

**Case Study**  
**Pencader Charter High School**  
**School-wide Recycling Program**  
*September 2011*

Pencader Charter High School, located in New Castle City, Delaware, is committed to cost-effective recycling that has allowed the school to divert a significant portion of its waste and has reduced solid waste expenses by more than \$200 per month.

**Background**

The Northeast Recycling Council, Inc. (NERC) was awarded a United States Department of Agriculture Rural Utility Services Solid Waste Management Grant in 2009 to provide direct technical assistance and training in waste reduction, recycling, and composting to rural schools in Connecticut, New York, and Delaware. Eight schools participated in NERC's Waste Reduction and Recycling (WR&R) project over the course of two years.

Pencader Charter High School, located in Delaware, had an informal recycling effort prior to joining NERC's WR&R project. The School participated in NERC's project to expand the recycling school-wide and find a cost-effective way to have materials hauled from the school. NERC provided resources on recycling bid specifications and implementing a school recycling program, including outreach and education. NERC worked with school representatives to formulate a WR&R Work Plan, outlining goals and activities to be undertaken through its participation in NERC's project. See Attachment A for the Work Plan.

**Facts at a Glance**

Implementing paper and plastic recycling helped the school reduce costs by more than \$200 per month and allows the school to divert a significant portion of its solid waste stream.

**Pencader Charter High School Overview**

Pencader Charter High School is located in New Castle City, Delaware, a town of just over 4,800. The school has 615 students in grades 9 -12, with an academic focus on business and finance. A School Recycling Advisory Committee was established, which included the School Leader, a business teacher, Facilities Manager, an additional facilities staff member; and five Eco Team students (students from an entrepreneurial business class).

**Nuts and Bolts**

Goals set by the School Recycling Advisory Committee included finding a vendor for hauling paper and implementing plastic beverage container recycling. It also set out to design a media campaign to inform students about the new recycling program and the environmental benefits of the school's efforts.

Following NERC's first visit to the school, the Eco Team students successfully negotiated with the school's waste hauler (then BFI) to provide commingled paper and cardboard recycling. Renegotiating the school's contract to include both recycling and solid waste hauling reduced costs for the school by nearly \$220 per month and allowed the school to

divert much of its waste through recycling. The school replaced one of its trash dumpsters with one dumpster for recycling.

The Business Advisor and Eco Team students became primarily responsible for implementing the school's recycling efforts. Students provided education on the new recycling program and expanded it school-wide.

### **Project Results**

At the start of the 2010 - 2011 school year, the teacher that spearheaded the recycling and incorporated it into his class curriculum left the school. Two science teachers took over advising the Eco Club. However, these teachers left the school as well. Two other science teachers are co-advising the Club for the 2011 - 2012 school year.

The school continues to recycle commingled paper and has also started recycling plastic containers. The school's Eco Club is still responsible for the recycling effort. The Club now has eight members. Waste Management is currently contracted to collect the paper and plastic for recycling. The Club meets once a week to collect the paper and plastic from classrooms.

The Eco-Club students are currently designing a lesson/program about the benefits of recycling. They will be providing that information to all of the health classes. The students are also looking into the Adopt-A-Highway Program to see if they can adopt Lukens Drive (the road the school is on), and help maintain it.

### **Challenges and Solutions**

Challenge: Maintaining the Eco Club and the school's recycling efforts when advisors leave the school.

Solution: Fortunately, two science teachers stepped forward to advise the Eco Club and to assist students in continuing the recycling efforts.

### **Tips for Success**

- Dedicated students to be involved with the Eco Club and willing to carry out the recycling collection responsibilities.
- Teachers willing to advise the Club, provide direction when needed, and spend the necessary time to participate in meetings and events with the students.

**Contact**

For more information about Pencader Charter High School, visit the school's Website at <http://pencadercharter.net/busfin/>.

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**Attachment A**  
**Pencader Charter High School**  
**Recycling Work Plan**

Goal One: Determine the most cost-effective means of moving paper for recycling from the School.

Strategy: Negotiate with the School's current solid waste hauler and consider also compiling a Request for Proposals for recycling collection services.

Tasks:

- Contact local businesses to inquire if they would be interested in pooling their paper with the school for the Paper Retriever option.
- Contact Recycle Bank to find out their recycling collection details.
- Contact Waste Management to inquire of their paper recycling fees.
- One implemented, track paper recycling tonnages and use an Environmental Benefits Calculator to evaluate environmental benefits of recycling the school's paper.

Goal Two: Grow the school's recycling program.

Strategy: Design an outreach and educational campaign for telling students, teachers, and all other staff the progress made and the environmental benefits of the recycling effort.

Tasks:

- Make recycling a formal part of the science classes.
- Post recycling signs around the building and make sure each recycling bin is visible and labeled.
- Include articles about recycling in the school's e-newsletter.
- Identify strategies for communicating recycling to the students and staff.
- Remind everyone that recycling is important to the school and everyone who is part of it.
- Look for ways to reduce the amount of trash generated by soliciting ideas from students and teachers.
- Design a new recognition programs for the most active classroom/section.
- Make recycling a policy at the school. This way everyone will know that it is expected and required for them to participate in the recycling program.

Goal Three: Begin collecting plastic beverage containers.

Strategy: Develop collection system for plastic beverage containers. Obtain collection bins for classrooms and hallways.

Tasks:

- Decide on a means to collect and haul plastic beverage containers.
- Post recycling signs around the building and make sure each recycling bin is visible and labeled.