



WRATT

WASTE REDUCTION AND TECHNOLOGY TRANSFER FOUNDATION

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The **WRATT Information Bulletin** is published periodically by the Waste Reduction & Technology Transfer Foundation as a free source of information on waste reduction and energy savings for our clients, contractors, and partners.

Update on the *WasteTrade* Waste and Surplus Materials Exchange!

As discussed in previous Information Bulletins, WRATT is operating the newly established online **WasteTrade** waste and surplus material exchange, funded by the Appalachian Regional Commission.

WasteTrade provides an opportunity for Alabama manufacturers, businesses, schools, hospitals, and municipalities to reduce waste disposal costs, and improve efficiency by accessing cheaper raw materials and supplies. The free internet-accessible exchange, available at <http://www.wastetrade.org>, has been described as an 'eBay-like' trading system which helps organizations dispose of unneeded materials and find items they need at the same time.

Examples of 'Available' items listed most recently on the exchange include:

- Polyurethane trimmings and scraps
- Cardboard
- Used stretch-wrap machine
- Used Ezy-Bond Pinch Roller
- Computers
- Wood scraps from furniture manufacture (Select grade, kiln-dried Oak, Poplar, Maple, Cherry)

Recent listings for 'Wanted' materials have included:

- Press brake
- Drill Press
- Baler
- Forklift

The **WasteTrade** website has received more than 5000 hits since the exchange became operational. Recent advertisements in the Florence Times, The Decatur Daily, The Jasper Daily Mountain Eagle, The Cullman Times, the Athens News Courier, and the Huntsville Times have boosted interest considerably. WRATT staff members have discussed the

exchange at meetings of a number of local economic development organizations, school boards, municipalities, and industrial and business development clubs. If your organization is interested in such a presentation, please give us a call!

The **WasteTrade** exchange currently uses the following categories of materials:

- Automotive
- Batteries
- Computers/Electronics
- Iron/Steel
- Non-Ferrous Metals
- Glass/Fiberglass
- Plastics
- Surplus Consumer Goods
- Surplus Commercial Goods
- Paper/Cardboard
- Tires/Rubber
- Textiles/Leather
- Liquids/Oils/Chemicals
- Food Waste
- Used Equipment
- Wood
- Surplus Supplies

All types of organizations can use **WasteTrade**: businesses, service and manufacturing industries, government facilities, public and private institutions such as schools, hospitals, churches, and non-profit corporations.

Users of the exchange can post information about their own waste or surplus materials and search for materials available from other sources. Organizational identities remain confidential until they contact each other directly to arrange transfer details. There is no charge for use of the exchange.

For more information about the materials exchange, visit <http://www.wastetrade.org/>, or call the WRATT Foundation at 256-248-0191.

Checked Your Flicker Lately?

Ballasts are an essential part of any fluorescent lighting system. In most office or industrial settings, the standard type of ballast for the last few decades has been the electromagnetic type, which operates at 60 cycles per second. This means that each lamp switches off and on 120 times per second, resulting in a barely perceptible flicker and a noticeable hum.

About 25% of the population is sensitive to ballast flicker and hum and can actually become physically ill, with symptoms such as headache, nausea, tension, and eye fatigue.

More recently, electronic ballasts have become more available. These ballasts are lightweight, produce very little heat, and operate at 25,000 cycles per second, which eliminates flicker and hum and removes health concerns.

Other advantages of electronic ballasts over the older electromagnetic types include:

- Producing more light but using 25-30% less energy.
- Using T-8 lamps, which have better color-rendering and retain their luminance longer than the older T-12 lamps.
- Purchasable in a type which is dimmable for greater energy savings and more convenience.
- Longer life than electromagnetic ballasts.
- Very low electromagnetic field emissions, so they interfere less with other electronic equipment.

It can be confusing to know exactly what kind of ballasts you have. For instance, some newer electromagnetic ballasts are described as “energy-saving” but that doesn’t mean they are electronic! To verify which type of ballast is installed in a given fixture without having to take it apart, you can use a “Flicker Checker”. The flicker checker resembles a child’s spinning top toy with a specific design on its top. When you spin it on a flat surface underneath the fixture in question, you’ll see a stroboscopic effect if the ballast is electromagnetic. If the fixture uses an electronic ballast no effect will be seen. Flicker checkers are available at no charge either from Motorola (800-453-1506) or Sylvania (800-544-4828).

How Much Fresh Air Do You Really Want To Pay For?

Most building codes require that a specific amount of fresh air be provided to ensure adequate air quality. To accomplish this, ventilation systems are often set to bring in the amount of outside air required when the building is at its maximum occupancy level. This results in more fresh air being brought into the building than is necessary most of the time because most facilities have variable occupancy levels. This effect is most pronounced for facilities with highly variable occupancy, such as office buildings, government facilities, schools, retail stores and malls, auditoriums, entertainment clubs, and movie theaters.

All this outside air must be heated in the winter and cooled in the summer. In humid climates, excess ventilation can also result in uncomfortable humidity, and mold and mildew growth.

This problem can be addressed by using some form of occupancy or “demand” controlled ventilation (DCV) in which the amount of outside air brought into the building is controlled by the actual occupancy levels of the building. Since people exhale carbon dioxide (CO₂), a common way to control ventilation in a DCV system is to use CO₂ sensors.

Various studies have shown that heating costs savings of between 20 and 45%, and air conditioning savings of 25% can be realized in southeastern climates. In most cases, payback periods can be less than two years. For more information on the benefits of DCV, see:

http://www.eere.energy.gov/femp/pdfs/fta_co2.pdf, and contact your HVAC contractor.

Free On-line ENERGY-STAR Training!

If your organization is interested in saving money on energy expenditures, assessing the energy performance of your facilities, or creating an action plan to save energy, you can benefit from these opportunities. Free EPA ENERGY STAR training sessions are available using your own computer and phone, or you can gather interested colleagues around a central phone and computer to train several people in your organization at the same time. You can view self-guided presentations, listen to previously recorded sessions, or participate in live training sessions. During the live sessions you can direct specific questions at energy and financing experts. More information about previously recorded sessions, and the current schedule for live presentations is available at:

http://www.energystar.gov/index.cfm?c=business.buss_internet_presentations.

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