PAN-INDIA CHLORINE EMERGENCY RESPONSE NETWORK
GUIDE FOR CHLOR-ALKALI PLANTS

ALKALI MANUFACTURERS’ ASSOCIATION OF INDIA
Chlorine Emergency Response Network

Network Concept-How it works?

- Chlorine Emergency Response Network has been formed to promptly attend to any emergency situation due to release of chlorine during its transportation and its use at consumers’ end.
- The network covers 30 chlor-alkali units, 20 states & 3 union territories all over India.
- All the 30 chlor-alkali units are committed to attend to chlorine emergencies which may arise near their plants during its transportation or use, irrespective of the source of supply of chlorine.
- All chlor-alkali units have also identified their major consumers / dealers to help them to attend chlorine emergencies as their “assisted units”.
- The chlor-alkali unit or their assisted unit, whichever is nearest to the incident site, will mobilize resources to control the chlorine emergency.

Who will be benefitted from the network

- Chlorine manufacturers, chlorine consumers, transporters, local administration, police and general public.

Launching of Chlorine Emergency Response Network

- The chlor-alkali units have been grouped region-wise based on their location under four regions namely Eastern, Western, Southern and Northern regions.
- Region-wise Chlorine Emergency Response Network manual has been distributed to all the units operating in the region for implementation.
- One co-ordinator from each unit has been nominated for implementation of Chlorine Emergency Response Network in their respective units and for co-ordination with other units of the region. Co-ordinators of each region nominated one Chief Co-ordinator for each state of the region and one Regional Co-ordinator for each region.
- The Chlorine Emergency Response Network implemented in all the chlor-alkali units of the region as per the manual. After, co-ordinators of all the units of the region confirmed implementation of the network in their respective units, the Chlorine Emergency Response Network of the region was launched. First, the Chlorine Emergency Response Network was launched in Western region on 28.05.2010, followed by Southern region on 24.02.2011, Eastern region on 02.02.2012 and finally the Northern region on 15.05.2012.

Key Personnel for implementation of the network

- Unit Head is the key person of the Chlorine Emergency Response Network who is overall responsible for handling chlorine emergencies. He will be supported by other key personnel such as designated persons of the unit, process control room staff, crew members and other connected persons.
● Each unit has nominated two of their senior officials for handling chlorine emergencies. The 1st responsible person is primarily responsible for attending all chlorine emergencies. In absence of the first responsible person, the second responsible person will handle all chlorine emergencies reported through Chlorine Emergency Response Network.

● Control room in-charge is responsible for receiving incident information & coordinating with the unit head / responsible persons for mobilization of resources to attend chlorine emergencies without delay.

● Crew members will control the incident & mitigate emergency at the incident site.

● Other connected persons are marketing heads, persons involved in material despatch, transportation, HR and training.

● Transporters and chlorine consumers, local public, police and local administration are other parties of the Chlorine Emergency Response Network.

**Overview of the System Established for Chlorine Emergency Communication**

● Dedicated Telephones
  
  ● All chlor-alkali units have made available dedicated telephones including Tata Walky telephones, installed in their control room for chlorine emergency communication.

● Pan-India Toll Free Telephone
  
  ● A pan-India toll free telephone 1800-11-1735 has been made operational from 14th April 2013. This toll-free number is connected to the dedicated chlorine emergency helpline telephones installed in the control rooms of all the chlor-alkali units including Tata Walky telephones installed in the control rooms of 11 chlor-alkali units.

  ● Once any person makes a call on the toll free number 1800-11-1735, either from any landline phone or mobile phone, the call will automatically be connected to the control room of one of the nearest chlor-alkali units of the state/region from where the call is generated.

**Telephone Directory**

● A directory containing landline & mobile phone numbers of the control room, responsible persons & heads of all the chlor-alkali units has been prepared. A copy of this directory is available in the control rooms of all the chlor-alkali units as well as with the unit head & responsible persons in each unit. This will facilitate inter-unit coordination during emergencies.
Chlorine Emergency Reporting Centre

- The process control room of all chlor-alkali units are the designated centres for receiving chlorine emergency informations.
- In the unit where more than one control room is operating, one of the control rooms has been designated for receiving the chlorine emergency information.
- The direct telephone installed in the above designated control rooms have been connected to chlorine emergency toll free number 1800-11-1735.

Reporting Chlorine Emergency Incident Information Chlorine Emergency Communication

- In case of any chlorine emergency, the transporter or the chlorine consumer / police will immediately contact the incharge of the process control room of the nearest chlor-alkali unit through the chlorine emergency toll free number 1800-11-1735 or through the respective dedicated control room helpline telephone number.
- The control room staff will take the following information.
  - Vehicle no. & place of accident, landmark of location, (e.g. nearest village / town, Taluka & District, etc.) contact person and phone numbers
  - Type & nature of accident/ incident. If any action taken to tackle the leakage temporarily.
- Transporters / chlorine consumers will take instructions from the control room staff for taking preliminary precautions till the emergency crew reaches the incident site.

Role of Control Room Staff / Incharge

The Control Room Staff / In-charge will:

- Take the incident information details and convey immediately to their unit head / responsible persons for further action.
- Co-ordinate with unit head / responsible person and mobilize emergency crew members and other resources to attend the chlorine emergency.
- Communicate with the affected persons / driver / consumers and inform them the tentative time by which the emergency crew members with resources will reach the site of incident.
- Communicate with the head of the emergency crew and get the feedback on the actions taken by the crew members till situation is brought under control.
- Guide the emergency crew members in consultation with unit head / responsible persons, whenever they need any help to mitigate the emergency situation and arrange additional resources, if required.
- Inform the unit head / responsible person after closure of the incident.
Role of Unit Head / responsible person for mobilization of resources to handle chlorine incident

- On receiving information on the chlorine incident, the unit head / responsible person will immediately decide whether to attend the emergency themselves or through any of its assisted units or to seek the assistance of the nearest chlor-alkali unit depending on the location and distance of the incident site from their unit.
- If the unit head decides to attend the emergency themselves, then he will contact control room staff / identified responsible persons to mobilize crew members & resources and send them to the incident site.
- In case the place of incident is far off, then he may contact directly or through their responsible person/ control room staff to the nearest chlorine manufacturing unit or the assisted unit or the lead unit of the district or the regional co-ordinator where incident took place and inform the details of the chlorine incident and request the unit to attend the chlorine emergency.
- On receipt of chlorine incident information, the unit head of the lead unit / the nearest chlor-alkali unit / assisted unit will mobilize required resources, crew members, etc and send them immediately to the incident site to attend the chlorine emergency.

Role of Emergency Crew Members

- The leader of the emergency crew will collect incident information details such as place of accident, vehicle no. if any, contact person, phone number, nature of accident, etc from the control room / responsible person and take instructions about possible actions required to handle the emergency before departure of the team.
- Crew members will keep their control room / unit head / responsible person informed about the action taken by the team to handle the situation till the closure of the emergency.
- After reaching the site, the emergency crew leader will contact the control room and seek additional assistance, if required.
- In case there is loss of life or damage to property due to the incident arising from their own supply, the crew members should inform the same to their control room / unit head who will depute their senior official to the incident site to deal with the situation.
- In case the incident is related to other supplier, then the control room staff / responsible person/ unit head will inform the original supplier to depute their senior official to the incident site.
- The crew members of the nearest unit which attended the emergency, will withdraw from the incident site, after controlling the emergency and handover the site to the representative from the supplier unit.
Preparedness for operation of the Chlorine Emergency Response Network

- Publicity of Chlorine Emergency Helpline Number
  All Chlor-Alkali units will publicize through following medium, their respective dedicated Chlorine Emergency Helpline Numbers and the toll free telephone number 1800-11-1735 for information of their chlorine consumers, transporters, local public & police.
  - Print in the TREM CARD, in the INFORMATION PANEL PLAY CARD which is pasted on the vehicles carrying hazardous goods and in the INVOICES of goods dispatched.
  - Display on the board near the factory gate for public information.
  - Also advertise through special handouts.
  - Upload a special page of CERN & toll free numbers on the respective chlor-alkali unit websites.

- Training of Crew Members
  - A list of crew members with their telephone numbers to be prepared and kept in the control room for ready reference.
  - Training for chlorine emergency to be imparted to all the crew members periodically.

- Safety Kits & PPEs
  - Necessary safety kits & PPEs have to be kept at identified place for ready access. The control room incharge should be aware of the place of storage of the safety kit.
  - The safety kits & PPEs have to be inspected at periodical intervals for their fitness for use. Items which have deteriorated / depleted shall be replaced.

- Vehicles for transportation of crew members
  - Ideally a dedicated company vehicle should be available for attending chlorine emergencies. Alternate plan should be in place for arranging vehicles (on hire) in case of non-availability of company vehicle.
  - All crew members should carry mobile phone for emergency communication.

- Information to Police / Disaster Administration
  - Local authorities such as local police, local administration, fire brigade, state & district disaster management authority, etc. have to be integrated into the chlorine emergency response network and their assistance may be sought whenever required to mitigate the emergency situation.
  - Each unit will communicate to the local administration / police about the availability of toll free chlorine emergency number 1800-11-1735 and their dedicated chlorine emergency helpline number installed in their control room, for use during any chlorine emergency, any where in the country.
OPERATION OF CHLORINE EMERGENCY RESPONSE NETWORK AT PLANT LEVEL
(SCHEMATIC FLOW DIAGRAM)

Chlorine Incident during transportation

The transporter informs the control room of the nearest Chlor-Alkali Unit or Chlorine supplier control room through the toll free telephone number 1800-11-1735 and dedicated Chlorine Emergency Helpline Number

Police / local public informs the incident to the control room of the supplier unit / nearest chlor-alkali unit

Incident information received at control room of the chlor-alkali unit

Control room I/C takes the incident information details from the informer (such as place of incident, nature of incident, vehicle no. etc.) and passes on the information to the Responsible persons / Unit Head

Unit Head / Responsible person who decides to attend the incident themselves

Yes

The unit head informs the control room / responsible person to organise crew members, safety equipments, vehicle for crew members to reach incident site immediately

Head of the crew members informs their control room about the nature of the emergency & extent of damage & seek additional help, if required

Control room mobilizes required additional resources and send to incident site

No

The unit head of the nearest unit informs their control room / responsible person to organise crew members, safety equipments, vehicles for crew members to reach to incident site immediately

Crew members reach incident site, assess the emergency situation and control the incident

If the incident is severe and there is loss of life & property, head of crew members informs the same to their control room

Additional resources reach the incident site & emergency is controlled

I/C of the control room informs the original supplier to send it’s representative to the incident site

Head of the crew member informs the closure of emergency and leaves incident site

Supplier representative co-ordinates with local police / public and resolves the emergency

Representative from supplier unit reaches the incident site and takes control of the situation

Original Supplier deputes one of their senior officials to the incident site along with additional resources

Prepare an incident report & submit to their unit head / responsible person. Unit head send copy of the report to AMAI / Supplier unit

Chlorine Incident at chlorine consumers end

The consumer informs the incident to the nearest Chlor-Alkali Unit or Chlorine supplier control room through the toll free telephone number 1800-11-1735 and dedicated Chlorine Emergency Helpline Number

Police / local public informs the incident to the control room of the supplier unit / nearest chlor-alkali unit
LIST OF CHLORINE EMERGENCY HELPLINE TELEPHONE NUMBERS

The Toll Free Chlorine Emergency Telephone Number 1800-11-1735 is operating in all the regions throughout India. Anybody can use the above toll free number for communicating chlorine emergency informations to the control rooms of nearest chlor-alkali unit. Also the control rooms of chlor-alkali units can be contacted for communicating any chlorine emergency through the dedicated chlorine emergency helpline telephone numbers installed in their control rooms as listed below.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of unit</th>
<th>Dedicated Telephone Number</th>
<th>Tata Walky</th>
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<tr>
<td>1</td>
<td>Aditya Birla Chemicals (I) Ltd., Jharkhand</td>
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<td>Atul Ltd., Valsad</td>
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<td>0251-2302958 / 2302959 / 07498284468</td>
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<td>044-25941334, 09840429607, 09840095176</td>
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<td>30</td>
<td>UPL Ltd., Jhagadia</td>
<td>02645-226011 / 226012 / 226013</td>
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</tbody>
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