

Awareness-cum-Training Workshop on  
**Chemical Emergency – Preparedness & Response**

Friday, 27th November 2012

**Venue - Conference Hall, M/s Gas Authority of India Ltd., Vijaypur**

**Programme Schedule**

9.30 - 10.00 am.	<b>REGISTRATION</b>
	<b>Inaugural Session</b>
	Welcome address Shri K.B. Singh (GM) M/s . Gas Authority of India Ltd., Vijaypur
	Opening Remarks Dr. Gunwant Joshi, Chief Chemist, ERC, Bhopal
	Address from Guest of honour Shri TEC Vidyasagar, Ex.- Dy. Chief Inspector of Factories, Govt of A.P.
10.00 - 11.50 am.	Address by Chief Guest Dr. N.P. Shukla, Chairman, M. P. Pollution Control Board, Bhopal.
	Vote of Thanks Shri P. C. Uchariya Regional Officer, M.P.P.C.B., Sagar
	..... <i>Tea break</i> .....
	<b><u>Technical Session I &amp; Discussion</u></b>
11.15 - 11.45 am.	1. "Safe Environmental practices at M/s Gas Authority of India Ltd." By Shri B. Roy, Head, Safety & Environment, M/s . GAIL, Vijaypur
11.45 – 12.30 pm.	2. "The Environmental & Process Safety considerations at M/s NFL." By Shri S. M. Sinha, Dy. Chief Factory Manager, M/s . GAIL, Vijaypur
12.30 – 01.30 pm.	3. "Concept of Table-top exercise of Mock-drill for Emergency Response " by Shri TEC Vidyasagar, Ex.- Dy. Chief Inspector of Factories, Govt of A.P.
01.30 - 02.15 pm.	..... <i>Lunch Break</i> .....
	<b><u>Technical Session II &amp; Discussion</u></b>
02.15 - 03.15 pm.	1. Field Demonstration of On-site Management Plan mock-drill at M/s Gas Authority of India Ltd./ M/s. National Fertilizers Ltd. , Vijaypur by HSE Department,
03.15 - 04.15 pm.	2. Review of the Mock-drill & Post Event Analysis by Shri TEC Vidyasagar , Dr. Gunwant Joshi and Dr. Rajendra Chaturvedi
04.15 - 05.00 pm.	3. "Emergency Preparedness and Emergency Response Centre" By Dr. Gunwant Joshi, Chief Chemist, ERC, Bhopal
05.00 - 05.30 pm.	Feedback and Valediction followed by Tea.

**Organised by : Emergency Response Centre, M.P. P.C.B., Bhopal**

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Awareness-cum Training Workshop on  
**Chemical Emergency –Preparedness & Response**  
**Organized at Vijaypur, Dist. Guna on 27/11/2012 by**  
Emergency Response Centre, M. P. Pollution Control Board

**A Note on the proceedings of the Workshop**

The Emergency Response Centre, Bhopal, in coordination with Regional office, MPPCB, Guna organized one day awareness seminar under an out-reach programme on "Chemical Emergency – Preparedness & Response" at conference Hall of M/s Gas Authority of India Limited (GAIL), Vijaypur industrial area in dist. Guna, Madhya Pradesh on 27th November 2012. The awareness program was mainly focused at creating awareness among the industry personnel, administration people and the first responder groups regarding the hazards of Chemical emergency and importance of preparedness in meeting such an emergency to save life, environment and the property.

Shri K.B. Singh, General Manager, M/s. Gas Authority of India Limited, Vijaypur delivered the welcome address and praised the idea of such awareness activity at industrial area. He urged the participants to take full advantage of this workshop. His welcome address was followed by the floral welcome of the dignitaries on dais. The programme was inaugurated by Shri TEC Vidyasagar, Ex. Dy. Chief Inspector of Factories, Govt. of A.P., who was the Chief Guest on the occasion, by lighting the ceremonial lamp.

The opening remarks were made at the beginning by Dr. Gunwant Joshi, Chief Chemist and Head of Emergency Response Centre, Who explained the need of organizing such programme and highlighted the importance of preparedness in dealing with the chemical emergencies. He also gave a brief introduction of the "Out-reach" activity of ERC.

Shri K. C. Jain, Tehsildar, Raghogarh, who was special guest on the occasion, said in his deliberation that the safety is responsibility not only of the Government departments or industry people but it is a collective responsibility of all and everyone in the society should take this in real spirit. He said that ERC should take-up the issues of chemical safety and preparedness not only with its member industries and the first responders but also with the people living in the vicinity of industries and establishments where hazardous chemicals are used and handled so that they are not taken by surprise and may be able to extend crucially useful support and instill a sense of confidence in the nearby community.

The chief guest of the function, Shri TEC Vidyasagar highlighted the issue and briefly explained the national scenario with respect to the chemical industry. He stressed the need to give highest priority to the environment and safety related aspects at all kinds of industrial installations. He pointed out that the safety does not cost much as compared to just one chemical accident which can cost the country dearly, besides loss of lives and damage to the environment. He also stressed on the importance of the safety and need to uphold high level of preparedness to avoid the chemical accidents culminating into disasters. He asked the industries to avail full benefits of these initiatives and share freely all their concerns with the ERC and the MPPCB in their own interest and the national interest.

The Vote of Thanks was extended by Shri P.C. Uchariya, Regional Officer, M.P. Pollution Control Board, Guna. In his address, he appealed the audience to carry the message of safe practices in the chemical process and requested the industries to adopt the safe practices in their own industrial installations by implementing the lessons learnt at the workshop.

A total of 55 participants from various industries, the first responders and the regulators, attended the programme and were benefited from the workshop.

The technical programme was divided in to two sessions, the first comprising of two lectures and a table-top exercise for conducting mock-drill. The second technical session had a live fire mock-drill exercise near Propane storage area in the premises of M/s Gas Authority of India Limited, Vijaypur to give a practical exposure to the participants regarding on-site emergency management, followed by evaluation of mock-drill exercise to highlight the weaknesses and the strengths observed during the mock exercise.

The 1<sup>st</sup> technical session was opened with the deliberation by Shri B.Roy, Head (Safety & Environment) at M/s Gas Authority of India Ltd.. He spoke about the safe environmental practices being adopted at M/s GAIL. All the participants were also briefed further about the code of conduct and the protocol to be observed during the mock-drill inside the plant. A video film on plant and process safety was also shown.

This induction training presentation was followed by another deliberation by Shri S. M. Sinha Dy. Chief Factory Manager, M/s National Fertilizers Limited (NFL), Guna. He talked about "The Environmental and Process Safety considerations at M/s NFL". In his deliberation he presented the safety norms that are being observed at their plant site. Importance of mock-drill exercise and implementation of on-site emergency plan & off-site emergency plan was also highlighted in his address. The presentation also included the accident management mechanism being adopted by them to mitigate an accident or chemical emergency. Issues such as awareness among the people living in the vicinity and 'mutual aid' with the other units in the area were also discussed during this session to let the participants know about the importance so they can develop the same practice in their respective areas.

This was followed by introduction to the Table-top exercise of the mock-drill and its importance by The Expert guest speaker Shri TEC Vidyasagar. Shri vidyasagar while speaking on his topic "On-site Emergency Management Plan and Concept of Table-top exercise of Mock-drill for Emergency Response". Talked about the various components of on site emergency plan that are to be considered while at site during the mock-drill, role of observers, role of all the team members etc. were also explained at sufficient length to the participants. He gave a very elaborated and informative address to the participants on chemical emergency wherein he covered many important issues related with on-site emergency management, risk analysis, consequence analysis and mock-drill exercise. Photographs of Past accidents at other industrial installations in various sectors in other States were also shown to the participants to have an appreciation about the damages and what should have gone wrong in to it.

The presentation was followed by 'field demonstration of on-site management plan and mock-exercise to give a practical exposure to the trainee participants. The exercise was also aimed to assess the strength and weaknesses of the emergency management plan. The mock-drill was headed by Shri B. Roy, Head Environment & Safety, M/s GAIL and the review of the task was done by expert Shri TEC Vidyasagar along with the participants who were independent observers of various operations of mock-drill.

The scenario was the outbreak of fire near Propane storage area inside the premises. The mock-drill started at 1507 hours and completed at 1528 hours. The emergency was initiated by blowing emergency siren which triggered various emergency actions by the concerned staff as stipulated in the emergency plan.

The process of emergency mitigation included the use of water canon and foam jet through the stationary as well as mobile fire equipment and foam tenders which helped in containing the effect of fire. Outside help from the adjoining industry M/s National Fertilizers Limited was also sought who immediately sent the fire tenders to control the fire. The medical staff and ambulance were also pressed into service to lift and carry the injured personnel affected due to heat radiations. The response of management and field equipment preparedness were tested during the drill. Water curtain was formed at the fire site to prevent the heat radiations to travel farther. Water jets were put to operation to keep the temperature of the area under control. An all clear was declared by the incident commander and the siren was blown at 1528 hours declaring the completion of the Mock drill exercise. This was followed by head count exercise at the assembly points and debriefing session .

Review of the mock-drill and the process of post event analysis was facilitated by Shri TEC Vidyasagar and ERC team. The gaps and lapses observed in the emergency management and the actual conduct of the mock-drill were discussed in detail along with the tips for the improvement

A powerpoint presentation was given by Dr. Gunwant Joshi about Emergency Response Center and its aims, objectives, functions etc. The participants were made aware about the strengths that ERC possesses to assist the target groups in times of chemical crisis situation. The participants were also briefed about the operation and functioning of ERC and how the industry people and other relevant groups can take the benefit of ERC's facilities. The out-reach programme initiated by the ERC in the larger interest of chemical safety and environment were discussed during the session.

The velidiction was marked by the penal discussion, wherein, TEC Vidyasagr, Shri K.B. Singh and few participants praised the idea to conduct such training programmes at industrial sector to give opportunity to more people to attend

