Hazardous Waste Recycling: No Justification for Toxic Trade

Very quickly following the first international toxic waste trade scandals that took place in the late 1980s and early 1990s, the environmentally friendly word “recycling” began to increasingly be used by waste traders to justify the export of hazardous wastes from rich to poorer countries. Today, this rationalization for toxic waste trade for industrial wastes continues. Virtually all hazardous waste trade now proposed, legally or illegally, is said to be exported for recycling. These exports range from industrial wastes to post-consumer wastes such as old computers and other electronic wastes, to even asbestos laden seagoing vessels.

Basel Convention Bans Exports for Recycling to Developing Countries

In 1994, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal banned all exports of hazardous wastes for final disposal and recycling from developed to developing countries (see BAN Briefing Paper 1). The Parties to the Convention included recycling in the total ban due to the knowledge that export of hazardous waste for recycling from developed to developing countries, works in contradiction to the obligations of the Basel Convention. These obligations include the achievement of national self-sufficiency in hazardous waste management and environmentally sound management of wastes through waste prevention.

As we shall see, the concerns that necessitated the ban are not limited to merely the technical capacity of developing countries to manage such wastes. The issues go far deeper and relate more, in fact, to providing incentives to manage hazardous wastes via upstream solutions of clean production and toxics use reduction rather than through the downstream approaches of recycling and disposal.

Sham and Dirty Recycling

Waste trade for recycling as witnessed in developing countries falls into two categories. It will either be “sham recycling” where wastes are not really recycled at all but simply burned or dumped, or “dirty recycling” which invariably involves polluting operations that jeopardize the health of the importing country’s populace and environment. Most often, both types of recycling are involved as it is rare indeed when 100% of a waste stream can be recycled. In fact, some waste streams such as electronic wastes are designed so badly that very large proportions of the wastes are simply dumped in the environment. Either one of these recycling scenarios – sham or dirty, or a combination of the two, equates to a transfer of pollution from rich to poor countries.

Hazardous Waste Recycling: A Polluting Enterprise Anywhere

What is not recognized nearly enough is that, unlike the recycling of non-hazardous wastes, such as paper, rags, scrap non-toxic metals, etc., hazardous waste recycling even in the best of circumstances is inevitably a polluting enterprise. Even in state-of-the-art facilities, hazardous waste recycling involves exposing workers to hazards, and/or producing toxic residues or emissions. While a majority of these residues may be captured via costly and maintenance intensive end-of-pipe engineering, they then in turn must be disposed of as hazardous waste.

Historically, hazardous waste recycling has proven to be an environmental nightmare even in rich developed countries. For example, a full 11% of US Superfund priority sites slated for clean-up were caused by recycling operations. And its not just an historical problem. For example, in the US existent secondary metals smelters are notorious polluters and that is the reason no new smelters are planned to be built in the US and instead that industry is migrating to poorer countries.

Further, many toxic problems created by recycling operations remain ignored by regulators. Among these concerns are highly toxic dioxins and furan compounds created by secondary metal smelters, and secondary plastics melting operations that process brominated compounds in plastics and PVC. Other problems that have not been adequately assessed include brominated flame retardants, beryllium and mercury releases from recycling.

Thus, it is clear that even in the United States and other rich industrialized countries where the technological level is high and the infrastructure and resources exist to monitor and maintain the highest standards, it is still not possible to prevent pollution from hazardous waste recycling. So how can we ever justify export of that same pollution to developing countries where the possibility to mitigate the impacts are even less?

Special Problems in Developing Countries

In developing countries the hazardous waste recycling becomes even deadlier than what is experienced in developed countries. This is not
simply a matter of a lack of adequate technology but involves many additional factors that might be taken for granted in developed countries. Social, financial and infra-structural factors are at least as important to protecting the populace and environment as technical criteria. These factors include adequate legislation, adequate resources, manpower, and political will, to enforce such legislation, including monitoring and inspecting operations. It involves infrastructure to provide emergency response, adequate roads and services to ensure safe transport, and adequate medical facilities to monitor worker and community health. It involves the public and workforce having adequate democratic capability to redress environmental and occupational concerns and to be able, if necessary, to protest hazardous working or living conditions. It is naive to expect most of these factors to adequately exist in the developing world.

An Affront to Environmental Justice and Clean Production

Toxic waste exports justified by recycling are now one of the biggest threats to the overarching goals of global environmental justice and in fact the implementation of clean production. The principle of environmental justice asserts that no people should bear a disproportionate burden of environmental problems, particularly when those people do not benefit from the products that created the pollution in the first place. Not only does waste trade under the name of recycling victimize the poor simply because they are poor, but it creates a disincentive to achieving true waste prevention and minimization. As long as the cheap and dirty avenue of export is available, there will be little incentive for upstream efforts to make products more long-lived, more recyclable and without toxic inputs.

False Justifications for Export: Mining v. Recycling?

Often we have heard export for recycling justified by comparing it head to head with environmental damage from mining. It is of course clear that mining is environmentally destructive, but it is hardly logical to compare one environmental evil to another with an assumption that our choices are limited to the two terrible options. In order to avoid destructive mining we as a society need to first, minimize and phase-out our use of toxic metals such as cadmium, lead, and mercury. The assumption that we should, and will continue to extract and use toxic metals and introduce and re-introduce them into the biosphere is a very dangerous one. When one recycles a hazard, one is left with a hazard; and is it not hazards that we are all trying to minimize? For those metals which are non-hazardous, we must design easily recyclable products. For these, recycling is certainly preferable to mining.

Cheap Resources for Developing Countries?

We have also heard justifications for hazardous waste exports for recycling based on the reported need of developing countries to obtain cheap sources of certain raw materials, such as lead, that might be obtained from imported hazardous waste sources such as lead-acid batteries from the USA. But it is vital to bear in mind why such sources are cheaper than obtaining already processed pure lead. It is cheaper because such operations are typically very difficult to operate without serious pollution. The cost differential then is largely a factor of externalizing environmental and health costs to developing countries. Further, such importation of such cheap sources of lead from rich, wasteful, developed countries, often leads to disincentives to perpetuate serious collection and recycling of materials such as lead from batteries in the importing country. In actual fact, despite the short-term economic gains that can be made from importing wastes, non-OECD countries have repeatedly rejected this option in favor of long-term economic and ecological sustainability. In every instance in the Basel Convention when developing countries had the opportunity to vote against waste trade they have used it decisively. In fact, many countries; such as in the case of China’s ban on electronic waste, have enacted import bans on their own.

Take Back to Asia?

We have sometimes heard argumentation that due to the fact that certain products such as electronics are increasingly manufactured in Asia, then export of these post-consumer waste materials back to Asia makes some kind of sense. We have even heard justifications of waste export to Asia as a twist on the “take-back” producer responsibility argument. This argumentation is seemingly compelling to those wishing to justify waste exports, but the professed logic falls apart quickly on closer examination. The mere fact that cheap labor is exploited first by a transnational electronics manufacturer in the production of a product can absolutely not be a justification to further exploit that very same low-wage labor population again at the end-of-life disposal of that product, particularly if that exploitation involves hazardous substances. It is the height of cynicism to ask developing countries to bear the burden of the most polluting segments of a product’s life-cycle – particularly when the benefits of most of the high-tech products are enjoyed after dirty manufacturing and before dirty disposal in rich developed countries. In order to minimize cross-boundary dumping and unnecessary transport, “Take-Back” must occur in the country of consumption and where the product becomes a waste.

Upholding International Environmental Justice

The export of toxic wastes to poorer economies for recycling is an unacceptable transfer of pollution to those least able to afford it. It can only be justified by brute economics and not from a moral or environmental standpoint. Such trade leaves the workers in developing countries with a choice between poverty and poison – a choice nobody should have to make. Moreover, by allowing a convenient escape valve for rich consumptive societies and manufacturers, it stifles the innovation needed to truly solve our toxic waste problems through upstream “green” design and clean production. We must all do our part to reaffirm the Basel Convention commitment to ban this destructive trade.