

## **American Public Works Association (APWA) on Pharmaceuticals: It's Time for Producer Responsibility**

**Published March 2010 Edition of APWA Reporter Magazine**

**Ziad Y. Mazboudi**, PE, LEED AP, CPSWQ, CPESC, Senior Civil Engineer/Environmental Division Manager, City of San Juan Capistrano, California and member of the Solid Waste Management Committee; **Heidi Sanborn**, Executive Director of the California Product Stewardship Council

As we are well aware, pharmaceuticals are ending up everywhere – in our water, our seafood, and in the ground, and there is much more to learn about the full impacts of pharmaceuticals escaping into the environment.

While we continue to document what changes are occurring in the environment and with human health due to exposures from waste pharmaceuticals, we should also work towards implementing solutions to prevent unnecessary exposure. The saying that prevention is worth a pound of cure may prove to be very true with pharmaceuticals.

While we have not yet identified how to control the pharmaceuticals that enter our environment from normal use, we can work now to control exposure due to “waste” pharmaceuticals. While local, state, and even congressional committees in the U.S. discuss what to do, other countries have already implemented a preventative policy measure called Extended Producer Responsibility (EPR) also known as Product Stewardship, to ensure a collection infrastructure is funded and managed by the corporations who created and profited from the sale of those drugs: the pharmaceutical industry. This concept can be applied to various types of waste, not just pharmaceuticals.

In fact, many companies that sell pharmaceuticals in the U.S. also sell into other countries such as Australia, Canada, Portugal, and Spain which have implemented pharmaceutical take-back programs, some for over a decade.

### Spain

The pharmaceutical industry in Spain complied with the [European Union Packaging Directive](#) by starting a non-profit called SIGRE in 2002 to establish and operate the collection of packaging of pharmaceuticals and the unused pharmaceuticals in them. This quote is taken from page 55 of SIGRE's [2007 Annual Report](#):

*SIGRE is the system of selective collection set up by pharmaceutical laboratories to allow citizens to dispose of out-of-date or non-used medicines they have at home. This avoids that packaging, or the remains of medicines in them, can be mixed with other domestic waste and finish in household rubbish or the drains, contaminating our environment.*

The report goes on to say that the public is embracing the program and each year they see an increase in pharmaceuticals collected from 2.5 to 4.8 kg/1000 persons per month between 2003-2007. But that is only half the story. Implementing an EPR system where the industry has a financial feedback mechanism because they are required to take the packaging back, gave them an incentive to reduce packaging, and resulted in the laboratories implementing 144 prevention measures affecting 26.6 million packages which reduced their weight and volume while ensuring that materials chosen for the packages were the most environmentally friendly.

### Canada

In the province of British Columbia, the Mediations Return Program is operated by the [Post Consumer Pharmaceutical Stewardship Association](#) (PCPSA) created in 1999 to manage safe disposal of unused or expired medications returned from the public. The PCPSA provides the pharmaceutical and consumer health products industries with a collective means of adhering to the requirements of the [British Columbia Recycling Regulation](#). The PCPSA is funded by approximately 95 pharmaceutical companies and brand owners and has a 12 member board. In 2008, they have pharmaceutical collections in 95 percent of licensed pharmacies in the province which equates to 942 pharmacies. The PCPSA is responsible for the public awareness campaign to maximize public awareness of the program as well as providing annual reports to the provincial government on the program statistics. The public simply returns unused drugs to a participating pharmacy and the container and drugs are collected – the containers are recycled if possible and the drugs are incinerated at high temperature. Collections increased from 23,384 kg in 2007 to 35,704 kg in 2008. In 2008, the entire program only cost \$315,000 Canadian dollars with the province which has 4.4 million people.

### Support for an EPR Solution

These examples of good stewardship by pharmaceutical companies and brand owners is gaining attention in the U.S. In fact, the National Association of Counties adopted [a resolution](#) in support of EPR solution for pharmaceuticals in July 2009 and November 14, 2009 the National League of Cities adopted [a resolution](#) in support of principles of product stewardship which support internalizing cost of end of life in the product price and having the solution designed and managed by the producers. Additionally, thanks to the support, advice and coordination of the [Product Policy Institute](#), there are now five [Product Stewardship Councils](#) in the U.S. including [California](#) and [Texas](#) which would be supportive of such efforts. Local governments across the country are trying to tackle the problem by starting their own collection programs, funded by the taxpayers and ratepayers, but these programs are at risk of losing funding as local governments continue to see funds drop.

APWA solid waste management committee sponsored an advocacy position statement on the safe disposal of pharmaceutical waste that was supported by the Water Resources Management Committee for the Board to adopt. This is planned to take place later in the year.

## Conclusion

For pharmaceuticals, and many waste products, it is time for us to change the paradigm and implement product stewardship policies. These policies have worked for over 10 years in other countries and are seeing success and reducing potential damage caused by improperly managed pharmaceuticals. The public wants to have convenient collection available to them, we want to provide it, and its time for the pharmaceutical industry to step up and help as they have proven they can do cost-effectively in other countries. You can work in your area with your legislators to inform them that you support such a position for future legislation. If you are interested in reading about APWA's advocacy position on this matter or other matters, you can check them out at <http://www.apwa.net/Advocacy/positions.asp> .

Ziad Y. Mazboudi can be reached at 949-234-4413 or [zmazboudi@sanjuancapistrano.org](mailto:zmazboudi@sanjuancapistrano.org). Heidi Sanborn can be reached at 916-480-9010 or [Heidi@CalPSC.org](mailto:Heidi@CalPSC.org)