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Cooperation, Not Conflict: Municipal Solid Waste Management in the 21st Century

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Having recently retired after 31 years working on waste management regulations and policy at the US Environmental Protection Agency, I'd like to voice a massive frustration on the state of municipal solid waste management policy in this country. Perhaps the observation below, a result of combined experiences in this field, might trigger some steps along a path of reconciliation. Here goes.

You would think there were two battling camps, fighting over the right to establish whether cattle or sheep will be the predominant livestock grazing the fertile but constricted grasslands of our particular valley.

In one camp are the "zero wasters." They see a world where real integrated materials management means all materials are contained in a continuous use/reuse cycle: organics to composting and soil enhancement, recyclables returned to use either in closed or open loop recycling systems, metals and glass back to new metals and new glass, and paper back into paper. They see the public as ready for a massive change to a more sustainable lifestyle, trashwise. And, incineration is viewed as the enemy of zero waste, not a complement.

In the other camp are the "energy recoverers." They see a practical, realistic world, where real integrated materials management is driven by market forces, where recycling occurs when it makes market sense and energy is recovered from the bulk of the remainder of the non-recyclable municipal wastestream through mass-burn incineration or advanced thermochemical conversion. They see it as a decision on whether to landfill or recover energy, not whether to incinerate or recycle. They see the public as most likely to do what they are currently doing—and that doesn't include a big change in lifestyle, trashwise.

The zero wasters and the energy recoverers, like the shepherders and the cattle ranchers in the movie "Shane," don't talk much to each other. Their get-togethers are on the opposite sides of town. When they do run across each other, it is usually in the glare of a public hearing, that hot and dusty main street of interaction, and they are virtually certain to be staring each other down, diametrically opposed as to what is best in terms of waste management for the city or county hosting the hearing.

On its face, it is ridiculous to take such rigid positions on what is a continuous and growing national problem. After all, the trash trucks show up at the gate every morning. Trash continues to flow, even after years and years of effort to reduce, reuse, and recycle. And right now, the less expensive, de facto destination of the majority of this flow is the place of unknown future impact, the cheap out-of-sight, out-of-mind location, and the “America has a lot of land and no pressing need for sustainable materials management” solution: the landfill. It’s way outside of town. These days, it is way, way outside of town, down the lonesome long-haul trucker route and into rural America.

“What should communities do with their municipal solid waste”? It has become almost a religious question. The ranchers and the herders involved are busy demonizing each other over what strategy is best for handling our ever-increasing mountain of trash. It is becoming a fight not just over incremental changes to MSW management, but also of international problems involving climate and health. In meetings and at conferences across the country, I hear individuals thunder that there is only one way to handle municipal waste (their way) and that any other strategy will probably bring down civilization as we know it.

Meanwhile, in the years I have been most actively working on potential energy recovery solutions, we have buried somewhere near one billion tons of MSW. That represents an estimated 100 billion kWh of potential energy per year, enough to run 8 million homes. Please! There is so much trash generated (between 240 and 400 million tons per year, depending on how you count it), in so many places (where isn’t it generated?), that we need all the materials management solutions we can get. Landfills are many things, convenient, inexpensive, practical, but they should not be seen as permanent solutions. Who knows what environmental legacy they represent? We don’t know what will happen with them in the years ahead.

Every day, the US generates a massive amount of material that has served its purpose and is discarded. We all contribute, and it is not a sin. What is unfortunate about it is that much of what we discard is truly wasted. The US invests a huge amount of energy, resources, and money (and the accompanying carbon) in the assembly of products, uses them, and then buries over 50% of them, effectively wasting a vast amount of valuable material that was gathered at a massive cost.

Why are we arguing? Why are we not cooperating? There is no one solution for all communities. You can’t expect people in different places to all agree to do the same thing—for the simple reason that people and places are different. The local communities that face the daunting prospect of dealing with all this daily waste are caught in the middle of the argument. We, the professionals in the waste management business, need to supply the necessary information to the local decision makers so they can make the right decision on what to do for their community.

It’s not like there are no alternative strategies. There are many, many ways to beneficially use this trash mountain of ours. Augment soil. Generate power. Make paper and save trees. Reduce bauxite mining. Recover even more metal out of the ash. Make park benches and roads. Produce ethanol and biodiesel. Use all alternatives where they make sense. Use different waste management strategies in different places. Do more of some of

these things in some places and less of them in other places. But don't editorially gun people down when they don't do what you think they should do. Give communities the best available information, and they will probably do what is best for them. Let them make their trash more valuable.

About the only thing we can say right now is that there exists a massive lack of consensus on what constitutes an effective integrated materials management strategy. That has to change. Ranchers and herders. Are we now just waiting for Shane?

(NOTE: The US EPA recently changed the name of its Office of Solid Waste to the Office of Resource Conservation and Recovery – reflecting its new emphasis on sustainability and recovering value from waste materials.)