

Recycling Technical Assistance Project
#567

EDDYSTONE BOROUGH, DELAWARE COUNTY, PENNSYLVANIA

**ENGAGING BUSINESSES AND IMPROVING RESIDENT PARTICIPATION IN
RECYCLING IN EDDYSTONE BOROUGH, PA**

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1.0 STATEMENT OF PROBLEM

Eddystone Borough (the Borough, or Eddystone), a non-mandated municipality in Delaware County, operates a voluntary recycling program with single-stream curbside residential recycling collection that began in 2013. In 2013, Eddystone had a 6% municipal recycling rate¹, based on information provided by the Borough; however, the Borough's short-term goal is to reach 20%. The Borough requested aid in determining how to improve recycling program participation and awareness. Eddystone is home to many businesses, however, the businesses are not required to recycle. Eddystone is seeking assistance in involving elementary students in recycling education, increasing the residential recycling rate, and engaging the business community in recycling. Eddystone is interested in techniques to improve student, residential, and business recycling program participation. Through the partnership between the Pennsylvania State Association of Township Supervisors (PSATS) and the Pennsylvania Department of Environmental Protection (PADEP), the Borough was provided with technical assistance by KRF Environmental (KRF).

2.0 SCOPE OF WORK

Task 1 – Project Organization – KRF Environmental met with Eddystone Borough and developed a Scope of Work.

Task 2 –Data Gathering and Technical Assistance – KRF identified and contacted local businesses to determine their recycling trends and potential improvements for increased participation. KRF identified local recycling opportunities for various standard and non-standard materials. KRF developed residential recycling educational materials. KRF contacted the elementary school principal to determine an acceptable method, timeframe, and media for classroom recycling education. KRF assessed elementary school recycling opportunities. KRF discussed business, residential, and elementary school recycling education with the Borough.

Task 3 – Report Writing – KRF produced this report detailing options for elementary school, residential, and business recycling education. Appendices include educational worksheets for schools, example curbside recycling participation notice, summary of residential recycling opportunities, draft residential communication, summary of business survey results, and draft business communication.

Task 4 – Report Revision and Final Submission – KRF revised this report as necessary and submitted the final report.

3.0 EXISTING WASTE MANAGEMENT PROGRAM

Eddystone Borough is a 1.5-square-mile non-mandated² municipality in Delaware County, Pennsylvania with approximately 2,410 residents, serving approximately 950 households, according to Borough records. The Borough Public Works Department employs staff and owns vehicles necessary to run a once-per-week residential curbside single-stream recycling collection, once-per-week trash collection, seasonal leaf collection, and an on-demand bulk pickup of both freon-containing and non-freon items. Bulk item pickup is a pay-per-item, pickup-request system. Businesses are responsible for contracting privately for trash and, optionally, recycling collection. Eddystone performs limited ongoing education and enforcement. The Borough posts refuse and recycling information on its website and distributes information to new residents. On refuse and recycling collection days, Public Works employees inspect some cans to determine if residents are in compliance with refuse and recycling requirements. If residents are in violation, materials are still collected, but the Borough leaves an orange sticker. In February 2015, the PADEP awarded Eddystone Borough a Section 902 Recycling Program Improvement Grant that will be used to purchase recycling carts for every household, install mechanical tippers on the existing Borough recycling trucks, purchase a new recycling collection vehicle, expand educational outreach to the community, and upgrade recycling information on the Borough's website.

¹ Municipal Recycling Rate = [(Approved Residential Tonnage + Approved Commercial Tonnage)/(Population * 0.8)] x 100, per PADEP Section 904 Recycling Performance Grant calculations.

² Act 101 mandates that Pennsylvania municipalities containing over 10,000 people, or over 5,000 people if population density exceeds 300 per square mile, require residential and commercial recycling.

4.0 SUGGESTED WASTE MANAGEMENT PROGRAM OPTIONS

4.1 Elementary School Program

4.1.1 Elementary School Study Results

Eddystone Elementary School is a public school in the Ridley School District, and serves the residents of Eddystone Borough. There are approximately 210 children who attend kindergarten through fifth grade at Eddystone Elementary. The school currently has a glass and plastic recycling collection dome located behind the school. There are no other recycling opportunities at Eddystone Elementary, and recycling is not collected in the classrooms. During conversations between KRF and Eddystone Elementary principal, Jeff D’Orazio, he exhibited a willingness and desire to bring recycling education into their classrooms, if provided with educational material.

4.1.2 Elementary School Program Options

Recycling is an easy way that even young children can have a positive impact on their environment and community. Educating children about recycling procedures and benefits empowers them to be a good example to family and friends. In essence, if you educate a child you may indirectly educate his or her entire family.

4.1.2.1 Paper Retriever Bin

It is said the best education comes from experience. While that may not always be true, experience can provide enduring lessons. If students at Eddystone Elementary are encouraged to experience recycling in the classroom, this can be a lesson they bring home to their families, and keep with them as they grow. Paper Retriever Bins, from Suburban Waste, offer schools a free way to both earn money and recycle paper and cardboard. The green and yellow Paper Retriever Bin is placed in the parking lot, students and community members fill it with recycled paper and cardboard, the company empties the bin as often as needed, and the company pays the school per ton of collected recycling. When presented with this opportunity in discussions with KRF, Eddystone Elementary agreed to host a Paper Retriever Bin and Eddystone Borough expressed willingness to support implementation of classroom paper recycling. To implement a viable classroom-recycling program, the school needs classroom bins, student education, and support from the teachers and school janitors. While schools generate a lot of waste paper, to have fundraising success the school needs to promote the program to families and community members as well. School paper recycling benefits the whole community, and the Borough can advertise the Paper Retriever Bin on the website and in mailings to residents. The tons of paper collected at the Paper Retriever Bin can also be included in the Borough’s yearly Section 904 Recycling Performance Grant totals.

4.1.2.2 Classroom Education

Recycling education in the classroom can support the new Paper Retriever program and the Borough’s curbside recycling program. Eddystone Borough could provide recycling education materials to Eddystone Elementary School. Posting these materials on the Borough website will allow school teachers to print the materials at any time without requiring the Borough to send materials every year. A simple reminder e-mail can be sent each year for events such as Earth Day in April to remind the school about the recycling educational materials available on the website. The e-mail could also contain an invitation for the school to request a visit from a Borough Recycling Truck. Examples of Recycling Educational Materials, Lesson Plans, and a Teacher Letter are provided in Appendix A. The “Make an Advertisement” worksheet encourages students to take ownership of the Paper Retriever program and promote the program to family and friends. The school or Borough could hold a recycling advertisement contest and post the “winners” on the Borough website or in a prominent place in school. The pictorial worksheet is appropriate for young students to either complete on their own, or to review with the teacher. The recycling math word-problem sheets for older elementary students are meant to be a group or class activity that will stimulate discussion.

4.1.2.3 Other Recycling Opportunities

Recycling paper, glass, and plastic at school gives students many opportunities to make decisions about where to place their waste. Other non-standard-material recycling fund-raising opportunities, such as Terracycle®, are available to schools. When students experience recycling, they can learn the concept of reducing waste and apply that to more

areas of their lives as consumers. Terracycle® is a fund-raising opportunity for schools that agree to collect non-standard items for recycling, such as toothbrushes, baby food pouches, used shoes, drink pouches, solo cups, writing instruments, and much more. The school receives money for the amount or weight of items recycled. There are details about the program at www.terracycle.com. While setting up Terracycle® recycling at the school could be overwhelming for the administration at this time. The opportunity could be presented to the parent teacher association, school parents, or community members who may volunteer to run the program. The Borough may also consider hosting Terracycle® recycling at the Borough offices.

4.2 Residential Program

4.2.1 Residential Program Options

To increase residential recycling participation and awareness, it is important for a recycling program to include motivation, education, and enforcement. Since the Borough's weekly single-stream curbside recycling program already provides residents with a user-friendly recycling system, the following suggestions are meant to supplement the established program and aid Eddystone in achieving at least a 20% recycling rate. Eddystone can assess the feasibility of these suggestions and choose to implement all or some of the following ideas.

4.2.1.1 Recycling Ordinance

Eddystone Borough is investing significant time, effort, and resources to implementing and improving the recycling program. In conjunction with the financial aid provided through the Section 902 Recycling Program Development and Implementation Grant, the Borough is investing in new recycling truck equipment, new residential recycling carts, improved recycling web-presence, and recycling education. If the Borough invests money to improve recycling, and no one participates in the program, there is no return on the investment. Therefore, to make the most efficient use of the resources spent on recycling, recycling participation should increase. Although Eddystone is a non-mandated municipality, the Borough may still adopt an ordinance requiring residents and businesses to recycle. Adoption of an ordinance, and education of the public and businesses about the ordinance, may compel them to take recycling seriously.

Also, adoption of a recycling ordinance is required if the Borough receives more than \$10,000 from the Section 904 Recycling Performance Grant program. Based on the PADEP formula, if the Borough recycling rate reaches the stated goal of 20% (193 tons), and the current business recycling remains the same, the yearly PADEP Section 904 Recycling Performance Grant will exceed \$10,000. If Eddystone recycles 250 tons the Borough would receive \$13,600, and for 300 tons the Borough would receive \$17,000. However, if there is no recycling ordinance in place, the Borough is ineligible to receive more than \$10,000 each year. Actually, if Eddystone surpasses \$10,000 in grant funds and fails to enact an ordinance, Eddystone could forfeit any future grants.

4.2.1.2 Curbside Enforcement and Positive Reinforcement

Eddystone currently has employees mark cans containing incorrect material with an orange sticker when residents do not comply with established waste and recycling procedures. However, sanitation staff will still collect that incorrect material. Curbside enforcement has proven to be a very effective means of education in other municipalities, and can be utilized in Eddystone by including more dedicated inspection time, strict do-not-collect practice for non-compliances, specific curbside notifications, and community awareness of the practice. The do-not-collect practice for non-compliances is a very important part of the education, as an un-collected can at the curb sends a stronger message than any notice. Eddystone could set a manageable goal to check at least 20 household cans each week (thereby checking each of the 950 households about once per year). If a household is not in compliance a notice can be placed on the can, stating the specific violation, and the contents of the can should not be collected. To reap the benefits of each can check, reinforce positive behavior, and let the homeowners know the Borough is checking, Borough employees should leave a congratulatory notice when residents are in compliance. That way each house that is checked will either receive a warning or a congratulations. An example of a Non-Compliance Notice and Positive Reinforcement Notice is shown in Appendix B. The acronym SWEEP, Solid Waste Education and Enforcement Program, is used in multiple municipalities, like Allentown and Philadelphia, and could be adopted by Eddystone. Naming and acknowledging the can check

program on the website or in newsletters can increase recycling awareness and also alert residents that they may see Borough public works staff checking cans for compliance.

4.2.1.3 Educate to Foster a Recycling Mindset

Currently, the Borough's recycling education is confined to the Borough website and some materials handed out to new residents. Most municipalities and haulers agree that the key to a successful recycling program is education. Even established recycling programs must provide varied and ongoing education to keep their programs active and effective. In addition to the aforementioned SWEEP education, the Borough can provide recycling education via mailings, newsletters, and the website. Recycling education should include information on curbside recycling procedures and also appropriate disposal methods for all materials. While many residents seem to understand the basic materials they can recycle curbside, they may not know what to do with odd items such as plastic bags, bottle caps, or electronics. KRF researched local recycling and disposal opportunities for a variety of materials. The Summary of Residential Recycling Opportunities is included in Appendix C. Using this succinct guide, residents will be able to appropriately dispose of various materials that may otherwise mistakenly end up in the landfill. This list may be included on the Borough's recycling webpage, along with a link to the Delaware County Recycling and Household Hazardous Waste website at <http://www.co.delaware.pa.us/recycle/index.html>.

4.2.1.4 Motivate Residents to Recycle

Although most people realize that recycling is good for the environment, many residents still desire a tangible or financial motivation to recycle. There are programs available that provide residential recyclers with coupons or reward points based on their weekly recycling tonnages, but municipal membership in such programs can be expensive. Educating residents about the financial incentives of recycling, such as lower landfill fees, municipal income from recyclable sales, and yearly state grant awards, may resonate with finance-conscious residents who appreciate keeping taxes low. A Draft Residential Educational Flyer is provided in Appendix D. Education of residents and businesses is essential if the Borough does enact a recycling ordinance. The front of the flyer provides motivational financial recycling information and guidance as if the Borough enacted a recycling ordinance. The back of the flyer provides an abbreviated version of the Summary of Residential Recycling Opportunities, so residents may post a hard copy at home if they wish.

One effective form of financial motivation, proven to increase recycling participation, is to institute a Pay-As-You-Throw (PAYT) program. In these PAYT programs, residents pay for waste collection based on how much they throw out, but recycling is free. The municipality sells specially-labeled trash bags at local grocery stores and gas stations, for a calculated cost that covers operation and disposal costs (typically \$2 - \$4). The residents can only use these special trash bags to put out trash, and the hauler will only pick up trash in a labeled bag. Recycling is free. There may be concern over public perception of a PAYT; more specifically, paying for disposal via expensive bags rather than on a tax bill, and the inconvenience of having to purchase special bags at a specific store. PAYT can work with rigid containers as well. While public perception of PAYT would likely be an obstacle, PAYT motivates residents to recycle more, can significantly increase waste diversion, and typically results in the lowest total program cost per household. Eddystone can discuss whether viability of a PAYT program is worth assessing.

4.2.1.5 Semi-Annual Newsletter

Many municipalities provide a yearly, semi-yearly, or quarterly newsletter to residents and businesses. A newsletter helps foster a sense of community and aides in the dissemination of important information. To reduce cost, a yearly newsletter can be sent out with the tax bill. The Borough could send out a newsletter highlighting curbside recycling protocol, yard waste disposal opportunities, news of the 902 grant award, and upcoming changes in recycling, such as the new recycling carts. The newsletter could include Borough information aside from recycling as well. As one Eddystone business owner suggested, the Borough newsletter could list local businesses to encourage residents' support of local businesses. The key to recycling program success is varied and ongoing education, so the Borough should commit to at least one form of written communication (e.g., newsletter or flyer), ideally at least twice per year.

4.3 Commercial Program

4.3.1 Commercial Study Results

The Borough provided KRF with a contact list of all Borough businesses. KRF attempted to contact over 115 of the listed businesses via phone. Of the businesses listed, 43 were willing to discuss recycling. Each business was asked questions such as 1) do you recycle, and if so by what method, 2) what do you think is the biggest difficulty in recycling at your business, and 3) do you have any questions about recycling, or recommendations for the Borough? Out of 43 businesses, 21 businesses (49%) recycled some form of “single-stream” material (i.e., glass, plastic, aluminum and bimetallic cans, paper, or cardboard). The recycling of automotive oil, tires, and scrap metal is a standard practice of mechanics, and while it was recorded in the survey results, those materials were not counted as “single-stream” material. Of the 21 businesses that recycle, 4 recycle only cardboard, and in 3 an employee collects recycling and takes it home. When asked what the biggest impediment to recycling was, 4 businesses cited expense, 5 businesses said they do not generate recyclable materials, and 6 businesses said their trash hauler did not offer recycling collection. Sixteen businesses said it would be helpful if the Borough provided them with a recycling can and pickup of the recycling, either at their business-place, or just outside their business in a public space (e.g., on the sidewalk or in front of a strip mall). One business suggested having a local business directory, and featuring a number of local businesses in each quarterly newsletter. Overall, many of the 43 businesses that were willing to discuss recycling had limited interest in or knowledge of their recycling practices. The Summary of Commercial Survey Results can be found in Appendix E.

4.3.2 Commercial Program Options

4.3.2.1 Recycling Ordinance

As mentioned earlier, Eddystone may adopt an ordinance requiring residents and businesses, including apartments and business complexes, to recycle. Many businesses already recycle, but for those that do not, various recycling options should be presented so that adding a recycling collection to their existing trash collection does not present excessive financial burden. Based on KRF conversations with local haulers, the addition of weekly recycling collection costs approximately \$400 to \$700 per year to collect a 96-gallon can weekly. Some haulers provide discounted services if recycling is paired with trash collection. The Borough could also assess the feasibility of providing less expensive business recycling collection, and this is discussed in Section 4.3.2.4.

If hiring a recycling hauler presents great difficulty for some businesses, then businesses can jointly contract a hauler, or the businesses could drop off paper and cardboard at the proposed Eddystone Elementary Paper Retriever Bin, and drop off glass, plastics #1 and #2, and steel and aluminum cans at the Delaware County Solid Waste Authority’s recycling igloo located in the Eddystone Highway Garage at 8th and Eddystone Avenues. While change is difficult, and not always welcomed immediately, businesses should be able to comply with a mandatory recycling requirement.

4.3.2.2 Communicate with Businesses

As with most practices, accountability increases the chance of success. When businesses feel they are a part of the community and are held accountable, they will likely comply with recycling requirements more easily. It is good business to be part of the community or to network in some way, and when businesses participate in recycling it benefits the community and results in lower taxes for everyone. The Borough could host a meeting with Eddystone businesses every few years. A brief networking and informational meeting could provide a platform for the Borough to inform businesses of recycling requirements, apprise them of recycling opportunities, work with businesses to help them develop better recycling practices, and encourage businesses to jointly contract haulers. To reduce the Borough administration’s responsibilities, the Borough could approach prominent local business owners to see if they would like to head the Eddystone business-networking meeting. The Borough could offer the Borough offices as a meeting place, and request a few minutes at the meeting to apprise business owners of recycling news.

Additionally, the Borough could choose several businesses each year to specifically contact and work with to improve their recycling participation. The Borough should choose at least 20 of the 115+ Eddystone businesses to contact by phone each year, beginning with businesses that are likely to generate more recyclables (e.g., bars, restaurants, grocery stores, conveniences stores, larger stores, etc.). The Borough could use the business contact list and add columns of

information such as 1) “email address”, 2) “do they recycle”, and 3) “who is their hauler”. Keeping this information on file may also help when the Borough compiles information for the yearly Section 904 Recycling Performance Grant.

4.3.2.3 Annual Newsletter

An Eddystone business newsletter, whether hardcopy or electronic can serve as a forum for business news and networking, while encouraging community and offering another venue to remind businesses of recycling opportunities and responsibilities. A business newsletter could highlight businesses in compliance, list local businesses, list recycling hauler contact information, and note recycling drop-off locations and acceptable materials. An Example of a Business Newsletter is included in Appendix F.

4.3.2.4 Assess Business Collection Feasibility and Public Recycling Cans

During the business survey, many businesses stated they would appreciate a Borough recycling pickup. If the Borough were to collect 200 tons of recycling from the estimated 50+% of businesses that do not recycle currently, theoretically the Borough might earn an additional \$1,200 in state grant money, and may earn \$4,000 from sale of the recyclables. If the Borough could charge an economical rate for business recycling pickup, such as \$250-\$300 per year for weekly toter pickup, the Borough may attract enough business customers to make the business recycling pickup financially viable. Under the requirements of the PADEP Section 904 Performance Grant, residential and commercial tonnages must be reported separately, so the Borough would have to make a reasonable “guess” at how much of the total was residential versus commercial. Any earnings from the additional recycling pickup should at least cover the expense of the extra pickups. If the Borough is entertaining the idea of commercial recycling collection, the Borough should assess the financial feasibility and logistics. The survey in Appendix E notes which businesses are interested in Borough pickup. The Borough should discuss Borough-run commercial recycling pickup. If the Borough decides to make business recycling mandatory, and many businesses still cannot find affordable recycling pickup, despite the recycling drop-off sites and joint-contracting opportunities, Borough-run recycling pickup may be welcomed by even more businesses. Placement of recycling containers in public places can also provide a business and its customers with a place for recyclables. The Borough could place public recycling receptacles outside of businesses in the Walmart/ShopRite business complex on Chester Pike. Two businesses in this complex suggested public recycling cans.

5.0 RECOMMENDATIONS AND CONCLUSION

- **ELEMENTARY SCHOOL EDUCATION** – Support the school’s Paper Retriever Bin by providing classroom bins and advertising the recycling opportunity in Borough communications. Post School Worksheets on the Borough website. Send the school example worksheets and an invitation to request a visit from a recycling truck in conjunction with an Earth Day celebration (April 22).
- **RESIDENTIAL RECYCLING PROGRAM** – Enact a Mandatory Recycling Ordinance for residents, apartments, and businesses. Commit additional staff time to checking cans. Adopt a strict do-not-collect practice for non-compliances. Utilize non-compliance warnings and positive reinforcement notices for can checks. Make residents aware of the can check program and the various local recycling and disposal opportunities, via mailings and the website. Distribute a Recycling Education Flyer to residents. Send a semi-annual newsletter to residents and businesses.
- **COMMERCIAL RECYCLING** – Organize a yearly business meeting to discuss recycling information and foster community. Commit to contacting at least 20 businesses each year to discuss their recycling procedures. Distribute recycling information and highlight recycling-compliant businesses in a yearly newsletter or on a special Business Recycling webpage. Consider commercial pickup, and placement of public recycling cans at the business complex on Chester Pike.

Ultimately, Eddystone Borough should choose the recycling program improvements it feels are feasible and best serve the residents and businesses of Eddystone at this time. The Borough should consult with the Solicitor or legal counsel to determine the appropriateness of these recommendations.

Appendix A

Examples of Recycling Educational Materials, Lesson Plans, and a Teacher Letter



Dear Teacher,

Recycling is an easy way that even young children can have a positive impact on their environment and community. Educating children about recycling procedures and benefits empowers them to be a good example to family and friends.

Eddystone Borough is currently undertaking a recycling education initiative, with the goal of increasing awareness of and participation in recycling by all Borough citizens, including students, homeowners, landlords, and business owners. In an effort to promote recycling awareness in Eddystone Elementary, the Borough is providing you with Recycling Lesson Plans and associated worksheets.

The four lesson plans with associated worksheets are listed below.

Grade	Lesson	Lesson Plan	Worksheets
K-5 th	Create a Recycling Advertisement	LP-E-1	Wksht E-1
K-3 rd	Where Can Our Waste Go?	LP-E-2	Wksht E-2
3 rd -5 th	Recycling Really Adds Up	LP-E-3-4	Wksht E-3
3 rd -5 th	Recycling Just Makes Cent\$	LP-E-3-4	Wksht E-4

You may want to include this lesson in the schedule around April 22nd (Earth Day). It is our hope that this upcoming year all grades would participate in the recycling education initiative. These lesson plans and worksheets can also be made available and used in subsequent years if desired. You can tailor the Recycling Lesson Plans to a class's specific skill level. We hope these Recycling Lesson Plans and worksheets will be helpful in your classrooms and will increase recycling awareness in our Borough. Thank you for all your hard work with our Borough's students.

Best Regards,

The Borough of Eddystone

E-1 Elementary School Recycling Lesson Plan



Lesson: Create a Recycling Advertisement

Background:

Advertising is a tool used to get people to want to do something, like buy a product. An advertisement provides information to help people make a decision. Most advertisements are directed at a target audience, or a group of people that the advertisers think may want to use their product. Advertisers think about what their target audience likes, dislikes, and may find interesting. Advertisers place their advertisements where their target audience will see them. Advertisements are created to convince people to do something, but it is the audience's responsibility to decide if they agree with the advertisement. If you look at ten advertisements you may only agree with five, or one, or none at all. It is important to make up your own mind about an advertisement.

We have something worth advertising right here at Eddystone Elementary. Eddystone Elementary now has a big green and yellow Paper Retriever Bin in back of the school to collect the paper and cardboard from our classrooms. When the bin is full, the paper and cardboard are taken away and made into new paper and cardboard products. Paper is made from trees, so when we use recycled paper to make new paper, we are saving some trees from being cut down. For each pound of recycled paper and cardboard, the Paper Retriever company gives Eddystone Elementary some money, which we can use for new technology in our classrooms. Using the Paper Retriever is good for the earth, and good for Eddystone Elementary. Anyone is welcome to drop off paper and cardboard in the Paper Retriever Bin, like students, school families, neighbors, friends, businesses, and other community members. Eddystone Elementary can advertise the Paper Retriever Bin as a paper and cardboard recycling drop-off for the whole community.

Materials Needed:

1. A copy of Worksheet E-1 for each student
2. Paper and coloring supplies for the students
3. Optional: You can bring in some examples of advertisements to discuss.
4. Optional: You may want to check out a few books on advertising from the library and have these available for the students to reference while making their own advertisement.

Procedure:

1. Tell the students they are going to create an advertisement today. Explain what an advertisement is (use Background section provided).
2. Optional: Show the students examples of real advertisements. For each one ask them 1) who is responsible for the advertisement, 2) of what are they trying to convince us, 3) what techniques are they using to appeal to us?
3. Briefly explain the benefits of the Paper Retriever Bin at the school, and that the class will be making advertisements for the Paper Retriever Bin (use Background Section provided).
4. Hand out Worksheet E-1 to the students. Read over the recycling information with them. Have them work individually or in groups to answer the worksheet questions.
5. Provide paper and coloring supplies and let the students create their advertisements.
6. When the students are finished, have them present their advertisements to the class.
7. Optional: The school may have a recycling advertisement contest and post winners in the main office or on the website.

CREATE A RECYCLING ADVERTISEMENT!



Eddystone Elementary is hosting a paper recycling PAPER RETRIEVER BIN! Recycling is a great way to help the Earth and support our community, so let's spread the word!

You're Invited to RECYCLE!

WHO: Students, School Families, Community Members, ANYONE!

WHY: Help earn money for school technology at Eddystone Elementary

WHERE: Eddystone Elementary's back parking lot, near the 10th St. entrance

WHAT: Recycling of paper and cardboard products including

SCHOOL & OFFICE PAPER
CARDBOARD
DISCARDED MAIL
MAGAZINES & CATALOGS
NEWSPAPER
CONSTRUCTION PAPER

PAPERBOARD (cereal-box-like material)
SHREDDED PAPER
PAPERBACK BOOKS
PHONEBOOKS
NOTEBOOKS

The Paper Retriever Bin does **not** accept soiled paper products (tissues, paper towels, etc.), glass, plastic, metal, plastic bags, or trash.

Create Your Own Ad:

1. Think of the different types of people who can recycle (students, family, neighbors, relatives, businesses, grocery shoppers...). Which **audience** will your ad target?

2. What **techniques** will you use in your ad? _____

3. Where will you **place** the ad? Explain why. _____

4. Now you are ready to create your ad! Make sure to include the information your audience will need, and be creative!

E-2 Early Elementary School Recycling Lesson Plan

Lesson: Where Can Our Waste Go? : Recycling and Composting

Teacher Note: You may want to include this lesson in your schedule around April 22nd (Earth Day).



Background:

At home, school, and work we use products. What are some things you use in a normal day? You probably use a toothbrush, clothes, bed sheets, soap, toys, books, food, paper, pencils, etc. When you are done with these products, where does your waste go? Typically your waste can be recycled, composted, donated for reuse, or thrown in the garbage.

In Eddystone, we **recycle**, and many families have a bin to collect recycling in their homes. The materials recycled in Eddystone include paper, cardboard, cartons, glass, plastic, and aluminum and metal cans. The recyclable materials from your home are picked up by a recycling truck and taken to processing facilities where the materials are separated, ground, processed, or melted to form new usable materials. The big Paper Retriever Bin in back of Eddystone Elementary also collects various types of paper and cardboard for recycling.

Although we can recycle many of the containers our food comes in, we cannot put food in the recycling bin! However, we can **compost** some of our food scraps and yard waste. Composting is the process of combining leaves, grass clippings, food scraps, and other organic materials in a pile, mixing them up and letting them turn into dirt. You can have a compost pile right in your own backyard. Food scraps that can be composted include fruits, vegetables, coffee, tea, and eggshells. No meat, oil, or dairy is allowed in a compost pile.

There are many ways to **donate** unwanted items like toys, clothes, household goods, and books. Many thrift stores and Goodwill stores will take these items. There are also services like Purple Heart, where you can put your unwanted things in bags on your front porch and an organization will pick up the bags and make those items available for someone else to use. You can have a yard sale right in front of your house. When you are done with your stuffed animals or toys, you do not have to throw them away, you can give them away!

The garbage from your home is picked up by a garbage truck and taken to a landfill. A landfill is a large area of ground where layers of trash are piled between layers of dirt. The trash sits there for a long time and when the landfill is full we have to find another large piece of area to pile the trash. Landfills are filling up rapidly because so many people create a lot of garbage. Do you know how to reduce the amount of garbage we make? By **Reducing** the amount of materials we use, **Reusing** items that do not need to be thrown away, and **Recycling** items that are made of recyclable materials, we can all stop the landfill from filling up as quickly. When you recycle a can or bottle, compost an orange peel, or donate an old pair of pants, you are reducing the amount of garbage that goes to the landfill.

Materials Needed:

1. A copy of Worksheet E-2 for each student
2. Red, yellow, blue, black, and green crayons or pencils for each student
3. Optional: You can bring in one item for every student in the class. Items should be a mix of recyclable, compostable, donate-able, and trash-able items. (e.g., plastic bottle, carrot stick, leaf, steel can, stuffed animal, old shoe, potato chip bag, dirty napkin, etc.)
4. Optional: You may want to check out a few books on recycling from the school library. You can read one to the class after the lesson, and have the other books available for students to look at and/or check out to take home.

Procedure:

1. Ask the students what items they use in a normal day. Have each student provide at least one unique example. (For example: toothbrush, toothpaste, soap, clothes, cereal, milk, car, pencil, paper, etc.) Write the list on the board.
2. Briefly explain how waste can be handled by recycling, composting, donating/reusing, or throwing away. Explain what materials can be recycled, composted, and donated. Explain that landfills are filling up, and how students can help by reducing, reusing, and recycling (use Background section provided).
3. Ask the students what kinds of materials can be recycled and write the correct answers on the board.
4. Ask the students what kinds of materials can be composted and write the correct answers on the board.
5. Ask the students what kinds of materials can be donated/sold for re-use and write the correct answers on the board.
6. Go down the list of items on the board. Ask each student, in order, to tell where an item belongs when you are done using it – recycling, compost, donation, or trash. If you have brought in physical items, have each student come up, pick an item, tell where that item belongs and then place that item elsewhere so the other children cannot pick the same item.
7. Hand out the worksheet provided and ask the students to complete the worksheet.
8. Review the correct answers for the worksheet with the students.
9. Ask the students how recycling, composting, and donating can reduce the amount of garbage sent to the landfill. Why is it important to reduce the amount sent to the landfill? Why is it important to reduce, reuse, and recycle?

Worksheet Solution:

(From the first column top to bottom and then moving right)

Recyclable (Blue): plastic bottle, milk carton, cola can, pear can, plastic bottle, paper, tuna can, paper bag, glass bottle, cardboard box, newspaper.

Paper Retriever Bin (Yellow): paper, paper bag, cardboard box, newspaper

Compostable (Green): eggshell, banana peel, apple core, leaves

Donatable (Black): basketball, cell phone, teddy bear

Trash (Red): dirty napkin

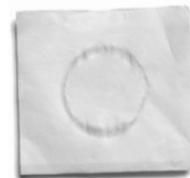
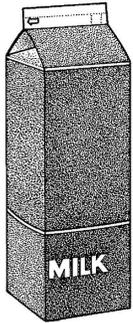
Name: _____



Where Can Our Waste Go?

Directions:

1. Color in blue each recyclable item.
2. Circle in yellow any item that goes in the school paper recycling bin.
3. Color in green any compostable item, and circle in black any item that can be donated.
4. Draw a red X through any item that is not recyclable, compostable, or fit for donation.



E-3&4 Older Elementary School Recycling Lesson Plan

Lesson: Recycling Really Adds Up, Recycling Just Makes Cent\$

Teacher Note: You may want to include this lesson in your schedule around April 22nd (Earth Day).



Background:

In Eddystone, we **recycle**, and many families have a bin to collect recycling in their homes. The materials recycled in Eddystone include paper, cardboard, cartons, glass, plastic, and aluminum and metal cans. When we recycle materials it means they do not get dumped in a landfill, but instead they are reused. The recyclable materials from your home are picked up by a recycling truck and taken to processing facilities where the materials are separated, ground, processed, or melted to form new usable materials. (The big Paper Retriever Bin in back of Eddystone Elementary also collects various types of paper and cardboard for recycling.) Companies buy these usable materials to make new products. When a paper company buys recycled paper, it means they can use the recycled material to make new paper products, instead of having to send truck crews out to log forests, ship wood to processing facilities, and process new trees to make paper. Recycling saves energy.

Recycling saves money, too. Eddystone residents have to pay the landfill for each ton of material that is dumped. When we recycle material, we save it from going into the landfill, and we save money. Eddystone receives money for the recycled materials, since these materials are bought by companies to make into new products. The State of Pennsylvania also pays Eddystone for each ton of material recycled here. So recycling is good for the Earth, saves energy, and it saves money.

Materials Needed:

1. A copy of Worksheets E-3 and E-4 for each student

Procedure:

1. Ask the students what materials are recycled curbside in Eddystone and write the correct answers on the board.
2. Briefly explain the financial benefits of recycling (use the Background section above).
3. Hand out the worksheets provided, and ask the students to complete the worksheets individually, in groups, or as a class.
4. Review the correct answers for the worksheets with the students.
5. Ask the students how recycling can reduce the amount of garbage sent to the landfill.
6. Ask the students how recycling is good for the Earth? How does recycling save energy?

Worksheet Solution:

E-3	E-4
1. 3 pounds	1. 400 tons
2. 1 pound	2. \$8,000
3. 7 pounds	3. \$6,000
4. 16 pounds	4. \$14,000
5. 800 pounds	5. \$16,000
6. 800,000 pounds	6. \$30,000
BONUS: 400,000 pounds	BONUS: Saves energy, less area needed for landfills, less mining for materials

Name: _____



Recycling Really Adds Up!

In Eddystone, we recycle paper, cardboard, cartons, plastic, glass, aluminum, and metal cans. **Why does recycling matter?**

1. One glass jar weighs a $\frac{1}{2}$ pound. How much does 6 jars weigh?

_____ pounds

2. One empty water bottle weighs one ounce. There are 16 ounces in one pound. How much does 16 empty water bottles weigh?

_____ pounds

3. Each day the Smith family receives 1 pound of junk mail. How many pounds of junk mail do they have each week?

_____ pounds

4. Each week, the Smith family **recycles** 6 glass jars, 16 empty water bottles, all of their junk mail, 3 pounds of cardboard, and two pounds of steel cans. How much does the Smith family recycle each week?

_____ pounds

5. The Smith family puts out their recycling at the curb for pickup 50 weeks per year. How many pounds does the Smith family recycle each year?

_____ pounds

6. In Eddystone, there are 1,000 families that recycle like the Smiths. How many pounds of recyclables does Eddystone recycle every year?

_____ pounds

BONUS:

If only **half** of the families in Eddystone recycled, how much more trash would be added to the landfill?

_____ pounds

Name: _____



Recycling Just Makes Cent\$!

In Eddystone, we recycle paper, cardboard, cartons, plastic, glass, aluminum, and metal cans. **Why does recycling matter?**

1. If Eddystone recycles 800,000 pounds in one year, and one ton equals 2,000 pounds. How many tons of recycling are collected in Eddystone each year?

_____ tons

2. Recycled materials are bought by manufacturers to make new products. If Eddystone is paid \$20 per ton of recycling, how much will Eddystone receive each year from selling the materials?

_____ dollars

3. The State of Pennsylvania rewards towns for the amount they recycle. If Eddystone is awarded \$15 per ton of recycling, how much will Eddystone be awarded by the State each year?

_____ dollars

4. How much money will Eddystone receive each year from recycling?

_____ dollars

5. A town must pay money to dump trash at a landfill. If Eddystone did **not** recycle, all the recycling would go to the landfill. If it costs \$40 per ton to dump trash at a landfill, how much money would Eddystone have to pay to dump all of the recycling at the landfill?

_____ dollars

6. By recycling, how much more money does Eddystone have every year?

_____ dollars

BONUS:

List some other benefits of recycling versus dumping materials at a landfill.

Appendix B

Example of a Non-Compliance Notice and Positive Reinforcement Notice

EDDYSTONE BOROUGH S.W.E.E.P.
Solid Waste Education and Enforcement Patrol

Congratulations!

Address: _____

Date: _____

Dear Resident,
An inspection of your Recycling & Refuse has indicated that
you are in compliance with Eddystone requirements.

Thank you for your cooperation!

Eddystone Borough 1300 East 12th Street, Eddystone, PA 19022
(610) 874-1100 info at EddystoneBoro.org

EDDYSTONE BOROUGH S.W.E.E.P.
Solid Waste Education and Enforcement Patrol

Notice of Non-Compliance

Address: _____

Date: _____

Your curbside materials were not collected for the following reason(s).
We will gladly collect the materials on the next scheduled pickup,
provided the following problems are corrected:

- Trash contains recyclables / yard waste / electronics
- Recycling contains trash / yard waste / electronics
- Can is improperly placed / facing wrong direction / overloaded
- Large Item requires a bulk sticker purchased from the Borough
- Other / Details _____

Thank you for your cooperation!

Eddystone Borough 1300 East 12th Street, Eddystone, PA 19022
(610) 874-1100 info at EddystoneBoro.org

Appendix C

Summary of Residential Recycling Opportunities

Appendix C - Summary of Residential Recycling Opportunities

MATERIAL	EXAMPLES	CURB¹	CALL BORO²	HHW³	OTHER⁴	LINK
ALUMINUM & METAL CANS	Soda, Tuna Cans	X				
APPLIANCES CONTAINING FREON	Refrigerator, Air Conditioner, Dehumidifier		X		Best Buy Appliance Pickup, PECO Smart Appliance Recycling, Local Company Pickup - see link	http://www.co.delaware.pa.us/recycle/feron.html
APPLIANCES NOT CONTAINING FREON	Stove, Washer, Dryer		X		Best Buy Appliance Pickup	http://www.bestbuy.com/site/GlobaI-Promotions/Recycle-Pop-up/pcmcat179600050004.c?id=pcmcat179600050004
AUTOMOTIVE PRODUCTS	Oil, Antifreeze, Tires, Car Batteries			X	Walmart, Various Local Automotive Facilities, see link	http://www.co.delaware.pa.us/recycle/pdf/motoroil.pdf
BATTERIES - ALKALINE					Whole Foods Glen Mills, or trash (after 1996 alkaline batteries do not contain mercury)	
BATTERIES - RECHARGEABLE				X	Best Buy, AT&T Eddystone	
BULK TRASH	Mattresses, Carpet		X			
CARDBOARD		X			Paper Retriever Bin Eddystone Elementary	
CARTONS	Milk, OJ, Broth, Juice Boxes	X				
CELL PHONES				X	All Delaware County Libraries, AT&T Eddystone	
CDs/DVDs					Best Buy	
CONSTRUCTION WASTE	Wood, Concrete, Brick, Windows				Delaware Valley Recycling, Habitat for Humanity ReStore Folsom	http://www.hkgroup.com/companies/delaware-valley-recycling/
ELECTRONIC WASTE	Computer, Printer, Camera, GPS, Audio Equipment, TVs				Best Buy	http://www.bestbuy.com/site/GlobaI-Promotions/Recycling-Electronics/pcmcat149900050025.c?id=pcmcat149900050025&ref=199&loc=je6NUbpObpQ&acampID=1&siteID=je6NUbpObpQ-Wo092QXA.L562AcG2xxOIw
EYEGLASSES & HEARING AIDS					Springfield Township Library	
FURNITURE			X			
GLASS BOTTLES & JARS		X				
HOUSEHOLD HAZARDOUS WASTE	Oil Paint, Paint Thinner Varnish, Kerosene, Gasoline, Motor Oil, Antifreeze, Weed Killer			X	Also Fungicide, Pesticide, Items Containing Mercury, Ni-Cad, Lithium, Rechargeable & Lead Acid Batteries, Cell Phones, Thermometers, Thermostats	http://www.co.delaware.pa.us/recycle/hhw.html
LIGHT BULBS - CFL				X	Home Depot, Lowes, Ikea	
LIGHT BULBS - NOT CFL	Incandescent, LED, Halogen				Regular Curbside Trash	
MEDICATIONS	Prescription Drugs				Ridley Township Police Department	
PAINT - LATEX					Mix with kitty litter or shredded newspaper to solidify and dispose in regular trash with open empty paint can	
PAINT - OIL				X		
PACKING PEANUTS					UPS Store Aston	
PAPER	Office Paper, Paperboard, Newspaper, Phonebooks, Magazines, Discarded Mail, Paperback Books	X			Paper Retriever Bin Eddystone Elementary	
PLASTIC #1, #2, #4, #5, & #7	Look for the Recycling Number, Food and Beverage Containers with Caps Removed	X				
PLASTIC BAGS	shopping bags, produce bags,				Walmart, other grocery stores	
PRINTER CARTRIDGES					Staples, Target, Best Buy	
SCRAP METAL	Pipes, Ducts, Gutters, Screws, Bolts, etc.				Various Local Automotive Shops, Accurate Metals Darby	
STYROFOAM	Do Not Place in Curbside Recycling				Even though some styrofoam or polystyrene has a recycling number these items cannot be placed in curbside recycling. They can be placed in Regular Trash, or taken to Recycling Services Inc. Pottstown	
YARD WASTE	Leaves, Shrub Clippings, Twigs				Leaves collected curbside twice per year, yard waste can be dropped off at Delaware County Compost Farm 2300 Concord Road & Incinerator Road, Chester, PA 19013	http://www.co.delaware.pa.us/recycle/composting.html

1 - The Borough collects Single Stream Recycling on Tuesdays

2 - Call or visit the Borough website to arrange a heavy trash pickup. 610-874-1100 eddystoneboro.org

3 - The County hosts Household Hazardous Waste (HHW) collection events throughout the year. Visit their website for dates. <http://www.co.delaware.pa.us/recycle/>

4 - Contact these places first, to make sure they will recycle the item you have.

Appendix D

Draft Residential Educational Flyer

If each household recycled **16** pounds per week,

Eddystone Borough could recycle **400** tons per year.

Eddystone could save **\$13,000** in landfill dumping fees,

and combined with our earnings from the sale of recyclables, and State recycling refunds,
our Borough could have **\$40,000** more each year.

This year our Borough was awarded **\$246,000** in State grant money to upgrade our recycling equipment and program.

This means energy savings, **LOWER TAXES**, and less trash in our landfill.

When each of us recycles, **RECYCLING REALLY ADDS UP**, and
so do the savings. **RECYCLING JUST MAKES CENT\$**

That is why Eddystone has made the switch to mandatory recycling beginning _____. The Borough is investing in our recycling system, and investing in our future. Having a mandatory recycling program means that we are all saving money and making the most out of the recycling program we have. Requiring all homes and businesses to recycle also enables Eddystone to receive a greater amount of State grant money every year.

Mandatory recycling, per Ordinance ____, means that all homes and businesses are required to recycle glass, plastics, cardboard, paper, aluminum, and steel cans. **By law, trash cannot be placed in the recycling, and recycling cannot be placed in the trash.**

Join Eddystone Borough, as we **INVEST IN OUR FUTURE!**



Yours in service,

Eddystone Borough Administration &
the Highway and Sanitation Committee

At the curb, Eddystone recycles Glass, Paper, Cartons, Cardboard,
Aluminum and Steel Cans, and Plastics #1, #2, #4, #5, and #7
But don't stop there!

Here's How to *RECYCLE EVERYTHING*, well, almost.
(or visit www.eddystoneboro.org for links on our website)

MATERIAL	EXAMPLES	CURB ¹	CALL BORO ²	HHW ³	OTHER ⁴
ALUMINUM & METAL CANS	Soda, Tuna Cans	X			
APPLIANCES CONTAINING FREON	Refrigerator, Air Conditioner, Dehumidifier		X		Best Buy Appliance Pickup, PECO Smart Appliance Recycling, Local Company Pickup - see link
APPLIANCES NOT CONTAINING FREON	Stove, Washer, Dryer		X		Best Buy Appliance Pickup
AUTOMOTIVE PRODUCTS	Oil, Antifreeze, Tires, Car Batteries			X	Walmart, Various Local Automotive Facilities, see link
BATTERIES - ALKALINE					Whole Foods Glen Mills, or trash (after 1996 alkaline batteries do not contain mercury)
BATTERIES - RECHARGEABLE				X	Best Buy, AT&T Eddystone
BULK TRASH	Mattresses, Carpet		X		
CARDBOARD		X			Paper Retriever Bin Eddystone Elementary
CARTONS	Milk, OJ, Broth, Juice Boxes	X			
CELL PHONES				X	All Delaware County Libraries, AT&T Eddystone
CDs/DVDs					Best Buy
CONSTRUCTION WASTE	Wood, Concrete, Brick, Windows				Delaware Valley Recycling, Habitat for Humanity ReStore Folsom
ELECTRONIC WASTE	Computer, Printer, Camera, GPS, Audio Equipment, TVs				Best Buy
EYEGASSES & HEARING AIDS					Springfield Township Library
FURNITURE			X		
GLASS BOTTLES & JARS		X			
HOUSEHOLD HAZARDOUS WASTE	Oil Paint, Paint Thinner Varnish, Kerosene, Gasoline, Motor Oil, Antifreeze, Weed Killer, Fungicide, Pesticide			X	Also Items Containing Mercury, Ni-Cad, Lithium, Rechargeable & Lead Acid Batteries, Cell Phones, Thermometers, Thermostats
LIGHT BULBS - CFL				X	Home Depot, Lowes, Ikea
LIGHT BULBS - NOT CFL	Incandescent, LED, Halogen				Regular Curbside Trash
MEDICATIONS	Prescription Drugs				Ridley Township Police Department
PAINT - LATEX					Mix with kitty litter or shredded newspaper to solidify and dispose in regular trash with open empty paint can
PAINT - OIL				X	
PACKING PEANUTS					UPS Store Aston
PAPER	Office Paper, Paperboard, Newspaper, Phonebooks, Magazines, Discarded Mail, Paperback Books	X			Paper Retriever Bin Eddystone Elementary
PLASTIC #1, #2, #4, #5, & #7	Look for the Recycling Number, Food and Beverage Containers with Caps Removed	X			
PLASTIC BAGS	shopping bags, produce bags,				Walmart, other grocery stores
PRINTER CARTRIDGES					Staples, Target, Best Buy
SCRAP METAL	Pipes, Ducts, Gutters, Screws, Bolts, etc.				Various Local Automotive Shops, Accurate Metals Darby
STYROFOAM	Do Not Place in Curbside Recycling				Even though some styrofoam or polystyrene has a recycling number these items cannot be placed in curbside recycling. They can be placed in Regular Trash, or taken to Recycling Services Inc. Pottstown
YARD WASTE	Leaves, Shrub Clippings, Twigs				Leaves collected curbside twice per year, yard waste can be dropped off at Delaware County Compost Farm 2300 Concord Road & Incinerator Road, Chester, PA 19013

- 1 - The Borough collects Single Stream Recycling on Tuesdays
- 2 - Call or visit the Borough website to arrange a heavy trash pickup. 610-874-1100 eddystoneboro.org
- 3 - The County hosts Household Hazardous Waste (HHW) collection events throughout the year. Visit their website for dates. <http://www.co.delaware.pa.us/recycle/>
- 4 - Contact these places first, to make sure they will recycle the item you have.

Appendix E

Summary of Commercial Survey Results

Eddystone Borough RTA - Business Recycling Participation Survey

Business ID No. *	Recycle Standard Materials**	Do you recycle, and if so how/who do you use for collection? Is it single stream?	What do you think the biggest difficulty is, in recycling at your business?	Do you have any questions about recycling, or recommendations?	Would use Borough pickup
1	y	yes, hauler dumpster, separated materials	it's pretty easy	they find recycling to be easy, and have no questions	
6		no, private pickup, no recycling, hauler doesn't recycle	it's expensive being separate from residential, the price is the impediment, the hauler has a set price for trash pickup, it's hard to get them to reduce it even if they contract for recycling collection and so have less trash	no, but he'll contact Bill Stewart if he thinks of anything	
9		no, trash is collected in dumpster	the cost, which is handled by the corporate office	the Borough could provide recycling cans, even outside the front of businesses, chained to the poles so businesses can dump recycling in there, or can provide small containers for inside stores	y
11	y	recycle cardboard, hauler for trash and cardboard pickup, send cardboard back on the delivery trucks	they don't really generate anything more than paper or cardboard	no questions/comments	
15		not sure if they recycle		the Borough could give a can that the Borough picks up	y
17		recycle chemical products, recycle aluminum scrap, normal recycling is trashed	no real impediment, they'd have to hire another hauler for recycling	no	
18	y	yes, do have bins and take them to their homes	taking recycling home is inconvenient and it would be more convenient to collect recycling at their business, and they generate a normal amount of recycling that would fit in a residential bin	they have mostly paper boxes, and plastic bottles	
23		recycle scrap metal			
25		no, all goes in trash, waste mngt is hauler	they could recycle cardboard, even when presented with separate trash and recycling bins, their customers don't separate the materials anyway, and it is a pain to pick through and separate them after the fact	if the Borough provided a bin, that might help, they could separate out cardboard for recycling	y
27		no	they don't generate recyclables	they would like a pickup for paint and items you can't throw away	
34	y	yes			

Business ID No. *	Recycle Standard Materials**	Do you recycle, and if so how/who do you use for collection? Is it single stream?	What do you think the biggest difficulty is, in recycling at your business?	Do you have any questions about recycling, or recommendations?	Would use Borough pickup
35	y	yes, everything, even computers, baldwin towers is the buliding owner and they hire a hauler	it's easy, they generate mostly paper and computer parts	they have a great hauler that comes up to the office and takes everything, they would recommend their hauler to anyone	
38	y	yes, hauler for paper, wiggins is the hauler they recommend			
39	y	yes, dome for glass and plastic outside			
40		owners of a park, each tenant contracts trash/recycle separately			
42	y	pickup cardboard boxes, also scrap metal, sometimes they have scrap metal, but their hauling company takes it if they request it	It has been 5-6 years now since they've been recycling, their system is reliable	no	
45	y	yes, bins in everyones office, paper, Baldwin towers manages the building, they hire the hauler			
48		no, don't produce any recyclables, sometimes have cardboard, but they reuse it	only 2 people work there, so they don't generate much	recommends reuse of materials, he reuses cardboard to pack his hauler trucks, they only thing he throws away is sawdust	
50	y	yes, located in Baldwin towers			
52		Opdenaker takes trash, not recycling, they recycle copper/brass to a center in chester, even steel and metal go to a scrapper	if the Borough could provide a can, he would recycle plastic/paper/glass/cardboard	a normal size recycling can would be suffficient if the Borough were to offer recycling pickup	y
53		no, they scrap metal though, and they recycle tires	recycling causes him aggravation, he doesn't have to do it, and it's too difficult to separate things out	recycling containers are expensive, he contracts trash privately, he doesn't see how the Borough could help, he doesn't think businesses would like help	
57	y	Yes, they recycle cans & bottles, haulers pick up trash and recycling	they don't have much trash, employees are not usually at the business place, they are out most of the day	no	
58		no they do not		their recycling would probaby fit in a big trash can/bin, if the Borough were to provide pickup	y
61	y	yes, but not sure what materials		no ideas	

Business ID No. *	Recycle Standard Materials**	Do you recycle, and if so how/who do you use for collection? Is it single stream?	What do you think the biggest difficulty is, in recycling at your business?	Do you have any questions about recycling, or recommendations?	Would use Borough pickup
64	y	private trash hauler, a recycling company picks up pallets and drums, plastic is separated and employee takes them home		she recommends putting a light in the alley due to dark and unsafe conditions, also if the Borough provided containers that would be helpful, or maybe put containers outside on the walkway for public trash and recycling, which would keep the streets cleaner too	y
67	y	yes, they think so			
68		no, theyd like to recycle paper and cardboard though because they have a lot	everything gets thrown in one can right now, they don't have recycling pickup now, all trash gets put in one dumpster	they could fill a can at least once per week with paper and cardboard, if the Borough offered	y
70		no, they put everything in one dumpster,	they don't have recycling pickup, but they generate a lot of paper	they might use a paper dropoff if they added it to the dome yard, also they had an idea - the Borough should produce a directory of all Eddystone businesses - send a quarterly newsletter to residents - list different vendors in each issue so residents know the local businesses	y
71	y	yes, office facilities/ cleaning people pick it up		not sure	
82	y	they scrap metal, and sometimes office workers take normal recycling home	they don't generate many materials	no, they only really have scrap which they already recycle	
85		no they do not, they do have a lot of cardboard	they don't know where to take recycling	they would drop it off, if they knew where, or curbside pickup once every week or two would be very helpful	y
88		they have a trash dumpster, no recycling pickup - its expensive, they do generate recyclables though	hauling is expensive, they're in the baldwin development, but not the towers, so the landowner does not provide recycling pickup	they would like if the Borough offered recycling pickup next to their dumpster outside, a trash can size recycling container would be sufficient, educational materials would probably go unused	y
90	y	haul cardboard, they do have other materials that they'd like to recycle	their hauler only collects cardboard, not other materials	they would not use a drop off site, they may use Borough recycling pickup if offered, depending on the cost	y
91	y	they recycle mostly cardboard and plastic, handled by waste management		recycling is handled by corporate and he can't answer questions	
93	y	yes, they think so			

Business ID No. *	Recycle Standard Materials**	Do you recycle, and if so how/who do you use for collection? Is it single stream?	What do you think the biggest difficulty is, in recycling at your business?	Do you have any questions about recycling, or recommendations?	Would use Borough pickup
96		no, they do generate recyclable materials, but have no recycling bin to put them in	they don't have a bin, the trash bins out back get picked up by hauler, and it is used by multiple businesses, there is one recycle bin out back but usually people put trash in that too, so there is no point in separating recycling	the Borough could provide a bin for in the workplace	y
97		no, they have a lot of cans etc, they would love to recycle, they have tons of bottles and cardboard	their trash company doesn't pick up recycling	they would like Borough to provide a recycling can and pickup recycling, or they would use a dropoff center for bottles and cardboard	y
99		no, but they do have bottles and recyclables	they don't have anyone to pick up recycling	it would help if the Borough picked up recycling	y
101		yes, they recycle and are happy with their system			
102		no, they don't recycle, they don't generate much	a private contractor hauls their trash but not recycling, they rent their hall out for events, but it would be difficult to separate out the recycling from the trash after an event		
107	y	yes, they have a separate dumpster for all recycling materials, they recycle oil and scrap		no questions/comments	
112		no, they just have a trash dumpster out back	at one time they tried to recycle, but the cans were used for trash anyway, they have lots of paper	provide them with a can, advertise a FAQ for what can be recycled, send a poster with pictures, because pictures help! They would have to ask their hauler if they collect recycling	y
116	y	the cardboard boxes are picked up for recycling, but they do not have any other recycling collected	there aren't any recycling bins around	it would help to have containers out front of strip of businesses, a lot of stuff goes in the trash now because they don't have bins around, they have a lot of large cardboard that they probably do recycle a different way, but a can could fit all of the other recycling produced	y

*Since this report is public, businesses have been given a business ID number to protect their privacy. Business ID Numbers correspond to the order of the Borough's business list provided to KRF. If desired, a complete digital copy of the spreadsheet will be provided to the Borough.

** Standard Materials include plastics, glass, aluminum and steel cans, paper, and cardboard

Appendix F

Example of a Business Newsletter

Eddystone Business Newsletter



The Borough of Eddystone is committed to helping your business have a successful recycling program. Please call us with questions and we will do our best to help.

Eddystone Recycles

1300 East Twelfth Street
Eddystone, PA 19022
610-874-1100
www.EddystoneBoro.org



Mandatory Business Recycling

Recycling of glass, paper, cardboard, plastic, steel cans, and aluminum cans is now required for all businesses and residents in the Borough of Eddystone, per Ordinance 12345. Inside this newsletter find helpful tips for starting or improving recycling at your business.



Eddystone Business Newsletter

Borough of Eddystone
1300 East Twelfth Street
Eddystone, PA 19022



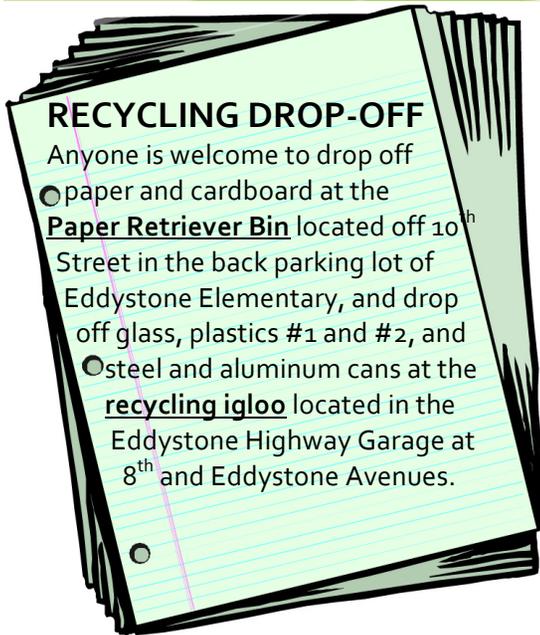
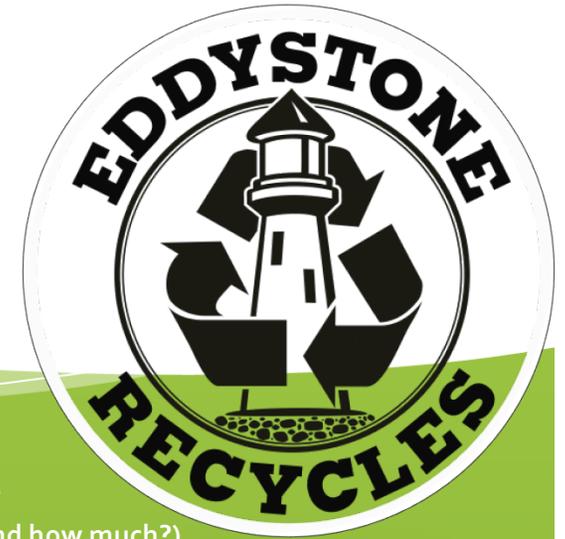
Recycling is Good Business!
We focus on recycling in this first issue of the Eddystone Business Newsletter

[Recipient]

Address Line 1
Address Line 2
Address Line 3
Address Line 4

Eddystone Business Newsletter

The Borough of Eddystone is making great strides toward a more involved community, and we want to include the businesses of Eddystone! Eddystone recently enacted the Refuse & Recycling Ordinance #12345 which makes recycling mandatory for all residents and businesses in the Borough. Recycling not only conserves resources and reduces landfill tipping fees, it can also provide a significant source of income for the Borough, which means tax reduction for us all.



RECYCLING DROP-OFF

Anyone is welcome to drop off
● paper and cardboard at the **Paper Retriever Bin** located off 10th Street in the back parking lot of Eddystone Elementary, and drop off glass, plastics #1 and #2, and ● steel and aluminum cans at the **recycling igloo** located in the Eddystone Highway Garage at 8th and Eddystone Avenues.

Tips for a Successful Recycling Program

- make a commitment to recycle and appoint a coordinator
- assess your waste stream (what materials do you have, and how much?) and choose a program that meets your needs
- decide what materials you will collect
- conveniently place recycling cans in the workplace, involve custodial personnel in the design of the collection system
- educate employees and post signs so employees know what to recycle
- maintain your recycling program, keep reminding employees of how to recycle
- shop around for the best recycling hauling price
- talk to nearby businesses about jointly contracting a waste hauler
- ask haulers about a discount for contracting both trash and recycling services
- return packing materials to vendors for reuse whenever possible



©Lakeshore

Eddystone Business Networking Meeting

Come join other Eddystone business owners to network and discuss issues that concern us all.

Where: Eddystone Borough Hall, 2nd floor
When: Tuesday November 15, 2015 7:00-8:00pm

NEED A RECYCLING HAULER?

Accurate Recycling..... 610-623-7772
J&K Trash Removal..... 610-816-6347
Opdenaker..... 610-616-3573
Republic Services..... 484-868-8581
Shred Patrol..... 215-947-1010
United States Recycling... 215-338-5050
Waste Management.....877-652-4550
Wiggins Shredding..... 610-692-8327
Eddystone does not endorse any company.

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