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## Virginia Department of Education

## **Guidelines for Recycling Materials in Public Schools**

Authorized by Code of Virginia §10.1-1425.9

January 2010

#### Introduction

The *Code of Virginia*, Section 10.1-1425.9, directs the Virginia Department of Education, with the assistance of the Virginia Department of Environmental Quality, to establish guidelines for use by school divisions for reducing and recycling solid waste materials in Virginia's public schools. The Department of Education recognizes that it is the responsibility of each local school board to develop its own individual recycling and waste reduction program, and that the implementation of any such program rests with the local school board. These voluntary Guidelines provide recommendations useful to divisions in establishing a successful recycling and waste reduction program or improving existing programs.

#### Foreword

#### Virginia Department of Education Guidelines for Recycling Materials in Public Schools

As Virginia's population grows, more solid waste is being generated each year. The General Assembly has recognized this problem and has enacted legislation over the years which emphasizes the role that local governments and school boards can play in diverting solid waste from landfills. Any successful recycling program is dependent upon the support and cooperation of stakeholders such as private industry, recyclers, building services and custodial department heads, curriculum specialists, and citizens of all ages. A key component of a public school waste reduction and recycling program is the establishment of close working relationships with the local governing bodies.

The Virginia Board of Education has offered some recycling guidance through the Standards of Learning, which require that students investigate and understand that materials can be recycled, reused, and conserved. In addition to educating students to be good stewards of our limited natural resources, there is a need to provide school boards with guidance on how to set-up and implement a comprehensive waste recycling program. These Guidelines are designed to provide school divisions the necessary information on starting or improving school recycling programs.

Why should school administrators, staff, teachers, and students work to conserve resources and manage solid waste? The answer is two-fold, with both environmental and economical benefits.

In the face of today's environmental issues, there is a responsibility to be good stewards of environmental resources. Encouraging recycling not only supports the practice of good stewardship and helping to protect the environment, but also promotes the concept of environmental sustainability. From an economic standpoint, recycling may, in the long run, decrease the cost of waste hauling and may be a cost neutral enterprise. These Guidelines are intended to offer a basic framework to help schools divisions that do not have an existing recycling program to establish one, and to guide next steps for development.

The Virginia Department of Education Guidelines for Recycling Materials in *Public Schools* was developed in cooperation with the Department of Environmental Quality. The Guidelines' purpose is to provide a structure that school boards can adopt on two levels. The first level is to help those school divisions with no recycling program to establish one. The second level is to help improve and expand existing school based recycling programs. When it comes to solid waste reduction, it is important to remember the three R's – Reduce, Reuse, and Recycle. This should be the primary focus of any divisionwide school recycling program. The Department of Education acknowledges that it is the responsibility of each school board to develop their own individual recycling program and its implementation rests solely at the local level.

The Department of Education wishes to thank the Department of Environmental Quality for its support and also acknowledge those individuals who served on the committee that developed the Recycling Guidelines.

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## **Definitions Used in the Guidelines**

Compost – A mixture of decaying organic matter used as fertilizer.

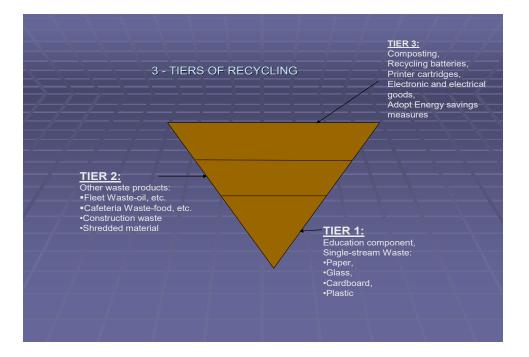
**School Recycling Program** – A program implemented by local school boards to collect recyclable solid waste materials from school classrooms, school offices, and cafeterias. The recyclables are collected by or delivered to a vendor who processes the material for reuse or manufacturing markets.

**Single Stream** (also known as "commingled") – Refers to a system in which newspaper, cardboard, paper, plastic, glass and metals are mixed together in the collection bin and truck. The items are sorted after collection at a special recycling facility that uses a system of conveyors, magnets and blowers to separate the materials.

#### Key Stakeholders (to assemble for planning meetings):

- □ Head of Custodial Staff in your school
- Current Company that holds the contract to collect trash
- □ Prospective recycling collector
- □ Facilities Manager
- Teacher who has been recycling in their school
- □ Student representative

**Tiers of Recycling** – Tier 1 is the most basic recycling practices/recycled materials; Tiers 2 and 3 are more extensive recycling practices/recycled materials.



#### **Guidelines for Establishing a School Based Recycling Program**

A strong school board recycling policy is a critical link between the community and its school system. It will express to the community a desire that schools are actively trying to conserve resources and save tax dollars. Therefore, it is recommended that school divisions adopt a resolution that requires the division to establish a recycling program for collecting recyclable waste from every school in the school division. (A sample resolution is provided in the appendix to the Guidelines.)

Additionally, schools should endeavor to integrate the *Standards of Learning (SOL)* recycling lessons with their recycling programs. The *Science Standards of Learning* have explicit standards relating to recycling in the kindergarten (SOL K.10), grade one (SOL 1.8), and grade three (SOL 3.10) standards. In addition to these standards, it would seem appropriate to discuss recycling when covering topics in other grade levels that relate to natural resources, maintaining air and water quality, and general policies related to the environment. It should be the goal of every school to integrate recycling with hands-on activities as part of the school recycling programs. It is imperative that faculty and staff, at all levels, and students are educated about the need to recycle. This education should include the concepts of Reduce, Reuse, and Recycle. While these Guidelines focus primarily on recycling, it is not intended that they discount the importance of reducing waste and reusing materials wherever possible.

#### Why Should Schools Recycle?

- Compulsory for some local, state and federal agencies.
- Many localities already have residential recycling programs.
- Many local governments already have a recycling program in place.
- Component of the Commonwealth's Green Initiative.

## Key Components of a School Recycling Program



## **Tiers of Recycling Programs**

School recycling programs can be categorized into three tiers, with increasing time, costs, and complexity with each tier. A Tier 1 program involves the most basic program of recycling practices and recycled materials. Tiers 2 and 3 involve more extensive recycling policies, practices, and recycled materials. These Guidelines focus most on Tier 1 as a beginning point for new school recycling programs and for ideas for improving existing basic programs.

#### **Starting a Tier 1 Recycling Program**

#### A Divisionwide Program

- Assemble a school division recycling committee who will identify stakeholders.
- Involve the custodial staff, students, teachers, parents, school administrators, and community or local government recycling official to ensure success.
- Involve the Parent Teacher Association (PTA), student organizations (e.g., 4-H, science clubs, etc.) and other school-based organizations to help establish and maintain school recycling programs.
- Each school division should identify a recycling coordinator for the purposes of overseeing the development and implementation of a divisionwide recycling program. The duties of this recycling coordinator may include the following:

- Identify and coordinate all school recycling efforts with any ongoing or established county, city, or town recycling programs, such as Virginia Naturally Schools, which has recycling as a component of its program. (Virginia Naturally Schools is the official environmental education school recognition program of the Commonwealth, administered by the Department of Game and Inland Fisheries with support from the Department of Education, Department of Environmental Quality, and other resource agencies.)
- Review the school's current waste hauling contract and investigate if it can be revised to include recycled materials. If the school board's current contract cannot be modified to include recycled materials, then a hauler for recyclable materials should be identified (this is critical to any recycling program.) If no recycling hauler can be identified in the local area, then develop alternative plans possibly using volunteers or other environmental organizations.
- Identify contracts that may exist with the local government that the school board may possibly use.
- Identify and develop a list of recycling vendors and companies that may be working in the county or city. If none exist, then develop a list of potential recycling haulers.
- ► Work with the local governing body to establish a contract with private recycling companies if no recycling contracts currently exist.
- ► Identify any federal, state, or local grants that may help offset the start-up cost for establishing a recycling program.
- When discussing the recycling collection needs of schools with recycling vendors, two key elements should be cited volume and separation of solid waste material. This will help market the program to potential recyclers that it is a profitable program.
- Review the school division's recycling program with the recycling committee at least once a year.
- Provide a survey to teachers, students, and parents for ideas about improving the program.
- Evaluate the current waste hauling and/or recycling contract because a good recycling program may decrease the amount and cost of trash being removed from the schools.

The school recycling coordinator should work with each school to help establish a school based recycling team. Each school's team can then set up its own goals, objectives, and strategies for their school recycling program. School based recycling teams are particularly effective in getting a program off the ground and getting a commitment from the stakeholders on recycling efforts.

The recycling coordinator should work with each school's PTA and other schoolbased organizations with the goal of gaining their support for the program. Promotional ideas could include the following:

- 1. Invite recycling experts and informational speakers.
- 2. Take students to a recycling facility.
- 3. Distribute recycling information to students, teachers, and parents.
- 4. Place articles in school newsletters or on the school Web site.
- 5. Have contests between classes or grade levels.
- 6. Use a national event day to promote recycling such as America Recycles Day on November 15 or Earth Day on April 22.

The recycling coordinator will identify direct and/or indirect costs for the overall recycling program. Generally, the first question asked by school administrators is the cost of the program. This is a reasonable question considering the constraints of school division budgets. The PTA or other groups may be able to purchase some of the items needed for the recycling program. Recycling expenses to a school may include the following:

- 1. Charges to collect recyclable materials.
- 2. Necessary collection equipment (tubs, bins, etc.) rental, lease, or purchase.
- 3. Cost for school signage and publicity, newsletters, and flyers.
- 4. Labor cost for the time to collect, store, and transport materials.
- 5. Fuel and transportation cost if school vehicles transport materials.

#### **Individual School Activities**

Organizing each school's recycling collection and storage system may include:

- Meeting with custodial staff to learn where trash is currently discarded and stored.
- Determining and mapping the location in each school where collection containers will be located.
- Determining from recycling hauler if permanent outdoor collection containers will be necessary at each school.
- Determining the exterior location points where recycling containers should be located for pick-up by the recycling hauler.
- Determining the types of materials to be recycled: Paper, cardboard, glass, aluminum, plastic, etc.
- Determining the number and type of collection containers needed at each school.
- Determining the collection schedule for each classroom container and school's outside pick-up containers.
- Providing each school with the necessary information on how and what will be recycled.
- Providing the individual classroom and outside school collection containers (if needed) with appropriate signage.
- Determining how holiday and summer vacation recycling will be handled.
- Determining a reporting system for how much waste is being collected weekly, monthly, and yearly at each school.
- Determining if the sorting and storage areas for recycling containers will impact any building code or fire regulations. It may be necessary to contact the local Building Code and Fire Marshal officials before indoor/outdoor locations are finalized.

It is important to recognize those within schools whose recycling efforts are making a difference by saving resources. For example, school-level recycling can be encouraged by providing awards for top recycling classrooms. Also, awards can be given for exemplary performance to school and custodial staff that make special efforts towards having the school's recycling program be a success. Decisions about which incentives will motivate students and staff must reflect a balance between organizational and individual needs. Therefore, it is important to remember to encourage everyone in the school and make them believe that they are critical to the program's success.

It is recommended that reports on each school's recycling efforts be made available to students, teachers, and school administrators on a regular basis. This feedback allows schools to track their progress and measure themselves against other schools, which tends to be a motivator.

#### Moving Ahead With Your Recycling Program

Once the Tier 1 Recycling program has been successfully implemented, schools may consider moving to the Tier 2, and on to the Tier 3 programs as the recycling program grows.

### **Tier 2 Recycling Program**

The Tier 2 Guidelines are intended to enhance and improve existing school recycling programs. The goal is to make a good school recycling program better by taking it to the next level of development.

Areas of focus would include:

- Seek funding from state agencies, federal grants, PTAs, or other organizations to help fund recycling efforts.
- Establish school based environmental clubs that will embrace and promote the concepts of recycling to students and teachers as one part of environmental stewardship.
- Start collection, as practical, of other recyclable materials such as surplus electronic equipment (computers, etc.), batteries, used printer cartridges, and tires.
- Establish a plan for collecting cafeteria food waste.

#### **Tier 3 Recycling Program**

Participate in the "Green Schools Challenge," an initiative of the Virginia Municipal League and the Virginia School Boards Association encouraging divisionwide implementation of conservation and recycling policies and actions (see Web link in appendix).

Areas of focus would include:

- Contact vendors who promote and utilize environmentally friendly cleaning products and "green custodial materials" for janitorial supplies.
- Establish clubs/waste management teams at each of the schools.

# Appendix

## Sample Resolution of the County/City School Board

<u>WHEREAS</u>, the County/City School Board recognizes its responsibility to promote environmental sustainability, conservation of resources and protection of the environment for future generations; and

<u>WHEREAS</u>, the school division staff, teachers, and students should serve as positive role models concerning environmental issues and use of resources; and

<u>WHEREAS</u>, recycling creates environmental and economic benefits through energy conservation, pollution prevention, and natural resources conservation; and

<u>WHEREAS</u>, the school division recognizes the need to effectively collect and recycle waste materials,

#### THEREFORE, BE IT RESOLVED THAT:

- the County/City School Board will promote and implement to the fullest extent possible the recycling of paper, plastics, metals, and food service disposables used in the school division program;
- the division will secure the cooperation from local and state agencies and public and private organizations to implement cost effective recycling;
- the division will purchase recycled materials whenever practical; and
- the division will encourage student and staff participation in recycling through appropriate activities and instructional programs.

Adopted: (Date)

# Examples of Successful Locality/School Recycling Programs Operating in Virginia

- Spotsylvania County: http://www.spotsylvania.va.us/departments/generalservices/index.cfm?doc\_id=165
- Virginia Beach: http://www.vbgov.com/vgn.aspx?vgnextoid=666cb4023704c010VgnVCM1000006 310640aRCRD&vgnextchannel=3e8ffd67f3ad9010VgnVCM100000870b640aRCR D&vgnextfmt=default

## Virginia Recycling Organizations

- Virginia Department of Environmental Quality <a href="http://www.deq.state.va.us/">http://www.deq.state.va.us/</a> Your locality's local recycling coordinator can be found at: <a href="http://beta.deq.virginia.gov/recycle/contactlist.html">http://beta.deq.virginia.gov/recycle/contactlist.html</a>
- Virginia Recycling Association <u>http://www.vrarecycles.org/</u> Representative - Contact: Erica Trout (804-302-4231)

## **OTHER SUGGESTED RESOURCES**

## Model Informational Posters to Download or Purchase:

- http://www.ciwmb.ca.gov/BIZWASTE/Posters/#PaperMan
- http://www.project-yes.org/prod.posters.html
- http://www.fpm.iastate.edu/recycling/posters.asp
- http://www.awarenessideas.com/Recycling-School-Posters-Recycling-School-Decals-s/28.htm
- http://www.planetpals.com/pprecycle.html
- http://www.co.marion.or.us/PW/ES/recyclingposters.htm
- http://www.portlandonline.com/osd/index.cfm?c=49805

#### **Resources and Web Links for Recycling and Recycling Education**

- Virginia Naturally School Recognition Program: <u>http://www.dgif.virginia.gov/education/school-recognition/</u> recognition/VAN\_School\_Recognition\_Information\_Packet.doc
- DEQ List of local recycling contacts: <u>http://www.deq.virginia.gov/recycle/contactlist.html</u>
- DEQ's recycling home page: <u>http://www.deq.virginia.gov/recycle/homepage.html</u>
- Va. Municipal League's Go Green Initiative: <u>http://www.gogreenva.org/?/challenge/participate/id/2</u>
- Virginia Recycling Association (scroll down the left column for school recycling toolkit):

http://www.varecycles.org/

 Stimulus Money for Virginia Information: <u>http://www.dmme.virginia.gov/DE/arra1.shtml</u>