

Presentation on
Success of Disaster Prevention & Management Centre
(DPMC Model in Ankleshwar Industrial Area, Gujarat)

in the Conference on

Chemical (Industrial) Disaster Management (CIDM) –
Emergency Preparedness & Disaster Risk Reduction
in Chemical, Petroleum, Petroleum Products & Natural Gas Industry

June 30-July 1, 2014 at Lucknow

Presented by ; Vijay Asar, Chief Co-ordinator

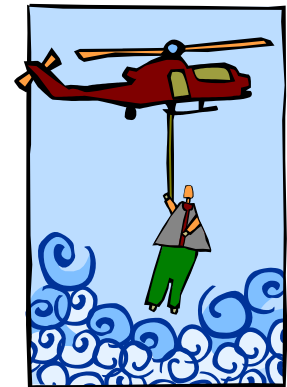
Disaster Prevention & Management Centre

Fire Station, Notified Area,

GIDC, Ankleshwar, (Gujarat)

Tel.- (02646) 220229, 653101, E mail : dpmcank@gmail.com

Disaster Prevention & Management Center, Ankleshwar



Disaster Prevention & Management Centre

Managed by

Ankleshwar Environmental Preservation Society

Supported by

Ankleshwar Industries Assocaion

&

Notified Area Authority Ankleshwar

Fire Station, Notified Area,

GIDC, Ankleshwar, Gujarat

Tel.- (02646) 220229, 653101, E mail : dpmcank@gmail.com

Disaster Prevention & Management Center, Ankleshwar

CONTENTS

- **Purpose of Establishment**
- **Importance**
- **Details of Industrial Areas of Ankleshwar & Bharuch**
- **Details of DPMC & Fire Station**
- **Major Activities**
- **Set up of DPMC**
- **Emergency Response Flowchart**
- **Off-Site Mock- drills conducted**
- **Prevention & Awareness Programmes
(Trainings, Seminars and Demonstration)**
- **Major Resources Available**
- **Financial Aspects**
- **Achievement and Comments**
- **Future upgradation programme.**

Purpose to establish DPMC

- In spite of reasonable & practicable measures, accidents are taking place in industries.
- To help Industrial Society in case of any Emergency OR Disaster, which is Required to control within shortest possible time.
- Endanger Situations which required to save and safe guard Human life, property, health of public at large.
- By Team efforts - Government Authorities, Industries & Voluntary organization, NGOs & Public.



Importance of DPMC in Industrial Areas of Ankleshwar and Bharuch District

- **Total Nos. of MAH Units in Gujarat State – 393**

Out of that;

- **Total Nos. of MAH Units in Bharuch District – 89**

- **Industrial Pockets in Bharuch District**

- **Ankleshwar**

- **Panoli** (Distance from Ankleshwar – 5 kms.)

- **Jhagadia Mega Industrial Estare** (Distance from Ankleshwar – 15 kms.)

- **Bharuch** (Distance from Ankleshwar – 10 kms.)

- **Dahej** (Distance from Ankleshwar – 55 kms.)

- **Vilayat** (Distance from Ankleshwar – 35 kms.)

Disaster Prevention & Management Centre

Chronology

- **Established on 4th April, 1995 (Accommodated in old Fire Station building)**
- **Accommodated in full fledged new building in December – 2003.**
 - **Promoters:**
 - **Ankleshwar Environmental Preservation Society**
 - **Ankleshwar Industries Association**
 - **Notified Area Authority**
 - **GIDC**
 - **Supporters:**
 - **Industrial Safety & Health Dept. (Factory Inspectorate)**
 - **Dist. & Local Administration**
 - **GSDMA**
 - **GPCB**

Disaster Management Centre - Inauguration – 4th April 1995

by Chief Inspector of Factories, Gov. of Gujarat



Disaster Prevention & Management Center, Ankleshwar

Disaster Management Centre – Old Building



Disaster Prevention & Management Center, Ankleshwar

DPMC & Fire Station Complex

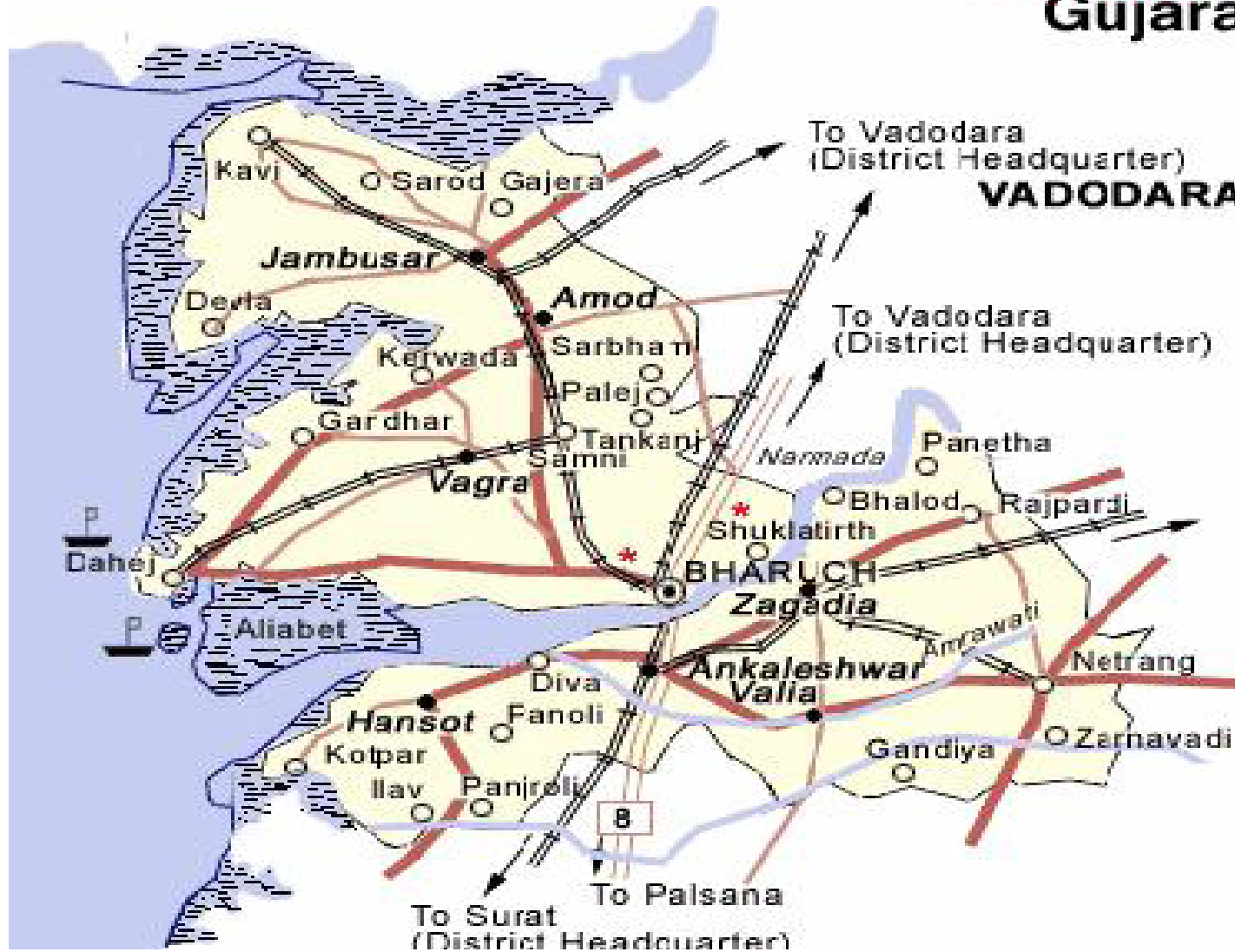
Accommodated in full fledged new building in December – 2003.



Disaster Prevention & Management Center, Ankleshwar

District Area Map

BHARUCH
Gujarat



Disaster Prevention & Management Center, Ankleshwar

Details of Ankleshwar Industrial Estate , Gujarat

- **Ankleshwar Industrial Estate came into existence in 1976-77.**
- **Industrial Estate spread over an area of 1600 Hectares.**
- **Nearest Railway Station: Ankleshwar: 0 km.**
- **Bharuch: 10 kms.**
- **Vadodara 85 kms.**
- **Surat 50 kms.**
- **National Highway No. 8 passing through the estate**
- **Airport at Vadodara just 90 kms. away.**

- More than 1200 industries consisting of:

Chemicals	450
Pharmaceutical & Bulk Drugs	100
Textile, Plastic & Engineering	550
Packaging, Rubber & Service units	100
- Investment Rs. 10,000 Cr.
- Production Rs. 15,000 Cr.
- State & National Revenue Contribution Rs. 4,000 Cr./Annum
- Employment 1,00,000

Ankleshwar Industries Association



Disaster Prevention & Management Center, Ankleshwar

Common Projects in Ankleshwar Industrial Estate



Disaster Prevention & Management Center, Ankleshwar

Common Projects in Ankleshwar Industrial Estate

Common Effluent Treatment Plant (CETP)



- Enviro Technology Ltd, a co-operative venture of industries with major contribution of United Phosphorous Limited was established in 1994-95.
- Construction of CETP started in November 1995 and the plant was commissioned in March 1997.

Initially CETP began operations with 50-60 industries as members. Today 239 small and medium scale industries are its member.

Common Projects in Ankleshwar Industrial Estate

Common TSDF



The common TSDF facility at Ankleshwar was set up in 1998-99 and is run by Bharuch Enviro Infrastructure Limited (BEIL).

Today, industrial estates of Bharuch District are almost free from illegal dumpsites thanks to TSDF, Ankleshwar.

Common Projects in Ankleshwar Industrial Estate

Common Incineration Project



- The project was completed in January 2005 by Bharuch Enviro Infrastructure Limited.
- Total 31,893 MT waste has already been incinerated as on 31st March, 2007.



Disaster Prevention & Management Center, Ankleshwar

Common Projects in Ankleshwar Industrial Estate

Effluent Conveyance Pipeline Project



- **Industries Associations of Ankleshwar, Panoli and Jhagadia industrial estates along with GIDC formed Bharuch Eco-Aqua Infrastructure Limited (BEAIL), a Rs. 125 Crores Project, with equity participation of industries and GIDC.**
- **BEAIL executed the project which has enabled the discharge of treated effluent into deep sea through on-shore and off-shore pipeline.**
- **The project was launched on 26th July, 2003. Though this project started functioning informally in November 2006, it was dedicated to the public on 26th January, 2007.**

Common Projects in Ankleshwar Industrial Estate

Ankleshwar Research & Analytical Infrastructure Limited

- R & D Laboratory of this centre is to provide testing and analytical facility for raw and finished products to the industries of the area.



- To meet challenges of global competitions and to go beyond statutory compliance, rather than effluent treatment, AIA took initiatives to establish Cleaner Technology Development Centre through a company named as Ankleshwar Research & Analytical Infrastructure Ltd in co-operation with academic institutions and national laboratories.

Disaster Prevention & Management Center, Ankleshwar

Common Projects in Ankleshwar Industrial Estate Centre Excellence – IT Data Centre & Auditorium



Disaster Prevention & Management Center, Ankleshwar

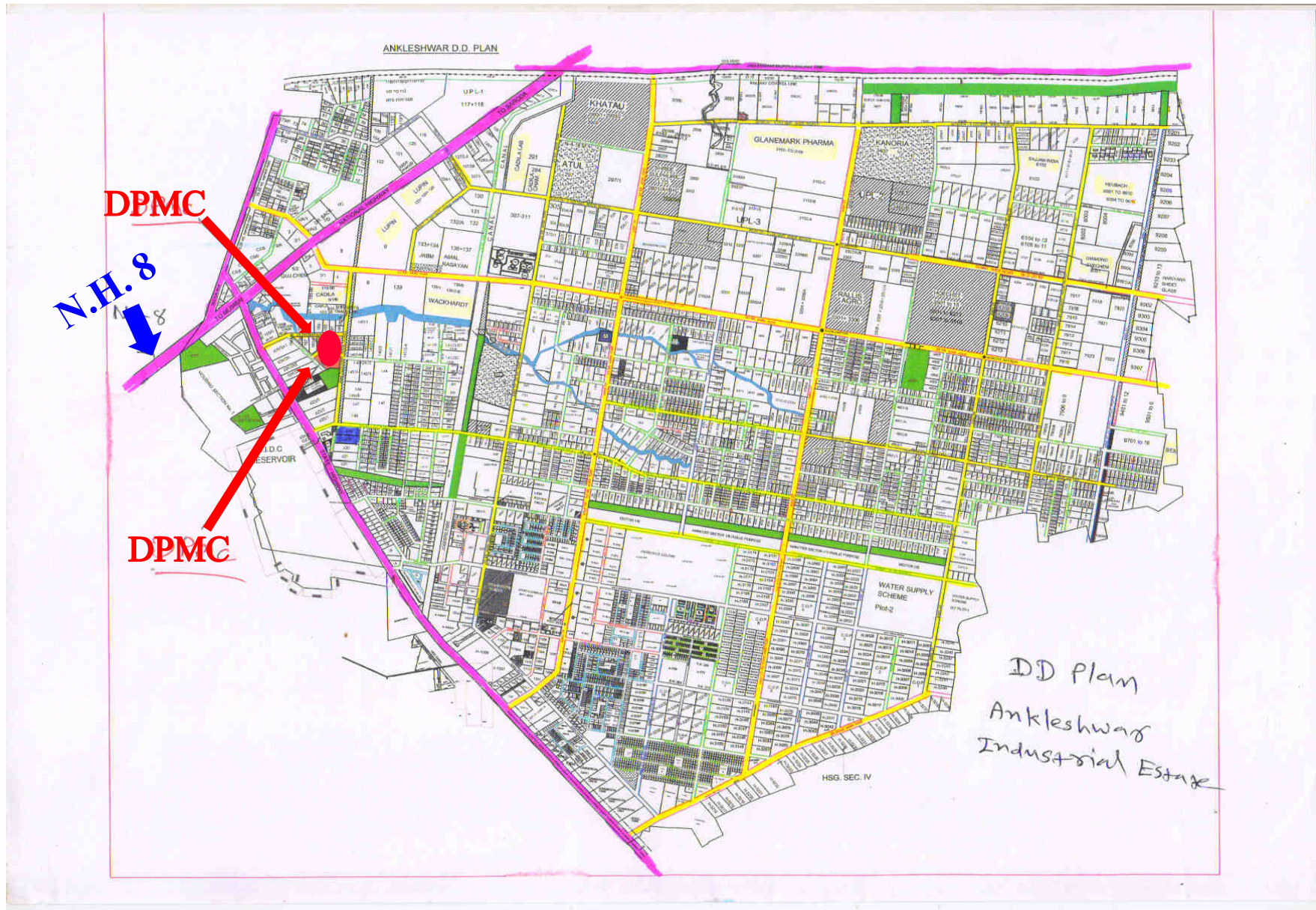
Additional Resources

Smt. Jayaben Modi Hospital



- A full-fledged 100 Bed Hospital.
- Provides Occupational Health Services to the industrial estate.
- Provides Mobile Health Services to the villages surrounding to the industrial estate.

Ankleshwar Industrial Area Map



Disaster Prevention & Management Center, Ankleshwar

DPMC & Fire Station Complex



DPMC & Fire Station Complex



Disaster Prevention & Management Center, Ankleshwar

DPMC & Fire Station Complex

Total area of plot : 10,112 m²

**DPMC & Fire Station
Built up Area : -**

G. F :- 117.04 m²

F. F. :- 117.76 m²

S. F. :- 368.03 m²

Total :- 602.83 m²

**Staff Quarters
24 Nos.:-**

**Total Built up area :-
627.44 m²**

DPMC & Fire Station Complex

Particular	Quantity
Ground Floor	
Garage for Fire Vehicles	06
Garage For Fire jeep & Ambulance	02
Staff Room / Routine Control Room	01
Store Rooms	03
Pump House with Water reservoir up to total 300 KL	01
First Floor	
Emergency Central Control Room	01
Library	01
Office Rooms	02
Office Hall	01
Second Floor	
Training Rooms with necessary training aids	06

Major Activities

■ **Handling of Industrial Emergencies & Disasters**

- **Fire & Rescue**
- **Chemical Spills**
- **Toxic release / Gas leaks**
- **Road & Rail Accidents**
- **Natural Calamities like Flood, Cyclone , Earthquake etc.**
- **Rural Fires,**
- **Rescue from water**

Major Activities

- **Data Collection from industries regarding;**
 - **Hazardous Chemicals**
 - **Hazardous Processes,**
 - **MSDS of Hazardous Chemicals**
 - **Antidotes for Hazardous Chemicals**
 - **Toxic release, data**
 - **Details about external resources etc.**

Major Activities

■ **Safety Awareness Programmes such as**

- **Seminars & Exhibitions**
- **Safety Rally, Safety Drama (Street Play)**
- **Safety Competitions**
- **Fire fighting Competitions**
- **Good Housekeeping Competition etc.**

Major Activities

■ Training Programmes on

- Industrial Safety & Fire Fighting (**Recognized by DISH**) ,
- Safe Handling of Hazardous Chemicals,
- On Site Emergency Plan,
- First Aid (**Recognized by DISH**),
- Drivers' Training (Safe Transportation of Hazardous Goods) (**Recognized by Transport Authority**)
- Village Disaster Management Plan
- Other Special topics related to Industrial Safety etc.

Major Activities

- **Help to all industries in Fire & Safety related activities like ;**
 - **Design & assessment of Fire Protection Systems.**
 - **Fire drills, Fire demos, On Site Emergency Mock drills on different scenarios and to suggest for rectification if required.**
 - **Fire & Safety Audits**
 - **Proper selection of right type of fire & safety equipments and its' installations.**
 - **Investigation of Fire Incidents and suggestions to prevent such type of incidents.**
 - **Implementation of Fire Safety norms and standards.**
 - **Fulfillment of statutory obligations, concerning to Fire Protection & accident prevention and to maintain safe working environment.**
 - **Identifying Fire & Safety Training Needs based upon Work Profile.**

Major Activities

- **Help to all industries in Fire & Safety related activities like ;**
- Designing Fire & Safety training modules for different Fire & Safety related programs & Conducting trainings as per required.
- Promotional & Awareness Activities related to Fire & Accident Prevention.
- Preparation of Fire Safety related SOPs
- **Fire Service Week and Safety Week celebration programmes.**
- Preparation of ON-SITE and OFF SITE Emergency Action Plan
- **Training to employees of different industries on**
 - Fire Fighting, Fire prevention techniques
 - On Site Emergency Plan & Mock – drills
 - **Industrial Safety**
 - **Work Permit Systems, Working at Height, Confined Space .**

Major Activities

■ Celebration of

- **National Safety Week (4-10 March)**
- **National Fire Service Week (14-20 April)**
- **DPMC annual day (4th April)**
- **Industrial Safety Day (3rd December)**
- **World Disaster Reduction Day (2nd Wednesday of Oct.)**
- **World Environment Day etc. (5th June)**

■ Co-ordination with authorities

- **GSDMA and State Govt. Authorities**
- **Dist. Authorities**
- **Local Authorities**

■ **Off Site Emergency Exercises under DCG / LCG**

■ **Activities of Local Crisis Group and District Crisis Group**

■ **Safety Forum Activities**

Activities – Safety Forum Meeting



Disaster Prevention & Management Center, Ankleshwar

Existing setup of DPMC

DPMC Committee (AEPS, AIA, NAO)

↓
Chief Co-ordinator, DPMC

↓
Manager , DPMC

↓
Emergency Handling, Maintenance etc.

↓
Planning, Preparedness, Training, Emergency Handling

↓
Fire Officers – 3

↓
Asst. Manager - 1

↓
Fire Crew – 39

↓
Fire & Safety Officers - 5

Team DPMC



Disaster Prevention & Management Center, Ankleshwar

Team DPMC



Disaster Prevention & Management Center, Ankleshwar

Emergencies Attended by DPMC, Ankleshwar upto 31.03.2014

Year	Incl.		Road/ Rail	Rural	Total
	Major	Others			
1995 – 96	0	54	0	34	88
1996 – 97	0	78	0	32	110
1997 – 98	7	79	0	10	96
1998 – 99	5	53	9	13	80
1999 – 2000	5	95	8	9	117
2000 -01	4	66	11	22	103
2001 – 02	5	50	11	61	127
2002 – 03	2	65	5	41	113
2003 – 04	2	63	11	44	120
2004 – 05	5	43	7	24	79
2005 – 06	1	66	7	26	100
2006 – 07	2	66	12	26	106
2007 – 08	4	59	11	37	111
2008 - 09	6	62	9	30	107
2009 -10	6	51	14	40	111
2010 -11	6	55	9	44	114
2011-12	8	42	16	31	97
2012-13	8	50	08	29	95
2013-14	5	76	21	25	127
Total	81	1173	169	578	2001

Disaster Prevention & Management Center, Ankleshwar

Major Emergencies / Disasters handled by DPMC

- **December 2006 (Night hours); National Highway No. – 8, between Ankleshwar – Bharuch, a passenger bus of Gujarat State Road Transport Corpo.** dashed through the angles on the sides of the bridge and plunged 40 feet to fall into the river bed. On receiving a call, the DPMC Team has immediately reached the site and immediately started the search & rescue operation from the river bed. Due to night time there was darkness and the lighting arrangement was done by his team. **Total 9 casualties and 25 injured were rescued and shifted to hospital.**
- **April 2008; M/s. Bharuch Enviro Infrastructure Ltd. Major Fire in Haz. Waste Storage.** A solid waste disposal and incinerator site. On receiving a call, DPMC Team has immediately reached the site and started fire fighting operation. Considering the severity of Fire, other fire brigades from whole district and neighboring districts were called for help. **Dist. Authority and all the District Crisis Group members** remained present at the site for required help. The fire controlled after 7-8 hours with the help of other fire brigades from Bharuch and neighboring district. **DPMC Team had successfully provided good leadership to combat this fire.**
- **April 2010; M/s. Wockhardt Ltd. - Major Fire in Plant.** On receiving a call, the DPMC Team has immediately reached the site and started fire fighting operation. **Considering the severity of Fire, other fire brigades from whole district and neighboring districts were called for help. Dist. Authority and all the District Crisis Group members remained present at the site for required help.** The fire controlled after 5-6 hours with the help of other fire brigades but it reignited again during night time and it was further controlled on the next day. **DPMC Team had successfully provided good leadership to combat this fire.**
- **July 2010; M/s. Uma Organic & Chemicals - major fire blazed after explosion** in Process Vessel & whole plant caught fire. On receiving a call, the DPMC Team has immediately reached the site and started fire fighting operation. **2 dead bodies were found during search operation by DPMC team after the control of fire.**

Highway Accident on Highway near Ankleshwar. Total 10 casualties on the spot and 2 fatalities during treatment.



BHARUCH ENVIRO INFRASTRUCTURE LIMITED

Ref : camp/f/20/08
April 05, 2008

Disaster Prevention & Management Center
GIDC Estate
Ankleshwar - 393 002

Kind attn :- Mr Vijay Ashar, Chief Coordinator

Dear Sir;

Sub :- Fire Incident on 03.04.2008

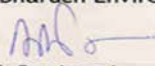
We are very thankful to you, your team and organization who have helped us in extinguishing the fire which took place at one of the godowns on 03.04.2008 evening. The fire could be brought under control and we could avoid any injury / casualty due to support from you and your team.

We would like to extend our whole-hearted thanks for the support and guidance provided during the above emergency.

We also would like to request you to send your service bill, if any, and expenditure to be reimbursed to you.

Thanking you

Yours faithfully
For, Bharuch Enviro Infrastructure Ltd


Ashok Panjwani
Director.


10/4

Plot No. 9701-16 GIDC Estate, Post Box No. 82, Ankleshwar 393 002, Dist.: Bharuch (Gujarat)
Phones (02646) 253135, 225228, 222833, Fax : (02646) 222849 E-mail : aap_bell@narmada.net.in

Major Emergencies / Disasters handled by DPMC

- **January 2013 ; Indian Oil Corporation (IOC), Hazira Terminal, Dist. Surat. - Major fire set off after an explosion in a fuel Storage Tank.** On receiving a call from authorities the DPMC Team has immediately left for the fire site alongwith resources.

DPMC Manager has provided good leadership and all team members performed remarkable duty to control the major fire and on that basis DPMC Manager has been given Special Award by Dist. Collector and Dist. Crisis Group, Surat and all team members were also awarded by Certi. Of appreciation by Directorate of Industrial Safety & Health Dept., Govt. of Gujarat.

- **February 2013 ; Vivek Chemicals, Ankleshwar. - Major fire blazed out & engulfed whole plant area.** Flames & dense smoke observed. Our fire crew immediately reached at the site & took the position front & backside of the company. Fire Brigades from surrounding areas were called for help. **All Local Crisis Group members and govt. authorities also attended the site and extended their help to combat major fire.**

- **May 2014; National Highway No. – 8, Near Ankleshwar (Panoli) -Dangerous & strange road accident.** A steel pipe laden truck trailer collided with three three vehicles involving a State Transport Bus, a Wagon-R Car and a jeep carrying the staff of a pharma company. The truck fell on the jeep due to collision and all **10 persons including driver were deceased.** Many Passengers in Bus and Car were also injured due to collision. **Our crew immediately started rescue operation using Hydraulic tools and all the deceased were brought out. Approx. 9 persons had lost their lives on the spot.**

Highway Accident on Highway near Ankleshwar. Total 10 casualties on the spot and 2 fatalities during treatment.

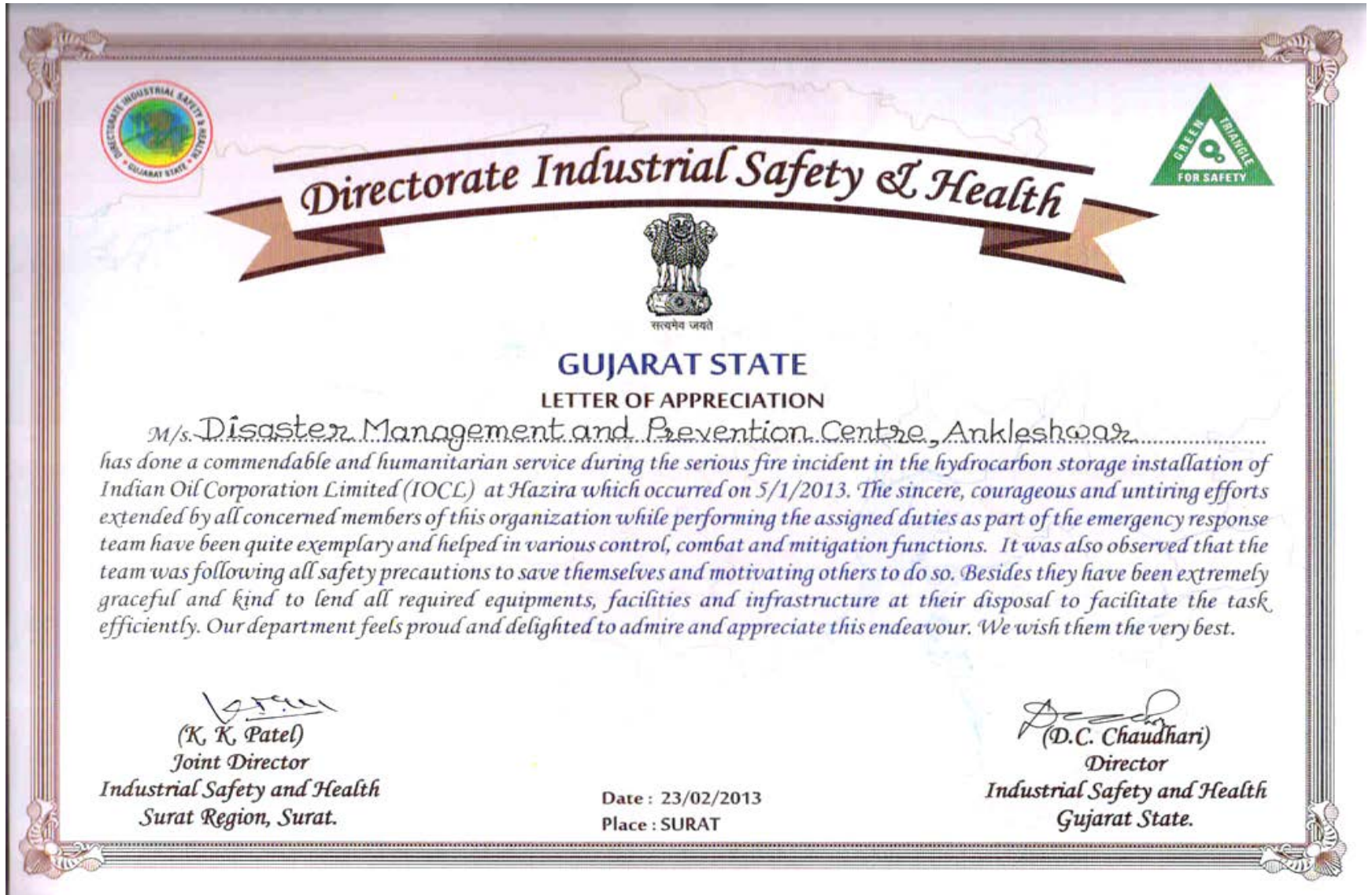


Major Fire at Oil Depot of IOC Hazira, Surat (Gujarat) on 5th January 2013.



Awards & Appreciations

Awarded by Letter of Appreciation for remarkable duty performed by DPMC & Fire Team during Major Fire at IOC Hazira on 5th January 2013.



Awards & Appreciations

Awarded by Certificate of Merit from Dist. Collectorate & Dist. Crisis Group, Surat by auspicious hands of Sri. Ganpatbhai Vasava, Hon. Minister of Gujarat State for remarkable duty performed during Major Fire at IOC Hazira on 5th January 2013.



Awards & Appreciations

Manager, DPMC awarded by Certificate of Merit from Dist. Collectorate & Dist. Crisis Group, Surat by auspicious hands of Sri. Ganpatbhai Vasava, Hon. Minister of Gujarat State for remarkable duty performed during Major Fire at IOC Hazira on 5th January 2013.



Letter of Thanks for remarkable duty performed during Major Fire at IOC Hazira on 5th January 2013.

इंडियन ऑयल कॉर्पोरेशन लिमिटेड
गुजरात राज्य कार्यालय
शिखर कॉम्प्लेक्स, मीठाखली छे रास्ता,
नवरंगपुरा अहमदाबाद - 380 009.

Indian Oil Corporation Limited
Gujarat State Office
Shikhar Complex, Mithakhali Six Roads,
Navrangpura, Ahmedabad - 380 009.
Tel.: 079 - 26474001 / 4002 / 4004 / 4005 / 4021 / 4159
Fax: 079 - 26474003 / 4053 / 4133 / 4153


IndianOil
A Maharatna
Company

विपणन प्रभाग
Marketing Division

Ref. ED/06
Dt. 21.03.2013

Shri Manoj Kotadia,
Manager – Fire & Safety,
Disaster Prevention & Management Centre,
Fire Station, Notified Area,
GIDC, Ankleshwar (Gujarat)

Dear Sir,

On behalf of Indian Oil Corporation Ltd., I extend sincere gratitude to your organization for the timely help in mitigating the Fire that engulfed Tank no.4 of our Terminal at Hazira. The timely positioning of fire fighting tenders, equipments and personnel from your organization helped contain the fire which started during the noon hours of January 05, 2013 and was finally extinguished on 07.01.2013.

The co-ordinated effort by the local agencies and neighbouring industries set an example in resource sharing and collaboration in the face of adversity.

I take this opportunity to convey our appreciation for your assistance and whole hearted support in the fire fighting operation. Further I request your good self to kindly convey our gratitude to each of our team members who helped us during this emergency. It is for the training and leadership skills imparted to them by your organization that we were able to restrict the losses.

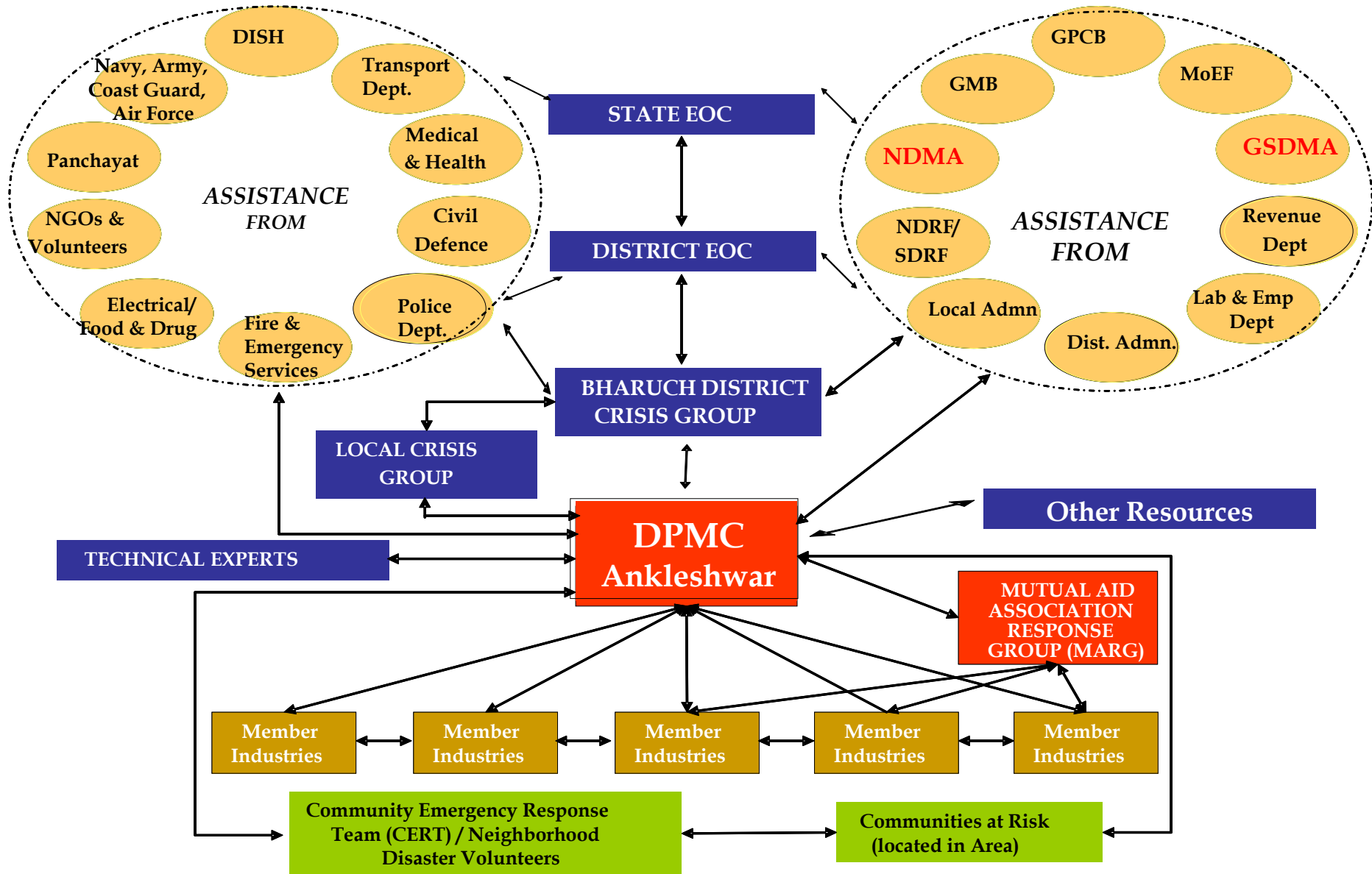
Thanking you,

Yours faithfully,
For Indian Oil Corporation Ltd.

(S. K. Diwan)
Executive Director

पंजीकृत कार्यालय : 'इंडियनऑयल भवन' जी-9, अली यावर जंग मार्ग, बंदरा (पूर्व), मुंबई - 400 051. (भारत)
Regd. Office : IndianOil Bhavan, G-9 Ali Yavar Jung Marg, Bandra (E), Mumbai - 400 051 (India)

DPMC : Emergency Response Flow Chart



Disaster Prevention & Management Center, Ankleshwar

Communication chart depending on level of Emergency

Levels of Emergencies:

- **L₀ - On Site Emergency**
- **L₁ - Off-Site Emergency (DPMC level)**
- **L₂ - Off Site Emergency (LCG Level)**
- **L₃ - Off site Emergency (DCG Level)**
- **L₄ - Off site Emergency (State/National level)**

No.	Types of Emergency / Disaster	Possible Levels
1	Fire	L ₀ , L ₁ , L ₂ , L ₃
2	Explosion & Fire	L ₀ , L ₁ , L ₂ , L ₃
3	Gas leak	L ₀ , L ₁ , L ₂ , L ₃
4	Chemical Spillage	L ₀ , L ₁ , L ₂
5	Dangerous occurrence	L ₀ , L ₁

Communication chart depending on level of Emergency

Level	Line of Action
L ₀	Company people will tackle
L ₁	<p>Control room operator will pass on information to</p> <ul style="list-style-type: none"> -Manager, DPMC -Chief co-ordinator, DPMC - Chief Officer, NAO -Hon. Gen. Sec. / President, AIA
L ₂	<p>CR operator will pass on information to</p> <ul style="list-style-type: none"> -Co-ordinators of communication Team, LCG -Other Fire services as per instruction from site. -Ambulance services as per instruction from site as per requirement. <p>Co-ordinator of Communication Team, LCG will pass on information to -</p> <ul style="list-style-type: none"> Chairman as well as all the members of Fire & Rescue Team, LCG All the members of SMC & IC Team, LCG All the members of Health & Medical Team, LCG (if casualties occurs) All the members of Toxicity & D.M. Team, LCG (if toxic gas is produced from Fire) Chairman of Traffic Control & Evacuation (Dy.SP.) (If traffic Control & Evacuation is required)

Communication chart depending on level of Emergency

Level	Line of Action
L ₃	<p>Co-ordinator of communication Team LCG (or C.R. operator), will pass on information.</p> <p>Chairman & Sec. of LCG, Ankleshwar Co-ordinator of communication team, DCG</p> <p>Co-ordinator of Communication Team, DCG will pass on information to ; Chairman / Sec. of DCG. Other Fire services from District as per instruction from site by SMC / IC. All the members of Fire & Rescue Team, DCG All the members of SMC &IC Team, DCG All the members of Health & Medical Team, DCG (if casualties occurs) All the members of Toxicity & D.M. Team, DCG (if toxic gas is produced from Fire) Chairman of Traffic Control & Evacuation DCG, (DSP) (If traffic Control & Evacuation is required)</p>
L ₄	<p>Chairman of DCG will pass on information to Chairman, State Crises Group Chairman, DCG will arrange to extend the required help to LCG.</p>

Performed key role in Off Site Mock- drills conducted by DCG / LCG

No.	Date	Location	Scenario
1	29.07.1997	Gujarat Insecticide Ltd., GIDC, Ankleshwar	Chlorine Leakage from Tonner
2	09.08.2001	Kanoria Chemical & Industries Ltd, GIDC, Ankleshwar	Ammonia Leakage from Storage Tank
3	30.10.2002	IPCL, Dahej	Ammonia Leakage from Storage Tank
4	28.01.2003	Huber Chemical Ltd, GIDC, Jhagadia	LPG Leakage from Storage Tank
5	30.09.2004	Cheminova (I) Ltd. (Unit-3), GIDC, Panoli,	Chlorine Leakage
6	30.09.2005	GNFC, Bharuch	Ammonia Leakage
**	11.10.2006	GIDC Road , Ficom Chowkdi to UPL-2, GIDC, Ankleshwar.	Oleum Leak from Road Tanker
7	29.12.2006	GACL, Dahej	Chlorine Leakage from Storage Tank
8	29.03.2008	Hikal Ltd., Panoli	Bromine Leakage from Storage Tank
9	20.03.2009	United Phosphorus Ltd. , (Unit -5), Jhagadia.	Chlorine Leakage from Storage Tank
10	19.02.2010	LNG Petronet, Dahej	LNG Leakage from Storage Tank
11	11.03.2011	HPCL LPG Plant, Piludra, Ta.; Ankleshwar.	LPG Leakage from Storage Tank
12	15.09.2011	GAIL, Roja Tankaria, Gandhar,	LPG Leakage from Road Tanker
13	27.03.2012	Jayshree Aromatics Pvt. Ltd, GIDC, Ankleshwar.	Chlorine Leakage from Tonner
14	21.03.2013	Shriram Alkalies & Chemicals, Jhagadia	Chlorine Leakage from Storage Tank
15	05.02.2014	LNG Petronet, Dahej	LNG Leakage from Transfer pump

Disaster Prevention & Management Center, Ankleshwar

Off Site Emergency Exercise under DCG on 09.08.2001



Neutralisation of Ammonia by sprinkling water.

Disaster Prevention & Management Center, Ankleshwar

Off Site Emergency Exercise under DCG on 09.08.2001



Transfer of the affected person to the Base Hospital.

Disaster Prevention & Management Center, Ankleshwar

Off Site Emergency Exercise

on 11.10.2006 to observe World Disaster Deduction Day



Controlling of Gas Leakage

Disaster Prevention & Management Center, Ankleshwar

Fire Week – Demonstration



Disaster Prevention & Management Center, Ankleshwar

Fire Week – Demonstration



Disaster Prevention & Management Center, Ankleshwar

Fire Week – Demonstration



Disaster Prevention & Management Center, Ankleshwar

Fire Week – Demonstration



Disaster Prevention & Management Center, Ankleshwar

Fire Safety Demonstration in Schools



Disaster Prevention & Management Center, Ankleshwar

Prevention Programs, Fire & Rescue Drill.



Disaster Prevention & Management Center, Ankleshwar

Prevention Programs , Rescue operation.



Disaster Prevention & Management Center, Ankleshwar

Training Programmes conducted by DPMC till 31st March – 2014

Sr. No.	Training Programmes	No. of Batches	Total no. of Participants
1	Industrial Safety, Fire Fighting, Rescue, PPEs, HAZCHEM, ERT etc. without Certi.	219	5237
2	Industrial Safety & Health (Certi. under Sec.-111-A of F.A.)	65	1515
3	On-Site Emergency Plan & Mock drills	29	591
4	First Aid Training (U/s. 45 (3) of F.A.)	20	461
5	3-Days Drivers Training Course for Transporting Hazardous goods/Chemical	41	800
6	1 - day Refresher Training Course for Drivers Transporting Hazardous goods/Chemical	19	212
7	Industrial Safety & Fire Fighting for SSI	14	349
8	First Aid Training Courses (St. John Amb.)	58	1528
9	Industrial Safety & Health – 2 days Trg. (with the financial aid from DISH)	16	493
10	Industrial Safety & Health – 1 day Trg. (with the financial aid from DISH)	14	460
11	Training Programme on “VDM Plan” for village disaster management committees of 10 Villages of Ankleshwar Taluka	01	74
12	Fire Fighting & Rescue (with Certi. Wef. 13.06.2013)	18	392

Disaster Prevention & Management Center, Ankleshwar

Technical Courses under AEPS (DPMC)

Sr. No.	Training Programmes	No. of Batches	Total no. of Participants
1	Post Diploma in Industrial Safety (2 years part time) (Recognized by Tech. Exam. Board, Gujarat)	15	366
2	Post Diploma in Industrial Environmental Technology & Management (2 years part time) (Recognized by Tech. Exam. Board, Gujarat)	13	171
3	Chemical Laboratory Technician (2 years part time) (Recognized by Tech. Exam. Board, Gujarat)	06	90

Visit by Students of Fire & Safety Engineering College, Indore, MP



Disaster Prevention & Management Center, Ankleshwar

SEMINAR, on 19.10.2002



In the presence of CEO – GSDMA, Jt. CEO – GSDMA, Dist. Magistrate etc.

Disaster Prevention & Management Center, Ankleshwar

State level Safety Conference by Gujarat Safety Council at Ankleshwar on 20.12.2013



Disaster Prevention & Management Center, Ankleshwar

**Activities – Celebration ; 10th Annual Day of DPMC, Ankleshwar ;
04.04.2005 in the presence of Dist. Magistrate**



Disaster Prevention & Management Center, Ankleshwar

Exhibition



Disaster Prevention & Management Center, Ankleshwar

Visit by CEO, GSDMA, Gujarat State alongwith Dist. Collector, Bharuch and other dignataries



Disaster Prevention & Management Center, Ankleshwar

Visit by CEO, GSDMA, Gujarat State alongwith Dist. Collector, Bharuch and other dignataries



Disaster Prevention & Management Center, Ankleshwar

Activities – Celebration

18th Annual Day of DPMC, Ankleshwar ; 04.04.2013



Activities – Celebration

19th Annual Day of DPMC, Ankleshwar ; 04.04.2014



Disaster Prevention & Management Center, Ankleshwar

Major Resources Available

No.	Fire Vehicles	Quantity
1	Multipurpose Tender (DCP 500 kg / Foam 500 ltr)	01
2	Foam Tender (Foam 500 ltr)	01 (Out of Service)
3	Foam Tender (Foam 1000 ltr)	01
4	Water Bouser – 14 KL	01
5	Water Bouser – 12 KL	02
6	Foam Nurser – 4 KL	01
7	Mini Fire Tender (Water Mist)	01
8	Ambulance	01
9	Fire Jeep	01



Major Resources Available



Disaster Prevention & Management Center, Ankleshwar

Major Resources Available



Disaster Prevention & Management Center, Ankleshwar

Major Resources Available

No.	Equipment / Material	Quantity
10	Foam Compound	Min. 7000 Ltrs
11	DCP	Min. 1500 Kg.
12	Portable Monitor	01
13	High Press Fire Extinguishers	02
14	Hydraulics Power pack – Combi Tool (Spreader & Cutter) and Hydraulic Ram)	01
15	Lifting Bags (Pneumatic)	02
16	Search Camera	01
17	Portable Fire Pump	01
18	Foam Generator (High Expansion)	01
19	Smoke Extractor	01
20	Light Mast (Inflatable)	01
21	Generator Set (25 KVA)	01
22	Duckback brand inflatable boats - Mark – IX	02
23	40 HP Motor Engine for above boat	01
24	Under water SCBA sets	02
25	SCBA Sets (21 – 13)	08



Major Resources Available

No.	Equipment / Material	Quantity
26	ELSA Sets (02 + 02)	04
27	Trolley Mounted SCBA Set	01
28	Breathing Air-Compressor for refilling of BA Sets	01
29	Fire Entry Suits	02
30	Proximity suits	04
31	Chemical Splash Suits / PVC Suits	23
32	Asbestos Suits	02
33	Florescent jackets for responders	50
34	Chlorine Kit	02
35	Oxy-acetylene cutting Set	01
36	Axe man Kits	11
37	Chain Saw for Wood Cutting	01
38	Glass management kit	01
39	Traffic guide conicals	10



Major Resources Available

No.	Equipment / Material	Quantity
40	Lifebuoys	22
41	Life Jackets	28
	Gas detecting Instruments	
42	Oxygen Meter	01
43	Explosive Meter	01
44	LPG detector	01
45	SO ₂ detector	01
46	Chlorine & Ammonia detector	01
47	Sound Meter	01
48	Lux Meter (to measure the Light)	01
49	Wind velocity meter	01
50	Infra Red Temp. Indicator	01
**	Other necessary equipments	



Facilities available - Pneumatic Lifting Bag

Useful for lifting heavy objects during building collapse, road accidents etc.



Disaster Prevention & Management Center, Ankleshwar

Facilities available - High Expansion Foam Generator

To cover the fire area at the basement and large Storage Tank dyke areas



Disaster Prevention & Management Center, Ankleshwar

Facilities available - Search Camera

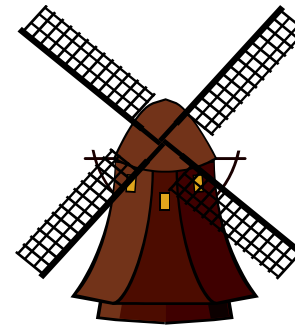
To search out victims which is not directly visible and difficult for human being to reach physically (ie. trapped in under building debris / under water,)



Disaster Prevention & Management Center, Ankleshwar

Facilities available at Control Room

- **Fire Fighting & Rescue Equipments**
- **Gas leak control equipments**
- **Gas detecting Equipments**
- **Communication system, Telephone, Fax, e-mail, wireless.**
- **Area map (MAH units, road, hospital, police station, school, shelter, water resources etc.).**
- **Toxic Release data w.r.t. wind speed & quantity.**
- **Demographic data.**
- **Meteorological data / Wind Rose.**



Details available at Control Room

- List of Fire Services available in the area.
- List of Hospital, Doctors and Ambulances.
- List of technical experts.
- List of antidotes and their sources.
- List of Emergency Equipment.
- List of transporters & Heavy vehicles suppliers like Crane, JCB
- List of schools, colleges, community halls, shelters for rehabilitation.
- List of Voluntary Organization & NGOs.
- Resources for Lime, Sand etc.
- Reference books in DPMC Library
- On line reference from website – 24 hrs.



How DPMC involved in activities of Govt. Agencies

1. Notified Area Authority

- Administration & Operation of Fire Station, Notified Area, GIDC, Ankleshwar for better & expertise services to Industrial community in the field of Emergency or Disaster mitigation.

2. Industrial Safety & Health Department (Factory Inspectorate)

- Various training programmes, organization activities of Seminar related to safety.
- Data updation of MAH industries
- Off site emergency Plan & Exercise
- Activities of Local Crisis Group & Dist. Crisis Group

3. Dist. & Local Administration

- **Activities of Dist. Crisis Group, Local Crisis Group**
- **Off site emergency plan & Exercise under DCG & LCG**
- **Safety & Disaster awareness Programmes**
- **Data Collection for Indian Disaster Resource Network (IDRN) & State Disaster Resources Network (SDRN)**
- **Training on Village Disaster Management Plan and related activities**
- **Blackout rehearsal during war situations**
- **Precautionary measures during Disasters**

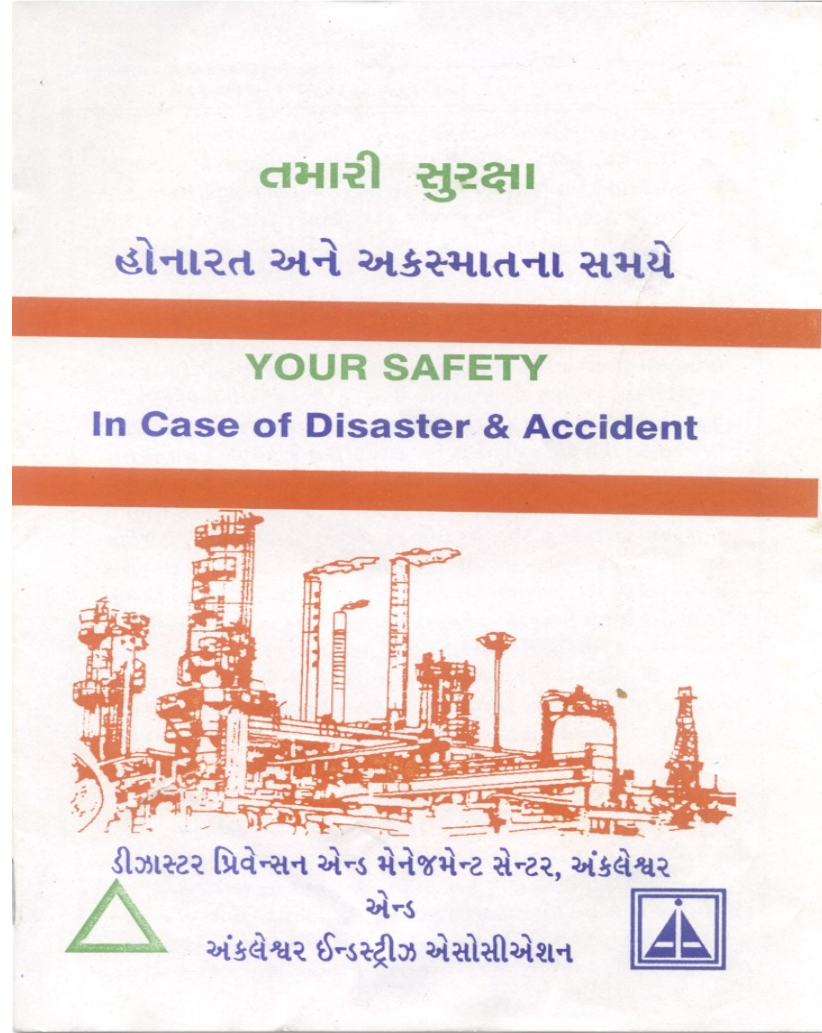
How DPMC involved in activities of Govt. Agencies

4. GSDMA (Gujarat State Disaster Management Authority)

- **Data Collection for IDRN & SDRN**
- **Village Disaster Management project under United Nations Development Programme.**
- **Off Site Mock drills under GSDMA & NDMA**
- **Mock-drills on Village Disaster Management Plan**

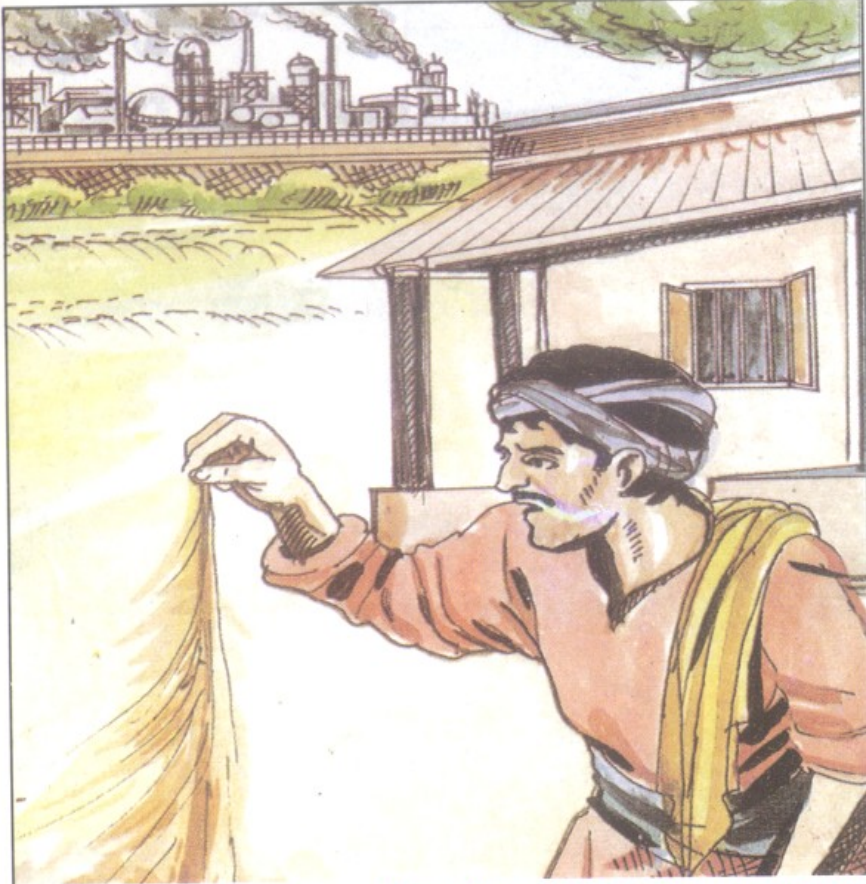
Public Awareness booklet

In case of Disaster & Accident



Disaster Prevention & Management Center, Ankleshwar

Prevention Programs - Public Awareness.



ઘરની બહાર આવીને (વાયુ) પવન કઈ દિશામાંથી આવે છે અને કઈ દિશામાં જાય છે તેનો નિર્ણય કરો અને આ બે દિશાઓ સિવાયની કોઈ પણ દિશામાં ઝડપથી નીકળી જાઓ.

૧૨



હવાની દિશા ખેંચ જમણી અથવા ડાબી બાજુ દૂર જતા રહો.

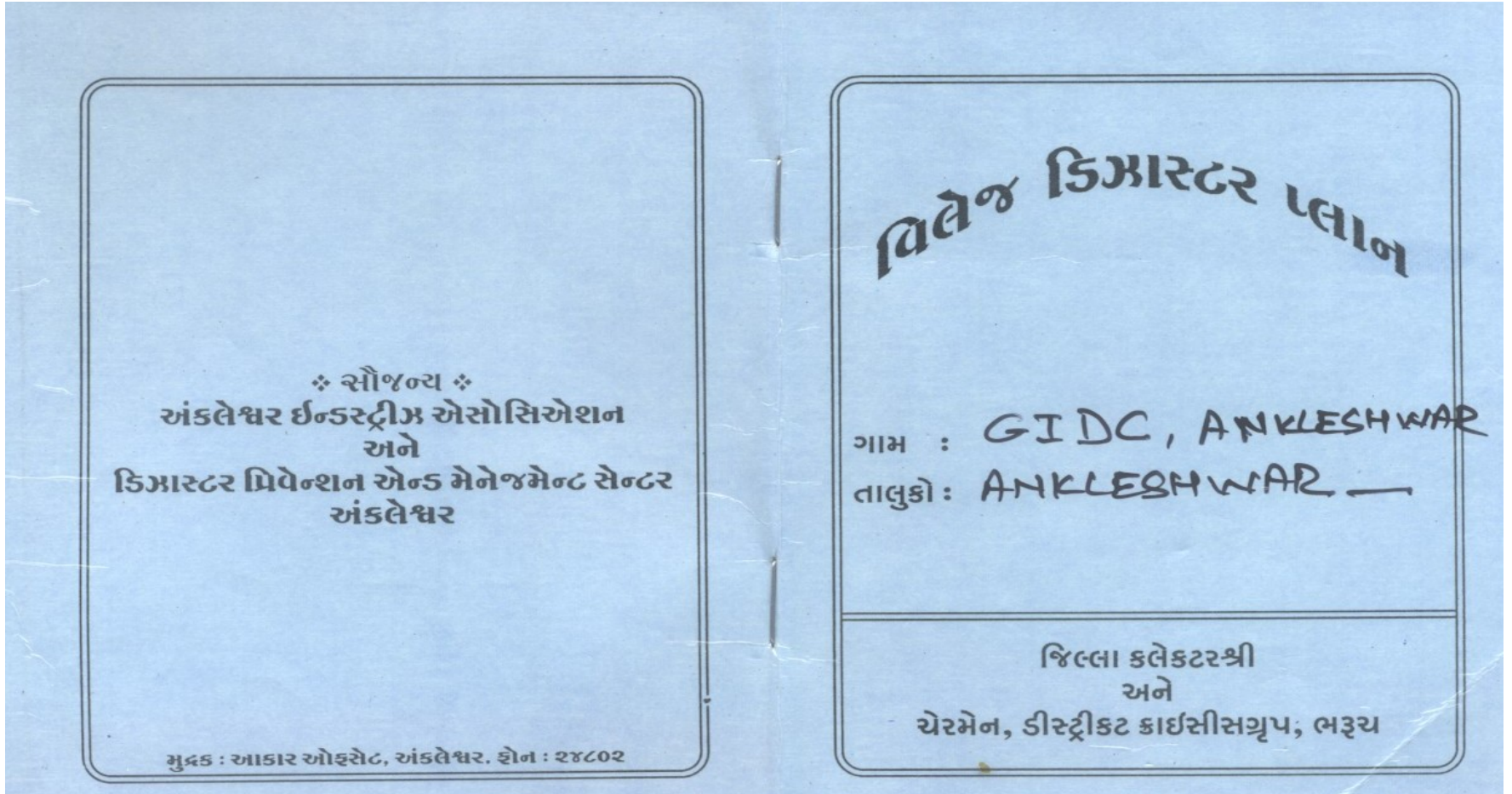


કારખાનામાંથી લીક થતો ગેસ તમારા વિસ્તારમાં આવતો હોય તો નાક અને મોંઢા પર ભીંજું કપડું રાખીને ઝડપથી સલામત સ્થળે પહોંચી જાઓ.

૧૩

Village Disaster Management Plan

To Handle disasters at Village level and provide Mutual aid to neighboring affected villages



Disaster Prevention & Management Center, Ankleshwar

Total Assets Value
“DPMC & Fire Station Complex, Ankleshwar”
Approx. in Lacs (as and when procured)

Sr. No.	Particular	Details	Total Estimated Cost Rs. in Lacs	Provided by
01.	Land for Office & Staff Quarters	10,112 Sq. Mrtrs.	100	GIDC
02.	Building & Infrastructure	Office + Parking garage for min. 8 vehicles + 24 Staff Quarters	150	NAO
03	Fire & Emergency Vehicles	6 vehicles	200	NAO
04	Fire & Emergency Vehicles & Special Equipments	2 vehicles + Sp. Equipments	100	DPMC (IIUS)
05	Fire & Emergency Vehicles	2 vehicles	55	GSDMA
	Total		605	

Income – Expenses of DPMC

■ **Sources of Income / Facilities;**

- Membership Fees from industries (Not mandatory)
- Training Programmes and Seminars
- Sponsorship from industries and
- Financial Aid in the form of Capital & Infrastructure from Government authorities like ;
 - GIDC - Land for Building & Infrastructure at token rate.
 - Notified Area – Building & Infrastructure , shortfall of fund for staff pay etc.
 - GSDMA & State Govt. – Special equipments
 - Central Govt. – Ministry of Industries – grant in aid for special equipments

■ **Expenses :**

- Staff Salary & wages
- Office Expenses
- Maintenance of Equipments & Infrastructure
- Operational Expenses of Equipments
- Training Programmes and Seminars
- Celebration of different occasions
- Awareness programmes

Achievements

- **Handled so many Fire & Accident sites including many major / fatal cases and also learnt from that, different causes of fires & accidents and its' prevention & control measures. Normally about 100 emergency calls are received in a year at Fire Station, DPMC, GIDC, Ankleshwar.**
- **Got appreciation from various Govt. & Non. Govt. Organisations for excellent work done in the field of Disaster Management.**
- **Organized so many Training Programmes, Seminars, Exhibitions and Certificate Courses related to Industrial Safety, Fire Prevention, Fire Protection and Fire Fighting, First Aid, Transportation of hazardous Chemicals, Handling of Hazardous Chemicals, Disaster Management Plan etc.**
- **Presented many papers on different topics on Safety, Fire Fighting and Disaster Management in various Seminars and Workshops organized at State level and National level also.**

Few Comments from
GUJARAT STATE INDUSTRIAL CHEMICAL DISASTER MANAGEMENT PLAN
prepared by GSDMA

EXECUTIVE SUMMARY

■ **Enhance Chemical Disaster Response Capacity (Page – 27)**

The **state has already planned** five regional Emergency Response Centres (ERC) and **four mini ERCs modeled on the DPMC Ankleshwar in a PPP model**. We recommend creation of specialist Regional Response Teams (RRT) at ERCs to augment LERT capacity as required.

■ **Public Private Partnerships (PPP) for Disaster Response (Page – 28)**

PPP allows us to combine the authority and resources of government with skills, technology and resources of the private agencies. Partnerships can also be formed between two public agencies to give structure to their joint training, resource sharing and other such plans instead of responding to ad-hoc cries for help. Some suggestions are:

- Expand mutual aid between large industries
- **Replicate successful model of DPMC – Ankleshwar elsewhere**
- Public private partnership to respond to road emergencies
- Forming mutual aid between neighbouring districts
- Improving preparedness of ports and forming mutual aid with corresponding DCG
- Improving preparedness of airport and forming mutual aid with DCG
- Improving preparedness of railways and forming mutual aid

Few Comments from
GUJARAT STATE INDUSTRIAL CHEMICAL DISASTER MANAGEMENT PLAN
prepared by GSDMA

■ **4.4.6 Regional Response Team at Emergency Response Centres (Page – 54)**

The **state has already planned 5 regional emergency response centres (ERC) and 4 mini ERC modeled on DPMC Ankleshwar in a PPP model.** This is a crucial step towards greatly enhancing the preparedness, and should be completed on a priority basis. ERCs are multi hazard units that would be attached to local municipality's fire department. Subsequently, ERC may be housed under unified fire service at the state level if and when it is established because ERCs are state level assets and not restricted to only the city or district they are located in.

■ **4.5 Plan for Training, Equipment and Resources for Hazmat Response (Page – 55)**

In section 4.4.1 we provide summary of capacity assessment for qualified HAZMAT response in the state. We have recommended creation of LERT, RRT and SERT as well as a state level fire services department. In addition, Appendix F lists the available hospitals, fire stations, and supplier of emergency responder safety equipments as of now. More detailed information on the industrial experts, available NGOs, shelters is provided in SCG response plan 2008. **It is clear that whatever chemical response capability is in Gujarat is with the industry and exceptions of fire services such as DPMC Ankleshwar.** However, this CDMP requires that the Gujarat capability is in line with international standards which basically means that public authorities must have qualified and effective response assets under their control and this cannot be achieved by relying entirely on the industry. Industry will continue to remain an important partner but over time the CDMP envisions a more proactive and leadership role for the government authorities.

Few Comments from GUJARAT STATE INDUSTRIAL CHEMICAL DISASTER MANAGEMENT PLAN prepared by GSDMA

■ 4.6.2 Replicate Successful Model of DPMC for Mutual Aid among Industries (Page – 66)

Currently, a critical gap in existing mutual aid between industries is that the small industries without own resources to respond to chemical emergencies are not the members of the mutual aid. The primary reason for this is that large industries in the mutual aid seek commensurate level of reciprocity from other member industries. Large industries do provide help to smaller units on request from them or district authorities, but as a benefactor and not under a formal or binding agreement. **Considering this, we recommend a replication of the DPMC model in other industries' pockets in Gujarat to serve smaller industries. DPMC can also serve larger units in addition to mutual aid assistance from other large industries.**

DPMC Ankleshwar is managed and supported by Ankleshwar Industries Association, GIDC Fire Stations, GIDC and GIDC Notified Area. It is well equipped with SCBA sets, fire fighting equipment, both FEAS, foam and water tenders, PPEs, breathing apparatus, air compressor and variety of monitoring instruments including lox meter and wind velocity and direction meter.

DPMC helps in industries in the areas of:

- Strengthening of their preventive measures
- Emergency and industrial disaster management
- Data collection regarding hazardous chemicals and processes, MSDS, antidotes, toxic release, resources etc.
- Conducting safety awareness programmes and training programmes inclusive of industrial safety and fire fighting, safe handling of hazardous chemicals, first aid and community education
- **The control room at DPMC also maintains list of fire services available in the area, hospitals, doctors and ambulances, technical experts, antidotes and their sources, emergency equipment etc.**

Disaster Prevention & Management Center, Ankleshwar

Few valuable Comments / Feedback by Visitors

Sr. No.	Date of Visit	Name & Address of Organization / Visitor	Remarks/ Purpose
1	20.10.2002	Sri. V. G. Bukkavar Retired DISH , Maharashtra	“Yes We also can do it” are the only words to appreciate the achievement of Ankleshwar industries in the field of environment, Health & Safety. Keep it up for yourself & for others for implementation.
2	01.12.2004	Sri. Rajiv Ranjan Mishra, IAS Dy. Director (Senior) , Lal Bahadur Shastri National Academy of Administration, Govt. of India	Very good effort for industrial cluster.
3	11.12.2005	Sri. V. J. Francis Xavier Joint Director of Fctories & Boilers , Kozhikode, Kerala	I appreciate the way you formulated this modern aspect in preparedness in Disaster Management & the success kept managed with one’s own endeavors to help public & environment.
4	22.09.2005	MAHIZ Boaching, Ciba BASF, Switzerland and John Cooper, Ciba, Crayton, England	Very impressive organization. Very professional team a good station. Impressing expertise level. Congratulation.
5	27.01.2006	A. Ravindra Ex. Chief Secretary, Karnataka	Deeply impressed by the work. The centre should serve as an example to state Disaster Managemant Centre in the country.
6	28.01.2006	Sri. R. R. Khan , Advisor, MoEF, Govt. of India	DPMC visit has been a very rewarding experience. It is a unique effort particularly it is managed by local industry Association. Equipments are fully in readiness to meet any exigency. Keep it up. Officers are highly motivated & experienced.
7	25.04.2006	Sri. Sarat panda Programme Associate, UNDP , (GSDMA, Gujarat.)	Highly impressed by the capacity, potentiality and commitment level of the organization and its personnel. Wish the organization all the very best.

Disaster Prevention & Management Center, Ankleshwar

Few valuable Comments / Feedback by Visitors

Sr. No.	Date of Visit	Name & Address of Organization / Visitor	Remarks/ Purpose
8	10.06.2006	Sri. Anil Kakudhar Chairman, Atomic Energy Commission (AEC), GOI.	I am impressed by DPMC, that has been established and is well equipped and organized centre for prevention & Management of disasters. My compliments to everyone working with.
9	30.08.2006	Dr. Vijay Kalti, Dr. S. Bhatia and Mr. Chaman Dhanda, IIFT, New Delhi	We feel that this initiative with private & public participation a unique in self sustain interest of community development.
10	07.02.2007	Rashesh Desai Manager Corporate Affairs Reliance Ind. Ltd., Hzaira, Surat	Very well equipped & managed organization. Having very good database should initiate a demo program to develop same kind of centre & other Notified Area
11	20.10.2008	Philippe R.Scholtes Representative & Head Regional Office For South Asia, UNIDO and James Lamont, World News Editor, Financial Times London	Very interesting & organized structure for Disaster Management. Impressive awareness programs conducted for industries & community.
12	05.11.2009	Jayakumar T.C. Ethiraju Joint Chief Env.Engg.. Tamilnadu Pollution Control Board	Very Useful study & Latest Equipment used Impressed us We want to follow good procedural Approvals & same to be Extend to our Chennai
13	28.02.2012	Dr. J. R. Bhardwaj, (Former Member, NDMA) Team Leader, PRESTEL , (Consultaning Agency for CIDM Plan by GSDMA in Gujarat) . Total 11 members.	Highly appreciated the set up of DPMC
14	09.10.2012	Mr. John J. Steinauer, MCRP Sr. Tech. Hazard & Transportation Planner, USA and Team PRESTEL Consultaning Agency for CIDM Plan by GSDMA in Gujarat .	Excellent job in training and preparing for chemical emergencies. I am impressed. Good job all.

Disaster Prevention & Management Center, Ankleshwar

Part – 2, Proposal for

**“Upgradation of DPMC, Ankleshwar
as Mini ERC on PPP base”**

Submitted to

Gujarat State Disaster Management Authority

Disaster Prevention & Management Center, Ankleshwar

Project Cost – distribution

development of DPMC, Ankleshwar as Mini ERC

Sr. No.	Particular	Govt. Contribution (GSDMA & GIDC)	Local Contribution by NAO / AIA	Total Estimated Cost Rs. in Lacs
01.	Additional Building for Parking garage for min. 4 vehicles + 4 Staff Quarters	80 %	20 %	100
02.	Consultancy	80 %	20 %	10
03	Special Vehicles – 6 nos. (As per Annexure- 7 + new addition)	80 %	20 %	1,200
04	Training Expenses	50 %	50 %	5 Lacs / year
05	Salary & wages to Staff 48 + 16 + 1 = 65 person	--	100 %	80 Lacs / year
06	Operation & Maintenance	--	100 %	30 Lacs / year
07	Consumable items / materials	---	100 %	30 Lacs / year
08	Office Expanses	---	100 %	5 Lacs / year

Disaster Prevention & Management Center, Ankleshwar

Project – Capital Cost

development of DPMC, Ankleshwar as Mini ERC

Sr. No.	Equipment / Material	Quantity	Estimated Cost Rs. in Lacs as per proposal during Jan. 2012	Projected Cost Rs. in Lacs as on today
1	HAZMAT / Rescue Van	01	300	400
2	Snorkel/ Hydraulic Platform - 20-25 mtrs capacity (Earlier requested for 32 mtrs.)	01	500	400
3	First Responder Van	01	30	50
4	Rescue Tender	01	170	200
5	Foam Tender (New addition)	01	---	70
6	Multipurpose Fire Tender (New addition)	01	---	80
7	Construction of additional Infrastructure & Building (4 -Garage for vehicles and 4 - Staff Quarters)	---	50	100
8	Consultancy	---	10	10
	Total Amount Rs. in Lacs		1,060/-	1,310/-

Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required

■ HAZMAT VAN

HAZMAT VAN is a unique vehicle having excellent facilities to combat chemical accidents.

There has been rapid indl. development of Bharuch Region, comprising Ankleshwar, Panoli, Jhagadia and Valia Industrial Estates.

As DPMC, Ankleshwar was established to help industries during emergency situation in industries and is working for prevention and management of chemical and other industrial disasters with the help of various resources provided by Notified Area Authority, Ankleshwar including its fire station and man power.



Additional Resources Required

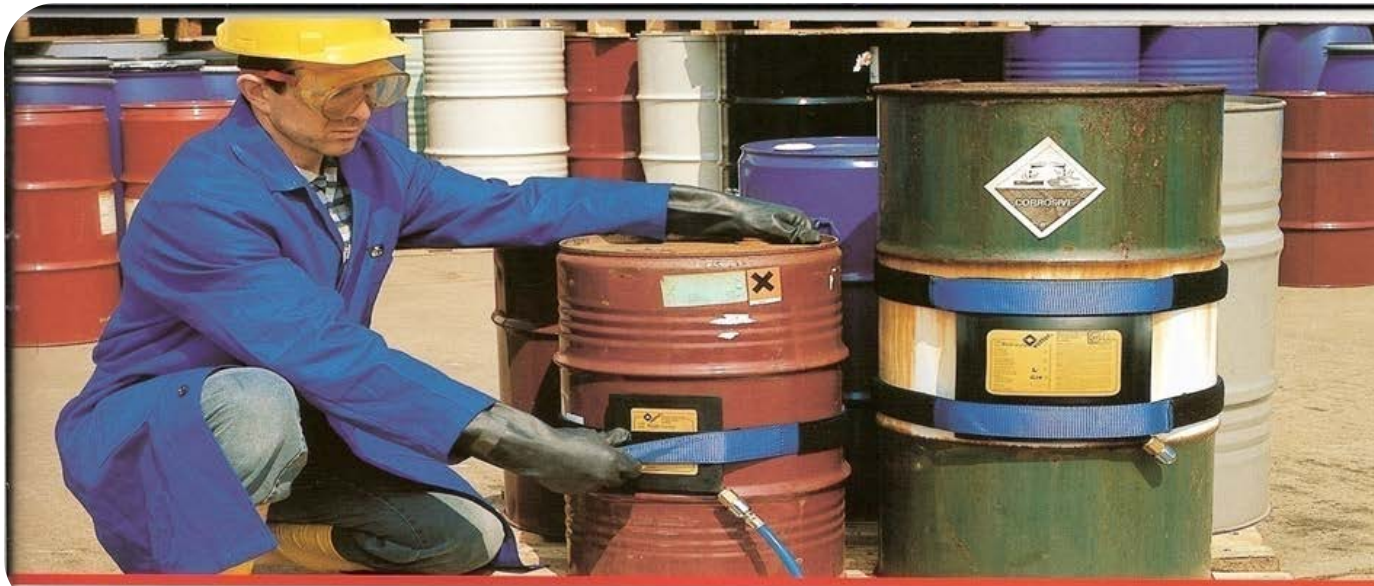


Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Additional Resources Required



27

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

11 13:05

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Additional Resources Required



Disaster Prevention & Management Center, Ankleshwar

Development of DPMC, Ankleshwar as Mini ERC

Revenue / Funding and Recurring cost/ expenses

(Estimated as on Today)

No.	Revenue / Funding		Recurring cost / expenses	
**	Particular	Rs. in Lacs per year	Particular	Rs. in Lacs per year
1	Local Contribution from NAO / GIDC	125	Salary & Wages to staff 48 + 16 + 1 = 65 person	80
2	Recovery of Service charges for Consumable items / Materials	25	Consumable items / materials	30
3			Operational & Maintenance Expenses	30
4			Training Expenses	05
5			Office Expanses	05
6				
	Total	150	Total	150

Time Frame – Probable time required

for development of DPMC, Ankleshwar as Mini ERC

Sr. No.	Particular	Starting Time	Completion time	Time period required to complete the job
01.	Tendering for Procurement of equipments			6 months
02.	Additional Infra. & Building (Parking garage for min. 4 vehicles + 4 Staff Quarters)			15 months
03	Supply of equipments			12 months
04	Tendering for Recruitment of Staff			3 months
05	Recruitment of Staff			3 months
	Total period required (removed over lapping time)			18 months

Suggested setup of Mini ERC (DPMC), Ankleshwar

Chair Person of Mini ERC (Dist. Collector)

Mini ERC / DPMC Committee (AIA, NAO, AEPS, Dist. & Local Admin., DISH, GPCB)

Member Secretary of Mini ERC (Chief Co-ordinator, DPMC)

Incharge Mini ERC (Manager -Fire & Safety, DPMC)

**Fire, Emergency and
Disaster Management Operations**

Fire Officers – 1
Asst. Fire Officers – 2 +2 = 4

Fire & Emergency Staff - 39 + 10 =51

Control Room Operation

Control Room Operators - 0 +4

**Planning, Preparedness, Training,
Data base & Reporting**

Asst. Manager -1
Fire & Safety Officers – 4

Disaster Prevention & Management Center, Ankleshwar

Staff position for development of DPMC, Ankleshwar as Mini ERC

No.	Position	Present Strength	Proposed strength
*	Chief Co-ordinator, DPMC	01	01
1	Manager- Fire & Safety, DPMC	01	01
2	Asst. Manager- Fire & Safety, DPMC	--	01
3	Officer - Fire & Safety, DPMC	05	04
4	Fire Officer	01	01
5	Asst. Fire Officers	02	04
6	Control Room Operator	--	04
7	Head Firemen	04	04
8	Driver cum operator	13	18
9	Firemen	21	26
10	Maintenance – Electrical , Mechanical	01	01
	Total	49	49 + 16 = 65

Disaster Prevention & Management Center, Ankleshwar

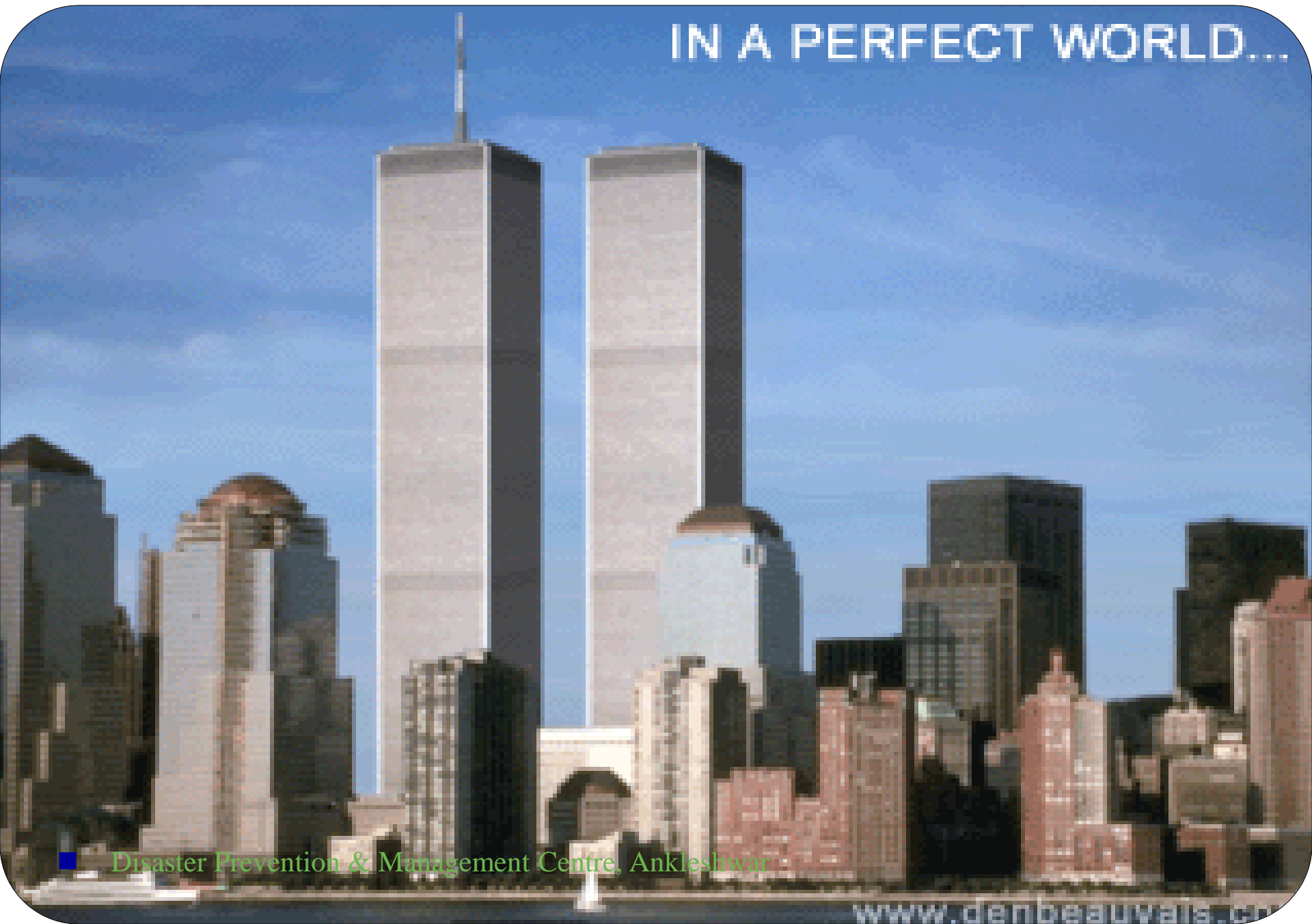
Scheme for Development of DPMC, Ankleshwar as Mini ERC on PPP mode

- ❖ All expenses for Building & infrastructure, purchase of Equipments :- by GSDMA, GIDC & Local Contribution from NAO on PPP mode.
- ❖ All expenses towards Maintenance including insurance, Administration, Operation, spare-parts requirements :- by Local Contribution / NAO .
- ❖ All expenses towards men power requirement :- by Local Contribution / NAO .
- ❖ Administration, entire operation and maintenance :- by ERC (DPMC) with the help of persons and resources provided by NAO .
- ❖ Training to the staff :- 50 – 50 % will be provided by GSDMA as well as ERC (DPMC).
- ❖ ERC (DPMC) shall provide the services to outsided areas under the order of Local Authority / Concerend District Collector.

**We are always ready to
help for developing
such kind of facilities
in various areas of our
Country**

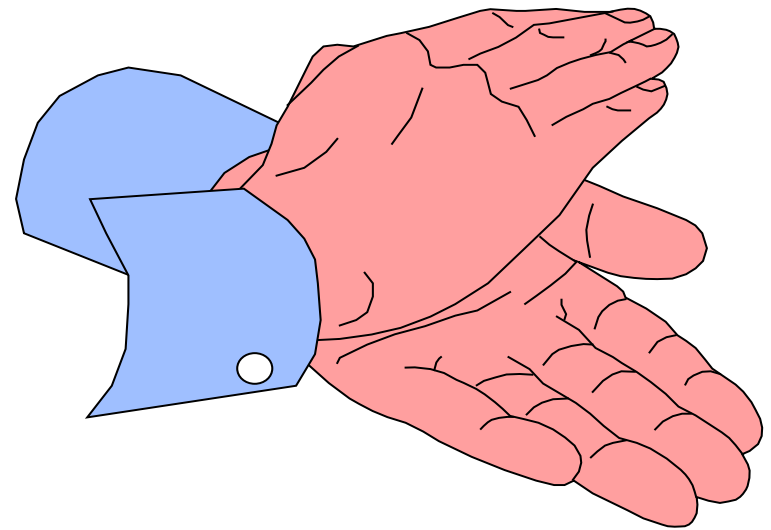
Let us do something right now !!!

IN A PERFECT WORLD...



Have a Accident & Disaster free Environment

Thanks



Disaster Prevention & Management Centre

AnklESHwar.

Disaster Prevention & Management Center, Ankleshwar