

### **APELL Programme and Success Stories**



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# **UNEP APELL Programme**



 Both a process and a UNEP Programme established to help promote and expand its application

- Main purpose of APELL:
  - to increase the awareness of communities to local industrial and man-made hazards
  - to help them be better prepared for emergencies





# APELL dates back 25 years



- Established in 1986 in partnership with the US EPA, CEFIC and the international chemical industry (right after the 1984 Bhopal and Mexico city accidents)
- 1987: UNEP's Governing Council requested the Secretariat to take into account existing international initiatives - such as the "Community Awareness and Emergency Response" (CAER) programme developed by the chemical industry
- 1988: publication of the APELL Handbook





# APELL dates back 25 years



- APELL (1989 2011): UNEP published several guidance materials and promoted a series of awareness raising workshops and pilot demonstration projects, in more than 30 countries, leading to APELL implementation communities worldwide;
- In 2014: Update of APELL Handbook, with experiences and case studies and new tools





## Recent activities and next steps



- Update of the handbook
  - To better reflect the increased complexity of industrial operations
  - APELL 'phases'
  - State-of-the-art tools
- Training of Trainers
  - Aims at leveraging the existing expert network
  - Further promote APELL and the regional level around the world

# Virtual network Global APELL Platform





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# Why APELL?



#### Lack of Awareness

"I never expected that such an accident could occur"

### **Lack of Preparedness**

"These impacts of an accident could have been limited if only there had been an emergency plan in place"



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### What does APELL do?



- Identifies **possible hazards** in the community
- Raises awareness of such hazards and the steps taken by industry and authorities to protect the community
- **Trains** the public on actions to take should an accident occur and thereby build communities' resilience
- Promotes **co-ordinated preparedness** among the stakeholder groups in a community
- Develops or updates local emergency response plans
- Builds **local capacity** for multi-party coordinated response in the event of an emergency







- Enhanced local knowledge of industrial and natural hazards
- Informed community about the risks they are exposed to
- Educated community on how to react to accidents/disasters
- Promotion of co-ordination between representatives from the industry, local institutions and the public
- Preparation of an integrated plan for community response to emergencies



















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### **APELL Handbook & Sector Guidance**



- Technological accidents (chemical industry)
- TransAPELL
- APELL for Port Areas
- APELL for Mining
- Tourism Destinations
- Multi-hazards





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### **APELL for Port Areas**



- Published in 1996 with IMO
- Presents how to implement APELL in the context of a port area
- Presents cases of accidents in or near port areas illustrating the need for integrated emergency planning for accidents
- Highlights special considerations which apply in Port Areas
- Proposes a 5 tiered structure for emergency planning for port areas:
  - Ship/facility
  - Port/maritime authority level
  - City/provincial level
  - National
  - International



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### **TransAPELL**

- Guidance for Dangerous Goods Transport Emergency Planning in a Local Community
- Published in 2000
- Focus on shipping, distribution and transport of dangerous goods:
  - Land transport of DG: road, rail and pipeline
  - Transport Interfaces (ports and airport)
- Intends to supplement the provisions of national and international law



### **Case Studies**



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# Colombia- Barranquilla



- Initiated in 1990 by the local chemical industry with the support of the National Association of Industries of Colombia, the APELL process is implemented in Barranquilla in coordination by a group of companies, representatives of the Government and communal leaders.
- Main achievements: the development of a number of locally adapted pedagogical resources such as videos and an 'Apelito'





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### Peru- TransAPELL



- NGO RAPID LA is applying the APELL methodology to the realities of Peru
- Has been adopted by 50 communities located in the Departments of Ancash, Cajamarca and Lima
- Local level efforts are supported by the Antamina Mining Company, the Barrick Misquicicla Mining Company-Pierina Unit, the Gold Fields La Cima Mining Company and Rio Tinto Minera Peru.
- Key characteristics and successes include the participatory hazard identification moderated by NGO RAPID LA, repeated emergency drills and CinemAPELL campaign.





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# Romania- APELL for Mining



- Since 2006, as a result of interest for restoring and/or ensuring environmental integrity at mining sites.
- In 2007, the APELL National Centre for Disaster management Foundation established that focuses on risk prevention, mitigation strategies and community training and preparedness.
- The APELL process contribute to the improvement of existing emergency plans by involving and training members of the local community.



### INTERNATION. COUNCIL OF CHEMICAL ASSOCIATION:

### India



- Led by the National Safety Council of India (NSCI), APELL has been successfully implemented since 1992 in six high risk industrial areas.
- "The Chemical Accidents emergency Planning, Preparedness and Response Rules" (1996) provided legal backing to the formation of APELL-like co-ordination groups called Local Crisis Groups (LCGs) in all industrial areas having hazardous installations.
- 2002 the first national APELL Centre in Mumbai and 2 others in 2004 and 2006





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# Argentina

- An example of APELL implementation in an industrial port, initiated in 1996 at a large petrochemical site
- Serious stakeholder engagement & community outreach
- An emergency communications centre vigilance system established
- Training, awareness and confinement drills in schools, clubs and community institutions
  - More than 100 safety drills have been conducted in 2010-2011





# **APELL Worldwide**







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### What does APELL do?



- Intention: to understand the risks in the community and work with everyone in that community to establish roles and responsibilities associated with these risks.
- Focus on local community:
  - Coordinating group is key, involving representatives of all stakeholders: effective, inclusive
  - Process is owned, implemented and maintained by individual communities
- Encourages local authorities, owner of risks and community to sit at the same table
- Each community adapts the APELL process to its specific conditions: coordinated emergency plan and education/ outreach policy

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## What does APELL do?



- Recognises that community members have roles and responsibilities for preparedness:
  - Relying on emergency services alone is not adequeate
- Allows communities to identify gaps, prioritise and strategically plan:
  - It is not possible to fill ALL possible gaps that may exist





# Overview of the APELL process







### **Overview of APELL Process**



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# Overview of the APELL process



Identify participants and define their roles	
Evaluate an	d reduce risks
	<b>~</b>
Review existing plans	and identify weaknesses
	<b>~</b>
Task identification	
Match tasks and resources	
Integrate individual plans into overall plan and reach agreement	
Draft final plan and	d obtain endorsement
Communication and training	Testing, reviewing, and updating
	Evaluate an Review existing plans  Task ide  Match tasks  Integrate individual and reach  Draft final plan and

**Community education** 



#### 1. Identify participants & define their roles







- List potential participants in emergency response activities.
- Obtain copies of existing emergency plans: for industrial and natural hazards and events
- Prepare description of all participants, roles and the resources (personnel, equipment, facilities, special

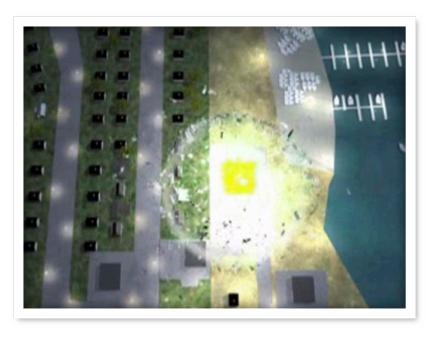
expertise)



#### 2. Evaluate & reduce risks







- List potential hazards both **industrial and natural hazards** which have resulted, or may result in emergency situations in the community
- Conduct risk assessment: involve experts in both industrial and natural hazards
- Define the magnitude of the risk and the potential severity of the impact
- Locate people and environmental assets exposed or at risk (e.g. maps)
- List risk reduction measures (existing and needed)

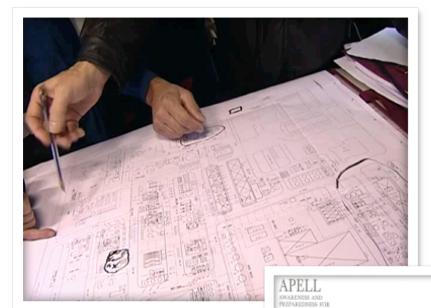




#### 3. Review existing plans & identify gaps







- Have participants review their own plans (Annex 4 of the APELL Handbook)
- Identify strengths and gaps (Annex 10 of the APELL Handbook)



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#### 4. Task identification







• In the context of an integrated response, identify and list required tasks which are not covered by by existing plans



#### 5. Match tasks & resources







- Evaluate each of the unassigned tasks
- Assess resources needed to complete these tasks
- Undertake review meetings





### 6. Integrate individual plans into overall plan & reach agreement







- Prepare a draft plan using a format acceptable to the lead government agencies
- Review the plan against the planning elements in Annex 4 of the APELL Handbook
- Conduct a tabletop role-playing exercise (include multi-hazard events)
- Identify gaps of the integrated community plan
- Ensure consistency with regional / national disaster preparedness plans





#### 7. Draft final plan & obtain endorsement







- Commit the plan to final writing
- Make presentations, hold meetings and review sessions to all relevant government authorities to obtain approval



#### 8. Communication & training







- Compile a list of participating agencies who will need to know more about the plan
- Make presentation to explain the plan, the roles
- Identify training needs
- Develop and implement training sessions
  - drills for hands-on training and tabletop exercises





#### 9. Testing, reviewing & updating







- Prepare a test drill scenario
- Undertake the drill/exercise
- Analyse the results
- Correct deficiencies and revise the integrated plan
- Prepare a procedure for an annual review of the plan





#### 10. Community Education







- Prepare a brochure and a media kit
- Prepare an event/training session to present the kit and distribute the brochure (strategy for risk communication)
- Implement elements of a public education programme



## Conclusion: expected results



### Local community is aware of...

- existing hazards and risks
- exposed assets and vulnerabilities
- official (e.g.: municipal) emergency planning
- appropriate individual and collective response

#### Emergency services are...

- coordinated
- prepared to respond to emergencies
- able to provide coordination and information systems





### Additional benefits



- Improved communication and trust among communities, industry and authorities;
- Improved understanding of risk within the community;
- Regular review of risks in the community;
- Improved understanding of existing capabilities

