

**The Showcase of 3Rs Good Practices**

Date: January 18th, 2006

Country/Organisation: SGPA/DGGIMAR (México)

| No. | Name of the practice                                   | Summary of the practice<br>-level of implementation(national, local, industry, NGOs/NPOs)<br>-duration<br>-stakeholders involved   | Impact:<br>-Improvements after the introduction of the practice   | Key For Success<br>What are the major reasons for the success of the activity?   |
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| 1   | Crusade for cleaning México                            | <p>The Crusade for Cleaning Mexico is a national effort that implies programs like clean school, clean localities and solid wastes management, among others. At the moment the Crusade is a consolidated program that counts with success experiences and it's linked to other programs of the government. Examples of stakeholders involved are: GTZ (German Technical Cooperation Agency), local and regional governments and NGO's.</p> <p>One of the key goals of this effort are related to reuse and recycle actions</p> | <p>The Crusade looks for to incorporate, to educate and to raise consciousness on the values and a respect culture for the environment through key axis like the initiative of 3R's.</p>  | <p>It's necessary to arouse the participation of different sectors from the Mexican society to strengthen the awareness on the environment and the caring of our natural resources, because only with its commitment and its actions, the environmental deterioration of our country can be stopped.</p>   |
| 2   | Management plan for used oil                           | <p>The Management plan for used oil is an initiative that at the present time is in the phase of approval by the government, the main target is environmental sound management to the used oils in all the country as of 2006.</p>   | <p>The implementation of the plan will reduce the impact of used oil in the environment, as well as to take advantage of its potential like alternative fuel, and of course reducing, reusing and recycling it.</p>   | <p>It's fundamental the consolidation of waste markets, the substitution of conventional fuel by other alternative ones, and reducing the environment pollution caused by the inappropriate disposal of used oils.</p>   |
| 3   | Co-processing of hazardous in the cement kiln industry | <p>Even when there are many kinds of hazardous wastes, that are suitable to use as alternative fuel or being incorporated in the process as raw material, there exists a negative list of wastes that are not allowed to feed into cement kilns. These list is always part of the transact permit that every cement kiln has to get from the Authority in order to feed hazardous wastes.</p>  | <p>The benefits to the environment arising from the industry of cement, taking place on the matter of hazardous waste management are basically two: the first one of them is related to the huge kind and big amounts of hazardous wastes that are susceptible to feed a cement kiln and being used as alternative fuel or as raw materials in the cement production, both going on in a very secure way for the environment, because the high temperature and long time of residence that are necessarily applied in a cement kiln, which has as final purpose the production of cement not the waste management, and because of that, the two parameters mentioned before are always steady, and that guarantee a very low environmental risk; also these kind of facilities have a very strict emission control. The second one, is the great saving of conventional fuel, a no renewable resource, when it's substituted by hazardous wastes, leading the use of these conventional fuels for process which do not have the security controls and operational characteristics for using hazardous wastes in them.</p> | <p>There are many elements that have contribute to the successes of the participation of cement kiln industry in hazardous waste management, but the most important of them are mentioned below: The active participation of The Cement National Chamber (CANACEM) and The Cementos Cruz Azul enterprise, in The generation of The agreement CANACEM-SEMARNAT- Sociedad Cooperativa La Cruz Azul, S.C.L., for The hazardous waste management in Cement kilns. The high number of facilities that the Mexican cement industry have all across the country, which allowed it to be an acceptable option for the disposal of the hazardous waste for many generators.</p> |

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| 4 | Recycle of plastics [polietilentereftalato (pet)] | In Mexico a plant for recycling packages of PET was inaugurated recently, unique in its type in Latin America, because it has a capacity of processing up to 25 thousand tons per year. In this plant the amount of PET will be extended beyond the amount that today is recycled in the country, and that ascends to 75 thousand tons annual. The new plant will process around one thousand 900 million of packages, that will contribute to almost 7 percent of the total of PET bottles that produces the industry in Mexico. In addition, the factory called Mexican Industry of Recycling (IMER), will contribute to elevate the number of recycled products, since at the present time two of each 10 packages are collected. | The main uses of PET recycled in Mexico are destined to the fiber manufacture of polyester, for product elaboration like rugs, articles to dress and fillings, iron strap, or for exporting. In last dates, in the just inaugurated plant, also PET is recycled to elaborate packages, from pellets recycled again. In other countries PET is recycled for the thermoform: lamina manufactured that is used for plastic wood, additives or supports of paving and manufacture of new bottles multilayer. Also it is possible to be used like fuel for the energy generation and like raw material for the virgin production of PET. | The key for success is the participation and the association of the government and the industry, both along with the intervention of materials chains of PET and the awareness of the civil society.  |
| 5 | recycle of dust for metal smelting industry       | A facility located in Monterrey uses the dust from the electric furnace on smelting process to convert it in raw materials like zinc, cadmium, and other metals, which illustrate that reuse and recycling could be feasible and an economical support for the Mexican industry.   | As a result of the zinc recovery, this facility produce oxide of zinc with nutritional degree for animal's balanced food and in agricultural fertilizers, raw material for the ceramic industry, the industry of the rubber takes place, painting industry, production of rims and chemical industry. The company offers direct and indirect jobs for about 4500 people and have obtained the certificate of clean industry by PROFEPA.   | The technology of the plant has been developed through 30 years and is one of the success keys, as well as the demand of its products in the international market. The company doesn't jeopardize the environment and enjoys good relations with the population of the community that surrounds it, this is considered as highly exporter and 60% of their facilities are subjected to the environmental control. |