

Lessons Learned From Networks Based on Information Sharing in Mexico to Strengthen Waste and Chemicals Environmental Management Capacities

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Mexico has a territory of about 2 million square kilometers and a population of more than 100 million inhabitants, as well as an incipient capacity for the environmental management of wastes and chemicals, making necessary the informed and organized participation of all social sectors to support governmental efforts to achieve chemical safety and waste reduction, recycling and environmentally sound disposal.

In 1996, the Mexican Government was invited by the Panamerican Health Organization (PAHO) and the International Agency for Technical Cooperation from the German Government (GTZ), to join the Panamerican Network on Environmentally Sound Waste Management (REPAMAR), formed by Argentina, Brazil, Colombia, Costa Rica, Ecuador, Panama and Peru, to exchange information, knowledge and experiences –through Internet- in order to strengthen waste management capacities in the Latin American region.

In response to that invitation, the Mexican Network on Environmentally Sound Waste Management (REMEXMAR) was created. Considering the extension of the territory and the different needs at the local level, the Ministry of the Environment, Natural Resources and Fisheries (Semarnap), decided to promote the creation of similar networks in each of the 32 federal entities. Such networks have been formed with the voluntary participation of members of governmental agencies, industry, academic sector, non-governmental organizations and every person interested in strengthening waste management capacities in their communities.

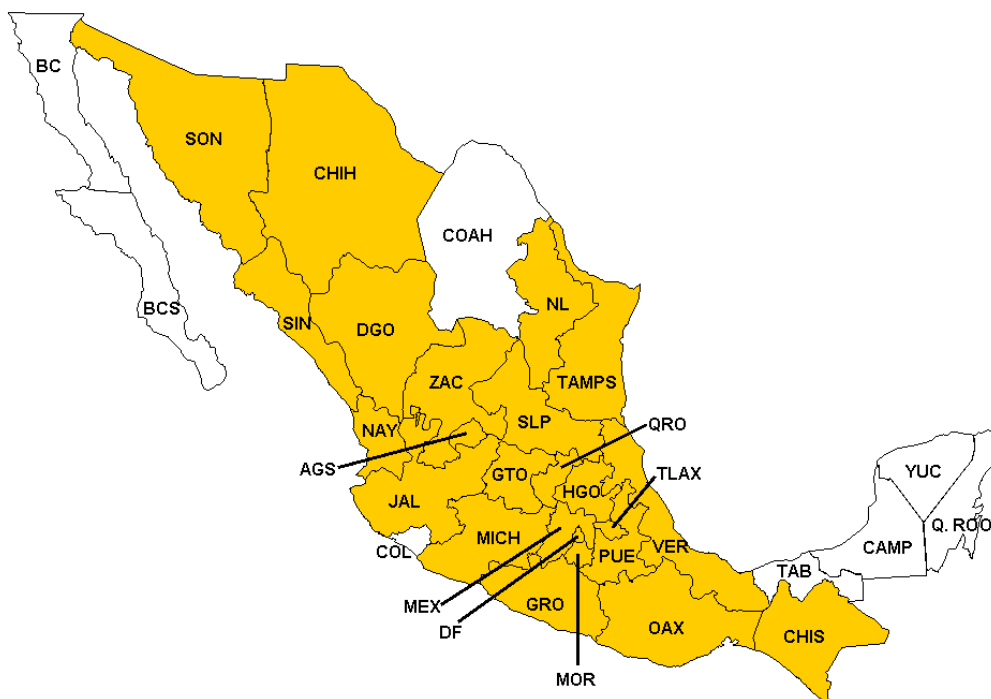
Between 1996 and the year 2000, about 22 of such networks were created, some of which remain active and have created Web pages such as the following: (www.remexmar.org, www.geocities.com/remexmar.jal, www.remexmar.morelos.org, www.reqmar.org, www.segam.gob.mx).

In October 2003 the General Law on Waste Prevention and Integral Management was published and the Ministry of the Environment and Natural Resources (Semarnat) decided to activate the REMEXMAR networks or to create new ones, with the idea of involving them in activities to support local legislators and governments in the development of the regulatory and non regulatory instruments needed to implement the new legislation, as well as in education, training, technical assistance and other related activities. The map in the next figure shows in which states the network has been

¹ President of the Queretaro Network on Environmental Waste Management (www.reqmar.org), (www.cristinacortinas.com). The author has collaborated with legislators at federal and state level to develop the new legislation and regulatory instruments for waste prevention and integral management.

activated or created during 2004-2005, and there are plans to complete the network with the participation of the 8 remaining states in 2006.

REMEXMAR Networks Activated or Created in 2004-2005



The author of this document was involved in the creation of the REMEXMAR networks as General Director on Chemicals and Hazardous Waste Management at Semarnap till the year 2000 and became the President of the Queretaro network (www.reqmar.org). As an independent environmental consultant, was invited by Semarnat to develop training courses on the new waste legislation as well as to create or activate the networks all over the country.

It became evident after visiting the different states and getting in contact with the networks, that some factors are key for the success of their operation and their survival, such as the following:

- Leadership of the persons/organizations that form the directive board of the networks.
- Support from government agencies at federal/local level.
- Interest from the industrial, academic or social sectors in developing concrete projects for their own benefit.

Some of the limiting factors that contribute to the weakening or disappearance of the networks are:

- Scarce access to information, knowledge and training on waste management and few technical related norms (common as well in the case of chemical management).
- Lack of experience or training in the administration and operation of multisectorial networks and work teams.
- Ignorance of means for the financial sustainability of the networks and poor experience in developing projects that could obtain funding from national or international agencies.

In order to contribute to eliminate such barriers for the success of the above mentioned networks, the author of this document decided to create a personal Web page (www.cristinacortinas.com), through which information can be obtained for free on topics related to waste and chemical management, chemical accident prevention and other related issues. Most of the documents available at the Web site have been elaborated by the author of the page: a) in response to requests from those who consult it, b) to facilitate the interpretation of the new waste legislation, c) as training material, d) as conference materials. Others are documents from different authors or countries (some have been translated into Spanish to facilitate its analysis), to put into perspective what is happening in Mexico and in other areas of the world.

To increase the possibility that the documents could be read and used as reference by those who need the information on the particular issues that they cover, they are sent to more than a thousand e mails from persons from all over Mexico and some Latin American and Caribbean countries (most of them persons that are not known by the author from government agencies, industry, academic and social sectors).

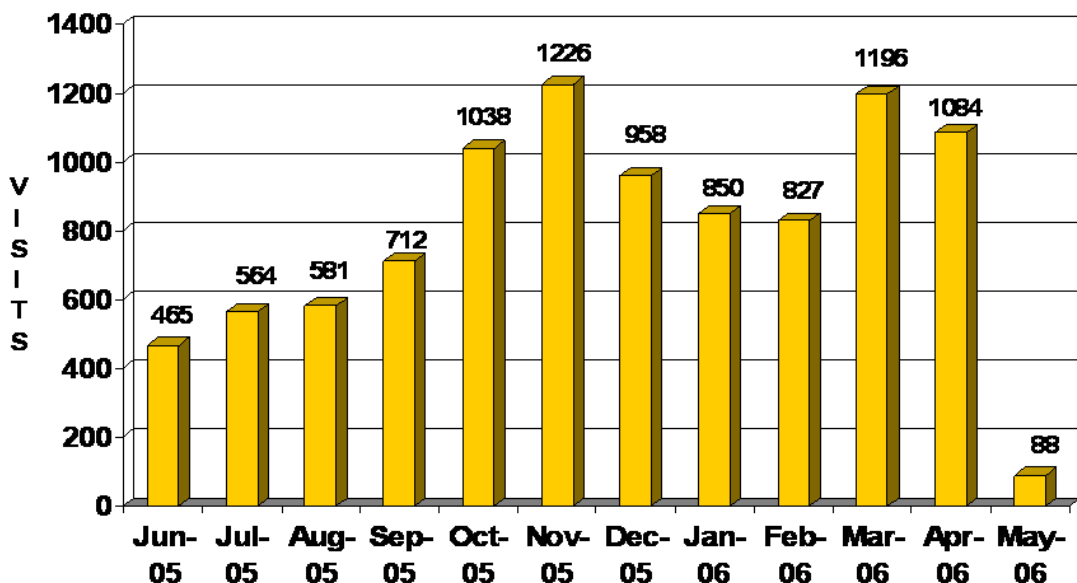
It is worth to mention that after four years sending these documents to people that did not asked to receive them, their reaction varied and include:

- Suspicion about the reasons behind the distribution of information for free and not demanded by the recipient.
- Requests to stop sending the information because of lack of interest in the subject.
- Gratitude.
- Admiration to the effort.
- Interest in continuing receiving it.
- Interest in sharing their own information.
- Interest in establishing some form of collaboration.
- Invitation to participate in concrete projects of technical assistance.

The following figures show the number of consultations to the Web page between June 2005 and May 2006 and their origin in April 2006. By example, some professors are now using the information on the Web page as reference material for their courses; students are using it to prepare their thesis, waste generators to prepare their management

plans, regulators to orient their work. Some countries in the Latin American and Caribbean region have asked for advice on questions related with hazardous waste and solid waste regulation and management or invited the author to give conferences or take part in training courses to share these experiences.

Number of visits to the Web page between June 2005 and May 2006



Number of Hits per country in April 2006

#	Hits		Country
1	43,240	68.02%	Mexico
2	9,157	14.40%	Unresolved/Unknown
3	3,767	5.93%	Network
4	2,202	3.46%	US Commercial
5	1,924	3.03%	Peru
6	1,102	1.73%	Argentina
7	765	1.20%	Colombia
8	337	0.53%	Greece
9	281	0.44%	Brazil
10	189	0.30%	Ecuador
11	156	0.25%	Germany
12	135	0.21%	Non-Profit Organization
13	95	0.15%	Chile
14	76	0.12%	Spain
15	55	0.09%	United Kingdom
16	53	0.08%	Sweden
17	8	0.01%	Seychelles
18	8	0.01%	Uruguay
19	5	0.01%	US Educational
20	4	0.01%	Paraguay
21	2	0.00%	Costa Rica

22	2	0.00%	Guatemala
23	2	0.00%	Japan
24	1	0.00%	Old style Arpanet (arpa)
25	1	0.00%	Canada
26	1	0.00%	Nicaragua
27	1	0.00%	Venezuela

At present, the author of this document is working (as temporal consultant) as National Coordinator of the project to habilitate Mexico to develop the Stockholm Convention National Implementation Plan at the Semarnat, which is interested in developing a similar approach as the above mentioned to:

- Create chemical groups at the REMEXMAR networks.
- Open a Web page to provide as much information as needed to involve the participation of all sectors in the safe management of chemicals and the development of the National Implementation Plan.
- Send through e mail the information all over the country to multiply the opportunities for reaching key sectors of the society at the local level.