

SAVE YOUR SCHOOL BOARD AND DISTRICT MONEY BY RECYCLING: A BRIEF INTRODUCTION

See also the Power Point presentation on the [Importance of School Recycling]

PAPER RECYCLING ECONOMICS

What are the primary products of any school? Students and PAPER.

If your school is not recycling paper, you are wasting hundreds or thousands of dollars which are being spent needlessly by whoever pays your trash bill:

Some case studies: Montclair recycles paper for its public schools. It gets paid about \$35 for every ton of paper recycled – and it saves an additional \$77.50 per ton on its trash bill – for a total trash bill reduction of \$112.50 per ton. Since Montclair picks everything up together, we don't have a savings number for individual schools – but the entire town is saving about \$450,000 per year.

In Hamilton Township, in 2005, 17 schools paid \$13,000 per month for about 100 tons of trash to be hauled away, or about \$130 per ton, inclusive of tonnage and hauling charges. It paid about \$2650 per month for an estimated 65.37 tons of paper and corrugated to be recycled – for a per ton charge of about \$40.54. SAVINGS, PER TON, ON RECYCLED PAPER, WERE \$89.46 PER TON, OR ABOUT \$70,176 PER YEAR.

The hauler for Hamilton noted that the paper/cardboard mix was mostly corrugated cardboard, and suggested that the school was actually recycling only a fraction of its paper. For comparison sake, a cubic yard of paper weighs about .02 ton, while a cubic yard of paper (office paper) weighs ten times as much, .2 tons. Schools are simply wasting enormous amounts of money by not recycling paper, whose weight adds up amazingly fast. That is money which could be spent on teaching students.

As of late 2005, the Lawrenceville School, a private secondary school, was paying approximately \$12 per ton for paper recycling, and more than \$100 a ton for trash, so per ton paper recycling savings are \$80 per ton or more. As in Hamilton Township, we found there was significant recyclable paper still ending up in the trash, which meant that Lawrenceville School had the potential to save even more on its trash bill by capturing this paper.

BOTTLE AND CAN RECYCLING

While currently paper recycling is the most dramatic way of reducing school waste costs (food waste will be dramatic in the future, see below), recycling of bottles and cans is not only a

money saver, but IS REQUIRED BY NEW JERSEY LAW, meaning that a school which does not recycle these materials is in violation.

In Montclair, the savings on recycling bottles and cans from the school is about \$65 per ton.

Many schools are simply not recycling bottles and cans, thinking there are few of them. Here are the ways schools can get the benefits of cheaper recycling on bottles and cans:

- ⇒ If you have the option of municipal or county hauling, either for free or a reduced price, it will usually give you savings over trashing these resources. Call your township recycling coordinator or us for help with this.
- ⇒ You might want to do a contract with a hauler which allows you to aggregate paper, bottles and cans all together. This is called single stream. It will usually cost more than straight paper recycling, but since bottles and cans are full of air by themselves, it will make hauling more efficient (and there will be only one pick up), so you should see good savings over trashing all this.
- ⇒ When people put bottles and cans in the dumpster for recycling, make sure they are not in plastic bags. Not only are the plastic bags not recyclable with the bottles and cans, but they trap more air, further reducing your hauling efficiency.
- ⇒ Negotiate well with your hauler, to get the most out of all recyclables. Let us know if you want help.

FOOD WASTE RECYCLING

Schools in Vermont are already successfully recycling food waste, generally with the help of a student club or class. They save hundreds of dollars per month and avoid sending the food waste to the landfill, where it makes methane, a greenhouse gas with 72 times more heat trapping capacity than carbon dioxide (according to the latest data from the International Panel on Climate Change).

Currently New Jersey school food waste, which contains a mixture of “prep” waste and plate waste, with meats, vegetables, and dairy, can be recycled at [Converted Organics link] in Keasbey, New Jersey. We are expecting other recycling options to come on line soon. Schools can also compost food waste on site, as [Lavallette School] is doing.

A school waste audit of the East Brunswick schools indicates that when paper/cardboard and bottles and cans are recycled, the residual waste which remains is 90% food waste. This means that a school which combines food waste recycling with traditional recycling can reduce its waste – and its waste bill – significantly.

STUDENT INVOLVEMENT LEADS TO VALUABLE LESSONS IN MATERIAL CONSERVATION

In Brick Township, the Brick Primary Learning Center is getting its students – preschoolers and kindergarteners – involved in hands on recycling. Every week the recycling coordinator for the school – apparently named Mr. Green – has a “blue recycling crew:” consisting of those lucky kids who get to collect recyclables and wheel the blue recycling bins from the classrooms to the

big blue bin at the back of the school where all the recyclables are aggregated for hauling. Kids make sure no one – especially the teachers – put any recyclables into the trash. Rochelle Sheiman, Assistant Principal, says that now “It’s just habit now.” The recycling is part of an entire green school experience, where students learn about energy conservation by turning off lights, and a variety of other resource – and money – saving measures are popular with both the schools and the school board which finances them.

The Solid Waste Resource Recycling Group (SWRRG) is collecting and improving curriculum materials for a curriculum based on material conservation – the idea that keeping resources in play, by recycling or remanufacturing or reuse, saves us money and avoids these resources being tied up in a landfill, where many of them create methane or contribute to toxic leachate. Please email us to find out more.

SOME RESOURCES

- ⇒ SWRRG offers affordable prices on services to schools from individualized waste assessments to comprehensive waste audits. Prices and descriptions can be found in the Waste Audits/Services section, or if it is not posted yet, please contact us at hayes@aesop.rutgers.edu or 732-932-9155, x233.
- ⇒ SWRRG has waste audit work sheets online [link] for you to use in improving your school recycling system.
- ⇒ Please feel free to call or email for pictures of collection and hauling systems, and further information on cost savings through recycling. Your school will not be sorry to recycle, when you see the savings adding up.
- ⇒ NJDEP has school materials on line [link]. You will find a school recycling manual.