Greening Floor Care

It is estimated that there are more than 70 billion square feet of commercial space (school, office, medical, etc.) in the United States. Most of these floors have to be maintained on a regular basis, especially in school facilities, requiring the use of millions of gallons of strippers, finishes, glosses, and detergents along with a variety of floor machines.

Proper floorcare involves three key components: vacuuming, chemicals, and floorcare equipment. Each must do its part in contributing to the Green floorcare system and the protection of the environment.

VACUUMING

Whenever possible, custodial crews in an educational setting should vacuum hard-surface floors instead of using push brooms or dust mops. Considerable amounts of dust particulates are generated in the sweeping/dust mopping process, and as the dust becomes airborne, it has the potential of harming the health of custodial workers as well as building occupants.

Germs and bacteria on the floor that become airborne can exacerbate indoor air quality (IAQ) problems in health, education, and other facilities. To further complicate matters, dust and contaminants can be drawn into a facility's HVAC system and spread throughout the building.

Instead of sweeping, many cleaning professionals are finding the new generation of backpack vacuums to be much more comfortable to use than earlier models because they are smaller, lighter, and quieter and help protect IAQ as well. This is because some backpacks are true-HEPA machines. The HEPA exhaust filter not only traps more than 99.9 percent of contaminants, so they are not released into the air, but the entire casing of the machine is airtight, preventing dust and soils from escaping as well.

CHEMICALS

Although they have served us well for decades, we now know that many conventional floorcare chemicals are some of the most powerful and environmentally hazardous in the professional cleaning industry. This is because many contain such metals as zinc, considered to be a neurotoxin that can be harmful to aquatic life if not properly removed by local water-treatment centers.

Other information about conventional floorcare chemicals that can trigger health concerns includes the following:

Many have high amounts of volatile organic compounds (VOCs), which can harm indoor air quality and cause a variety of ailments from nose and eye irritation to asthma attacks, especially in children.

A chemical found in many conventional floor strippers, 2-butoxy ethanol, is considered a possible carcinogen.

EGME (ethylene glycol methyl ether) and EGEE (ethylene glycol ethyl ether) are found primarily in floor finishes. These compounds have been associated with eye, skin, and ear infection, and even birth defects.

Fortunately, there are some Green-certified floorcare chemicals now available that perform well. These are made from ingredients that are tested and proven safer than those in the traditional products used for the same or similar purpose—and even more are expected to enter the marketplace soon. Green floorcare products do not contain metals such as zinc, known carcinogens, or toxins; have a low VOC concentration; and are even packaged in recyclable and refillable containers.

Cleaning professionals can also select more environmentally responsible floorcare products by:

- Making sure all the ingredients in the product are clearly listed
- Selecting products that do not contain zinc, toxins, or the other ingredients mentioned earlier
- Making sure the VOC concentration is under 7 percent at use dilution
- Purchasing from jansan distributors and suppliers that are well versed on floorcare and Green cleaning and will provide hands-on training

Additionally, for health, safety, and to protect the environment, floorcare chemicals should always be properly diluted per manufacturer's recommendations. And strippers should be diluted with cold water because heat may speed the evaporation of the chemical, rendering the product less effective and potentially requiring more coats to complete the task.

FLOORCARE EQUIPMENT

Often the buffers and burnishers used in floorcare produce considerable amounts of dust when cleaning tasks are being performed. This is because the top surface of the floor is actually being "sanded" when buffed or burnished to remove soils, contaminants, and heel marks.

To help minimize this, building managers and school administrators should select machines that have built-in vacuum systems that help trap the dust before it can become airborne. In some areas of the world, floor machines will have separate motors for the vacuum system and the pad. However, in the United States most machines have one motor doing double duty.

These systems should have a deck shroud or "skirt" covering the base of the machine. This helps collect and trap dust and particulates so that they can be vacuumed up by the machine.

Additionally, cylindrical brush floor machines, a newer technology, are increasingly viewed as a "Greener" choice for floorcare because they tend to use less water and chemical than conventional machines. Whenever less chemical is required, whether Green or conventional, it is a positive component of Green cleaning because it helps reduce cleaning's impact on the environment. Also, because they use brushes instead of pads, cylindrical machines often can remove more deeply embedded soils from porous floors and grout without requiring the use of more or stronger chemicals, also improving worker productivity.

For more information, visit http://www.cfrcorp.com/ or contact a CFR representative in your area.