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Interview with Cary Perket

“It was, and remains, exceptional to be able to say definitively whether a substance is safe or hazardous”

Cary Perket is CEO of the The Envirobiz Group Inc., a consultancy and research company in the field of resource preservation and environmental protection in North America. The company is naturally involved in management of hazardous and non-hazardous waste and preservation of the resources it contains.

How has regulatory policy on hazardous waste been changing in the United States?

Hazardous waste regulations in the United States are primarily based on the Resource Conservation and Recovery Act (“RCRA”) of 1976 and the subsequent Hazardous & Solid Waste Amendments (“HSWA”) of 1984. The command and control regulatory approach embodied in the RCRA and HSWA legislation has fallen out of political favor and much of the USEPA regulatory initiatives in recent years have been to provide regulatory relief from the “cradle to grave” controls embodied in the RCRA and HSWA.

What is the most important current federal hazardous waste regulatory policy initiative?

The most important recent regulatory development, in my view, is a new regulatory definition of solid waste. Theoretically, the change in regulatory definition of solid waste will settle the controversial question of when a residual from human endeavors is considered to be a solid waste and when it is a resource. The regulation’s goal is to reduce the regulatory burden/costs on recycling from federal RCRA regulations. It should be pointed out that individual states are not obligated to accept this change. The USEPA had exempted the

processing operation at recycling plants from RCRA facility permits back in the 1980s. However, some facilities had the need to store incoming materials, and previously this did require RCRA storage permits. The net effect of these regulations, from a regulatory perspective will be to therefore further reduce permitting requirements and eliminate other federal regulatory burdens. What is unique about this particular initiative is that it has come about not because of individual states taking similar unilateral comparable regulatory reforms, but as a federal level initiative. The states are not obligated to adopt these reforms and some states might be reluctant to do so because of past environmental issues with recycling facilities.

What are the effects of these latest developments on the waste management market?

The presumptive basis of this recycling initiative is that cost of compliance with RCRA regulations was an impediment to recycling. It is clear that this regulatory change will reduce the cost of operations for recycling facilities, but only in states that also adopt similar policies and regulations. The US hazardous waste management market has operated under the principle of

LERAT, an acronym for “Least Expensive Regulatory Approved Technology”. Recycling is often not the least expensive alternative for many types of industrial residuals. Other alternatives, because of proximity and lower costs, are often selected over recycling. It is a supposition of these regulations that the competitive position of recycling will be improved. However, it remains to be proven that the regulatory shift will make a significant difference in recycling competitive position.

What are the incentives for recycling beyond the value of recovered resources?

The LERAT marketplace responds to factors that change the economics. The economics change dramatically when typically the least expensive treatment options are prohibited from accepting certain wastes. For example, when HSWA passed in 1984, it led to the prohibition of land disposal of certain waste and ultimately eliminated land disposal as a competitive option. From my perspective of working in the field for over 30 years, the intervention of regulatory agencies to ban certain less expensive waste management options is one of the most effective and fair incentive options. Individual

states have increasingly used this approach with small quantity sources; an example being the banning of discarded electronic devices from municipal sanitary landfills. This is not always a popular approach, but it provides a “level playing field” for the regulated community.

How has the reinvigoration of the green movement impacted hazardous waste management?

Our clients in the waste management sector have seen more openness by some manufacturers to consider reuse and recycling alternatives; the caveat being that the reuse and recycling alternative has to be economically justifiable. And one has to be mindful that as crude oil prices are now back down to around \$80 per barrel that these economics are significantly different than at well over \$100.

Where I believe the green movement is making the most significant progress is in the retail sector. We are now seeing a greater involvement by that sector in helping consumers manage their household discards more appropriately. This is a very positive development.

How successful have hazardous waste minimization and reduction efforts been in the United States?

Since 2000, there has been a decrease in the amount of hazardous waste sent to some types of hazardous waste management facilities. However, one has to be careful about interpreting these reductions in the amount of hazardous waste. Simply judging progress by the amount of waste is a difficult basis of measurement. Less waste often does not mean less toxic, but rather

more concentrated, difficult to treat toxic wastes. Or in the case of reduced amounts of hydrocarbons, the waste management has been transferred from hazardous waste management to an aqueous waste management challenge for the local municipal wastewater treatment plant... And, there is also the issue that manufacturing has been outsourced to other countries.

Where do you think the most significant challenge remains in US hazardous waste regulation?

In the 1970s, I was charged with the responsibility for establishing the definition of hazardous waste as part of overall responsibilities for the hazardous waste rule development. I left that post with a profound appreciation for how much we really did not know about the chemicals that we were using every day. I also had a deep appreciation for how it was difficult to not establish conclusively what a safe level of a specific chemical for exposure to test an animal population was, let alone to a wider universe of living organisms of differing health, age, sex, etc. It was and is an exceptional situation where there is a black and white answer as to whether something is safe or not safe; thus it is an area of hazardous waste regulation that by its nature creates professional contentious debate about a chemical's safety. As is evident by the inclusion of different metals as toxic under RCRA and the Toxic Release Inventory (“TRI”) reporting, even the USEPA own regulations are not in harmony as to what is toxic. For example, TRI reporting includes the metals and/or metal compounds of

beryllium, cobalt, copper, lithium, manganese, nickel, thallium, and zinc that are not covered by the RCRA.

Further, since the promulgation of the RCRA regulations in the 1980s, science has broadened our appreciation for the potential impact of chemicals on living organisms. Endocrine inhibitors are an excellent example of our increasing scientific knowledge. The USEPA's has made remarkably little progress on addressing this issue because of contentious scientific debate. Something needs to be done to improve our ability to reach scientific consensus about the hazardous risk posed by such chemicals.

Where do you think the most significant future progress will be made in hazardous waste management?

The policy driver for major improvements in hazardous waste management will be the issue of sustainability. In the early 1990s, the Federal Facilities Act was passed. This Act included a provision which included the adoption of a waste management hierarchy that emphasized reuse and recycling over waste treatment and disposal. Sustainability policy does not start with reuse and recycling, but begins with the concept of conserving natural resources and using the resources conscientiously.