RECYCLING OPERATING PROCEDURES

Each school building, in order to reduce the amount of solid waste entering landfills, is expected to participate in a recycling program that is student driven and supported by the school administration. Every non-school building shall also have a staff driven recycling program. Items for recycling shall include, but not be limited to, paper, plastic bottles, batteries, printer cartridges and cardboard. Custodial staff is available to provide support but are not the primary persons responsible for recycling. The implementation of this procedure is the joint responsibility of administrators, teachers, support personnel and students, and its success is based on cooperation at all levels.

Objective
Farmington Public Schools seeks to minimize waste going into landfills through its recycling initiatives. Our goal is to promote recycling of materials by having in place a comprehensive recycling program to:

- Reduce the output of the general waste stream
- Minimize contamination in the recycling stream
- Reduce the need for landfill space
- Take advantage of the economic benefits arising from recycling
- Promote resource conservation on non-renewable and renewable resources

This procedure applies to the following recycling streams in every building in Farmington Public Schools.

- Paper (all inclusive)
- Cardboard
- Boxboard
- Polystyrene
- Aluminum
- Plastics
- Milk Cartons & Juice Pouches
- Glass
- Books
- Batteries
- Toner and Ink Jet Printer Cartridges
- E-Waste
- Fluorescent Tubes, Including CFLs
- Motor Oil and other Fluids
- Tires
- Brown Waste (leaves and other yard waste)
- Green Waste (food scraps)

Note: Each of the recycling streams listed above MUST be placed in separate clear plastic bags prior to being placed in a District recycling dumpster. Example: Paper cannot be mixed with plastic…each must be placed in a separate clear plastic bag.
Procedures

1. Recycling Paper & Cardboard
   Paper recycling will occur in classrooms, auditoriums, media centers, offices, etc. Recycling boxes can be obtained from each building’s Green Team or by contacting the custodian’s office. Every District building has a recycling dumpster on site; most District buildings have an ABITIBI Bowater Paper Retriever on site as well.

   **Acceptable Material:** Catalogs, magazines, newspapers, phone books, note book paper, copy paper, colored copy paper, neon colored copy paper, construction paper, paper marked w/ crayon, Post-it-Notes, envelopes with or without windows, cardboard, corrugated cardboard and boxboard (tissue box, cereal box, etc.)

   **Not Acceptable:** Tissues, toilet paper, hand towels, napkins and heavily soiled paper…wet paper is fine.

1.1 Recycling Paper
   • On a designated day of the week, staff should place their filled paper recycling box in the hallway outside the classroom door for curbside recycling pick-up by each school’s student-led Green Team or other designated student group.

   • After curbside pick-up is complete, students will sort through the items and place them in a clear plastic bag prior to putting them in the appropriate recycling container. A great place to use as a sorting center is the cafeteria by using the recycling station that is used during the lunch program. If time constraints prohibit students from placing sorted material in appropriate recycling dumpsters, custodial teams at each building will complete this task.

   • Co-mingled recycling is acceptable as long as a school or building has a plan established whereby each recycling stream is separated and placed in the appropriate recycling container. Co-mingled recycling refers to having all recycling streams being collected in one box; co-mingled recycling will only be used for the curbside recycling program.

For the purpose of recycling paper most buildings have two options...

Option-1: The building’s Waste Management recycling dumpster

Option-2: The ABITIBI Paper Retriever. Certain items cannot be placed in the ABITIBI Paper Retriever (see table below). An ABITIBI Paper Retriever is a free school & community paper recycling program that generates small revenue for the school hosting a container as well as benefitting the environment for all. ABITIBI Paper Retrievers are located at the following schools: Alameda, Beechview, Forest, Highmeadow, Hillside, Kenbrook, Lanigan, Longacre, Wood Creek, Power, Warner, Dunckel, East, Farmington High, Harrison High and North Farmington High.
The table below shows what paper products can be placed in which recycling dumpster.

Note: The community CAN place acceptable paper products in the ABITIBI Paper Retriever; this is encouraged as this program earns money for the school. Some schools use this revenue to adopt endangered species which helps them earn Michigan Green School recognition.

<table>
<thead>
<tr>
<th>Waste Management</th>
<th>ABITIBI Paper Retriever</th>
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<tbody>
<tr>
<td>Catalogs</td>
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<td>ABITIBI Paper Retriever</td>
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</tr>
<tr>
<td>Advertise Inserts</td>
<td>ABITIBI Paper Retriever</td>
</tr>
<tr>
<td>Office Paper</td>
<td>ABITIBI Paper Retriever</td>
</tr>
<tr>
<td>Paper w/ Crayon</td>
<td>ABITIBI Paper Retriever</td>
</tr>
<tr>
<td>Phone Books</td>
<td>ABITIBI Paper Retriever</td>
</tr>
<tr>
<td>Wax/Glossy Cardboard</td>
<td>ABITIBI Paper Retriever</td>
</tr>
</tbody>
</table>

1.2 Recycling Cardboard

All types of cardboard can be recycled. This includes boxboard (tissue box, cereal box, light bulb box, etc.), corrugated cardboard, waxed or glossy cardboard and pizza boxes. Under no circumstances should any type of cardboard be placed in the ABITIBI Paper Retriever.

- Discard packing material from all boxes used. Plastic bag packing material can be recycled; Styrofoam packing material cannot.

- Flatten cardboard boxes before placing in the building’s recycling dumpster…do not put cardboard in the ABITIBI paper retriever.

- Nutrition Service staff should flatten all cardboard boxes that food or supplies are delivered in. Custodial staff will place the flattened cardboard in the recycling dumpster.

2. Recycling Polystyrene

Polystyrene is a strong plastic created from ethylene and benzene that can be injected, extruded or blow molded; making it a very useful and versatile manufacturing material. It can be used as a building material with electrical appliances (light switches and plates) and in other household items such as, but not limited to, crown molding. In Farmington Public Schools polystyrene is mostly used for beverage cups, food trays and other food containers by the Nutrition Services department.
Recycling Polystyrene in the Cafeteria’s Recycling Station

- Empty foods from the polystyrene tray or container into the bin labeled “TRASH” and then place the polystyrene object in the bin labeled “Recycle Polystyrene Here”. Heavily soiled trays should not be recycled.

- Polystyrene products should be placed in the building’s recycling dumpster. DO NOT place polystyrene in the ABITIBI Paper Retriever.

- Polystyrene can be recycled as part of each building’s curbside recycling program.

- Packaging peanuts are made from polystyrene but CANNOT be recycled in Farmington Public Schools at this time.

- Hard, crunchy or spongy packing material or material that breaks apart yielding cottage cheese like curds is Styrofoam and cannot be recycled.

3. Recycling Aluminum
Aluminum foil, coffee cans, soup cans, soda cans, juice cans, fruit cans and industrial size food cans used in kitchens.

- All aluminum products can be recycled and should be placed in the container labeled “Recycle Aluminum Here” in each school’s cafeteria recycling station.

- Aluminum containers must be free of food or liquids prior to placement in the recycling container.

- Aluminum containers can be recycled as part of each building’s curbside recycling program.

- Large pieces of aluminum or other metal objects can be recycled at Facilities Management by submitting a work order on the School Dude work order system requesting a pick-up. This can be arranged by contacting the custodial office.

4. Recycling Plastic
Farmington Public Schools currently recycles all plastic containers with numbers 1 through 7 on the bottom of the container.

- Plastic containers with a number 1 through 7 can be recycled and should be placed in the container labeled “Recycle Plastic Here” in each school’s cafeteria recycling station once free of food and liquids.

- Containers to recycle plastic are in other locations throughout each building such as hallways, corridors, classrooms or offices making it convenient to recycle.

- Plastic containers can be recycled as part of each building’s curbside recycling program.

5. Recycling Glass
Bottles, jars, containers and broken window panes.
• Place glass bottles, jars and containers in a clear plastic bag before placing in the recycling dumpster.

• Broken window panes must be broken or crushed into smaller pieces, then placed in a double-lined clear plastic bag prior to placing in the recycling dumpster; this is particularly necessary for safety reasons.

6. Recycling Milk Cartons and Juice Pouches

6.1 Milk Cartons (Regular and Aseptical)
Regular milk cartons are the type you purchase in the lunch line, typically a half-pint container requiring refrigeration. Aseptical containers do not require refrigeration. An example of an aseptical container is Horizon milk seen on regular store shelves, not requiring refrigeration.

• Place either of these containers in the container labeled, “Place Milk Cartons Here” in each school’s cafeteria recycling station.

• Milk cartons must be emptied prior to placement in the recycling container; there is a bucket near the recycling container for this purpose.

6.2 Juice Pouches
Juice pouches can be recycled and many juice pouch companies conduct revenue building campaigns for their collection; several District schools benefit from this program.

• Place juice pouches in the container labeled, “Place Juice Pouches Here” in each school’s cafeteria recycling station.

• Juice pouches must be emptied prior to placement in the recycling container. There is a bucket near the recycling container for this purpose.

The picture to the right is the recycling station that was used at Kenbrook Elementary School as a pilot for the District’s recycling program. Similar recycling stations were placed at Dunckel Middle & North Farmington High schools as part of this pilot to develop a standardized recycling program in all District cafeterias. To kick-off the District-wide cafeteria recycling program, all District cafeterias were equipped with recycling stations. Since 2007, signs for each recycling container have been updated based on student input from each building level.

Every cafeteria has at least one recycling station; some have up to five, depending on student population and the size of the cafeteria. Cafeteria recycling stations at a few schools have grown to include up to eight (8) containers to accommodate various recycling streams; a couple schools even compost. The standard District cafeteria recycling station must include containers for polystyrene and plastics. In 5/6 schools and all secondary schools a container to recycle cardboard must be added to the standard cafeteria recycling station.
7. Recycling Books
During the school year, the Purchasing Department will collect used school textbooks and library books for recycling. Every building must follow the steps below prior to the collection of the used books:

7.1 Textbooks
- Buildings should contact a book buyer (Follett, Budgetext or Textbook Warehouse) to determine whether there is any resale value for the used textbooks; representatives from these firms will come out to your building to inspect the books. In some cases, arrangements can be made with the buyer to properly dispose of the remaining unwanted textbooks.

- Any remaining/uncollected textbooks must be properly packaged prior to collection by the Purchasing Department. Books should be packed in sturdy boxes; when packing each box, be mindful not to pack them too heavy. Please use copy paper boxes or boxes of similar size.

- Each box must be labeled with the name of building, number of books inside and the word “RECYCLING”.

- After all the textbooks have been boxed and labeled, the building should contact the Purchasing department by submitting a work order on School Dude. The work order must include the building name and contact person, storage location within the facility and the total number of boxes for collection.

- Once collected, the Purchasing Department will palletize the boxes and contact a book recycler to schedule a pick up date.

7.2 Library Books
- Media Specialists should offer Media Center books at no charge, which have been purged from the school’s collections, to students and/or staff for their use. Such books may also be offered District-wide to other District schools for their staff and students.

8. Recycling Batteries
Batteries are recycled through the Batteries Plus recycling program; all District buildings have one or more buckets, supplied by Batteries Plus for this purpose. These buckets should be placed in a centrally located spot, generally the main office.

- Only batteries purchased by Farmington Public Schools can be recycled through this program.

- Dead batteries taken from District equipment should be placed inside the Batteries Plus recycle bucket.

- Staff from each building is responsible to bring the bucket of batteries to Batteries Supplies Plus located at 30760 Orchard Lake Road, between 12 and 13 Mile roads. (248-737-9140)

- Upon drop-off, you will be charged $25 per bucket of batteries. There will be no charge if batteries are dropped off in a small bag (lunch bag size) throughout the school year. Multiple drop-offs throughout the year can occur at no charge...one small bag per drop-off. If your
school was awarded the $200 grant for having a student-led enviro-team, these funds can be used to cover battery recycling costs. To apply for this grant contact Jim Pearse by email.

- Vehicle batteries and batteries used to operate custodial and maintenance equipment are recycled by the Facility Management and Transportation departments.

9. Recycling Fluorescent Lamps
Fluorescent lamps of all lengths and sizes are recycled in all District buildings, including compact fluorescent lamps (CFLs).

9.1 Regularly Used Fluorescent Lamps (overhead lighting)
(Bullets 1 through 4…District Responsibility; bullets 5 through 10…USA/CRI Recycling Process)

- Put spent lamps in one of the lamp boxes, preferably one designated for spent lamps.
- When the box is full, tape all open edges securely.
- When six boxes of spent lamps are accumulated the head custodian should contact Facilities Management (FM) by submitting a work order on School Dude to schedule a pick up.
- Lamps will be stored at Facilities Management until picked up by a USA/CRI personnel or an authorized USA/CRI transporter. Upon pick up, Farmington Public Schools will be issued a numbered tracking document.
- Lamps are received at a USA/CRI processing facility. The shipment is inspected for broken lamps and packaging integrity during the unloading process. Containers of broken bulbs are weighed and set aside for special handling… poorly packaged lamps are handled individually to avoid breakage.
- Lamps are moved from the unloading and storage area to the processing station.
- Lamps are removed from the containers and placed on an enclosed negative air conveyor.
- Lamps are then shattered by rotating them at a low speed.
- Lamps are broken into uniform particles by rotating them in a steel drum crusher.
- Material drops onto a feed conveyor and is transported to a separation chamber. From this point the process continues in three different directions.

1. Mercury Vapors: Captured in an activated carbon filtration system. The drums of powder and carbon filters are shipped to an authorized retort station. The recovered mercury is sold and reused in commercial applications.

2. Glass & Phosphor Powder: This is air scrubbed and separated in a high capacity rotating sieve. The mercury contaminated phosphor powder is sealed in 55-gallon drums. The recovered mercury is sold and used in commercial applications. The clean glass is separated and collected in roll-off containers. It is tested to see if it is possible to use as aggregate for asphalt and concrete.
3. **Aluminum End Caps, Insulators & Wires:** These are separated and collected in a Gaylord container. The metal and aluminum is recycled as scrap material, smelted and reused.

9.2 **Compact Fluorescent Lamp (CFLs)**

Needed: A five-gallon bucket w/ a lid, double lined with clear plastic bags and stored in the custodial office.

- Carefully place the spent CFL in the clear plastic bags inside the 5-gallon bucket making sure the lid is placed back on.

- When staff from Facilities Management picks up the fluorescent tubes the spent CFLs should be collected as well.

- Upon pick-up, Facilities Management staff should remove the plastic bags from the bucket and carefully place them in an enclosed container to bring them to Facilities Management. CFLs will be stored at Facilities Management until picked up by USA/CRI personnel or an authorized USA/CRI transporter, at which time the District will be issued a numbered tracking document.

- The recycling process for CFLs is the same as stated above for overhead fluorescent lamps.

10. **Recycling Toner and Ink Jet Printer Cartridges**

(still pending…processing options)

11. **Recycling E-Waste**

E-waste is any refuse created by discarded electronic devices and components as well as substances involved in their manufacture or use. Examples: Computers, monitors, laptops, TVs, stereo equipment, electrical cords, etc.

- Throughout the year special E-Waste pick-up dates will be scheduled by the Information Technology department. Companies like Computer Recyclers of Michigan or My Free PC Inc., may be used as means to recycle e-waste.

- If a building has unwanted electronic equipment a work order should be submitted through School Dude requesting a pick-up. Whether or not this equipment qualifies as e-waste will be determined by either the Information Technology or Facilities Management departments.

- The District may choose to host a community-wide E-Waste Day; this will be decided annually by the District Green Team.

12. **Recycling Hazardous Waste**

The following applies to all chemicals, paint, motor oil and other fluids.

- To determine whether or not a material should be disposed of as a hazardous waste refer to the Material Safety Data Sheets (MSDS) which are available in the main office of every building.

- The Hazardous Waste Disposal form must be completed for all hazardous waste pick-ups. This form is available in the main office or custodial office of every building. It is critical that all chemicals are accurately identified on this form so proper arrangements can be made for disposal and so that lab analysis costs can be avoided.
• If there are any doubts regarding a method by which hazardous wastes should be disposed of, contact the Facilities Management Department.

13. Medical Waste
Medical waste cannot be recycled. This is picked up on a scheduled day each month by Facilities Management; a pick-up schedule is sent out to all buildings in September of each year. Additional pick-ups within the month need to be requested by someone in each building.

14. Recycling Tires
Tires from Farmington Public Schools’ buses and maintenance vehicles are recycled at the Transportation Department.

15. Recycling (Composting) Brown Waste
Brown waste is any biodegradable waste that is predominantly carbon based. The term includes such items as dry leaves, twigs, hay, paper, sawdust, corn cobs, cardboard, pine needles or cones, etc.

• Head custodians and/or parent/student groups will place leaves and other brown waste into brown lawn refuse bags or clear plastic bags.

• Bags of brown waste will be stored in the chiller enclosure until picked up by Facilities Management.

• A work order will be submitted through School Dude requesting the pick-up of brown waste.

• A roll-off dumpster will be stationed at the Facilities Management Department and all brown waste collected throughout the District will be placed inside for proper recycling/mulching. Important: All clear plastic bags containing brown waste must be emptied since plastic cannot be recycled/mulched with brown waste.

16. Recycling (Composting) Green Waste
Green waste is any biodegradable waste that is predominantly nitrogen based. The term includes items such as garden or park waste which can be composed of fresh cut grass or flower cuttings and hedge trimmings, as well as domestic and commercial food waste.

• Composting green waste should be done using a composting tumbler. For successful composting of green waste, brown waste must be incorporated.

• Composting green waste can be a terrific learning opportunity for students and can be an initiative for any school’s Green Team. Currently Kenbrook and Dunckel are the only schools with a “Green Waste” composting program; Gill is considering a program.
Note: The table below is an all-inclusive chart showing what can be recycled in Farmington Public Schools and where each stream should be recycled.

### FARMINGTON PUBLIC SCHOOLS...WHAT CAN BE RECYCLED & WHERE (Revised 1/04/10)

<table>
<thead>
<tr>
<th>Waste Management Dumpster</th>
<th>ABITIBI Paper Retriever</th>
<th>Other Recycling</th>
<th>Do Not Recycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch Program</td>
<td>*Curbside Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boxboard</td>
<td>Same as lunch plus...</td>
<td>Batteries (Batteries Plus)</td>
<td>Hanging File Folders</td>
</tr>
<tr>
<td>Cardboard Boxes</td>
<td>Catalogs</td>
<td>Fluorescent Tubes (FM)</td>
<td>Large Metal Clips</td>
</tr>
<tr>
<td>Foil Pans</td>
<td>CDs (Separate)</td>
<td>Glass Bottles (All Blgds)</td>
<td>Plastic Cutlery</td>
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<tr>
<td>Foil Wrap</td>
<td>DVDs (Separate)</td>
<td>Library Books (Purchasing)</td>
<td>Sandwich Bags</td>
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<td>Food Cans</td>
<td>Copy Paper</td>
<td>Advertise Inserts</td>
<td>Motor Oil, Fluids (Trans or FM)</td>
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<td>Paper Bags</td>
<td>Colored Copy Paper</td>
<td>Catalogs</td>
<td>Zip Lock Bags</td>
</tr>
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<td>Pizza Boxes</td>
<td>Construction Paper</td>
<td>Colored/Neon Paper</td>
<td>Textbooks (Purchasing)</td>
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<tr>
<td>Plastic (#1 - #7)</td>
<td>Corrugated Cardboard</td>
<td>Copy Paper</td>
<td>Cell Phones</td>
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<td>Plastic Grocery Bags</td>
<td>Envelopes</td>
<td>Junk Mail</td>
<td>Ink Cartridges</td>
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<td>Polystyrene Bowls</td>
<td>Envelopes w/ Window</td>
<td>Magazines</td>
<td>Electronic Waste (IT)</td>
</tr>
<tr>
<td>Polystyrene Cups</td>
<td>Glass Bottles</td>
<td>Newspaper</td>
<td>Terracycle Program (see bottom of page)</td>
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<tr>
<td>Polystyrene Trays</td>
<td>Junk Mail</td>
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*Bolded items can be placed in the ABITIBI dumpster.

**Terracycle** provides free waste collection programs for hard to recycle materials. These materials are turned into affordable green products. Terracycle’s purpose is to eliminate the idea of waste. This was done by creating a national recycling system for non-recyclable items. The process starts by offering programs to collect certain waste and then convert the collected waste into a wide range of useful products and materials. With over 14 million people collecting waste in 11 countries, Terracycle
has diverted billions of pieces of waste that are either upcycled or recycled into over 1,500 various products available at major retailers such as Wal-Mart and Whole Foods. Their goal is to eliminate the idea of waste by creating collection and solution systems for anything that today ends up in our trash. Founded in 2001 by a 20 year-old Princeton freshman, Terracycle has become one of the fastest growing green companies in the world. Schools can collect things such as juice pouches, inkjet cartridges, pens, pencils, etc.

Administrative Procedure for Policy 7060
4/12/11