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Part I
Introduction

How to use this guide

The purpose of this guide is to help school districts and/or individual schools get a recycling program organized and operating on any level; beginner, intermediate or advanced.

Schools, recycling and the law

The Minnesota State Legislature is committed to recycling as a way of life for all of its citizens. To meet this goal, a number of important laws have been enacted to encourage citizens to reduce waste, recycle, compost and preserve natural resources.

In 1980, The Legislature passed the Waste Management Act. Among the provisions is Minn. Stat. § 115A.151, which calls upon school districts to formalize their recycling efforts in school buildings.

The law reads as follows:
(a) A public entity shall:
(1) ensure that facilities under its control, from which mixed municipal solid waste is collected, have containers for at least three recyclable materials, such as, but not limited to, paper, glass, plastic, and metal; and
(2) transfer all recyclable materials collected to a recycler.

Interpretation of the law

Minn. Stat. § 115A.151 is straightforward in its intent to motivate all Minnesota school districts (public schools) to collect at least three recyclable materials, such as paper, plastic & aluminum. In addition it emphasizes that recyclables must be delivered to a recycling facility. This will help eliminate the practice of dumping recyclables into trash dumpsters.

Cost benefits of recycling

When you start recycling, your waste volume will do down. By reducing your waste volume you can ultimately save your district money. For example, the state of Minnesota require waste haulers to add taxes or charges to the waste bill, but recycling and composting are exempt from these charges. For information about Minnesota Solid Waste tax go to www.taxes.state.mn.us/special/waste/index.shtml

Private schools and institutions are not required, but encouraged to recycle. in support of this, the Minnesota Pollution Control Agency (MPCA) offers this guide. In addition, the MPCA developed waste management curricula for grades K-12 called WhataWaste. To request a copy please call the MPCA’s Resource Center at 651-215-0232 or 800-877-6300.
School districts have been on the cutting edge of societal change, leading the way on issues of environmental awareness, educating the handicapped, promoting multi-cultural, gender neutral curricula, requiring pay equity and much more. It is most appropriate that the schools would be called upon again to serve in a critical leadership capacity through a commitment to recycling and waste reduction.

It is recommended that you organize at the school district level for the most efficient recycling operation. Listed are some general steps to follow.

Create a school district recycling committee

It takes many people from various sections of a school to put together a successful recycling program. Each person is essential when developing and maintaining the program effectively.

If you are putting a recycling program together for the first time, you may want to team up with an existing team, such as Health & Safety, Wellness or other environmental committee/team. Here are some key people to have on your recycling committee.

- School district business administrator.
- School board member(s).
- County solid waste officer (or representative)
- Custodial union representative.
- Teacher union representative
- Food service representative
- Secretarial or clerical representative
- Building administrator
- City government representative
- Student Council or student environmental group representative
- PTA/PTO representative
- Waste hauler representative

Set challenging committee goals

The following are sample goals with could be established by the recycling committee

- Invite local and county experts to make presentations to the committee on the problem, future plans, and opportunities for school district involvement.
- Set up a meeting with your county solid waste officer to discuss local recycling and waste reduction plans.
- Attempt to secure school district representation or membership on the county solid waste solid waste committee (or to a municipal recycling committee if more appropriate).
- Direct the creation of building level committees on waste management and recycling.
- Work with local businesses and organizations to secure collection containers or funding to purchase containers and other needed items.
• Determine ways to follow up with schools and evaluate the recycling program progress.

**Develop a school board policy on waste management**

Some school districts found their recycling and waste reduction programs enhanced and more accepted if they established school board policy on waste management as part of initiating school recycling programs.

Also consider *Resource Management Contracting*, this is an innovative alternative to today’s typical waste management contracts. This type of contracting can help in reducing waste generation, increase recycling, obtain useable metrics & manage waste & recycling rate performance data. For more information go to [http://www.pca.state.mn.us](http://www.pca.state.mn.us)

**Determine budget and resource requirements**

Typically, the direct costs associated with the district recycling program should have a short payback time. For example, the greatest one-time capital cost for a district effort would be the acquisition of containers for collection recyclable materials. However, sturdy cardboard boxes could serve as free alternatives. Another option is to design and build your own containers as class projects.

Other examples of budget items to consider are compensation for the recycling coordinator, and funds for supplies, publicity, resource manuals and other items used for promoting the program. All costs should be offset in the long run by the savings that come from paying less for hauling non-recycled garbage away.

It is possible that local businesses and service clubs would donate the materials and supplies to the school district, including the recycling containers. This is another important reason to work with various representatives in planning committees at both the district and building level.

**Promote and evaluate the district’s progress**

Make a point of publicizing goals, tasks and accomplishments to help raise the awareness and involvement of the community.

Consider instituting special awards to schools that accomplish more than the minimum recycling required. The recycling committee could play a key role in creating incentives or individual schools.

The recycling committee will need to decide how it will evaluate progress in recycling and waste reduction. Periodic reports from school recycling leaders or spot visits by the district recycling coordinator are recommended methods of evaluation.

Ideally the district recycling coordinator would be appointed to head the district committee, direct planning, oversee completion of all tasks (including progress evaluations) and report materials recycled to the county recycling coordinator or solid waste officer.
The success of a recycling program depends on the level of involvement of the individual school buildings. If waste reduction and recycling are to become a part of daily living, staff, students and parents/guardians must get involved as active advocates for a change in waste management practices.

Create a recycling committee at each school

An effective committee would consist of enthusiastic, diverse people who will be most influential to the project. A Recycling Team Worksheet in the appendix will help guide you. Below is a list of key people to involve in your committee.

- Recycling coordinator (leader)
- School Administrator
- PTA representative.
- Kitchen staff
- Custodial/maintenance staff
- Faculty
- Students (or an Environmental Club).
- Waste disposal service provider.
- Local government staff

Goals and tasks to be considered by the school/building committee are:

- Publicize goals and tasks to staff, students and parents
- Conduct a waste audit
- Review the school’s waste hauling contract
- Determine materials to be recycled
- Secure storage units for recycled materials
- Specify recycling activities
- Establish and activate collection procedures
- Assign recycling program responsibilities to staff and students
- Inform and educate staff, students and parents about waste reduction and recycling

Select a recycling leader at each school

Parallel with the planning of a district recycling program, a district recycling coordinator mobilizes the participating schools to appoint individual building "recycling leaders." School recycling leaders may be principals, teachers or experts from the community.

The recycling leader responsibilities include:

- program implementation
- overall supervision and safe operation of the school’s recycling program
- continuing education & promotion
- ongoing evaluation and reporting results
Meet with solid waste officials

It is preferable for the school recycling committee to meet with the county solid waste officer or municipal recycling coordinator. They are experienced in waste management programs and familiar with local market resources.

Find recycling markets

Before you start your recycling program, it’s important to know what can be recycled. Finding the right market means figuring out which businesses can best meet your school’s recycling needs.

Questions to ask your waste service provider include: “What type of materials do you recycle? Where do your items go? How often would they be picked up? What type of bins do you provide? Your current waste service provider may offer recycling services.

If your current hauler doesn’t offer recycling pick up, think about utilizing Resource Management Contracting, an innovative alternative to today’s typical waste management contracts. This type of contracting can help in reducing waste generation, increase recycling, obtain useable metrics & manage waste & recycling rate performance data. For more information go to http://www.pca.state.mn.us

Finding out who recycles what may be a good project for an environmental club.

Decide what materials to recycle

Conduct a survey

It’s important to find out why people throw certain things away and what they know about recycling. Conducting a survey will help address some of the barriers to recycling. It will also assist in the types of bins needed and where to place them. A sample survey can be found in the appendix. Conduct surveys with:

- Students
- Teachers
- Custodial & maintenance staff
- Kitchen staff
- Administrative staff

Assess the Waste Stream:

A waste assessment is an on-site review of your waste stream. It will identify material types being discarded and what could potentially be recycled.

This is an excellent opportunity to involve students in identifying all types of school waste. There are three techniques staff and students can follow to examine the school’s waste stream.

- **Simple dumpster analysis.**
  Visually inspect the school dumpsters. Make note of its contents and estimate the amount of each material.

  Document the material types that are most noticeable. Use the Waste Audit Worksheet included in the appendix.

  Conduct a dumpster search more than once to get an overall picture of school waste stream. There may be fluctuations in volume due to seasonal or course changes. Consult custodial staff, food service staff, business managers and support staff to find what items are discarded.

- **School waste analysis.**
  This method involves scientifically analyzing the type, volume and generation rate of school waste.

  It is important to use extreme care when collecting sample materials for identification. In order to identify the samples, contact the local solid waste office, recycling office or a local recycler.
Procurement analysis. 
This method involves examining what the school purchases to determine what may eventually become waste. This analysis also allows a review of procurement practices to determine what recycled products can be purchased. To help you find products, an Environmentally Preferable Purchasing Guide is available on-line at www.swmcb.org search under “publications”.

What about materials that cannot be recycled? 
There are some waste materials which might be recycled, but due to technological or economic constraints they are not recycled at this time. Individual milk cartons and juice containers are examples. Meanwhile, schools can reduce their weight by draining the cartons and reduce the volume through compaction before disposal.

Determine what materials can be reduced or recycled.
Consider materials from the classroom, office, cafeteria and grounds. For both recycling and waste reduction, consider:

What alternatives are there for separating, preparing, collecting, storing and transporting the items?
What alternatives are best for our school situation?
Are there materials we want to market ourselves to redeem funds for school projects?
Which materials are best left for the recyclables collector to handle?

Note: Food waste from school cafeterias can be managed in a variety of ways. Independent School District 196 in Dakota County implemented a successful Compost Pilot Project. For more information, go to: www.isd196.k12.mn.us. Also listed in the appendix is Food Waste Management Resources.

Establish school goals 
Establish school goals for the overall amount of recyclables to be collected. For example, set goals for each classroom and an overall school recycling goal. Involve students in designing charts that monitor the amount of material collected on a monthly basis. Keep a running total, displaying the school’s progress in a prominent place. Everyone will try hard to reach goals if they know what is expected.
Consider establishing waste reduction goals, as well. See the appendix for waste reduction ideas.

Develop a promotional program 
A school information campaign should be planned and implemented to ensure that everyone understands the reasons for recycling and waste reduction, to motivate as many people as possible to take part, and to explain what and how materials are going to be recycled. This is a key step. Experience has shown the best programs will fail if there is no understanding or motivation.

The following activities for students could be part of your information campaign.

- Have a recycling kick-off assembly
- Design and make posters on what, how and why to reduce and recycle.
- Design, make and decorate collection containers for collecting and storing recyclables. These might be made from 55-gallon plastic or metal drums or from heavy cardboard boxes.
- Design school plays or skits around a reduction or recycling theme.
- Provide contests among classes, grades and buildings to stimulate involvement.
- Use the K-12 curriculum lessons on solid and hazardous waste management: "WhatAWaste" Available from the MPCA.
- Hold a science fair to display research projects related to recycling, such as compiling energy savings from recycling, composition studies of solid waste, making a list or map of recycling industries in the community.
- Survey the community to determine why some people recycle and others do not.
- Do art projects using only used items such as scraps of fabrics, plastic foam packing materials or plastic bottles.
- Tour local recycling centers and industries.

In addition, the school recycling leader or the environmental club could publicize the school's goals and accomplishments in the following ways.

- Monthly reports to PTA/PTO.
- Regular, weekly reports over school's public address system.
- Monthly reports in student newspaper.
- Monthly reports in principal's newsletter to parents.
- Periodic reports to local newspapers to inform the community.
- Work with local media for publicity.
- Monthly presentation at faculty meeting.

As the program moves from the exciting introductory stage to the maintenance stage, participation may fall off and contamination of recyclables may increase. You will need to step up your education efforts by continually and positively reinforcing your message.

Use your school news networks to keep interest high by publicizing program goals as they are met. For example, announce the collection of the first ton of paper, or the diversion of 90 percent of the school's steel food cans from the landfill, or report that 5,800 cans have been collected and recycled to date.

Some schools may have contamination problems where recyclables become contaminated with unacceptable materials, or where regular trash contains recyclables. Monitoring the program and reminding students and staff about correct procedures must be a permanent part of your publicity.

On the other hand, praise should also be used as a motivator. This can be accomplished through contests and awards, such as the recycling group of the month. Periodically you may want to organize special events, such as luncheon or dinner award ceremonies, to honor volunteers for their recycling excellence.
Obtain and place collection containers
The types and quantities of containers and other collection equipment will likely vary with each school. This, along with where to place collection containers, inside and outside of the building, must be determined by the recycling leaders for each participating school, with some general direction from the district recycling coordinator (if one exists). The following guidelines will help in making these determinations.

- **Small collection containers**

  Blue boxes or stackable bins are the most widely used household containers for recycling in Minnesota. Households place newspapers, metal cans, glass bottles and (in some areas) plastics into these containers for collection at curbside. These containers can also be used in classrooms, offices and other work areas.

  Many schools may want to collect white office paper for recycling because of its high market value. **Therefore, it is preferable that white office paper be collected in distinctly different containers to avoid contamination.**

  Note: Individual desk tray containers for teachers and office staff are also available.

  However, a single container per classroom, in which white office paper is co-mingled with other recyclable materials, may be sufficient in some cases.

  Finally, if students will be lifting full classroom containers, take safety precautions and be sure the container is not larger than the student’s ability to handle it.

- **Large collection containers**

  Large containers may be required for areas where large amount of waste is generated. Bins with swing-type covers, used mainly for the collection of white office paper, can be centrally located in or near offices, computer and photocopy rooms. Lined plastic barrels with self-closing lids and wheeled carts are ideal for large quantities of bottles and cans produced in cafeterias.

  Plastic barrels, lined with either burlap or plastic bags, are also suitable for temporary storage and transfer before pick-up day. Information on how to get these containers may be obtained from the municipal recycling coordinator or from the recyclables collector directly.

  **Be aware that the choice of containers must also satisfy the requirements of the recyclables collector and local fire prevention officer.**

  There are several different types of vehicles in use for municipal recycling projects and this may influence the choice of containers to be used. For example, if the recyclables collector uses automatic-loading vehicles, it may be best to use specialized containers (carts with wheels) which can be lifted onto the truck and unloaded automatically. If manual-loading trucks are used, it may be easier if the recyclables are picked up from their smaller bins or boxes.

  Finally, large containers may also be located outside the building, for example, next to the waste dumpster. Again, contact the recyclables collector about where to best locate the large containers to make collection efficient for both custodians and the hauler.
Container placement

Collection containers for white office and pastel-colored paper will need to be placed in each classroom, the media center, the duplicating room, the main office and other locations where a high volume of paper is used and discarded. Newsprint collection containers may be placed in faculty workrooms, media/library areas and classrooms where newsprint is used as a part of lessons. Soft drink collection containers may be placed in cafeteria areas, near vending machines, near gymnasiums and in faculty workrooms.

Arrange collection, storage and transportation of materials.

Collection

With the small containers in place, it will be helpful for staff and students to be aware of building collection procedures. A number of guidelines will ensure the success of the recycling process. Although the guidelines will vary from building to building, the following should be applied.

- Don't mix recyclable materials.
- Place recyclable items in appropriate containers.
- Remove paper clips.
- Empty soda pop cans before placing them in collection containers.
- Do not break glass.

Tasks for collection of recyclables in the building are as follows.

- Identify volunteers.
- Develop a list of responsibilities for volunteers involved in collection.
- Prepare a map of the building identifying small and large container locations.
- Prepare a list of volunteers responsible for emptying collection containers and returning the empty containers to their original location.
- Develop a monthly calendar of events, including volunteer assignments (by name or class), a timetable for in-district bagging or boxing and dates of pick-up by recyclables collectors.

Does the recyclables collector prefer that the materials be sorted or co-mingled (a mix of different types)?

Organize a collection schedule with custodians and recyclables collector. The frequency of collection may vary with each school according to material volume, storage limitations and capacity of the material collector.

In most municipalities, the collection of recyclables is scheduled on a weekly basis. Ideally, schools should follow this schedule and put out recyclables for collection on the same day. However, depending on the management requirements of the municipal recycling project and whether the school will be cooperating with the municipality, you may decide to have recyclables collected on a separate schedule.

Storage

In some schools where there is a lack of suitable indoor storage space, an outdoor storage structure may be required for the long-term storage of white office paper and other recyclable materials.
A supply of heavy-duty plastic bag liners may be required for large containers for recyclables containing food or drink residues that are collected from cafeterias. If white office paper is being collected and wheeled carts are not suitable for collection vehicles, plastic bags will help ensure a dry and marketable product that is easy to transport. If white office paper is picked up directly from an indoor storage area, canvas bags may be sufficient.

Security and safety

A district recycling plan should also contain guidelines for the security of a central sorting/storage area, safety procedures for handling recyclables and pick-up, and fire safety precautions in compliance with the Minnesota Fire Code and Building Code. Such guidelines should be created in consultation with a local fire prevention and safety officer and the district health and safety committee. Regular fire safety inspections of participating schools are important.

The use of safety equipment, such as gloves and safety glasses, should be stressed at all times when metal and glass recyclables are being handled.

Pick-up and transportation

Will the recyclables collector pick up the recyclables on school property or strictly curbside? For liability reasons, a materials collector may be restricted from driving a vehicle onto school property during certain hours of the day. On the other hand, it may be difficult or not feasible to place recyclables for collection at the curbside.

Type of transportation vehicle

As discussed under "Containers" on page 11, a private recyclables collector will use a vehicle compatible with the collection containers that must be emptied into the transport vehicle. However, if the school decides to collect, transport and market its own recyclables, almost any vehicle will do. Then, staff or volunteers generally use their own vans, pickup trucks or cars, or alternatively the school district's vehicles.

Establish a recycled products purchasing program

The purchase of products made from recycled materials is necessary to have a complete recycling program to close the recycling loop. The development of such a program should include:

- Specification analysis to determine if any procurement specifications prohibit the purchase of recycled products.
- Identification of products that are used that could be purchased containing recycled material
- Purchase of recycled products, focusing particularly on products that contain the materials collected. The Recycling Association of Minnesota has an on-line directory of recycled-content materials: www.recycleminnesota.org

Evaluate the program.

Program evaluation is important as planning and implementation. It is the mechanism that measures program success and forms the basis for future decisions.
The following may assist program evaluation.

By beginning a recycling program in your school you are learning how everyone's choices count. Plus, you and your school are doing your part to save resources, energy and landfill space to pass along a better world to the citizens of tomorrow.

Be sure to keep your county solid waste office(s) informed of how much you recycle so your progress is counted toward your county's achievement of the state recycling goal.

Each school experience will be different. School districts within the same region can share program strategies in order to assist implementation. They may want to contract for waste management and recycling services for all of their schools as a unit. Banding together may result in more comprehensive services and lower costs. Finally, schools are urged to share their progress with one another through newsletters or other means.

Plan to conduct an updated waste analysis to identify additional areas of the waste stream that can be recycled.
Recycling Team Worksheet

Date: __________________

Name of School: _______________________________________________________

Recycling Coordinator(s): _________________________________________________

_______________________________________________________________________

School Administrator(s): _________________________________________________

_______________________________________________________________________

Custodial and/or Maintenance Staff: _________________________________________

_______________________________________________________________________

Kitchen Staff: ____________________________________________________________

_______________________________________________________________________

Student Representative(s): _________________________________________________

_______________________________________________________________________

Faculty Representative(s): _________________________________________________

_______________________________________________________________________

Waste Hauler Representative(s): __________________________________________

_______________________________________________________________________

Local Government Representative(s): _________________________________________

_______________________________________________________________________

Additional Contacts: ______________________________________________________

(Parks and Recreation____________________________________________________

Staff, on site day care ______________________________________________________

workers, etc.)

Having the cooperation of the people listed on this page is critical to developing and maintaining a successful waste management program at your school. School administrators, faculty representatives and other administration members will assist with demonstrating the importance of recycling. Janitorial and cafeteria staff can ensure materials end up in the proper receptacles.
**Waste Audit Worksheet**

Date: ____________

**Caution:** If you are handling waste, picking up waste bags and opening them, please wear protective clothing, eyewear, gloves and other protective gear to prevent injury or illness.

<table>
<thead>
<tr>
<th>Materials found in trash</th>
<th>Where did the material come from?</th>
<th>Could it have been recycled?</th>
<th>What is the weight or volume of the material (per week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office paper</td>
<td>Classroom, Administration office</td>
<td>Yes</td>
<td>350 lbs./week</td>
</tr>
<tr>
<td>Cardboard</td>
<td>Maintenance, Administration, classrooms &amp; cafeteria</td>
<td>Yes</td>
<td>6 cubic yards</td>
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2.1 Buying Wisely to Reduce Waste

Environmental and Health Issues

Prevents Waste: Waste reduction is any activity that prevents waste at its source. It includes:
- Reducing the amount or the toxicity of materials used to do anything.
- Reusing an item in its original form.
- Using repairable, refillable, durable products that last longer.

Reduce waste
By choosing products wisely and changing a few small work habits, you can greatly reduce waste in the workplace and save your agency money, too.

The following checklist offers specific ways to reduce waste in your agency’s office.

Office Products

- **Use the “duplex” function** on your copier to make double-sided copies that reduce paper waste and save money. Buy or lease copiers and printers capable of making double-sided copies, and work with vendors to offer training to employees. Set the default mode on all machines for double-sided (“duplex”) output.
- **Reuse paper** printed on one side for making draft copies, fax cover sheets or notepads.
- **Buy erasable boards** as an alternative to paper flip charts.
- **Use self-stick fax addressing labels** instead of printing full-size fax cover sheets (or use half-page sheets if you need to include a message with your fax).
- **Use electronic software presentations** (e.g., PowerPoint®) to reduce the use of transparencies.
- **Buy solar-powered calculators and other devices** to eliminate the need for batteries.
- **Purchase refillable products** such as pens, pencils, and tape dispensers.
- **Reuse file folders and binders**; applying new labels extends their usefulness.
- **Post information on bulletin boards or use e-mail** rather than distributing paper memos.
- **Reuse paper printed on one side** for draft copies or make it into notepads.
- **Rent, lease, or contract for services**, instead of buying infrequently used equipment.
Food Service

- **Buy reusable cafeteria dishware.** Reusable dishes are often cost-effective over the long term compared with disposables.
- **Avoid using single-use cups.** Many workplaces have eliminated single-use cups in favor of using reusable cups.
- **Use beverage dispensers** for milk, juice, or soft drinks.

Packaging

- **Purchase products in reusable, refillable, or returnable containers.** For example, receive deliveries in reusable trays, totes, or pallets that can be returned to the vendor for reuse.
- **Buy products in bulk,** and only in the amount you need.
- **Purchase products with less packaging.** Work directly with vendors to identify ways to reduce packaging.
- **Reduce the use of aerosol spray cans.** Significant cost savings and waste reduction can result from using refillable and reusable pump-spray bottles.

General

- **Buy rebuilt, remanufactured, or refurbished products.** Specify rebuilt auto shop parts and electric motors, remanufactured laser toner cartridges, re-inked printer ribbons, refurbished office partitions and furniture, and rebuilt machinery (e.g., copy machines).
- **Buy durable products.** Evaluate frequently replaced items (or frequently purchased repair parts) to determine if replacing them with longer-lasting, higher-quality products makes sense. Examine in-house repair schedules, maintenance agreements, and extended warranties as ways to extend product life.
- **Set up a reuse system, or use an existing system,** that makes unwanted items from one department available to other departments. (Refer to Materials Exchange 3-1 and State and Local Surplus Programs 3-2 in the EPP Guide at http://www.swmcb.org/EPPG/default.asp

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*Environmentally Preferable Purchasing Guide* published by the Solid Waste Management Coordinating Board, 4/00. The SWMCB includes members from the Minnesota metropolitan counties of Anoka, Carver, Dakota, Hennepin, Ramsey, and Washington, with ex-officio members from the Minnesota Pollution Control Agency.

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The Environmentally Preferable Purchasing Guide (EPP)

2.2 Identifying Recycled-Content Products

www.swmcb.org

Environmental and Health Issues

| Recycled Content: Recycled-content products save energy and keep waste out of landfills and incinerators. |

Check the contents
Finding products made from recycled materials can be easy. Try to select products with the highest recycled content - this means the biggest gain for the environment.

Extensive help is available from the U.S. Environmental Protection Agency (EPA). As required by Federal Executive Order 13101, the EPA has issued a set of guidelines called the federal Comprehensive Procurement Guidelines (CPG). The CPG designates items that must contain recycled content when purchased by federal agencies, or by government contractors using appropriated federal funds. In some cases, state and local governments must also follow the recycled-content guidelines when purchasing certain items using federal funds. Even if not required to do so, everyone from local agencies to non-profits may find useful purchasing guidance in the CPG.

The EPA is required to update the CPG every two years. Last updated in June 2002, the CPG now includes over 50 products. Products containing recycled content are listed under the following categories, along with manufacturers, vendors, and suppliers for each item:

- Construction Products
- Landscaping Products
- Non-paper Office Products
- Paper and Paper Products
- Park and Recreation Products
- Transportation Products
- Vehicular Products
- Miscellaneous Products

For each category, the EPA recommends content levels for recycled-content products. These levels are divided into the recommended percentages of postconsumer content and total recovered materials content. Understanding each type of content can help you make the best purchasing decisions:

- **Postconsumer material** means a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item.
- **Recovered material** means waste materials and byproducts that have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process. Postconsumer material is a subset of recovered material.
For a complete list of products and the EPA’s recommended recycled-content level for each product, visit the Comprehensive Procurement Guidelines program website at http://www.epa.gov/epaoswer/non-hw/procure/index.html, or call the National Service Center for Environmental Publications at 800/490-9198 to request a copy of the Comprehensive Procurement Guidelines product listings.

The CPG web site features additional resources that are useful in identifying environmentally preferable products. Look for downloadable fact sheets in the "2000 Buy Recycled Series" which cover the following product areas: paper, non-paper office supplies, construction, landscaping, transportation, parks and recreation, and miscellaneous products. The EPA also issues guidance on buying recycled-content products in its Recovered Materials Advisory Notices (RMANs).

Additional Resources

New recycled content products are being developed continuously. Government agencies and schools are encouraged to regularly ask their vendors about the availability of recycled products. To learn more about recycled content products, check the resources listed below and the organizational resources listed in Appendix C in the EPP Guide at http://www.swmcb.org/EPPG/default.asp

The “Recycled Products Guide” provides information on the cost, quality, and availability of a wide variety of recycled content products. Download a free copy from the Recycling Association of Minnesota at www.recycleminnesota.org

The “Minnesota Recycled Products Directory” lists businesses that manufacture products with recycled materials in Minnesota. To search this on-line database of products, visit the Minnesota Pollution Control Agency (MPCA) web site at www.pca.state.mn.us, or call PCA’s Resource Center at 651/215-0232 or 800/877-6300 to receive a copy of the directory.

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"Put it in writing."
Consider including environmental attributes as specifications in your bid solicitations or proposal requests. Here are some strategies other public agencies have used.

- Avoid using language that prohibits the purchase of environmentally preferable products. **Example:** Avoid specifications that require new equipment so that vendors are able to offer remanufactured items, such as auto parts, office furniture, and toner cartridges.

- Require recycled content if adequate competition exists for a product that is readily available with recycled content. **Example:** Require 30% post-consumer recycled-content copy paper.

- If you are uncertain about the availability of a particular recycled-content product, you could instead give a preference to bids offering recycled content, or award additional points based on the level of recycled content offered in the bid or proposal. **Example:** You could award zero points for bids offering computer forms with no recycled content, five points for 10% recycled content, and 10 points for 30% recycled content.

- Eliminate over-specification without compromising performance. Allow alternatives that satisfy the end use. Specify product qualities that are critical to performance and leave other options open. **Example:** Avoid specifying clear plastic trash bags. Otherwise, you may eliminate recycled-content trash bags that are often darker or opaque in color, but perform just as well.

- Include environmental criteria - such as post-consumer recycled content, mercury-free, or Energy Star® compliance - for the product you want to purchase. **Example:** Specify the federal standard of 25% post-consumer recycled content in a solicitation for re-refined oil. Similar standards exist for most of the products listed in this Guide, and are ready for you to use in your bid solicitations.

- Take into account the life-cycle costs of products, such as savings on maintenance, replacement, and disposal costs, which are not factored into the initial unit price. **Example:** Your evaluation criteria for bids offering plastic benches and tables could include price, durability, manufacture warranty, required maintenance, recycled content, testing of product samples, and references.

- If packaging or containers are necessary, specify types that are refillable, returnable, or recyclable. Otherwise, specify that no packaging or container be provided.

- Require vendors to report your environmental purchases on a quarterly or annual basis so that your organization can track its progress, such as amount of recycled-content copy paper and file folders purchased. See Tracking Environmental Purchases 2-4 for a copy of the Minnesota Department of Administration’s sample tracking form in the EPP Guide at http://www.swmcb.org/EPPG/default.asp

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Specifications for Garbage and Recycling Services
Developed by Ramsey County, Minnesota, and Anoka County, Minnesota

This appendix provides sample specifications for bid solicitations for garbage and recycling services. All such provisions should become terms of any resulting contract for services. The following specifications reflect one particular county’s solid waste master plan, which establishes processing of mixed-municipal solid waste (MSW) for resource recovery as the preferred strategy for managing waste. This practice results in a fuel for energy production, rather than landfilling of waste. These specifications cover delivery of waste to a specific facility, disclosure and reporting requirements, and assurances that recyclables are not disposed of as garbage.

- The contractor(s) must comply with all Ramsey County and City of Saint Paul solid waste management requirements and transport all MSW to the Ramsey/Washington County Resource Recovery Facility, 2901 Maxwell Avenue, Newport, MN 55055.
- The contractor(s) will provide a written disclosure of the final destination of waste collected under any contract resulting from this bid as required in Minn. Statutes Section 115A.9302, and shall also provide such written disclosure by the date of commencement of services. The contractor(s) shall provide disclosure to the contact person listed for each location. The disclosure will be addressed specifically to the contact person and will identify the specific destination to which any MSW removed from that location will be delivered for final disposal. Ramsey County reserves the right to request documented receipts for all refuse delivered to the Ramsey/Washington County Resource Recovery Facility.
- The contractor(s) shall, upon request, provide the County with a report of the quantity of mixed-municipal solid waste and recyclable materials removed from each location. This report may be requested on a semi-annual basis.
- The contractor(s) shall transport all source separated recyclables collected under any contract resulting from this bid to a recycling processing facility, or to a facility accepting source separated recyclables for the purpose of recycling, as defined in Minn. Statutes Section 115A.03, Subd. 25b. The contractor(s) shall, upon request, provide evidence such as receipts or other documentation of final destination of all materials collected for recycling.

For more information, contact:

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Anoka County included the following specifications in their contract for garbage and recycling services regarding the recycling of office paper which could contain sensitive information, particularly about clients or legal issues.

- All mixed office paper, regardless of grade, offered for recycling under this Contract, shall be considered to be Confidential Office Paper and shall be handled pursuant to this Section. The successful bidder shall provide management of Confidential Office Paper in accordance with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13. The destroyed Confidential Office Paper shall be recycled. The successful bidder shall ensure that all containers for Confidential Office Paper are locked securely.

- The successful bidder shall destroy Confidential Office Paper within forty-eight (48) hours, and shall endeavor to destroy said materials within twenty-four (24) hours of pickup. Destruction may occur by either shredding or pulping into new paper in a manner that renders the data on the Confidential Office Paper to be completely unintelligible. The successful bidder shall immediately issue an original Certificate of Destruction signed and dated by an authorized agent of the successful bidder, clearly noting the date of the destruction, and include sufficient documentation to provide an audit trail to verify destruction of all Confidential Office Paper. The Certificate of Destruction shall be in form and substance as attached hereto as Exhibit 5, and submitted within five (5) working days after destruction to the County's Information Manager, or such other person or persons designated in writing by the Division Manager of Anoka County Finance and Central Services Division, confirming that that Confidential Office Paper was destroyed. Upon execution of the Contract, the successful bidder shall provide the County's Information Manager with a list of all persons authorized to execute Certificates of Destruction on behalf of the successful bidder.

- The successful bidder shall transport Confidential Office Paper in a truck that is locked and secure to prevent unauthorized access to Confidential Office Paper. The Confidential Office Paper will be baled or destroyed. After baling, the Confidential Office Paper shall be transported only in trucks that have been sealed with a unique number on the seal and with the same number placed on the bill of lading. The successful bidder shall immediately notify the County's Information Manager if the seal is broken by anyone other than an employee authorized to destroy the Confidential Office Paper. The successful bidder shall place Confidential Office Paper only in secure areas until destruction and protect them from being used or disclosed in any manner. The successful bidder warrants to the County that only employees engaged in the actual destruction/recycling process will be given access to the documents and that the successful bidder shall require employees to keep all documents and information confidential.

For more information, contact:

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Model Board of Education Waste Reduction Resolution and Environmental Purchasing Policy

Model Resolution

[Name of School District]

WHEREAS, the District recognizes the need to manage resources efficiently and cost effectively, and

WHEREAS, the integrated waste management principles of Reduce, Reuse and Recycle are consistent with principles of good management and environmental stewardship, and

WHEREAS, the integrated waste management principles of Reduce, Reuse and Recycle save energy and resources that will directly benefit our communities, and

WHEREAS, the integrated waste management principles of Reduce, Reuse and Recycle are necessary to reduce the impact on landfill capacity, and

WHEREAS, District staff should serve as positive role models to students and the community concerning environmental issues:

THEREFORE, BE IT RESOLVED that the [Name of School District] will implement a comprehensive and integrated waste management program that will include:

• Waste prevention practices such as material reuse, double-sided copying, e-mail, and electronic purchase orders.
• Recycling of corrugated cardboard; white and mixed paper; aluminum, glass, plastic, and metal containers; and landscape trimming.
• Reuse and recycling of construction and demolition materials to the greatest extent possible.
• Purchase of products containing the highest amount of post-consumer material practicable.
• Annual assessment of each department’s effectiveness in applying this policy.

AND THEREFORE BE IT FURTHER RESOLVED THAT: The Superintendent shall adopt school and departmental procedures that implement and support this integrated program.

Adopted: [Date]

Signed: [President of Board of Education, Superintendent of Schools]
Purpose

The purpose of this policy is to support the purchase of recycled-content, recyclable, and other environmentally preferable products in order to minimize environmental impacts relating to our work. The [Name of School District] recognizes our employees can make a difference in favor of environmental quality. The District prefers the purchase of environmentally preferable products whenever they perform satisfactorily and are available at a reasonably competitive price.

All District departments and schools shall adopt and promote the use of recycled-content, recyclable, and other environmentally preferable products as a department/school priority. In doing so, the department/school shall:

1. Encourage waste prevention, reuse, recycling, market development, and use of recycled-content, recyclable and other environmentally preferable products through lease agreements, contractual relationships, and purchasing practices with vendors, contractors, businesses, and other government agencies.
2. Adopt waste prevention, reuse, recycling, and use of recycled-content, recyclable, and other environmentally preferred products as a department/school priority.
3. Generate less waste material by reviewing how supplies, materials, and equipment are manufactured, purchased, packaged, delivered, and used, and the manner of their disposal.
4. Serve as a model for the District and our community to influence waste prevention, recycling, and procurement efforts.

Definitions

“Environmentally Preferable Products” means products that have a lesser impact on human health and the environment than competing products. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation and/or disposal of the product.

“Recycled-Content Products” are products manufactured with waste material that has been recovered or diverted from the waste stream. Recycled material may be derived from post consumer waste (material that has served its intended end use and been discarded by a final consumer), industrial scrap, manufacturing waste and/or other waste that otherwise would not have been utilized.

Policies

1. All District personnel will specify recycled-content, recyclable, and other environmentally preferable products whenever practicable.
2. The District shall solicit the use of recycled-content, recyclable, and other environmentally preferable products in its procurement documents as appropriate.
3. District department/schools shall practice waste prevention and recycling whenever practicable.

Responsibilities of [Name of Purchasing Department]

The [Name of Purchasing Department] shall be responsible for coordinating the implementation of this policy and shall:

1. Develop and maintain information about recycled-content, recyclable, and other environmentally preferable products to be purchased by the District, departments, and schools.
2. Inform other departments/schools of their responsibilities under this policy; provide departments/schools with information about recycled-content, recyclable, and other environmentally preferable product procurement opportunities.

3. Seek to participate in material exchanges and joint powers authorities to negotiate prices that are more competitive.

4. Reuse materials whenever possible.

5. Inform vendors of our Environmental Purchasing Policy.

6. Restrict contracts to only recycled-content, recyclable, and other environmentally preferable products whenever possible (e.g., office supplies, lubricating oils, and janitorial supplies).

7. Review specifications used in public bidding to eliminate barriers to recycled-content, recyclable, and other environmentally preferable products, such as outdated or overly stringent product specifications and specifications not related to product performance. All requests for proposals shall require vendors to offer recycled-content, recyclable, and other environmentally preferable products whenever practicable.

8. Provide the District Superintendent and Board of Trustees with an annual report on the status of key benchmark commodities.

Responsibilities of All Departments/Schools

Each department/school shall:

1. Practice waste prevention, reuse, and recycling whenever possible.

2. Continue to utilize recycling programs and expand where possible.

3. Procure recycled-content, recyclable, and other environmentally preferable products whenever practicable.

4. Evaluate each designated product to determine the extent to which departments/schools may practicably use it.

5. Ensure that procurement documents issued by the department/school require environmentally preferable purchasing wherever possible.

Exemption

Nothing in this policy shall be construed as requiring the purchase of products that do not perform adequately or are not available at a reasonable price.
Policy on Waste Reduction and Recycling

Educational Program Code No. 903.1 Business Procedures
Series 600 Series 800
Series 900 Equipment & Facilities

It shall be the policy of the Faribault Public Schools to make resource conservation an integral part of the physical operation of the school district and of the school curriculum. The Board of Education recognized that the practice of discarding materials used in school facilities is wasteful of natural resources, energy and money. Furthermore, one of the functions of schools is to set an example of stewardship of our natural resources and to develop responsible citizenship in our students.
Therefore, it shall be the policy of the Faribault Public Schools to implement the following actions:

I. The school district will integrate the concept of resource conservation, including waste reduction and recycling, into the environmental education curriculum at all levels of the school system.

II. The school district will decrease the amount of waste of consumable materials by:
   A. reduction of the consumption of consumable materials wherever possible.
   B. full utilization of all materials prior to disposal.
   C. Minimization of the use of non-biodegradable products wherever possible.

III. The school district will cooperate with, and participate in, recycling efforts being made by the city of Faribault and Rice County. As systems for the recovering of waste and recycling are developed within the city and county, the school district will participate by appropriately separating and allowing recovery of recyclable waste products.

IV. The school district will purchase, where financially feasible, recycled products. The school district will also encourage suppliers, both private and public, to make recyclable products available for purchase by public schools.

V. Representatives of the Faribault Schools will actively advocate, where appropriate, for resource conservation practices to be adopted at the local, regional and state levels.

Date of Adoption: 5-17-90
Research References


2. The Fourth R; An Action Booklet for Recycling in the Classroom and school, produced by Wisconsin Department of Natural Resources, web address: www.dnr.state.wi.us

3. Setting up a Solid Waste Recycling Program in Schools. November 1990 by J. Winston Porter PhD.


5. A Waste Management Promotion Campaign for your School. Date unknown. Province of British Columbia, Ministry of Environment


