

Awareness-cum Training Workshop on  
**Chemical Safety Preparedness & Emergency Response**  
Organized by  
**Emergency Response Centre, M. P. Pollution Control Board, Bhopal**

**A Note on the proceedings**

The Emergency Response Centre, Bhopal organized the event under an out-reach program on "Chemical Safety, Preparedness and Emergency Response" at Dewas industrial area in Madhya Pradesh on 31st May 2011, to create awareness among the industry personnel, the different first responder group officials such as Police, Fire brigade, district administration & officials from healthcare facilities and also the people living in the vicinity of chemical industries.

The program started with the welcome address from Shri Manas Ghosh, General Manager, M/s. Tata International Ltd. Dewas. The program was inaugurated by Shri H.V. Gurudutt, Scientist 'D', Central Pollution Control Board, who was the Chief Guest. This was followed by opening Remarks by Dr. Gunwant Joshi, Chief Chemist and Head of Emergency Response Centre, Who explained the need of organizing such a program and highlighted the importance of preparedness in dealing with the chemical emergencies.

The chief guest of the program highlighted the issue and briefly explained the national scenario with respect to the chemical industry. The other two guest speakers, Dr. Asit patra, Asst. Director, DMI, Bhopal stressed on the importance of the safety and high level of preparedness in avoiding the chemical accidents turning in to disasters, whereas Shri Anil kumar stressed the importance of reporting and analysis of the accident in the chemical industries and how does it adds to the collective wisdom of the community and could be used to avoid the similar situations in future. The Vote of Thanks was extended by Shri P.K. Trivedi, Regional Officer, M.P. Pollution Control Board, Ujjain.

A total of 84 participants from various industries, District administration, the first responders. i.e. police, fire brigade, health care people and regulators (MPPCB and DIHS) attended the programme and were benefited from the workshop. The resource persons as guest speakers were from Central Pollution Control Board, Delhi, National Informatics ERC/MPPCB

Centre, MoEF, New Delhi, Disaster Management Institute, Bhopal and Department of Industrial Health & Safety, Govt. of Madhya Pradesh.

In the 1<sup>st</sup> technical session, Shri Gurudutt spoke on 'Manufacture, Storage & Import of Hazardous Chemicals Rules 1989 and Chemical Accidents (EPPR) Rules 1996. He informed about status of import of hazardous chemicals in the country and the course that one has to follow, including mandatory provisions like permission from the concerned State Pollution Control Board and Ministry of Environment & Forests, Government of India. He also talked about responsibilities of industry owner and the officials in order to prevent and mitigate the chemical accidents. He also highlighted the issues like lapses in the application form etc. that cause undue delay in the grant of import permission.

Dr. Asit Patra deliberated upon 'the Administrative & Techno-legal aspects of Industrial Disaster, risk Management and Planning'. He further elaborated the issues concerned with risk assessment, risk analysis, on-site and off-site emergency planning, hazard identification, consequence analysis and simulation modeling to study a chemical accident scenario.

In the 2<sup>nd</sup> technical session, Shri Anil Kumar, Scientist, National Informatics Centre, New Delhi demonstrated Software on Chemical Accidents Incident Reporting System (CAIRS) which is a web enabled software to project the accidents status on the web for concerned authorities and common citizens. The participants got an insight of the software's utility and areas where it can be put to use to facilitate the concerned officials to review the status and plan out the strategy for future course.

The software provides an access to some of the concerned authorities including Atomic Energy Regulatory Board, Chief Inspector of Factories, Chief Controller of Explosives, Chief Inspector of Dock Safety and Chief Inspector of Mines but it is not accessible to the Emergency Response Centre, M.P. Pollution Control Board which is entrusted with the responsibility to ensure proper management of industrial chemical accidents. We feel that the Accidents related information, which is received by M.P. Pollution Control board in the prescribed Form-6 of MSIHC Rules, can be uploaded on web through CAIRS

platform. This is also very appropriate as the ERC has recently been given the responsibility to deal with issues related to 'Manufacture, Storage & Import of Hazardous Chemicals Rules 1989 and Chemical Accidents (EPPR) Rules 1996.

Shri Anil Kumar's presentation was followed by very useful talk by Shri D.M. Nema, Joint Director, Directorate of Industrial Health & Safety, GoMP. He shared very basic but useful tips that one should follow in routine day today life to avoid the possible chances of accidents in industry and off the industry. He also gave an effective presentation about safety aspects that one should follow while handling or transporting hazardous goods. A visual was also shown to the participants to sensitize them for mutual coordination and take lead role in their respective areas for ensuring accident free lives.

The two technical sessions were followed by feedback cum valedictory session Chaired by Shri H.V. Gurudutt. The other panel members included Shri Anil Kumar, Shri Asit Patra and Shri D.M. Nema and Dr S. Sarvanabham Manager Safety and Environment, M/s. Tata International Ltd. and Dr. T.M. Sonar from M/s. Grasim industries Ltd.

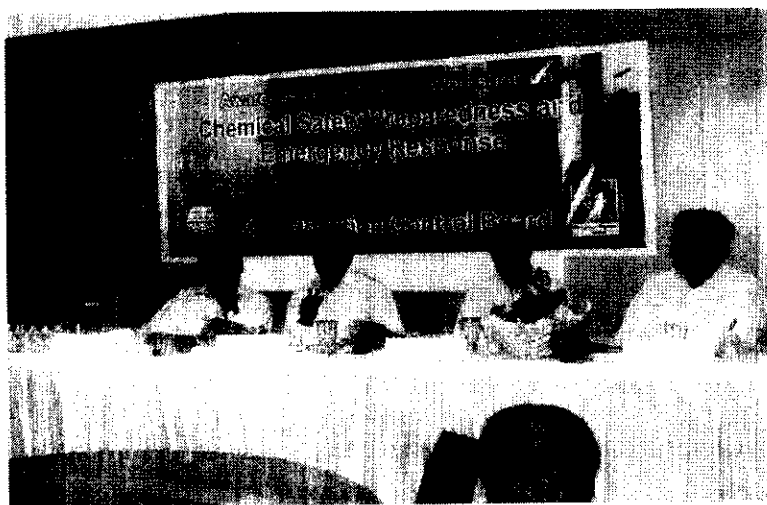
Shri Gurudutt expressed the need to include the presentation of case studies by industries in such training programmes to make programme more beneficial for the target participants. He praised the idea to conduct such training programmes at industrial sector to give opportunity to more people to attend and take benefit from it.

Shri Anil Kumar expressed the need to make use of web-based CAIRS in the interest of environment and especially for prevention of industrial accidents. He also assured to provide access to CAIRS to the Emergency Response Centre for projecting information on the web and make best use of the same.

Shri D.M. Nema, Joint Director, Industrial Health & Safety emphasized the need for such programmes on regular basis in different pockets of the State for wider awareness. The feedback received from the participants indicated their interests in such training and awareness programmes and they have suggested to conduct such programmes on regular basis.

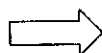
Dr. S. Sarvanabham, Manager Safety and Environment, M/s. Tata International Ltd shared with the audience the issues related to the onsite emergency plan and mock drills and Dr. T.M. Sonar from M/s. Grasim Industries Limited thanked ERC for taking up the out-reach program and expressed that such programs shall help develop better coordination amongst the industry, the first responders, regulators and the technical support group such as ERC and disaster management authority. Dr. T.M. Sonar also requested ERC to hold similar program at Nagda and promised to extend the full co-operation to ERC activities.

Dr. Rajendra Chaturvedi, Scientist, ERC conducted entire activity through out the day and helped build up the background material which was distributed in the form of C.D. alongwith other course material. The programme ended with thanks to the Chair, dignitaries and the participants by Shri Arvind Keshware, Sub-regional officer, MPPCB, Dewas.



**Chief Guest Shri  
H.V. Gurudutt,  
from CPCB,  
New Delhi,  
Giving the  
inaugural speech**

**The Audience  
engrossed in  
the academic  
deliberations**



0755-2463742 - Kind Attn. Sh. Chaturvedi se  
 केमीकल सेफ्टी प्रीपेयर्डनेस एंड इमरजेंसी रिस्पांस पर जनजागृति वर्कशॉप  
 दिनांक 31 मई, 2011 को देवास में उपस्थित उद्योग प्रतिनिधियों एवं  
 अधिकारियों के उपस्थिति विवरण.

क्रमांक	उद्योग प्रतिनिधियों एवं अधिकारियों के नाम	ई-मेल एड्रेस	मोबाईल नंबर	हस्ताक्षर
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7	Dr. S.M. Singh	Pithampur Tool Pvt	9303099145	
8	Rajon Jari	Jainraj & Patasuria Devas	8962052823	
9	Keshav Shrivastava	- - -	- - -	
10	Saligram Salindia	- - -	- - -	
11	Lalit Kulkarni	- - -	- - -	
12	Paramvir Chahal Yadav	- - -	- - -	
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24	Amaz Salunkhe	Laxmi Salves	932947448	
25	Dr. S.B. Tiwari	SRO MPPCB Meerut	9424333 861	
26	T.M. Sumar	VP GRASM	961004473	
27	S.K. Bhattacharya	Laxmi Salves	0756660721	
28	Sudrep Singh Parmar	Grasim and. Ltd	9827563135	
29	K.C. Jadhav Exports	Association of Indians	999386599	
30	MANOJ SARMA	Prati Nutrials Laxmi Salves	9302360 910	
31	S.S. Chugh	Laxmi Salves	8962002903	

32	Ashok Sharma	Paha International Lombard, Dewas	9926041500	Handwritten signature
33	SANDAY KAPOR	Sanday Kapor tstcinternational.com	8982002735 9893374860	Handwritten signature
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36	Santay Kothare	Gross and Chemical Dew	998744 8294	Handwritten signature
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40	Shamad Bhutya	Dewas Soyada	258807	Handwritten signature
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42	M. H. Khan	))	9826054752	Handwritten signature
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53	K.C. Jain	Kuber Lighting	9926437012	Amr
54	D.K. Roy	- H -	9826953661	Amr
55	Manoj Industries Mr. N. Kulkarni	Manoj Industries	9754112781	R.K.
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# A Web based Chemical Accident Information & Reporting System (CAIRS)



जहाँ है वन्यजन्तु ।  
यहाँ है सुराज्यम् ॥

## Chemical Accident Information & Reporting System

### CAIRS - AN INTEGRATED WEB BASED SOLUTIONS

It is a Web based System where concerned authorities as mentioned in schedule 5 of Manufacture, Storage and Transport of Hazardous Chemical Rule (MSHIC) Rule 1989 can online register (with password security) and post chemical accident information in the pre-set formats. It provides storage, accessing and analyzing data in visual form for all the information related to the chemical accidents happening in India. The CAIRS project has been developed by Environment & Forest Informatics Division of NIC in close consultation with Hazardous Substances Management Division of the Ministry of Environment & Forests.

### FEATURES

- ❖ Web based Customized software
- ❖ General Accident format for authorities
- ❖ Centralized database of Chemical Accidents
- ❖ Updated Chemical Accident details for all concerned authorities
- ❖ User authentication
- ❖ Online Reports/charts generation
- ❖ Simple and User friendly Design

### CAIRS MODULES

The Current version of CAIRS support following modules

- ❖ CAIRS Admin
- ❖ CAIRS For Authority
  - Data Updation
  - Add Industry
  - Change Password
- ❖ CAIRS Reports
- ❖ Charts

### CAIRS FUTURE

- ❖ CAIRS is primarily developed to store, retrieve and analyze data for Chemical Accident happening in India.
- ❖ Future enhancement can also be seamlessly integrated with existing modules.
- ❖ It is envisaged to add more modules to CAIRS or customize it as and when demand arises from the user.

## REQUIREMENTS

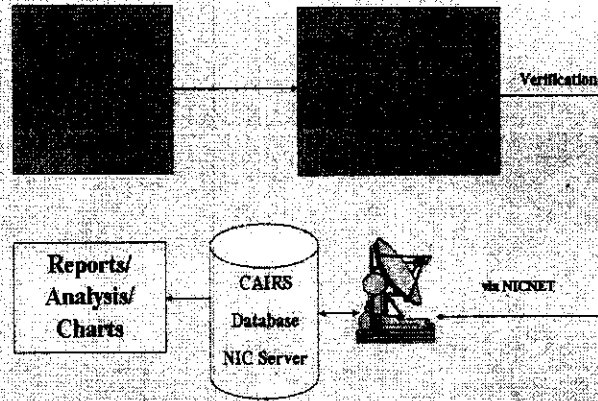
### ↓ Minimum Hardware Configuration

- ❖ Pentium IV machine with minimum of 512 MB of RAM
- ❖ Internet Connection (Total up to Broadband), Broadband recommended for fast access.

### ↓ Software Requirement

- ❖ Internet Explorer 6.0 or above (Browser).

## ACCIDENT DATA WORKFLOW OVER WEB



## PROJECT HAS DELIVERED.....

- ↓ A unique system for online reporting of chemical accidents in both pre-set & common format.
- ↓ A highly interactive web based, user friendly customized system for various authorities under MSIHC Rule
- ↓ Sharing of Chemical accident information among various authorities.

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