhaustion</b>	Heavy sweating, weakness, skin cold, pale, headache and clammy. Weak pulse. Normal temperature possible. 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 (Sun Stroke)</b>	High body temperature (106°F). Hot, dry skin. Rapid, strong pulse. Possible unconsciousness. 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. Delay can be fatal. Move victim to a cooler environment. Try a cool bath or sponging to reduce body temperature. Use extreme caution. Remove clothing. Use fans and/or air conditioners. 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 structured 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 category 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 movable facility.

4. Monitoring of Toxic waste Disposal: Waste disposal is the prime factors and must 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.

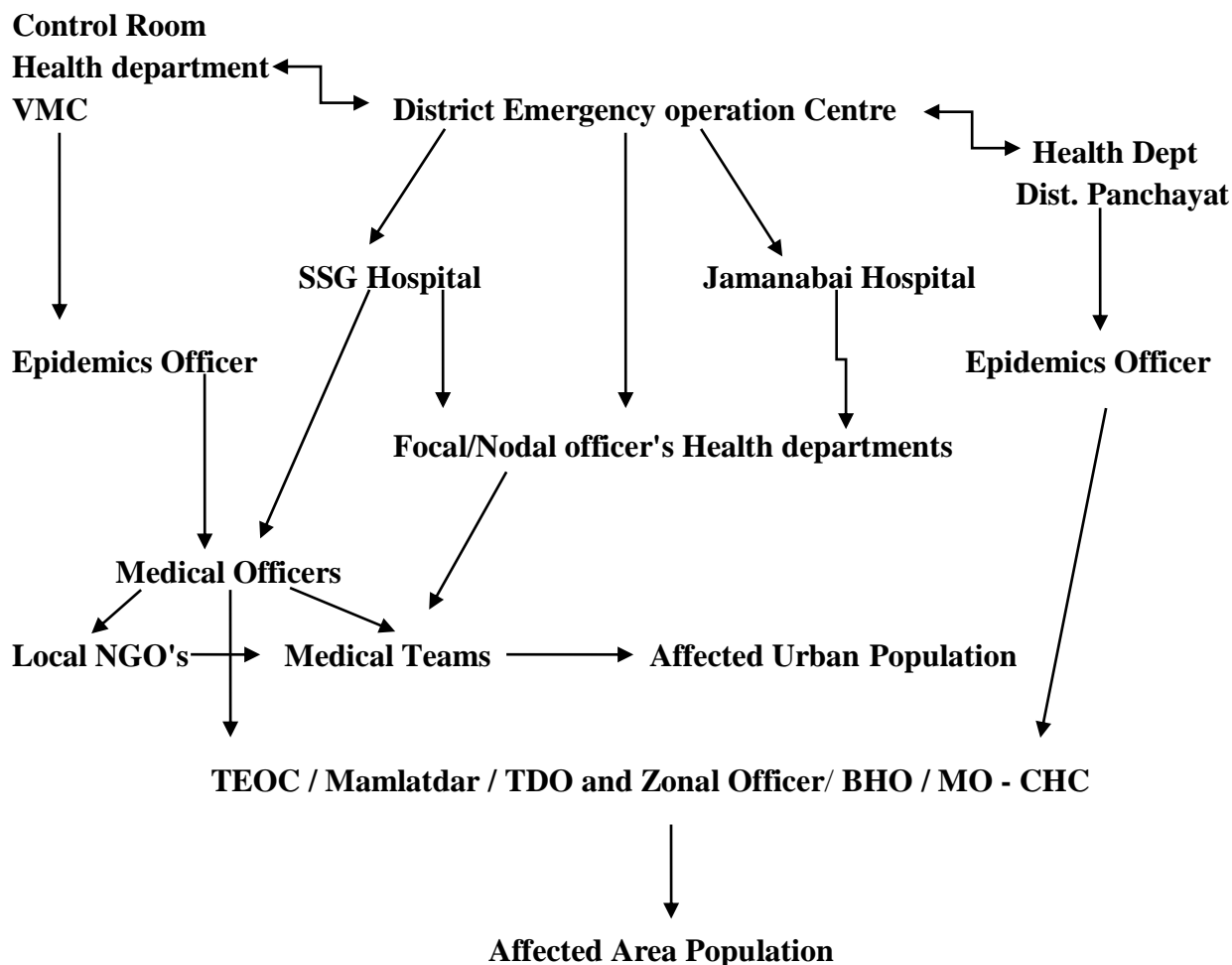
#### **Chemical disaster management plan includes:**

- 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.

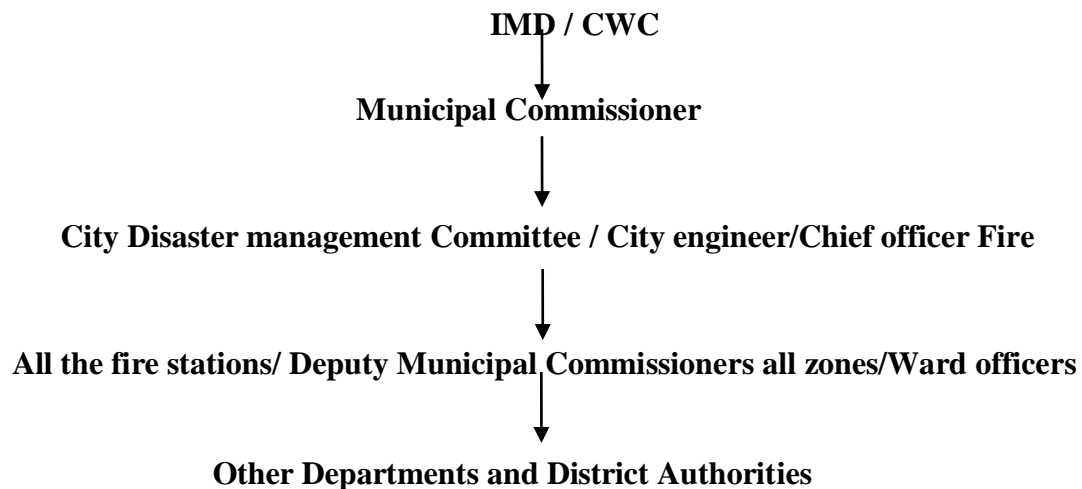
### **3.5.1 Response Chart:**



### **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:



- 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**

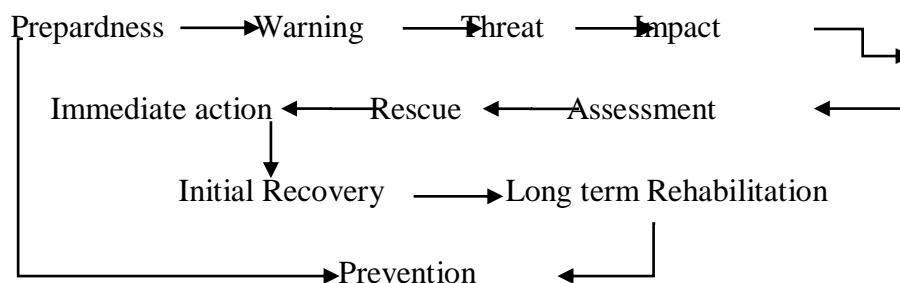
Biological Disaster has coexisted with human society since primitive days as it's a part of disaster which causes sickness and fatalities in human being, when they contact with biological hazard. Recently the pandemic Covid-19 outbreak has spread all over the world which resultant maximum human loss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



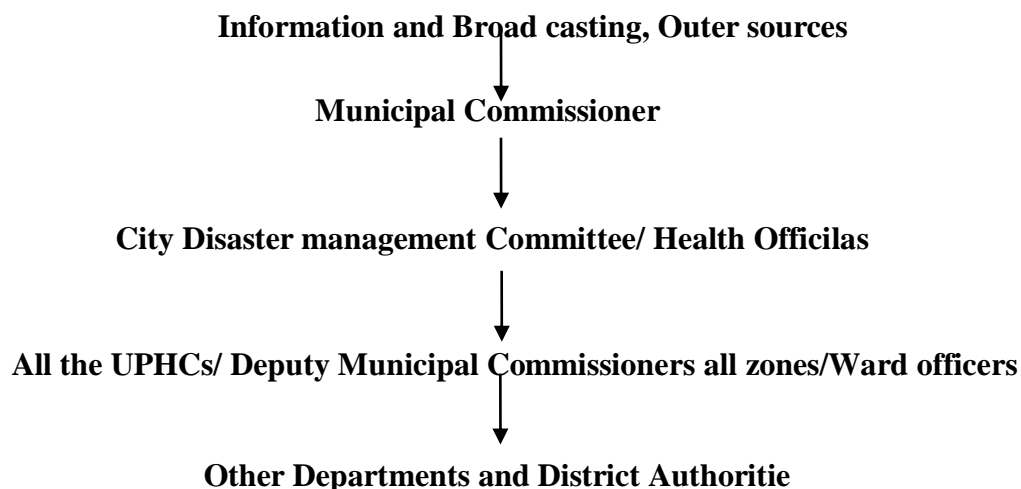
Pre Disaster depends upon the Hazard and Vulnerability analysis which involves the data pertaining to the nature eg: sources, incidence, distribution and consequences of past disasters as to make

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 in terms of District level, health officials and ambulance system.
- Establishing a surveillance 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 sources.
- Shelter places to be different from normal shelter places being utilizing for various other disasters.
- Health check up should be maximize 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 in terms of maximum death 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 negligence during such period.



### **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 emergency services works efficiently for fire control and rescue operation. Vadodara Fire brigade is having 6 fire stations and one ERC (GSDMA) for the whole district.

#### **Chain of command under VMC/ Jurisdiction limit:**

**Fire call received at Fire brigade main control room or at DEOC control room**



**Fire Calls forwarded to nearby fire station and also to Chief Officer Fire**



**Respective station officers to be alert and action taken for particular situation**



**For external support CFO to inform Municipal commissioner and Mayor**

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

**Fire call received at DEOC control room**



**Fire Calls forwarded to nearby fire station and also to Chief Officer Fire**



**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 making arrangements like:

- To receive casualties during an emergency in the corporation run Hospitals.
- To mobilize the firefighting equipment for 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 all 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 handling 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 doing 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 MGVCL**

- 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**

- The voluntary organization or NGOs are playing 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 aware local people 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 depraved 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:**

<b>Sr. No.</b>	<b>Ward No and Water logged places</b>	<b>Shelter places</b>
01	<b>Ward No 01</b>	NIL
02	<b>Ward No 02</b> 1. Ganesh Nagar Slum area in Tulsiwadi 2. Neareast slum area of Warasia colony, Rampir Moholla, Wasvani Colony 3. Mangleshwar zampa area 4. Harni Marg 5. Sanjay nagar slum area, warasia	1. Tulsiwadi primary school, Mangleshwar zampa primary school No 14(If required) 2. Fatehpura primary school No:17 Warasia 3. Mangleshwar primary school, Fatehpura Primary school No:14 4. Savad Municipal department, Infront of Vijay Nagar society 5. Fatehpura Sindhi School No 07,Behind warasia garden 6. Indulal Prathmik shada 15 and 16 7.Narmada khushalchand prathmik shada 8. Veer Bhagatsinh shada 9. Fatehpura shada no 11 and 18 swami vivekanand primary school 10 Harni village primary school 11. Sama Primary school 12. Vemali primary school
03	<b>Ward No 03 (Wadi)</b> 1. Pani Darwaza, Lowerline area 2. Near Mohammad Pond, Sabri Ngar, Jayraj Ngar, Kanshvado 3. Mnagal Park 4. Gujarat HousingBoard Kumbharwada 5. Near Gujarat Slum works 6.Ganesh Nagar, Samatala wadi 7. Behind Navgrah Temple 8.Wadi Vegetable Market 9. Govind Fakir Chawl	1. Jabmanpura Primary school,Lalwada primary school, Gajrawadi primary school 2. Daliyawadi,Vadi topkhana, Primary school, 3. Sindhvai Primary School near Wadi Vegetable market 4. Gajrawadi Pareshnagar Primary School 5. Gajrawadi Pareshnagar Primary School 6. Gajrawadi Pareshnagar Primary School 7. Dabhoi road, Zenith 8. Dabhoi road, Zenith 9. Dabhoi road, Zenith 10. Kavi premannd Primary school

		11 Aryabhata Primary school 12. Narayan Vidhyalaya
04	<b>Ward No 04</b> 1. Sindvai Mata road 2. Danteshwar, Near Santosh wadi pond, Slum area near Satyanarayanan society, Vijaywadi, Anupam Nagar. 3. Slum near tensile steel 4. Bhuratwadi, Near Zenith School 5. Near Gokulnagar, Kalali 6. Tarsali	1. Corporation School 2. Corporation School 3. Corporation School, Manjalpur 4. Saibaba School, Near Gokul Nagar, Kalali Bridge 5. Corporation School
05	<b>Ward No 05</b> 1. Navapura, Behind Khanderao Pond Mahavir Mohalla 2. Near SRP kumbharvada	1. Navapura Primary School, Near Jayratna Building 2. Khanderao School No-2
06	<b>Ward No 06</b> 1. Sayajigunj Bhimnath Bhatta, Sanjaynagar, Subhash nagar, Parasarvar Society 2. Navapura Akota Village, Rampura Slum 3. Mujhmahuda, Atladra Village 4. Kalali, Sarvodaya Nagar, Jagannath Nagar	1. Patel Nagar Primary school 2. Nagar Prathamik School Akota, Unnati Vidhyalaya 3. Nagar prathamik School, Atladra 4. Nagar prathamik School, Atladra
07	<b>Ward No 07</b> 1. Navyug School, Fatehgunj 2. Kamatipura Slum Quarters 3. Dhobighat/Industrial Society 4. Jalaram nagar 5. Navayard, Saraswatinagar 6. Pensionpura Amedkar Chowk 7. Pensionpura Patel Chowk 8. Pensionpura Gandhi Chowk 9. MGVCL Sub station, Chhani	1. Shree Sayaji School, Fatehgunj 2. Shree Ranapratap School, Behind Rangoli Hotel 3. Shree Sayaji School, Fatehgunj 4. Shree Sardar Vallabhbai Patel School, Karelibaug 5. Corporation Primary School, Near Lal pura Village 6. Laxmibai Primary school, Nizampura 7. Andhshada Nizampura 8. Laxmibai Primary school, Nizampura 9. Prabhuta Hall, Chhani
08	<b>Ward No 08 (Raopura)</b> 1. Binoba Bhabhe Marg, Tulsibai Chaowl, Bhabman area, Ekta Nagar, Kalyan Nagar 2. Near Gujarat Housing Board, Bhairav nath temple 3. Lower line area of Kash Mahal, Indira	1. Primary school of Mama-ni Podni, Maharani Chinnabai high school 2. Bhutdi Zapa practicing school, new era high school



	slum 4. Behind Karelibaug Aryakanya School, lowerline area of Jalaram nagar behind Buddhdev area, north side of Sayajibaug near Karelibaug, new Sahyog slum. 5. Navidharti, new slum quarters 6. Slum area of Reinbasera 7. Kalyan nagar slum, behind suraj estate slum, slum behind gandhinagar society 8. Besides new VUDA building	3. Navi dharti primary school, Jeevan sadhana school, Sardar hostel, Jeevan bharti school 4. Corporation school Nagarwada 5. Corporation school Nagarwada 6. Corporation school Nagarwada 7. Corporation school Nagarwada 8. Corporation school Nagarwada
09	<b>Ward No 09 (Panigate)</b> 1.Kadam school 2. Cortyard Nagar School 3. Ramdevnagar 02 School 4. Kavi Dulakag Primary school	1. Corporation School 2. Corporation School 3. Corporation School 4. Corporation School
10	<b>Ward No 10</b> 1.Bhainsasur Slum Panchamrit 2 Navrangpura Slum 3. Ganesh Nagar Slum 4. Karodiya Road, Near Jakatnaka 5. Gareeb Nagar Slum 6. Slum Near Jogpura Pond	1.Gotri Primary School 2. Gotri Primary School 3. Gorwa Primary School 4. Gorwa Primary School 5. Gorwa Primary School 6. Subhanpura Primary School
11	<b>Ward No 11</b> 1. Kadam School 2. Cortyark Nagar School 3. Ramdevnagar-2 School 4. Kavi Dulakag Primary School	1. Corporation School 2. Corporation School 3. Corporation School 4. Corporation School
12	<b>Ward No 12</b> 1. Vadsar Village, Koteswar Mhadev Temple Road, Jambua Nurm Housing Road, Ghaghreratiya Village, Makarpura	1. Vadsar Village Corporation School 2. Makarpura Village School 3. Jambua Village School 4. Ghaghretiya Village School

# **CHAPTER- 4**

## **EMERGENCY RESPONSE CENTRE**

### **(ERC)**

## CHAPETR 04: EMERGENCY RESPONSE CENTRE

### **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 district which would seek help from respective ERC as well.

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

#### **4.1.3 Function of ERCs during emergency 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 will 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 No./Mobile No.	Jurisdictions/ Districts	Officer In –Charge of ERC	Mobile No.& Email of In Charge of Fire Station
1	ERC Darjipura Vadodara	ERC Darjipura Near RTO Office N.H. No. 8 Vadodara 0265- 2541688 0265- 2541687	1. Vadodara 2. Anand 3. Narmada 4. Panchmahal 5. Dahad 6.Chhotaudepur 7. Mahisagar	1. Shri. Amit B Chaudhari Station officer  2. Shri. Parth G. Brahht I/c Chief Officer (Fire)	1. 9099426206      2. 9924025094 cfo@vmc.gov.in

# ANNEXURES

### **1.1 Vadodara City Information:**

<b>Area</b>	260.33 sq. km. (Approx.)
<b>Coordinates</b>	22.30°N 73.19°E
<b>Population</b>	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>	Summer Max. 42°C. Min. 21°C. Winter Max. 33°C Min. 09°C. Rainfall 1286 mm. (Mid. June to Sept.)
<b>Languages</b>	Major: Gujarati Other: Marathi, Hindi, Urdu, Sindhi, English, Tamil, Telugu, Kannada, Odiya, Malayalam, Bengali and other languages.
<b>Rail</b>	Zone: Western Railway. Main station: Vadodara Junction (BRC); Satellite stations: Vishwamitri (VS), Makarpura (MPR); Pratapnagar (PRTN), Chayapuri(CYI) Mumbai to Delhi and Mumbai to Ahmedabad line.
<b>Road</b>	RTO code: GJ06. National Highway No. 8 with all the major cities of India. 436 km from Mumbai and 956 km from Delhi.
<b>Air</b>	IATA= BDQ and ICAO= VABO. The city has an airport connected with Ahmedabad, Mumbai, Delhi, Kolkata, Hyderabad, and Chennai; among other cities.
<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.

<b>Sr. No</b>	<b>Ward Details</b>	<b>Total Population</b>	<b>Male Population</b>	<b>Female Population</b>
01	Ward No 01- 13	16,70,806	8,69,647	8,01,159
02 (Population with 0-6 Years)		1,65,559	89,402	76,157

### **1.2.2 Households and Family Details:**

Vadodara is having 12 Administrative wards and 13 election wards. As per 2011 Census the details of households and family details are mentioned below.

<b>Sr. No</b>	<b>Ward Details</b>	<b>Total Houses</b>	<b>Total House Holds</b>
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 vary year to year as per climatic condition. Below are the temperature details of previous year which showing maximum variations from summer to winter.

Sr. No.	Name of the Month	Average Temperature		Average Wind speed	Average Humidity
		Highest	Lowest		
1	January	29.0°C	18.0°C	11 km/h	40 %
2	February	35.0°C	21.0°C	11.6 km/h	24 %
3	March	36.0°C	24.0°C	12.2 km/h	31 %
4	April	42.0°C	30.0°C	13.7 km/h	25 %
5	May	42.0°C	30.0°C	16.2 km/h	37 %
6	June	36.0°C	29.0°C	19.9 km/h	56 %
7	July	34.0°C	28.0°C	19.3 km/h	67 %
8	August	31.0°C	26.0°C	18.8 km/h	77 %
9	September	33°C	28.0°C	9.6 km/h	70 %
10	October	35.0°C	28.0°C	7.7 km/h	50 %
11	November	33.0°C	24.0°C	9.8 km/h	33 %
12	December	31.0°C	21.0°C	9.8 km/h	35 %

Vadodara City Temperature Year 2020 (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 and 2020. Below are the rain fall details.

Sr. No.	Year	Rainfall Details(In mm)	Sr. No.	Year	Rainfall Details(In mm)
1	2004	1146.72	10	2013	1436
2	2005	1969.20	11	2014	1075
3	2006	1708.3	12	2015	450.30
4	2007	1210.30	13	2016	714
5	2008	379.3	14	2017	916
6	2009	595.5	15	2018	941
7	2010	1549	16	2019	1921
8	2011	1140	17	2020	1286
9	2012	934			

Vadodara City Rainfall Details (*Source: IMD*)

### 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.

Sr. No	Rivers	Dams & Affected Taluka	Reservoirs with Taluka	Irrigation Ponds With Taluka
1	Mahi River	Dev- 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 105 Primary school in which 27,107 students and 938 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 has 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 ( Under construction)	3500
<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

### 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

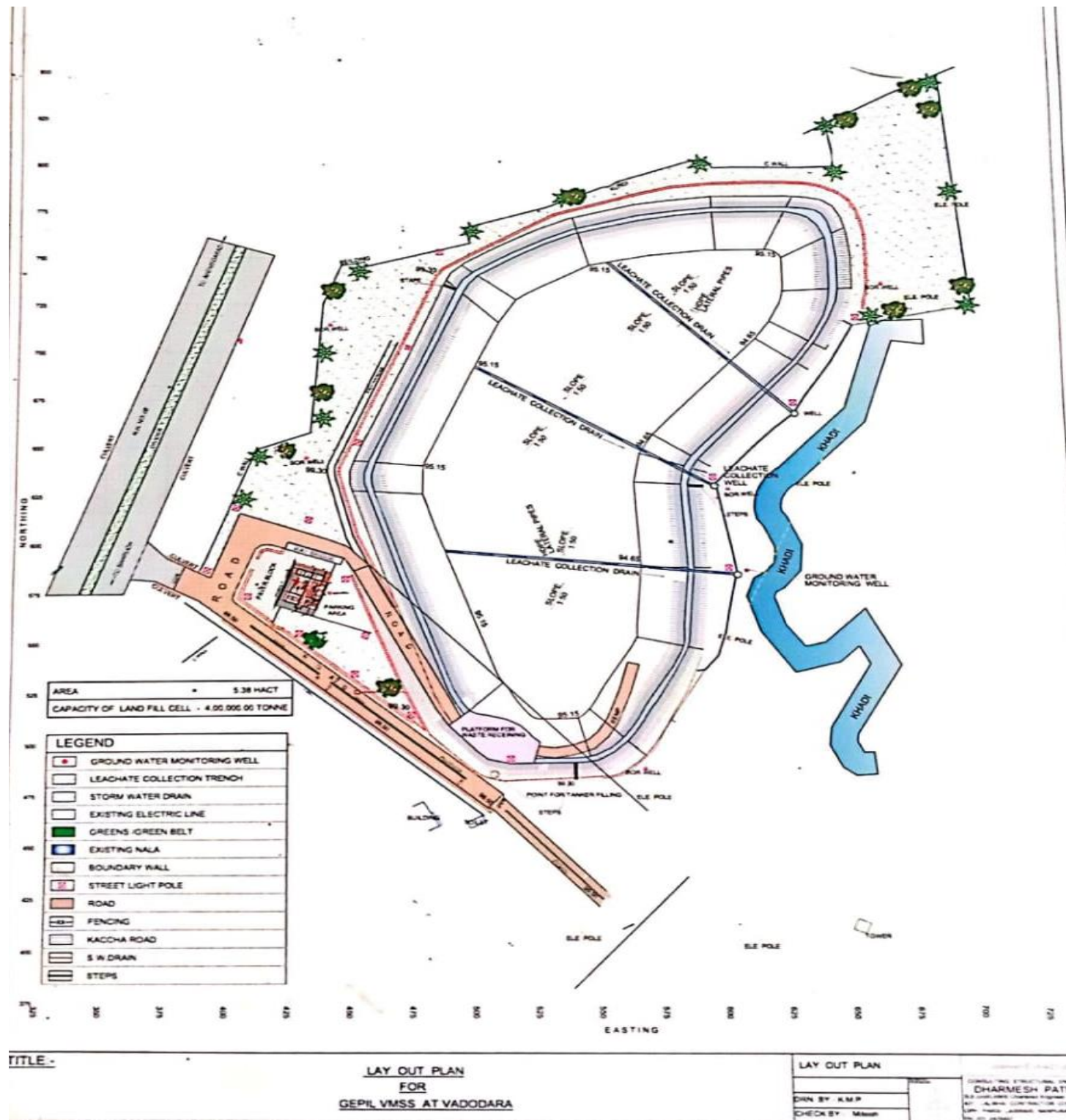
ILR and 41 Deep Freezer for Refrigeration and other vital equipment for storage. As per this year record total 922 hospitals are working under VMC limit among which 224 are currently working as Covid-19 hospitals during Pandemic.

**Below are the lists of 34 UPHCs in the Municipal Corporation:**

Sr. No	Zone	UPHC	Sr. No	Zone	UPHC
1	East	Bapod	17	South	Yamunamill
2		Jubelibagh	18		Gajrawadi
3		Kishanwadi	19		Kapurai
4		Ramdevnagar	20		Danteswar
5		Sawad	21		Tarsali
6		Sudamapuri	22		Maneja
7		Warasiya	23		Makarpura
8	West	Diwalipura	25	North	Vadsar
9		Atladra	26		Ektanagar
10		Tandalja	27		Navayard
11		Jetalpur	28		Navidharti
12		Akota	29		Karelibagh
13		Subhanpura	30		Chhani
14		Gorwa	31		Siyabagh
15		Gotri	32		Navapura
16		Gokulnagar	33		Sama
			34		Fatepura

**1.3.9 Solid waste Generation:** Vadodara Municipal Corporation is having Landfill Phase-1 Operational at R.S.No.346, Makarpura holding capacity of 4.5 Lakh M.T and area of 6 hectare.

Sr. No	Zone/Area	Collection Amount(KG)	Sr. No.	Zone/Area	CollectionAmount(KG)
01	East	74761.530	03	North	79982.460
02	West	99373.330	04	South	99208.910



Map No 01: Landfill site, Vadodara Municipal Corporation

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





# **RESOURCES DETAILS**

## **VADODARA MUNICIPAL CORPORATION**

## **2.1 Emergency Vehicle List: Vadodara Fire Brigade**

<b>Sr. No.</b>	<b>Vehicle No.</b>	<b>Make</b>	<b>Model</b>	<b>Type of Body</b>	<b>Gross Vehicle Weight</b>	<b>Horse Power/ CC</b>	<b>Seating Capacity</b>
1.	GJ-6-G-6376	A /Lay	2007	Emergency Van	16200	122	6
2.	GJ-6-W-9935	A /Lay	1999	Water Tanker	15875	110	4
3.	GJ-6-W-9934	A /Lay	1999	Water Tanker	15875	110	4
4.	GJ-6-G-232	M & M	1992	Jeep	1130	20	6
5.	GJ-6-X-673	Maruti	2002	Ambulance	755 UW	796 CC	4
6.	GQB-4849	A /Lay	1987	Fire Engine	18370 UW	180	8
7.	GJ-6-G-6363	Tata 407	2006	Fire Engine	5600	2956 CC	3
8.	GJ-6-Y-5783	Tata	2002	Water Tanker	10500	90	5
9.	GJ-6-AH2744	Quails	2002	Jeep	2225	24.46CC	10
10.	GJ-6-G-6365	A /Lay	2005	Fire Engine	16200	122 KW	6
11.	GJ-6-U-7454	A /Lay	1994	Fire Engine	22350	29.46CC	2
12.	GJ-6-T-5102	A /Lay	1988	Emergency Van	16200	31.5	6
13.	GJ-6-G-6382	Tata 410	2007	Ambulance	5300	29.56CC	10
14.	Gj-6-G-6390	Tata	2008	Dead Body Van	16200	5675CC	31
15.	Gj-6-G-6482	Ambulance	2009	Tata 407 Ambulance	5300Kg.	2956 CC	6
16.	GJ-6-G-6383	Tata 410	2007	Ambulance	5300	29.56CC	10
17.	GJ-6-G-6384	Tata 410	2007	Ambulance	5300	29.56CC	10
18.	GJ-6-G-6385	Tata 410	2007	Ambulance	5300	29.56CC	10
19.	GJ-6-G-6648	A /Lay	2011	Adv. Water Tender	16200	160 HP	1+6=7
20.	GJ-6-G-6647	A /Lay	2011	Adv. Water Tender	16200	160 HP	1+6=7
21.	GJ-6-G-6646	A /Lay	2011	Adv. Water Tender	16200	160 HP	1+2-3

Sr. No.	Vehicle No.	Make	Model	Type of Body	Gross Vehicle Weight	Horse Power/ CC	Seating Capacity
22.	GJ-6-G-6641	A /Lay	2011	Emergency Rescue van	16200	160 HP	1+5=6
23.	GBF-8573	Jeep	1985	Jeep	1140UW	15	6
24.	GJ-6-G-6734	Tata Winger	2013	Ambulance	1800	1948 CC	08
25.	GJ-6-G-6737	Tata Winger	2013	Ambulance	1800	1948 CC	08
26.	GJ-6-G-6732	Tata Winger	2013	Ambulance	1800	1948 CC	08
27.	GJ-6-G-6733	Tata Winger	2013	Ambulance	1800	1948 CC	08
28.	GJ-6-G-6735	Tata Winger	2013	Ambulance	1800	1948 CC	08
29.	GJ-6-G-6736	Tata Winger	2013	Ambulance	1800	1948 CC	08
30.	GJ-6-G-6700	Volvo FM400	2013	Fire Fighter Aerial Ladder Platform 44 Mt.	20450	FM 400 472	3
31.	GJ-6-GA-0185	Cargo Tata	2014	Emergency Rescue Van	16200	CC 5675	6
32.	GJ-6-GA-0245	Cargo Tata	2013	Foam Tender	16200	CC 5675	6
33.	GJ-6-GA-0270	Cargo Tata	2013	Foam Tender	16200	CC 5675	6
34.	GJ-6-GA-0487	Cargo Tata	2014	Foam Tender	16200	CC 5675	6
35.	Gj-6—GA 0402	Tata Winger	2015	Ambulance	2850	CC 1948	9
36.	Gj-6—GA 0421	Tata Winger	2015	Ambulance	2850	CC 1948	9
37.	GJ-6-GA-0169	Eicher	2014	W T with Pump	8250	95 Hp	3
38.	GJ-6-GA-0326	Eicher	2014	W T with Pump	8250	95 Hp	3
39.	GJ-6-GA-0368	Eicher	2014	W T with Pump	8250	95 Hp	3
40.	GJ-6-GA-0226	Eicher	2014	W T with Pump	8250	95 Hp	3
41.	GJ-6-GA-0228	Eicher	2014	W T with Pump	8250	95 Hp	3
42.	GJ-6-GA-0026	Eicher	2014	W T with Pump	8250	95 Hp	3
43.	GJ-06-GA-0331	Eicher	2014	W T with Pump	8250	95 Hp	3
44.	GJ-06-GA0292	Eicher	2014	W T with Pump	8250	95 Hp	3

Sr. No.	Vehicle No.	Make	Model	Type of Body	Gross Vehicle Weight	Horse Power/ CC	Seating Capacity
45.	GJ-06-GA-0132	Eicher	2014	W T with Pump	8250	95 Hp	3
46.	GJ-06-GA-0005	Eicher	2016	Water Tanker	16200	147Hp	3
47.	GJ-06-GA-0125	Eicher	2016	Water Tanker	16200	147Hp	3
48.	GJ-06-GA-0130	Eicher	2016	Water Tanker	16200	147Hp	3
49.	GJ-06-GA-0190	Eicher	2016	Water Tanker	16200	147Hp	3
50.	GJ-06-GA-0221	Eicher	2016	Water Tanker	16200	147Hp	3
51.	GJ-06-GA-0230	Eicher	2016	Water Tanker	16200	147Hp	3
52.	GJ-06-GA-0234	Eicher	2016	Water Tanker	16200	147Hp	3
53.	GJ-06-GA-0243	Eicher	2016	Water Tanker	16200	147Hp	3
54.	GJ-06-GA-0322	Eicher	2016	Water Tanker	16200	147Hp	3
55.	GJ-06-GA-0346	Eicher	2016	Water Tanker	16200	147Hp	3
56.	GJ-06-GA-0352	Eicher	2016	Water Tanker	16200	147Hp	3
57.	GJ-06-GA-0374	Eicher	2016	Water Tanker	16200	147Hp	3
58.	GJ-06-GA-0414	Eicher	2016	Water Tanker	16200	147Hp	3
59.	GJ-06-GA-0481	Eicher	2016	Water Tanker	16200	147Hp	3
59.	GJ-06-GA-0498	Eicher	2016	Water Tanker	16200	147Hp	3
60.	GJ-06-GA-2511	Bharat Benz	2017	Fire Engine	16200	167.50	6
61.	GJ-06-GA-2582	Bharat Benz	2017	Fire Engine	16200	167.50	6
62.	GJ-06-GA-2585	Bharat Benz	2017	Fire Engine	16200	167.50	6
63.	GJ-06-GA-2898	BharatBenz	2017	Fire Engine	16200	167.50	6
64.	GJ-06-GA-2659	Bharat Benz	2017	Fire Engine	16200	167.50	6
65.	GJ-06-GA-2682	Bharat Benz	2017	Fire Engine	16200	167.50	6
66.	GJ-06-GA-2766	Bharat Benz	2017	Fire Engine	16200	167.50	6
67.	GJ-06-GA-2900	Bharat Benz	2017	Fire Engine	16200	167.50	6
68.	GJ-06-GA-2904	BharatBenz	2017	Fire Engine	16200	167.50	6
69.	GJ-06-GA-2911	Bharat Benz	2017	Fire Engine	16200	167.50	6
70.	GJ-06-GA-2971	Bharat Benz	2017	Fire Engine	16200	167.50	6

<b>Sr. No.</b>	<b>Vehicle No.</b>	<b>Make</b>	<b>Model</b>	<b>Type of Body</b>	<b>Gross Vehicle Weight</b>	<b>Horse Power/ CC</b>	<b>Seating Capacity</b>
71.	GJ-06-GA-2999	Bharat Benz	2017	Fire Engine	16200	167.50	6
72.	GJ-06-GA-2842	Eicher	2018	Fire Tender	21490	7698	4
73.	GJ-06-GA-2748	Eicher	2019	Fire Tender	21540	7698	4
74.	GJ-06-GA-2563	Eicher Pro 8031T LSL CBC	2018	Fire Tender	21430	7698	4
75.	GJ-06-GA-2779	Ashok Leyland	2019	Emergency Rescue Van	13400	5760	2

## **2.2 Vadodara Fire Brigade: List of Equipments**

Sr. No	Item code Details	Name of the Fire stations						
		Vadiwadi	Dandiabazar	Panigate	GIDC	Gajrawadi	TP 13	ERC
1	Gas Cutters	0	0	1	1	0	0	0
2	Cold Cutters	0	0	3	0	0	0	0
3	Bolt cutters( Shears )	3	8	9	6	1	7	4
4	Electric Drill	0	0	0	0	0	0	0
5	Circular Saw with Diamond Blade(Electric)	0	0	0	1	0	1	0
6	Chipping Hammer	0	0	0	0	0	0	2
7	Chain Saw Diamond	1	0	0	0	0	0	0
8	Chain Saw Bullet	1	0	11	0	0	0	3
9	Cutters Hydraulic	0	1	4	2	0	2	2
10	Cutters Battery	0	3	2	5	1	2	0
11	Spreaders Hydraulic	1	1	3	2	0	1	2
12	Spreaders Battery	2	3	2	2	1	3	1
13	Air Lifting bags (Different capacity)/Tools	2	5	10	6	0	1	11
14	Jack with 5 ton lift	4	1	6	8	1	0	9
15	Iron shod levers, 10 ft. Long	0	0	0	0	0	0	0
16	Sledge hammer	0	0	5	8	1	8	6
17	Heavy Axe	0	0	3	0	0	0	3
18	Smoke Blower and Exhauster	1	2	2	4	0	1	1
19	Set of rope tackle	0	0	10	0	0	0	7

	( 3 sheave 2 sheave)							
20	Gloves Rubber, Tested up to 25, 000 volt	3	3	6	0	0	6	4
21	Stretcher harness (set)	0	0	1	2	0	1	2
22	Jumping Cushions	0	0	0	0	0	0	0
23	Rescue Rams	2	0	4	0	0	1	1
24	Blankets	2	2	0	0	0	2	0
25	Lifting tackle 3 ton	0	0	5	0	0	0	0
26	Chains 6 feet (3 ton lift)	0	1	1	1	0	0	1
27	Inflatable Light Tower	0	1	1	1	0	2	0
28	Light Mast	1	0	5	2	1	4	3
29	Search light	2	0	4	5	1	4	3
30	Electric Generator (10 kv)	0	4	1	4	1	0	2
31	Cranes Heavy Duty, Fork type	0	0	1	0	0	0	1
32	Search and Rescue Teams for Collapsed Structures	0	0	1	0	0	1	0
33	Rescue back boards	0	0	1	0	0	0	2
34	Diving suit	0	1	0	0	0	0	0
35	Under water BA set	0	1	0	1	0	0	1
36	Lifebuoy	20	7	11	15	0	14	20
37	Life Jackets	20	10	8	6	0	7	5
38	Basket Stretcher	0	1	1	0	0	1	2
39	Pneumatic Rope	0	0	1	0	0	0	0

	Launcher							
40	Inflatable boat (12 persons)	2	1	2	1	0	1	1
41	Motor Boats	3	1	0	5+1	0	3	3
42	Search and Rescue Teams for Flood	0	0	0	0	0	1	0
43	Suit fire entry	0	0	1	2	0	0	1
44	Clothing Chemical protective (A, B, C)	2	0	2	4	0	0	3
45	Breathing apparatus self contained	15	0	15	15	0	4	8
46	Breathing Apparatus Compressor	0	0	1	1	0	0	0
47	Pump high pressure, portable	0	0	0	1	0	1	0
48	Pump floating	1	0	0	0	0	0	0
49	Extension Ladder	5	4	8	8	1	6	5
50	Foam Type	2	0	1	0	0	0	0
51	Halons Type	0	0	0	0	0	0	0
52	Fire Tender	3	3	4	3	1	2	2
53	Foam Tender	1	1	1	2	0	1	1
54	Rescue Tender	1	1	2	1	0	2	2
55	Hydraulic Platform	1	0	0	1	0	0	0
56	DCP Tender	0	0	0	0	0	0	0
57	Fire Fighting Foam	0	0	0	0	0	1100 lit	8(20 lit)
58	Dry Chemical Powder	0	0	0	0	0	900kg	0
59	Spine boards	0	0	1	1	0	0	2
60	Stretcher normal	0	2	6	3	0	1	4



61	First aid kits	1	3	3	0	0	0	0
62	Mechanical ventilators	0	0	0	0	0	1	0
63	Water filter	0	0	0	0	0	0	0
64	Water tank	0	0	0	0	0	1	0
65	4 wheel drive vehicle	1	2	1	1	0	3	0
66	Light Ambulance Van	2	0	1	1	0	1	0
67	Medium Ambulance Van	2	3	1	0	0	0	0
68	Water Tanker Medium capacity	1	2	1	0	0	1	0
69	Water Tanker Large capacity	1	3	3	3	1	1	2
70	VHF Sets Static	0	5	4	0	0	1	0
71	VHF Sets Mobile	0	0	0	0	0	0	0
72	UHF Sets Static	0	0	0	0	0	3	0
73	UHF Sets Mobile	0	0	0	0	0	0	0
74	Walkie Talkie Sets	0	0	0	1	0	1	1
75	HF Sets Static	0	0	0	0	0	0	0
76	Mobile Phone GSM	0	0	0	0	0	0	0
77	Video Camera Digital	0	0	0	0	0	0	0
78	Emergency response guide book	0	0	0	0	0	0	0
79	Leak storing device	0	1	0	0	0	1	0
80	Traffic cones	0	0	10	4	0	2	10
81	Rope ladder	1	2	3	2	0	1	2
82	Aluminum ladder	1	0	0	0	1	0	0
83	Shovel	8	0	11	8	1	14	4

84	Spade	3	11	3	4	2	4	7
85	Crow bar	5	10	4	10	1	11	2
86	Helmet	8	0	0	0	0	0	0
87	Pick axe	3	12	4	7	2	0	3
88	Axe	4	6	8	0	0	12	4
89	Hacksaw	2	0	3	3	0	1	3
90	Ceiling hook	3	4	8	6	1	7	2
91	Pump	1	0	0	0	0	0	2
92	Public Address System	0	0	2	1	0	4	0
93	Electric Torch	4	5	7	10	2	5	3
94	Telescopic Pneumatic Mast (Light)	2	4	5	5	1	5	0
95	Office building	2	0	1	0	0	1	1
96	Hand Tool Set	0	0	2	1	0	0	1
97	B.A.Set	0	13	15	0	3	14	
98	Rope	3	10	5	15	2	13	15
99	Bucket	3	4	3	5	1	3	0
100	Hose/hose fitting	50	65/4	166	80	15	41	35/55
101	Air Compressor	0	0	0	1	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	13	06
2	Fiber Boat	11	09
3	Life Jacket	90	-
4	Fibre Ring	90	-
5	Rope	75	
6	Machine boat	EME, M.S University is having machine boats	

### **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:**

Sr. No	Location	Concerned person Name	Contact Details
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	Jetapur	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**

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
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 mahebubbhai	9904595024
6	Jetapur	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**

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
1	Gotri	Kanubhai n bharvad	9727073720
2	Akota	Patel bashirbhai ayubbbhai	9825413166

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

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
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**

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
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**

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
1	Vadodara	Mali Arjunbhai Laljibhai	9824084356
2	Vadodara	M P Enterprise	9825178710

### **2.13 List of Bulldozer**

<b>Sr. No.</b>	<b>Location</b>	<b>Concerned Person Name</b>	<b>Contact Details</b>
1	Vadodara	Vinod Construction	9909904727

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

<b>Sr. No.</b>	<b>Name of the Resources</b>	<b>Total In Nos.</b>	<b>Concerned person Name and No.</b>
01	De silting machine	29	Shri Dharmesh Rana-9825801942 Dy. Executive Engineer(Mechanical Department)
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	
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**

<b>No</b>	<b>Centre</b>	<b>Ambulance</b>	<b>Dead body van</b>	<b>Bus type</b>	<b>Vehicle No</b>
1	S.S.G.Hospital	06	02	03	-
2	Fire brigade	10	08	-	-
3	Jamnabai hospital	02	-	-	GJ18G 6763 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**

<b>Sr. No.</b>	<b>Vehicle No.</b>	<b>Make</b>	<b>Type of Body</b>	<b>Model</b>	<b>Engine No.</b>	<b>Horse Power CC</b>
1.	GJ6G-6510	Man Force	Multifunctional Rescue Van with Crain	2008	D54001157	BHP 280
2.	GJ6G-6511	Man Force	Multifunctional Rescue Van with Crain	2008	D54001168	BHP 280
3.	GJ6G-6512	Man Force	Water Tanker	2008	D54001387	BHP 280
4.	GJ6G-6513	Man Force	Water Tanker	2008	D54001358	BHP 280
5.	GJ6G-6514	Man Force	Water Tanker	2008	D54001422	BHP 280
6.	GJ6G-6515	Man Force	Water Tanker	2008	D54001394	BHP 280
7.	GJ6G-6516	Man Force	Foam Nurser	2008	D54001304	BHP 280
8.	GJ6G-6517	Man Force	Foam Nurser	2008	D54001233	BHP 280
9.	GJ6G-6518	Tata	High Capacity Pump	2008	FRZ 831993	3783CC
10.	GJ6G-6519	Tata	High Capacity Pump	2008	FRZ 835717	3783CC
11.	GJ6G-6520	Tata	High Capacity Pump	2008	FRZ 835821	3783CC
12.	GJ6G-6521	Tata	High Capacity Pump	2008	GRZ 839439	3783CC
13.	GJ-6-G-6531	Ashok Ley	Mini Rescue Tender	2008	KNH 533862	88CC
14.	GJ-6-G-6532	Ashok Ley	Mini Rescue Tender	2008	CNH 559827	88CC
15.	GJ-6-G-6538	Tata	Small Pickup Truck	2009	HQZ711511	1948CC
16.	GJ-6-G-1560	M & M	Scorpio "Command Vehicle"	2010	HAA4C14953	2179CC
17.	GJ-6-G-6642	Ashok Ley	Truck Mounted Hook loader	2011	VBH 691643	118KW



18.	GJ-6-G-6643	Ashok Ley	Truck Mounted Hook loader	2011	VBH 691668	118KW
19.	GJ-6-G-6652	Man Force	Fire Water Browser	2012	4DCG00252	180HP
20.	GJ-6-G-1890	Royal Enfield Bullet	Motor Cycle With Gear	2013	230754	19.8 BHP 350 cc
21.	GJ-6-G-1891	Royal Enfield Bullet	Motor Cycle With Gear	2013	232271	19.8 BHP 350 cc

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

<b>Sr. No.</b>	<b>Name of Equipment</b>	<b>Total No</b>
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	Parth G Brahmbhatt	I/c. Chief Officer	Badamdibaug
02	Nikunj P Azad	Station Officer	GIDC,Makarpura
03	Amit J Chaudhari	Station Officer	Panigate
04	Harshvardhan Puvar	Station Officer	ERC
05	R N Ghag	Sub Officer	Dandia Bazar
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 Bhaliya	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 Bhaliya	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**

<b>Sr. No.</b>	<b>Name</b>	<b>Phone no.</b>
<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 Ravindrbbhai 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**

<b>Sr. No</b>	<b>Name</b>	<b>Contact Details</b>
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

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

<b>Sr. No.</b>	<b>Name of the Hospital (Including Private)</b>	<b>Location</b>	<b>Contact Number</b>
01	Sir Sayajirao Gaekwad Hospital	Vinoba Bhawe Road, 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

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

<b>Sr No.</b>	<b>NGO Hospital Name</b>	<b>Location</b>	<b>Contact Number</b>
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	Janmotri Charitable Trust	Savli Dist- Vadodara	NA
06	M.H. Vadvala 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	Kalol Nagarpalika 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. No.</b>	<b>Reporting Unit Name</b>	<b>Type of Blood Bank</b>	<b>NACO/Non NACO</b>	<b>Contact No.</b>
01	GMERS Medical Collage & General Hospital, Gotri (DLBB)	Governmet	NACO	9925017767
02	Jamanabai Blood Bank, Vadodara (DLBB)	Governmet	NACO	98984 50765 2517400, 2462560
03	S.S.G Hospital, Vadodara (BCSU)	Governmet	NACO	2424848, 2424351
04	Dhiraj Blood Bank, Vadodara(BCSU)	Voluntary/Charitable	Non-NACO	9723065840
05	Kailash Cancer Hospital & Research Center (BCSU)	Voluntary/Charitable	Non-NACO	99982-74460 97254-21342 99099- 28906
06	Bhailal Amin, Vadodara (BCSU)	Voluntary/Charitable	Non-NACO	2307038, 2307039 2286666
07	Indu Blood Bank, Vadodara (BCSU)	Voluntary/Charitable	Non-NACO	9925627186 98250 17334 2437676, 2411477
08	Medical Care Centre, Vadodara (DLBB) (BCSU)- (BSC)	Voluntary/Charitable	NACO	9825335065 9979576507 2462404, 2438130
09	Suraktam Blood Bank, Vadodara (BCSU)	Voluntary/Charitable	Non-NACO	98250 44906 2363660, 2225903

## **2.24 Detail of Medical Officer- UPHC- Vadodara Municipal Corporation**

<b>Sr. No</b>	<b>Zone</b>	<b>UPHC</b>	<b>Name of Doctor</b>	<b>Contact Detail</b>
01	<b>East</b>	<b>Bapod</b>	Dr Bhavna Parmar	9909519649
02		<b>Jubelibagh</b>	Dr Ekta Shah	9909927430
03		<b>Kishanwadi</b>	Dr Ashish Gamit	9909915368
04		<b>Ramdevnagar</b>	Dr. Manisha Rathva	9714417967
05		<b>Sawad</b>	Dr. Parthiv Shah	9909927425
06		<b>Sudamapuri</b>	Dr Rikhiv Desai	7600429717
07		<b>Warasiya</b>	Dr. Jalpa Patel	8460622883
08	<b>West</b>	<b>Diwalipura</b>	Dr Aadityendra Arya	9099925730
09		<b>Atladra</b>	Dr Jayshree Khubchandani	9909927417
10		<b>Tandalja</b>	Dr Parul Tank	9909927426
11		<b>Jetalpur</b>	I/c Dr Parul Tank	9909927426
12		<b>Akota</b>	Dr.Kamaxi Jonwal	9978836100
13		<b>Subhanpura</b>	Dr Namrata Chauhan	9824021956
14		<b>Gorwa</b>	Dr Sejal Soni	9909927418
15		<b>Gotri</b>	Dr Dipak Solanki	8238018689
16		<b>Gokulnagar</b>	Dr Ashok Shah	9426377851
17	<b>South</b>	<b>Yamunamill</b>	Dr. Vallari Parmar	7984646307
18		<b>Gajrawadi</b>	Dr Smita Vasava	9825503817
19		<b>Kapurai</b>	Dr Prakash Prajapati	9909911719
20		<b>Danteswar</b>	Dr. Vyoma Rana	8460419520
21		<b>Tarsali</b>	Dr Mausami Kothari	9825856172
22		<b>Maneja</b>	Dr Jay Nilak	9925077734
23		<b>Makarpura</b>	Dr Chetna Patel	9909927415
24		<b>Manjalpur</b>	Dr Hiren chaudhari	9909927428
25		<b>Vadsar</b>	Dr. Ronak M. Patel	9099025418
26	<b>North</b>	<b>Ektanagar</b>	Dr. Bhumika R. Akabari	7046110044
27		<b>Navayard</b>	Dr Nital Thakkar	9909927436
28		<b>Navidharti</b>	Dr Jyoti Gamit	9712971523
29		<b>Karelibagh</b>	Dr Anjana Maheta	9825329355
30		<b>Chhani</b>	Dr Sakshi Kulkarni	9909927431
31		<b>Siyabagh</b>	Dr Abhisek Rathod	9924038613
32		<b>Navapura</b>	Dr. Purvika Patel	9979105450
33		<b>Sama</b>	Dr mahendra Mokani	9727767333
34		<b>Fatepura</b>	dr Nirmal Gohil	9909927429

## **2.25 List of Major NGOs in Vadodara**

<b>Sr. No</b>	<b>Name of the NGO</b>	<b>Concerned person</b>	<b>Contact Details</b>
01	Baroda Muslim Seva trust	-	-
02	Vadodara Chhatra Saansad	Kunal Sharma	9724661338
03	Alembic Pharmaceuticals CSR	-	-
04	Deepak Foundation	Archana Joshi	98250 18649
05	Akshay Patra Foundation	Animesh Gupta	99044 07516
06	Bhakt Mitro Campaign	Darshanbhai	98250 89881
07	Bharat Raksha manch	Harshad Maheta	98242 66899
08	Fulcrum	Arun Marte	76219 79361
09	BAPS Swaminarayan temple	Bhakt Vatsal Dasji	99989 91066
10	Seva Group	Pramod Agrawal	98250 24053
11	M.S University	Jigar Inamdar	99250 88855
12	Jay ambe sanitary mart	Kalpesh Desai	90999 94400
13	Aadhar Foundation	Ritaben Bhatt	9265212052
14	Madhuri Education Trust	Nikhil Kharva	99783 35379
15	Shroff Foundation	Girish Pathak	94271 18913
16	Community Science Centre	Dinesh Gandhi	98259 16874
17	Raksha Charitable Trust	Raksha Prajapati	98793 15935
18	United way of Baroda	Binita Vardiya	94287 64771
19	Unified Growth Foundation	Shikha Sen	97127 40032
20	Jivan Akshay Cheritable Trust	Rajesh Jhaveri	98250 40326
21	Helping Hand Foundation	Arjunbhai Govardhanbhai	7600246387
22	Social work	Nishita Rajput	9016038005



## **2.26 List of MAH Units**

<b>Sr. No.</b>	<b>Name</b>	<b>Address</b>	<b>Sector/Chemical Type</b>	<b>Contact person</b>	<b>Contact Number</b>
01	ACI Industrial Organics Pvt. Ltd.	A-1/47/4 & 5, GIDC Industrial Estate, Nandesari	Chemicals/ Chlorine	Mr.Aashish R. Amin Mr.Prakash K. Patel	09824024796 09824312339
02	AgrawalChemicals Industries	Plot No.159/1 to3, GIDC, Nandesari	Chlorinated paraffin wax (C.P.W)/ Chlorine	Mr.ShivlalGoyal Mr.VikashAgrawal	(0265)-2398555 9327996697
03	Base Metal Chlorination P. Ltd.	C-1/128/18,19, 24 & 25 GIDC Industrial Estate, Nandesari	Aluminium Chloride and Calcium Butyrate/ Chlorine	Mr.BipinD.Ramani Mr ApurvaC.Shah	98240 00925 9978777744 99789 01873
04	Bharat Petroleum Corporation Ltd.	Koyali Installation Village :Karachiya ,PO :Jawaharnagar	Petroleum Complex/ Motor Spirit, HSD, Ethanol, SKO	Mr.Amit Mittal Mr.P. R. Sethy	9687685600 9824401963
05	Chem TechIntermediates Pvt. Ltd.	C1/128/14-15-16, GIDC IndustrialEstate,Nandesari	Pharmaceuticals Chemicals/ Sodium Cyanide	Mr.AjaysinhB.Sarvaiya Mr Mahesh K Patel	9825415177 9408150682
06	Chloritech Industries	122 / 3 GIDCEstateNandesari	Chemical/ Chlorine	Mr.Bhavik. C.Shah Mr.N.S.Bhatt	0265-2781345 9227140316

07	CoromandelAgricoPvt. Ltd.	A-1/96 & 94-B, GIDC Nandesari	Pesticides/ Methyl Parathion	Mr.KanwalKishanBhat Mr. H. K. Kanzaria	0265-2840626 9909661063
08	DeepakNitrite Ltd.	4 / 12, GIDC Chemical Industrial Estate, Nandesari	Chemicals/ Chlorine Ammonia	Mr.GurishKhosla Mr S.B.Raval	9428520198 9429198186 09904406400
09	DhirenChemicalIndustrie s	124/36 B, GIDC Estate,Nandesari	Chemicals/ Engine Oil	Mr. R. R. Shah Mr.Dhiren R. Shah	(0265) 2340540 (0265) 2840503
10	GSP Crop Science Pvt Limitd, Unit-3	Plot. No.1 & 15, GIDC Industrial Estate,Opp. SBI Bank, Nandesari	Pesticides/ Acrylonitrile	Mr.KenalV.Shah Mr.Abhaykumar Sharma	9687652901 9427506500
11	Gujarat Alkalies& Chemicals Ltd.	P. O.Petrochemicals, Ranoli	Alkalis & Chemicals/ Liquid Chloride, Methyl Chloride, MethyleneChloride, Chloroform, Carbon TetraChloride, HydrogenPeroxide, Sodium Cyanide	Mr.M.N.Patel Mr.A.K.Shrivastava	9909029482 9909029436
12	Gujarat State Fertilizers &Chemicals Ltd	P. O. Fertilizernagar	Fertilizers &Chemicals/ Naphtha,Benzene, HCl,Cyclohexene, Ammonia,Oleum, Sulphuric Acid	Dr. YP Singh Shri VB Mishra	9978923083 9978923070
13	Gujarat State Fertilizers &Chemicals Ltd. Polymers Unit	Polymers Unit, Post: Petrochemicals, Ranoli	Polymers/ HCN, Acetocynohydrine, Acetone,Methanol, Ammonia	Shri H. V. Kachhadia Shri B. L. Lakhtaria	9979853410 9979856475

14	HariOrgoChem Pvt.Ltd.	A/237-238, GIDC Industrial Estate, Nandesari Dist. Vadodara-	Chlorine/ Tri Chloro Acetyl Chloride	Mr.Bhavesh P. Shah Mr.V.S.Shah	0265-2781345 9227140320
15	Hindustan Petroleum Corp. Ltd	Plot No. 48 & 49, GIDC, Nandesari,	Petroleum Products/ Motor Spirit HSD	Shri D.N. Meena ShriAnubhav Singh Yadav	9724323621 8980001533
16	Indian Oil Corporation Limited (Gujarat Refinery)	PO: Jawahar Nagar, Dist: Vadodara	Processing of crude oil for manufacture of Petroleum Products/ Crude Oi, LPG Methanol, HSD Naphtha, MS, SKO LAB, ATF, FO, LSHS	Shri S. K. Dhardas Gupta  Shri A. K. Singh	(0265) 2233301  9825041923
17	Link PharmaChem Ltd	161/1, 162, GIDC Nandesari, Dist. Vadodara	Chlorine/ Tri ChloroAcetyle Chloride	Mr. S. G.Thakur Mr. V G. Bhatt	9375999171 9426403158
18	Lovely Chemical Industries	Plot No-88, Shed No. C-1B4, GIDC Nandesari	Sulphur Dioxide/ SO2/ Zinc Forma (DM) Sulphoxylate	Mr.Vinodbhai	9824036857
19	Panoli Intermediates Unit - IV	Plot No. 122/1&2, GIDC Industrial Estate, Nandesari	EO/ Vinyl Sulphone	Mr.SurendraGoyal Mr.Jagdishbhai Patel	9327226698 9374241150
20	Panoli Intermediates (I) Pvt. Ltd, Unit-III	157, GIDC, Nandesari	Dyes Intermediates/ Ammonia	Mr.SurendraGoyal Mr. Shankarbhai Patel	9327226698 9377237128
21	Patel Pesticides (India ) Pvt.Ltd.	C-1b/ 124/30-31- 32 A, G.I.D.C Industries Estate , Nandesari	Liquid Bromine, Profenofos/ Chlorine Profenofos	Mr.Dineshbhai. Patel  Mr.KetanR	9067056656  9428492091
22	PrarthanaChemicals	129-6, GIDC Industrial Estate, Nandesari	Chemicals/ Chlorine	Shri Rajesh ChandrakantDhabal e	9978377677 9978377677

23	Rasayan Enterprise	Plot No. 36/37, GIDC Nandesari	Chemicals/ EO	Mr. R. L. Samant  Mrs.PrabhaRavindr anath Samant	98240 35051  (0265) 2252411, 2250290
24	RatnaNicochem. Pvt Ltd.	C-1/41/B-4, GIDCNandesari	Chemicals/ Chlorine	Mr.Mayur Jadeja  Mr.RajendraGami	98240 68117  81415 67115
25	Reliance Industries Ltd.	P.O. Petrochemicals, Dist. Vadodara	Petrochemicals/ Butadiene, VCM Acrylonitrile Ethylene, C4(LPG) Propylene, Ammonia E.O. EDC Benzene, Methanol Sulphuric Acid Hexane Toluene	Mr.Kuddalur V. Seshadri  Mr. S. K. Patel	0265 –6692610  07738770410 99982 13413
26	Styrolution ABS (India) Ltd.	51, GIDC, Nandesari	ABS Resin/ Butadiene Styrene Acrylonitrile	Mr. Vijay Kamat  Mr. Vijay R. Shukla	(0265) 2303215 91846992211  9879517187
27	Swati Chloride Pvt. Ltd.	Plot No. 99/1 B, GIDC Nandesari	Chemicals/ Chlorine	Sh. Om Prakash Jain	9824036177  9898003678
28	WaderaChemicalsCo.	48/2/A, GIDC	Chemicals/ Chlorine	Mr.Jaspal Singh	0265 – 2354147

		Nandesari		Mr R. K.Divetia	7698535601
29	Adar Chemicals Pvt. Ltd.	Plot No.383, Village Luna, TalukaPadra.	Chlorine/ Sulphur Mono Chloride, Plasticizer  Chlorinated Paraffin	Mr.Piyush M. Patel	99252 00676
30	Aroma De France	Block No. 1441, Vill. Dabhasa, Ta.Padra	Perfumes, Aerosols, Toiletries, etc. LPG	MineshM.Patel KetanBrambhatt	8141444944 9662529776
31	Bodal Chemicals Ltd. (Unit - VII)	Block No. 795 to 804, Village : Dudhwada, ECP channel Road, Tal. Padra	EO Oleum Chemicals - H- Acid, Dyes, Beta Napthol, VS, Acetanilide, Sulphuric Acid, Oleum, Chloro Sulphonic Acid, etc.	Mr.Mangaldas H. Patel	98790 07693
32	Bodal Chemicals Ltd. (Unit - VIII)	106-108,Village: Ekalbara, Taluka:Padra	Dasa& FC Acid, 6Acteyl Opa/ Oleum	Mr.Hareshkum ar Patel  Mr.Jitubhai Patel  Mr. Vijaybhai Joshi	9909950840 9909950827 9712922425
33	Crompton Greaves Ltd.	Village : Kural Padra – Jambusar Road. Tal : Padra	Electrical Lighting Lamps/ LPG	Mr.Nikunj Kumar Mevada	9824514551
34	Greenovat Organics Pvt. Ltd.	Block No. 231/A/B & 232/A,Village: Ekalbara	Chemical Product - Pigment Green – Chlorine	Mr.Pravin B. Rabadia	98980 27373
35	Plot No. 570 - 573, Mobha - Gavasad Road,	Plot No. 570 - 573, Mobha - Gavasad Road,	Chemicals/ LPG	Mr.Maulik Vyas	98252 96554

	Village Mobha, Taluka Padra,	Village Mobha, Taluka Padra		Mr. Rahul Patel	99090 35836
36	Gulbrandse n Chemical Pvt. Ltd.	On Coastal Highway, P. O. Mujpur, Taluka: Padra	Spatiality Chemicals/ Chlorine Butadine	Shri Jacob George	9909023419
37	I.S. Dyestuff Industries Ltd.	Plot No. 576/568, Village : Dudhwada, Tal. Padra	Sulpho Tobias Acid/ EO	Mr.GovindGoyal	93275 83205
38	Kadilac Chemicals Pvt. Ltd	Block No. 853/854, Village Chokari, Tal. Padra.	Chemicals/ Chlorine	Mr. Rajesh Gandhi	92753 02085
39	Kiri Industries Limited Unit – III	Plot No. 396-399, ECP Channel Road, Village: Dudhwada, Tal.Padra.	H-Acid & V.S (Vinyl Sulphone Ester), acetanilide/ EO	Mr.Pravinbhai A. Kiri	98250 20502
40	MayurDyechem Intermediates (Unit -III)	Block No. 326 / 327, Nr. E.C.PCanel, Vill: DudhwadaKarakhadi. TalukaPadra	Chemicals - H-Acid Dyes Intermediates/ Oleum	Shri Mukundbhai G. Brahambhatt Shri Narendrbhai G. Gorasia	9825364800 9925019807
41	Philips India Ltd. (Vadodara Light Factory)	Plot No. 108/B, 148,150, Near Village Kural, Jambusar Road,Taluka Padra.	Manufacturing Bulbs / Tubes / & other electrical applications & GLS lamps/ LPG	Mr. Rajiv Chopra Mr. Bharat J. Pandya	(02662) 242333 0265-6548767
42	Shimmer Chemicals Ltd.	Block No. 336/338, Borsad State Highway, Mujpur,Tal. Padra.	Chlorine/ BenzylChloride BenzaldehydeBenzyl idene Acetone n-Chloro Pentane n-Butyl Chloride Benzyl Alcohol IPA	Mr. R. C. Patel Mr.Jayesh Patel	(0265) 2334721 9879776612 98250 95336

			HCl Hydrochloric Acid (By-Product)		
43	T.M.L. Industries Ltd.	Village Karkhadi, Ta. Padra.	Chemicals/ Chlorine	ShriMulrajSindha	96620 23479
44	Transpek Industry Ltd.	At & Post : Ekalbara, Tal: Padra	Chemicals/ Chlorine Sulphur Dioxide SulphurDichloride	Shri K V Patel	9898991295
45	Transpek-Silox Industry Ltd.	At – Post – Ekalbara Village, Ta – Padra	In-Organic Chemicals/ Sulphur Dioxide	Shri P. M. Saraiya DrDharmesh Desai	Ph. 0265-2338086 (M) 9913122522 (M) 9879510165
46	Anugrah In-Org (P) Limited	1088/B, Lamdapura Road,At& Post Manjusar, Tal. Savli.	Chemicals/ Chlorine	Mr.Kashyap H Shah Mr.Janak Shah	Ph. (0265) 2773675/2762272 9825988988
47	Base metal Chemicals	Plot No. 2, RS. No. 1089/B, Lamadapura Road, Manjusar, Taluka: Savli.	Chemicals (Aluminium Chloride)/ Chlorine	Mr.Himanshu K. Mehta	98253 03215
48	Gurunanak Chemical Industries	663, Lamdapura Road, Tal. Savli, Majusar.	Chemicals (Chlorinated Paraffin Plasticizer) Chlorine	Mr.Vinod Nair	9427784232
49	HariOrgoChemPvt.Ltd.	579, At & Po Manjusar, Ta.Savli.	Mono chloroacetic acid Chloroacetyl chloride Para Cumidine Chlorine	Mr.Nilaybhai P. Shah	9227422660
50	Indo Amines Ltd	Plot No.1723,1724 & 174 6, Vill- Tundav, Tal-Savli	Fatty Amines & Derivatives EO, Ammonia	Mr. C. L. Kadam	09321526093

51	IOT Infrastructure e & Energy Service Ltd. DumadTerminal	Pol Terminal, Dumad, Savli Road	Chemicals (Bulk PetroleumProducts) Motor Spirit H.S .Diesel Kerosene	ShriVivekVenkatachal am  Shri J. B. Biswas	Ph. (0265) 66772702  M 9821133300  9898565940
52	Jubilant Life Sciences Limited	Block – 133, Village: Samlaya, Jarod – Savli Road, Tal.: Savli	Chemicals (Chlorine Chloride-feed grade), Corn Cob Powder/Grit, Animal feed premixes & Chlorine chloride premixes (Dry) Ethylene Oxide Trimenthamine	Shri K K Birla  Mr.Yunus P Khalivala	07874311122  09925034079
53	Lubrizol Advance Material India Private Ltd.	P.O. Manjusar, Ta. Savli	Manufacturing of Cassia Gum Power & Its derivatives/ LPG	Mr.DhirenMaiser	8140044361
54	Nirma Ltd (LAB Plant)	Block No. 166/B/2, Detergent Complex, Village: Alindra, Taluka: Savli	(Normal Paraffin & Linear Alkyl Benzene Production ) LPGNaphthaBenzen e Pentane ISO-octane	ShriShailesh V. Sonara  ShriDr.NavinKishor	9879144777 9099069085  9879144777 9099069085
55	Thermax Limited	Plot No: 21/1, 2, 3, GIDC Estate Savli, Vill. Manjusar	Manufacturing of boilers and related parts LPG	Mr. S. D. Gosavi Mr.Parimal	9904402161  9925281405
56	Vadodara LPG Terminal (IOCL)	Indian Oil Corporation Limited (MD), Vadodara LPG Terminal Village: Dumad	LPG Terminal	Mr.SaurabhChandra	9913241050



57	Apollo Tyres Ltd.	Vill. Limda, Tal: Waghodia	Automatic and Farm Tyres manufacturing LPG	Mr. YSD Pawar	9825422999
58	GAIL (India) Limited	GIDC Industrial Estate, Waghodia	Processing of Natural gas to produce LPG, Production of Naphtha from higher Hydrocarbons LPG	Mr.S.K.Mehrotra	9425799457
59	Munjal Auto Industries Ltd.	187, GIDC Industrial Estate Tal: Wagodia	Auto Components LPG	ShriSudhirMunjal	0265 -2371781
60	SeForge Limited	SeForge Limited	LPG	Mr.Vinod R. Tanti	(02668) - 245086/87/88/89
61	Alstom India Ltd.	Maneja	Turbine, Generators & Accessories/ LPG	Mr.Pinal Patel Mr. Kevin Chothani	98980 86306 75748 11513
62	Ashok Pesticides	840, GIDC Estate, Makarpura	Pesticide Formulation (Simple Mixing of Raw material, Solvent + Emulsifier + Stabilizer for Liquid & Soap Stone Powder & Raw material fordust formulation/ M.Parathionphoshamid on	Mr. D. N.Badhiwala	9624001421
63	FAG Bearing India Ltd	Maneja	Ball & Roller Bearings/ Propane	Mr. R. J.Anandpara	(0265)6602000- 2004

64	TranspekSilox Industry Private Limited	Kalali Road, Atladara	In- Organic Chemicals/ Sulphur Dioxide Oleum	ShriParesh. M. Saraiya	0265-2338086 9913122522
65	Shiva Pharmachem Ltd.	Plot No. 588, Vil.Luna, Ta. Padra	Respective acid react with Thionyl Chloride at 300°C to 1000°C to give acid Chloride. During the reaction, process emissioncontaining SO2and HCl gases areSulphur Dioxide	Mr. Viral Trivedi	9714856599

# **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>Residence Number</b>	<b>Mobile Number</b>	<b>Fax Number</b>	<b>E-mail ID</b>
1	Shri Parth G. Brahmbhatt	I/c. Chief Officer (Fire)	City Command and Control Centre, Badamadi baug & I/c. Dandiya Bazar Fire Station, VMSS, Vadodara	2343545 2420881		9924025094	2420881	cfo@vmc.gov.in
2	Shri Nikunj P Azad	Station Officer (Fire)	G.I.D.C. Fire Station, Makarpura & Gajrawadi Fire Station, Gajrawadi, Vadodara	2631444 2580908		9712928101		
3	Shri Amit Chaudhary	Station Officer (Fire)	Panigate Fire Station, Waghodiya Road, Vadodara & I/c. Darjipura, Near RTO ERC	2513014 2541688 2541687		9099426206		
4	Shri Harshvardhan Puvar	Station Officer (Fire)	Vadiwadi Fire Station, Vadodara & I/c. T.P 13 Fire station, Chhani, Vadodara	2343545 2772503 2772504		8141438666		

### **3.2 Police Brigade: 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>Residence Number</b>	<b>Mobile Number</b>	<b>Fax Number</b>	<b>E-mail ID</b>
1	Shri Shamsher Singh	Police Commissioner	Office of the Police Commissioner, 1st Floor Police Bhavan, Jail Road, Vadodara	2431414, 2431515	2322000	99784 06273	2432582	cp-vad@gujarat.gov.in
2	Shri Chirag Koradia	Add. Commisssoner of Police (Crime and Traffic)	Office of the Police Commissioner, 3rd Floor Police Bhavan, Jail Road, Vadodara	2432020	-	99784 05302	2432582	jcp-vad@gujarat.gov.in
3	Shri Deepak Meghani	Deputy Commisionser of Police (Zone-1 Division)	Office of the Police Commissioner, 4th Floor Police Bhavan, Jail Road, Vadodara	2432424	-	99784 05084	2432582	dcp-zone1-vad@gujarat.gov.in
4	Shri Jayraj singh Vala	Deputy Commisionser of Police (Zone-2 Division)	Office of the Police Commissioner, 4th Floor Police Bhavan, Jail Road, Vadodara	2432626	-	94284 80616	2432582	dcp-zone2-vad@gujarat.gov.in
5	Shri N A Muniya	Deputy Commisionser of Police (Administration)	Office of the Police Commissioner, 2nd Floor Police Bhavan, Jail Road, Vadodara	2431717	-	99784 05886	2432582	dcp-admin-vad@gujarat.gov.in
6	Shri Karanraj Vaghela	Deputy Commisionser of Police (Zone-3 Division)	DCP Zone-3, Dcb Police Station Old, Near Sawaminaryan Mandir Wadi	2565502	-	99784 08976	2432582	dcp-zone3-vad@gujarat.gov.in

7	Shri Jaydeep sinh Jadeja	Deputy Commisionser of Police (Crime branch)	Office of the Police Commissioner, 5th Floor Police Bhavan, Jail Road, Vadodara	2410833	-	99784 06093	2432582	dcp-crime-vad@gujarat.gov.in
8	Shri Lakhdheer sinh Zala	Deputy Commisionser of Police (Zone-4 Division)	DCP Zone 4 Office, 2nd Floor, Bhutadizapa Road, Near Karelibaug Police Line	2561310	-	99784 08950	2432582	dcp-zone4-vad@gujarat.gov.in
9	Shri Andrews Macwan	Deputy Commisionser of Police (Traffic Division)	Office of the Police Commissioner, 4th Floor, Police Bhavan, Jail Road, Vadodara	-	-	98784 08722	2432582	cp-traffic-vad@gujarat.gov.in

### **3.3 Contact Details of State & Govt. of India**

<b>Sr. No.</b>	<b>Department</b>	<b>Phone</b>	<b>FAX</b>
01	Ministry of Home Affairs, New Delhi	011-23092923,011-23093054 011-23092885 011- 23093897	011-23092763 011-23093750
02	State Emergency Operation Center (SEOC), Gandhinagar	23251914,23251900 23221902	23251916
03	PS, RD- COR & Secy (SEOC)	23251926	23251912,23251916
04	Irrigation Deptt. Gandhinagar	23220954,23248735 23248736	23240553
05	R & B Deptt. Ahemdabad	26305296,26303490	-
06	Health Commissioner, Gandhinagar	23253343,23250818	23253343 23250818
07	Home Deptt. G'nagar (State Control)	23252957,23252958	23252075
08	DGP, Police Bhavan, G'nagar (State Control) SCR-23254343, 23249257	23246328, 23246330/31	23146329
09	Police Commissioner, Ahemdabad	25633636	25630600
10	Gujarat Maritime Board, G'nagar	23238346-48	23234704
11	GEB Vadodara	0265-2330017	2337918, 2338164
12	IMD (Seismo), New Delhi	011-24611842	011-24611792
13	IMD (MET), Ahmedabad	22865012	22865449
14	GSRTC,Ahmedabad (Central Office)	25454102	25453280

### **3.4 Army, Airforce, Coast Guard: Contact Details**

<b>Sr. No.</b>	<b>Department</b>	<b>Name</b>	<b>FAX</b>
1	Ahmadabad	Army Exchange	22856251
2	Ahmedabad	Lt.Col. Chetan	(O)22852444 (R)22852682 (F)22856251
3	Ahmedabad	Col. Vinay Bahal	(O)22852403 (R)22852433 (F)22861902
4	Ahmedabad	Air Traffic Control	22869251
5	Gandhinagar	Air Force Exchange	23242600
6	Delhi	Air Force	011-23010231, 25687194-97
7	Gandhinagar	Coast Guard	(O) 079-23243264, 23243283 (Operation Center) 23243147 (F) 079-23241717
	P.V. Gopal, Comdt		(O) 079-23243241 (M) 9377858901
8	Mumbai	Coast Guard	(O)022-24372472, 24333727(F)022-24333727, 24372920
9	Wing Commander, Air-II for Air Commander-in-Chief, Sector-9, Gandhinagar	-	23242600/5241 (F)23240076/



### 3.5 City Officers: Vadodara Municipal Corporation

Sr. No.	Designation	Name	Tel No	Mob. No	E-mail Id
1	Municipal Commissioner	Shri Swaroop P (IAS)	2433344	9978406985	commissioner@vmc.gov.in
2	Dy. Muni. Commissioner (A.) GAD,Health, CEO Smartcity Vigilance	Shri S. K. Patel (GAS)	2433233 2431741	9909919529	dymc_a@vmc.gov.in, dymc_health@vmc.gov.in
3	Dy. Muni. Commissioner (West Zone), UCD, Election, Census, mechanical, Fire and Emergency, Legal, Co-ordination, IT(Non technical cell)	Shri Dhaval Pandya (GAS)	2433517	9428562173	dymcwest@vmc.gov.in
4	City Engineer(Zoo, Affordable housing ,PMAY, MGY,BSUP, RAY)	Shri Shaileshkumar H. Mistry		9825801964	cityengr@vmc.gov.in
5	I/c. Dy. Municipal Commissioner I/c. Addn. City Engineer(North zone, solid waste management, VGL	Shri Shailesh. K. Naik	2430051	9825025787	addlcityengr@vmc.gov.in, dymcnorth@vmc.gov.in
6	I/c. Dy. Municipal Commissioner I/c. Addn. City Enginee(South Zone, PRO, Press, tourist, housing Building)	Shri Alpesh G. Majumdar	PBX	9825801934	dymcsouth@vmc.gov.in
7	I/c. Dy. Municipal Commissioner I/c. Addn. City Engineer(East	Shri Dhirenkumar N. Talpada	2411057/ 2431741	9879509207	dymceast@vmc.gov.in, exen.specialproject@vmc.gov.in

	zone, futuristic planning cell, drainage project, storm water drainage project, sewerage)Engineer (Drainage Project), H.O.D. (Futuristic Planning Cell)				
8	Medical Officer of Health	Dr. Devesh M. Patel	2432050	9687606671	moh@vmc.gov.in
9	Director (I.T.)	Shri Manishkumar S. Bhatt	2435646	9727250159	directorit@vmc.gov.in
10	Municipal Secretary	Shri Chintan Desai	2419906/ 2419907	9825802161	munisec@vmc.gov.in
11	Chief Auditor	Shri Harikrushna M. Rao	2419908	9825025792	chiefauditor@vmc.gov.in
12	I/C. City engineer(water supply)	Shri Amrut M. Makwana	-	9879555092	exen.watersupply@vmc.gov.in
13	AMC (North zone ward no 5,7,8)	Shri Sureshbhai S. Tuver	2792505 / PBX	9825803116	amc.north@vmc.gov.in
14	A.M.C.( REV and South Zone ward 3,4,12)	Shri Jigneshbhai V. Gohil	2641805	9687654943	amc.south@vmc.gov.in,
15	I/c. A.M.C. (West Zone)	Shri Bhupendra M. Sheth	2433344/ 2351221	9879615028	amc.west@vmc.gov.in ,
16	I/c. A.M.C. (East Zone)	Shri Nitin A. Solanki	2465798	9825801254	amc.east@vmc.gov.in
17	Addl. Medical Officer Health	Dr. Mukesh A. Vaidya	2562010	9099025929	addlmoh@vmc.gov.in
18	Director Park and I/c. Director	Shri Mangeshbhai P. Jaiswal	PBX	9825110612	
19	Chief Accountant	Shri Santosh H. Tiwari	2432003	9925028515	chiefaccountant@vmc.gov.in
20	Executive Engineer(East zone)	Shri Pramodbhai C. Vasava	2438050	9879583369	
21	Executive Engineer (Drainage, storm water drainage, public health, eng	Shri Rajesh R. Shimpi	PBX	9925033674	exen.drainageproject@vmc.gov.in, exen.stromwaterproject@vmc.gov.in

	Laboratory				
22	Exe. Engineer (Futuristic Planning Cell,Central Stores-west and north zone,Traffic and Road)	Shri Rajesh R Chauhan	PBX	9879000704	exen.specialproject@vmc.gov.in
23	Exe. Engineer (North Zone ward 5,7,8)	Shri Dharmik kumar B. Dave	2785116	9879500278	exen.north@vmc.gov.in
24	Exe. Engineer (West Zone ward 6,10,11 / Zoo Dept/ Parks & Gardens)	Shri Rajendra H. Vasava	2331113	9925204680	exen.west@vmc.gov.in
25	Town Development Officer (B.P.)	Shri Jitesh R. Trivedi	PBX	9825411089	tdo@vmc.gov.in
26	I/c. Exe. Engineer (South Zone)	Shri Anup M. Prajapati	2658697	9879000713	exen.south@vmc.gov.in
27	I/c. Exe. Engineer (Road,Building Project west and south zone)	Shri Prakash J. Brahmbhatt	PBX	9879555059	exen.housingproject@vmc.gov.in, exen.roadproject@vmc.gov.in,
28	Exe. Engineer (East Zone,Bridge Project)	Shri Ravidrakumar H Pandya	-	9879506004	exen.east@vmc.gov.in, exen.bridgeproject@vmc.gov.in
29	I/c. Chief Officer (Fire & Emergency Services)	Shri Parth G. Brahmbhatt	2413635/ 2413753/ 2413754	9924025094	cfo@vmc.gov.in
30	Zoo Curator & I/c. Director (Planetarium)	Dr. Pratyush Girish Patankar	2784079	9638449825	sayajibaugzoo@vmc.gov.in
31	I/c. Solid Waste Manager, Environmental Engineer (Solid Waste Dept.)	Shri Kashyap R. Shah	2427517	9879505255	solidwaste@vmc.gov.in
32	I/c. Exe. Engineer (Mech., city bus services, vehicle pool, central work shop)	Shri Dharmesh Rana	PBX	9825801942	exen.vehiclepool@vmc.gov.in
33	I/c. Exe. Engineer	Shri Bharatbhai	PBX	9879000701	exen.sewrage@vmc.gov.in

	((Ele./Mech.)- Sewrage D Works)	D. Rana			
34	I/c. Exe. Engineer (Street Light)	Shri Kaushik S. Parmar	PBX	9879000702	exen.streetlight@vmc.gov.in
35	I/c. Exe. Engineer (Water Supply- Ele./Mech.), Dy. Exe. Engineer (Water Supply)	Shri Jatan S. Badheka	PBX	9925021590	exen.waterdistribution@vmc.gov.in
36	Dy.Exe. Engineer (Solid Waste)	Shri Pareshkumar Patel	PBX	9879000706	-
37	Deputy Exe. Engineer (Road Project, Sewerage D.Works)	Shri Aalok P. Shah	-	9724318303	deputyeng.roadproject@vmc.gov.in
38	P.A. to Commissioner	-	2433344		pa2comm@vmc.gov.in
39	Dy. Health Officer (South Zone)	Dr. Seemaben Tripathi	-	9825076369	dmoez@vmc.gov.in
40	Program Officer (Urban, ICDS)	-	2328178	-	icds@vmc.gov.in
41	Dy. Health Officer (West Zone)	Dr Minakshi B Chauhan	-	9879580223	dmowz@vmc.gov.in
42	Dy. Health Officer (Central Zone)	Dr Sejal Rajendra Soni	-	9909927418	dmocentral@vmc.gov.in
43	City TB Officer	Dr. Ramesh Nayak	-	9909927435	-
44	Dy. Health Officer (North Zone)	Dr Ramesh Naik	-	9909927435	dmonz@vmc.gov.in
45	Dy. Health Officer (East Zone)	Dr Roma shah	-	9909927416	dmoez@vmc.gov.in
46	Food Analyst (Public Health Lab.)	Shri Mahesh L. Patel	2411433	9824117544	-
47	Administrative Officer, Personnel Officer, Trainning Officer (General Adm. Dept.)	Shri Mahipal G. Zala	PBX	9825801941	gad@vmc.gov.in
48	System	Shri Shamik S.	PBX	7567888527	census@vmc.gov.in

	analyst(Census Officer & MIS Expert (Solid Waste UID)	Joshi			
49	Administrative Officer (Legal)	Shri Milan R. Hande	2433480	9687088111	legaladminof@vmc.gov.in
50	Legal Advisor	Shri Vijay K. Vairagi	2433480	9825178842	legaladviser@vmc.gov.in
51	Project Officer (U.C.D.)	Shri Krishna G. Solanki		6357097960	ucd@vmc.gov.in
52	Dy. Exe. Engineer (Futuristic Planning Cell)	Shri Kalpeshbhai Patel	PBX	9727744372	futuristicvmc@gmail.com
53	Dy. Exe.Engineer (Futuristic Planning Cell, drainage and building project)	Shri Divyang Modi	PBX	7069029132	futuristicvmc@gmail.com
54	Sub-Registrar (Birth, Death and Marriage)	Shri Hasmukh N. Patel	-	9825114717	-
55	I/c. Dy. Exe. Engineer (Street Light)	Shri Nirav Patel	PBX	9687606304	deputyeng.streetlight@vmc.gov.in
56	Dy. Exe. Engineer (Futuristic Planning Cell)	Shri Jignesh J.Shah	PBX	9825221875	futuristicvmc@gmail.com
57	Press Manager	Shri Alap U Patel	2412220	7069009516	pressmanager@vmc.gov.in
58	Labour Welfare Officer(Health) ,I/c Election Officer	Shri Sumanbhai K. Rathva	2433176	9879941088	election@vmc.gov.in
59	Pubilc Relation Officer	Shri Abhishek Panchal		9879410102	pro@vmc.gov.in
60	Deputy Assessor & Tax Collector	Shri Priyanka K. Oza	PBX	6357097962	assessment@vmc.gov.in
61	Land and Estate Officer (Acquisition-Adm., Commercial) & I/c. Town Planning Officer	Shri Kiranbhai Patel	PBX	9879000710	landestateadm@vmc.gov.in, landestatecomm@vmc.gov.in
62	Station Officer	Shri Nikunj	2631444	9712928101	-

	(Fire)	Aazad			
63	Station Officer (Fire)	Shri Amit B Chaudhary	-	9099426206	-
64	Station Officer (Fire)	Shri Puvar Harshvardhan	2772503	8141438666	-
65	Encroachment Removal Officer	Shri RajeshKumar M. Mecvan	PBX	9913285814	-
66	O.S.D.- Heritage Cell	Shri Rajendra M. Shah	-	9898816181	-
67	Ward Officer (Ward-01)	Shri Maheshbhai B Rabari	2411473	9825801948	wardofficer.w1@vmc.gov.in
68	I/c. Ward Officer (Ward-02)	Shri Dignesh C Damor	2466476	9687654937	wardofficer.w2@vmc.gov.in
69	Ward Officer (Ward-03)	Shri Jaydeep N wala	2569166	6357097961	wardofficer.w3@vmc.gov.in
70	Ward Officer (Ward-04)	Shri Vijaykumar S Solanki	2657994	9825637906	wardofficer.w4@vmc.gov.in
71	Ward Officer (Ward-05)	Shri virendra kumar T Rathwa	PBX	6357097959	wardofficer.w5@vmc.gov.in
72	Ward Officer (Ward-06)	Shri Jitendra K Brahmbhatt	2351221	9825803626	wardofficer.w6@vmc.gov.in
73	Ward Officer (Ward-07)	Shri Sanjay K Barot	PBX	9825801256	wardofficer.w7@vmc.gov.in
74	Ward Officer (Ward-08)	Shri Mangalbhai N Banjara	2411052	9687654946	wardofficer.w8@vmc.gov.in
75	Ward Officer (Ward-09)	Shri Riteshkumar A Solanki	2568025	7069100414	wardofficer.w9@vmc.gov.in
76	Ward Officer (Ward-10)	Shri Devang C Bhatt	2393113	8758307495	wardofficer.w10@vmc.gov.i n
77	Ward Officer (Ward-11)	Shri shaileshkumar R Panchal	2331504	9099089423	wardofficer.w11@vmc.gov.i n
78	Ward Officer (Ward-12)	Shri Maheshbhai M Pranami	2433176	9825579772	wardofficer.w12@vmc.gov.i n

### **3.6 List of Aapdamitra: Vadodara Municipal Corporation**

<b>Sr. No.</b>	<b>Name of Volunteer</b>	<b>Sex</b>	<b>Knowledge of Swimming</b>	<b>Phone Number</b>
1	Pawar Jagrutiben Rajendrabhai	Female	Yes	9558688068
2	Shri Monalkumar Vasava	Male	Yes	9898909869
3	Shri Arunkumar Kantilal Patel	Male	Yes	9998004634
4	Shri Arjunbhai Bhagwanbhai Rabari	Male	Yes	9904660810
5	Shri Patel Ruturaj Arvindbhai	Male	Yes	9712073070
6	Shri Suthar Rameshbhai I.	Male	Yes	8866950702
7	Thakkar Chetna Agamadhar	Female	Yes	7600978473
8	Shri Kahar Shailesh Krishnabhai	Male	Yes	9624249295
9	Patil Sheetal Uttam	Female	Yes	8980150434
10	Dodiya Minaben Naginbhai	Female	Yes	8488022420
11	Shri Jadav Arpit Pravinsinh	Male	Yes	8401792925

### **3.7 Satellite Telephone No. Details: Vadodara**

<b>Sr. No</b>	<b>District/Corporation Name</b>	<b>IMEI No</b>	<b>Phone Number</b>
01	Vadodara City	353032044144729	8991115022
02	Vadodara District	353032041433604	8991115052

### **3.8 Revenue Officer: Vadodara District**

<b>No.</b>	<b>Name of the Officer</b>	<b>Designation</b>	<b>Office Address</b>	<b>Office Number</b>	<b>Residence Number</b>	<b>Mobile Number</b>	<b>Fax Number</b>	<b>E-mail ID</b>
1	Ms. Shalini Agrawal	Collector & District Magistrate	Collector Office, Kotthi Compound, Raopura, Vadodara	2433000	2333999 2313131	99784 06224	2431093	collector-vad@gujarat.gov.in
2	Shri D R Patel	Resident Additional Collector	Collector Office, Kotthi Compound, Raopura, Vadodara	2419700	2330302	99784 05196	2431093	
3	Shri. S.D. Goklani	District Supply Officer	Collector Office, Supply Branch, Kotthi Compound, Raopura, Vadodara	2433201 2416190 (D)	2464066 2331990	75670 22247	2418900	dso-vad@gujarat.gov.in
4	Shri S G Gamit	Addl. Collector & Deputy Controller	Civil Defence, Kotthi Compound, Raopura, Vadodara	2431410	2466280	98252 74407	2434093	
5	Shri V.P Patni	Deputy Collector Protocol (I/c.)	Collector Office, Kotthi Compound, Raopura, Vadodara	2423086	2336806	75670 11244	2431093	
6	Shri M R Raol	District Planning Officer	Collector Office, Kotthi Compound, Kuber Bhavan, Raopura, Vadodara	2427325	-	94263 52746	2436438	dpo-vad@gujarat.gov.in
7	Smt K S Patel	Deputy Collector Land Reforms	Collector Office, Kotthi Compound, Raopura, Vadodara	2438869	2330986	99254 59999	-	dclr-vad@gujarat.gov.in
8	Shri . S.D. Goklani	Deputy Collector MDM(I/c.)	Collector Office, Kotthi Compound, New Kotthi Building, Room No. 50, 51 & 53, Raopura, Vadodara	2422114	-	75670 22247	2422114	mdm-vad@gujarat.gov.in



9	Shri Harshit Gosawi IAS	Regional Commissioner of Municipalities	District Urban Development Agency, Collector Office, Room No. 48, Old Kotthi Building, Vadodara		-	94264 52026		rcommvadodara@gmail.com
10	Shri R.P.Joshi	Deputy District Election Officer	Collector Office, Kotthi Compound, Kuber Bhavan, Raopura, Vadodara	2425656	-	9978405 289	2432120	dydeo.vad@gmail.com
11	Shri V.P Patni	Sub Divisional Magistrate	SDM Office Vadodara (City), Narmada Bhavan, 'C' Block, 6th Floor, Vadodara	2434402	-	75670 11244	2434402	sdmvadodaracity@gmail.com
12	Ms. R.S.Thummar	Sub Divisional Magistrate	I/c. Special land acquisition officer-1	2424402	2337167 2336806	99784 05226	2417286	laqvadodara@gmail.com
13	Shri V.M Rajput	Sub Divisional Magistrate	SDM Office Savli	(02667) 223132	-	75670 11148	(02667) 223132	prantsavli@gmail.com
14	Shri K.R.Patel	Sub Divisional Magistrate	SDM Office Karjan	(02666) 233168	-	75670 11301	(02666) 231168	dycollector-kar-vad@gujarat.gov.in
15	Shri Himanshu Parikh	Sub Divisional Magistrate	SDM Office Dabhoi	(02663) 254777	(02663) 254477	99784 05357	(02663) 256365	sdm-dabhoi-vad@gujarat.gov.in

### **3.9 Vadodara District and City Officers (Various Departments)**

<b>No.</b>	<b>Name of the Officer</b>	<b>Designation</b>	<b>Office Address</b>	<b>Office Number</b>	<b>Residence Number</b>	<b>Mobil e Number</b>	<b>Fax Number</b>	<b>E-mail ID</b>
1	Smt. Shalini Agrawal	Collector and DM	Kothi Compound, Vadodara	2433000		99784 06224		collector-vad@gujarat.gov.in
2	Shree D R Patel	Resident Additional collector and ADM	Kothi Compound, Vadodara	2419700		99784 05196		rdc-vad@gujarat.gov.in
3	Shree B D Waghela	Additional Collector (Irrigation)	Office of the Additional Collector (Irrigation), Kuber Bhavan, 9th Floor, Kotthi Compound, Vadodara	2424355 2428700	2394924	98241 03764	2424355	
4	Shree Mahendra Bhai Patel	Superintendent Engineer (Narmada)	Office of the Additional Collector (Narmada), Narmada Bhavan, 'A' Block, First Floor, Vadodara	2771180	2480066	99090 28747	2419611	
5	Shree A B Patel	Additional Collector (Vuda)	Office of the Additional Collector (Vuda), Vadodara	2466710 2490015	-	98790 44388	2465122	
6	Shree Sahas Patel	Executive Engineer	Road & Building Division (City), Raopura, Vadodara			96624 93656		execcityrnbvad@yahoo.co.in
7	Shree Sahas Patel	Assistant Engineer	Road & Building Division (City), Raopura, Vadodara	6554308	-	96625 48095	2410939	
8	Shree Darshan Joshi	Dy. Executive Engineer	Road & Building Sub Division (City), Raopura, Vadodara	6554308	-	99131 79777	2410939	

9	Shree K R Thorat	Executive Engineer	Road & Building Division (District), 'Suprabhat Bunglow', Behind Welcome Hotel, Alkapuri, Vadodara	2352099	-	97275 99555	2351911	exedist@yahoo.co.in
10	Shree U.A.Shah	Dy. Executive Engineer	Road & Building Sub Division No.1 (District), 'Suprabhat Bunglow', Behind Welcome Hotel, Alkapuri, Vadodara	2340979	-	98255 08384	-	
11	Shri B J Desai	I/c.Superintending Engineer (O & M)	M.G.V.C.L., Baroda City Circle, Navlakhi Compound, Vadodara	2416270	-	99252 08623	2420613	sebcc.mgvcl@gebmail.com; eebarodacity.mgvcl@gebmail.com
12	Shree S.A Solanki	Executive Engineer (HT Cell)	M.G.V.C.L., Baroda City Circle, Navlakhi Compound, Vadodara	2290572 2290573	239301	99252 08326	2420613	
13	Shree D V Patel	Executive Engineer	Jambuva Division Office	2634952 2634953	-	99252 08841	2657310	jambuvadiv.mgvcl@gebmail.com
14	Shree B.B.Chauhan	Director	G.E.T.C.O., Race Course, Vadodara	2339066	-	99252 08081	2337918	ceproject.getco@gebmail.com
15	Shree S H Upadhyay	Executive Engineer	G.E.T.C.O., Race Course, Vadodara	2353085	-	99252 10237	2338152	-
16	Shree R A Patel	Regional Transport Officer	Regional Transport Office, Varsiya, Vadodara	2540016	-	75670 29299	2562497	rtovad@gujarat.gov.in
17	Shree Akash Patel	Asst. Regional Transport Officer	Regional Transport Office, Varsiya, Vadodara	2540016	-	75748 51669	2562497	
18	Shree Nilofar Shaikh	Deputy Collector	Office of the Stamp Duty No. 1, Narmada Bhavan, Vadodara	2421168	-	99741 77274	-	

19	Smt Maitridevi Sisodiya	Deputy Collector	Office of the Stamp Duty No. 2, Narmada Bhavan, Vadodara	2420394	-	94288 86149	-	
20	Smt. Heena Sharda	Joint Director	Primary Training Centre (SPIPA), Harni-Varsiya Ring Road, Vadodara	2489724	-		2480885	
21	Shree B P Desai	I/c. Joint Director of Information	Regional Information Office, Information Department, 1 st Floor, Behind Khadi Gramodyog, Raopura, Vadodara	2423358 2458760	-	94265 67970	2431377	cdmo-vad @gujarat.gov.in
22	Shree B P Desai	Deputy Director Information	District Information Office, Information Department, 2 nd Floor, Behind Khadi Gramodyog, Raopura, Vadodara	2458761	-	94265 67970	2431377	cdmo-vad @gujarat.gov.in
23	Shree S.J.Mishra	Assistant Director of Information	Regional Information Office, Information Department, Behind Khadi Gramodyog, Raopura, Vadodara	2458760	-	94263 33748	2431377	cdmo-vad @gujarat.gov.in
24	Shree S.J.Mishra	I/c. Senior Sub Editor	Regional Information Office, Information Department, Behind Khadi Gramodyog, Raopura, Vadodara	2458760	-	94263 33748	2431377	
25	Shree Vasava	Joint Director	Model Farm, Agriculture, Vadodara	2281098 2281211	-	95863 10461	2429619	
26	-	Director	GEDA, Vadodara	2362066	-	-	-	
27	Shree B B Chaudhary	Director	District Rural Development Agency, Shripadnagar Society, VIP Road,	2487432	-	75670 43376	2485608	drda-vad @yahoo.com

			Karelibaug, Vadodara					
28	Shree Nitesh Soni	Asst. Project Officer Monitoring	District Rural Development Agency, Shripadnagar Society, VIP Road, Karelibaug, Vadodara	2487432 2481094 2481361	-	94084 62283	2485608	drda-vad @yahoo.com
29	Ms. Mahendra Patel	I/c. D.I.O.	NIC, Collector Office, Kotthi Compound, Raopura, Vadodara	2421831	-	94275 47224	-	gujvad @nic.in
30	Mrs. Bantish Parmar	District Project Officer	Disaster Management Branch, Emergency Operation Centre, Collector Office, Kotthi Compound, Raopura, Vadodara	2427592 1077 1077	-		2431500 / 2431093	
31	Shree Nilesh	District Manager	108, Emergency Operation Centre, Kotthi Compound, Raopura, Vadodara	-	2387245	70432 21108	-	
32	Shree Kapil Paroliya	Sub Divisional Engineer (MIS)	BSNL, Vadodara Telecom Karelibaug, Vadodara-18	2493655	2640200	94266 50200	2467541	vdrsdemis @gmail.com
33	Shree N M Gamit	DGM (Administration)	BSNL, Vadodara Telecom Karelibaug, Vadodara-18	2467550	2641350	94260 01230	2467551	dgmavad @ymail.com
34	Shree V.M.Tadvi	DGM (Planning)	BSNL, Vadodara Telecom Karelibaug, Vadodara-18	2570600	-	94276 12400	2571800	
35	Shree R.K.Dabral	AGM (Planning)	BSNL, Vadodara Telecom Karelibaug, Vadodara-18	2571700	2330555	94266 50200	2572400	shahmahesh51 @yahoo.com
36	Shree Kapil Paroliya	P.R.O.	BSNL, Vadodara Telecom Karelibaug, Vadodara-18	2467007	2640200	94266 50200	2467541	vdrsdemis @gmail.com
37	Shree K J Maharaja	Dy. Forest Officer	Social Forestry Division, Forest Bhavan, 1 st Floor, Raopura, Vadodara	2431128	-	99782 33747	2427696	dcfsfvadodara @gmail.com

38	Shree N K Dave	Assistant Forest Officer	Social Forestry Range, opp. Kamatibaug Circuit House, Vadodara	2783954	-	97127 31249	-	
39	Shree V R Damor	Assistant Forest Officer	Social Forestry Range, Savli, Ta.Savli, Vadodara	(02667) 222136	-	98983 75000	-	
40	Shree P V Patel	Superintendent Engineer	G.W.S.S.B., Land Record Building, Kotthi Anexi Compound, Vadodara	2432590 2411905	-	99784 06099	2333090	eevadodara1@gmail.com
41	Shree Kalpana Rana	Superintendent Engineer	G.W.S.S.B., 205-206, Jalsewa Bhavan, Geri Campus, Race Course, Vadodara	99784 41259	-	99099 74525	-	eephmdnvadodara@yahoo.in
42	Shree U N Rathod	District Education Officer	Office of the D.E.O., Purush Adhyapan Mandir, Karelibaug, Vadodara	2461703	2711416	99099 70230	2461703	vadodeo@gmail.com
43	Shree A.S.Patel	Educational Inspector	Office of the D.E.O., Purush Adhyapan Mandir, Karelibaug, Vadodara	2461703	2350119	94284 91053	2461703	ab_praj@yahoo.com
44	Shree Samirbhai R besana	Assistant Director	Office of the Assistant Fishries Director, 'I' Block, Room No. 920, Kuber Bhavan, Vadodara	2423947 2429888	-	95740 85475	2429888	
45	Shree Rajyagura	Divisional Controller	G.S.R.T.C., Race Course, Vadodara	2338050	-	99989 53076	2338050	dcbrd@gsrtc.in
46	Shree M P Patel	Senior D.T.O.	G.S.R.T.C., Race Course, Vadodara	2342492	-	99988 46202	2342492	
47	-	D.T.S.	G.S.R.T.C., Race Course, Vadodara	2342492	-	-	2342492	
48	Shree Devendra Kumar	D.R.M.	Western Railways, Pratapnagar, Vadodara	2638081	2638082	97240 91000	2645275	drm@brc.railnet.gov.in

49	Dr. Zenith Gupta	Senior D.C.M.	Western Railways, Pratapnagar, Vadodara	2641392	2641217	97240 91950	2641364	srdc @brc.railnet.gov .in
50	Shree A.K.Singh	A.D.R.M.	Western Railways, Pratapnagar, Vadodara	2641414	2644040	97240 91001	2645275	adrm @brc.railnet.gov .in
51	Shri H L Meeha	Senior DNL Safety Officer	Western Railways, Pratapnagar, Vadodara	2641925	-	-	-	
52	-	-	Control Room & Help Line, Western Railways, Vadodara	2638377 2362012	-	-	-	-
53	Shree Vimal Shah	Member Secretary	Offsite Industrial Emergency Control Room, Ground Floor, Materials Bhavan, (RIL VMD) P.O. Petrochemicals, Vadodara	6696471 2230342 2232327 2230556 6693892	2233345	99989 53963	0091- 265- 2232325	
	Shree V.B.Mishra	Member Secretary				99798 53450		
54	Dr. Kamal Mishra	Civil Surgeon	Jamnabai General Hospital, Panigate Road, Mandvi, Vadodara	2517400 2517915 2517916 2517919 2517920	2781003	82380 12033	2518134	cdmo.health.jam nabai @gmail.com
55		Assistant Hospital Administrator	Jamnabai General Hospital, Panigate Road, Mandvi, Vadodara	2517400	99259 25413	82380 12074	2518134	aha.jamnabai @gmail.com

56	Dr. Ranjan G Aiyer	Medical Superintendent	S.S.G. Hospital, Vadodara	2424848	-	94273 22493	2424351	medsup.ssgh@gmail.com & dr_rndaveshwar@yahoo.com
57	Dr. R B Shah	R.M.O.	S.S.G. Hospital, Vadodara	2424848	-	98251 42899	2424351	
58	Dr. R.N.Daveshwar	Professor & Head of Department	Department of Emergency Medicine, S.S.G. Hospital, Vadodara	2424848	-	94273 22493	2424351	hodembmc@gmail.com
59	Shree Khinje	Senior Plant Manager	I.O.C.L., Gujarat Refinery, P.O. Jawaharnagar, Vadodara	6530104 6530105	-	96879 58412	-	
60	Shree Piyali Chakraborty	Dy. General Manager (HR)	I.O.C.L., Gujarat Refinery, P.O. Jawaharnagar, Vadodara	6530104 6530105	-	98251 06221	-	
61	Shree Saurabhchandra	Deputy Manager (P)	I.O.C.L., Gujarat Refinery, P.O. Jawaharnagar, Vadodara	6530104 6530105	-	94264 16089	-	
62	Shree P.H Patel	Joint Director	Industrial Safety & Health, Block No. I, 7 th Floor, Kuber Bhavan, Vadodara	2432543 2434464	2345264 2331165	94260 46828	2426848	dycif-lab-vad@gujarat.gov.in
63	Shree R A .Patel	Dy. Director	Industrial Safety & Health, Block No. I, 7 th Floor, Kuber Bhavan, Vadodara	2432543 2434464	2972463	98986 30454	2426848	dycif-lab-vad@gujarat.gov.in
64	Mr. Arun Kumar	Executive Director	ONGC, Vadodara	2638864 2641574	-	94288 28001	-	
65	Shree R B Trivedi	Regional Officer	GPCB, Geri Compound, Race Course Road, Vadodara-7	2354850 2331928	2331078	75748 27582	2339205	gpcbvadodara@gmail.com
66	Shree R B Trivedi	Deputy Environment Engineer	GPCB, Vigilence Cell, Vadodara	2340553	-	75748 27582	2339205	gpcb-vad@gujarat.gov.in



67	Shree B K Sat	Dy. S.P.	SRP Group No.1, Lalbaug, Vadodara	2433401	-	94274 17033	-	
68	Shree D B Bambhaniya	Dy. S.P.	SRPF, Group No.9, Makarpura, Vadodara	2637100 2637200	2633872	99784 45873	2643022	cmdr-gr9-vad @gujarat.gov.in
69	Shree Anand Raghuvanshi	W/L Police Inspector	SRP Group No.1, Lalbaug, Vadodara	2433401	-	94270 01946	-	-
70	Shree A. K. Tiwari	Assistant Commandant	N.D.R.F., Jarod, Vadodara	02668- 274470	-		(079) 2320155	
71	Shree Ranvijay Singh	S.I.R.O.	N.D.R.F., Jarod, Vadodara	-	-	94273 04217	1 2320254	
72	Shree Badola	Assistant Commandant	N.D.R.F., Jarod, Vadodara	-	-	94296 27796	0	
73	Raj Bhatt	-	Jiv Dayal Prani Sanstha	-	-	98250 11117	-	
74	Shree Harshil Parikh	Manager	Circuit House, Alkapuri, Vadodara	2336417	-	97250 35202	2352836	-
75	Shree Nikunjibhai	-	GSWAN, Kotthi Compound, Vadodara	2414330 90131 (Gswan)	-	90161 94112	-	-
76	Shree Krunalbhai	-	GSWAN, Kotthi Compound, Vadodara	2414330 90131 (Gswan)	-	97278 24345	-	-
77	Shree B N Pathak	Deputy Director	Pradeshik Nyay Sahayak Vigyan Prayogshala, 1 st Floor, Raopura, Vadodara	2428571	-	94273 01756	2415912	astdir-fsl-vad @gujarat.gov.in
78	Shree Ranjish Piplani	I/c. Deputy Chief Controller of Explosives	Petroleum and Explosives Safety Organisation (PESO), 8 th Floor, Yash Kamal Building, Opp. M.S.University (Campus), Sayajigunj, Vadodara	2361035 2225159	2710978	94032 14578	2225952	dyccebaroda @explosives.gov .in

79	Shree A K Yadav	Controller of Explosives	Petroleum and Explosives Safety Organisation (PESO), 8 th Floor, Yash Kamal Building, Opp. M.S.University (Campus), Sayajigunj, Vadodara	2361035	2710978	97683 08858	2225952	-
80	Shree Sanjay Shrivastava	I/c. Geologist	GERI, Race Course, Vadodara	2313412 2340596	-	94265 64013		
81	Dr. Sumer Chopra	Director	Institute of Seismological Research, Gandhinagar	079-6673900 1		99784 07515		dg- isr@gujarat.gov. in
82	Lt. Col Sandeep Bhalla	Lt. Col.	46 AD Regiment, Lalbaug, Makarpura, Vadodara	2797958		82492 85675		
83	Lt. Col. Balbir singh	Lt. Col.	EME School, Harni Camp, Vadodara	-	-	92278 87979	-	-
84	Shree Nirav Shah	-	Bhailal Amin General Hospital, Bhailal Amin Marg, Gorwa, Vadodara	2286666 2285555 3956222	-	97234 63637	-	-
85	Shree Makwana	Godown Manager	Bhutdizampa Godown			63599 45810		
86	Shree Makwana	Godown Mamlatdar	Bhutdizampa Godown	2414098	-	63599 45810	-	-