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NYSED Office of Facilities Planning Newsletter



Carl T. Thurnau, P.E. Issue #112 - November 2013
Coordinator

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School Facilities, Severe Weather, and Preparing for Another Winter

A Message from NYSED Office of Facilities Plan- ning Coordinator Carl Thurnau, PE —

One year has passed since Super Storm Sandy pounded New York State. At the height of the storm more than one-half of all school districts, from Erie to Suffolk Counties, in the State were closed. Over 150 school buildings were impacted by Sandy's storm surge. Two years have passed since Tropical Storms Irene and Lee also inundated large swaths of the State, flooding entire communities, their schools, and uprooting the lives of students, school faculty, staff, and administrators.

Education has resumed in the areas impacted by these storms, however the work continues to fully rebuild and/or restore the communities and the schools in these areas. As this work moves forward, we need to keep in mind that winter often comes early in New York State. Some areas have already experienced winter condi-

tions; and there are critical safety concerns which accompany the cold, snow, and ice.

The following are some key issues to keep in mind as the snow flies.

Snow drifts on roofs may create concentrated loads which exceed the load imposed by uniformly distributed snow, and ice buildup can further increase roof loads. Snow drifts are common on pitched and curved roofs. Snow drifts may also occur on roofs with parapets, rooftop mechanical equipment, solar collectors, and other obstructions.

Large roofs are more prone to snow drifts due to the fact that there is a larger volume of snow available for drifts to form. Another potential hazard may occur where snow can slide off sloped roofs onto lower roofs. To manage excessive snow load situations consider reinforcing roof areas to handle large potential snow accumulation and/or remove the snow to maintain snow loads at acceptable limits.

If your buildings are showing any signs of structural overloading, an architect or structural engineer should be consulted.

Repeated overloading of roofs can significantly weaken the roof structure over time. It is vital that you keep and eye on your roofs for the presence of excessive snow and ice throughout the winter. Do not forget to check roofs for plugged drains and ice accumulation under the snow.

Still another hazard associated with snow drifts include blocked fire exits. It is absolutely essential that all fire exits be checked throughout the winter to ensure there are no snow drifts or snow banks blocking their use.

As always, thank you for the important work you do everyday to ensure students are educated in safe and healthy schools.

Is there a topic you would like addressed in the Facilities Planning Newsletter?

**Please email suggested topics and comments to:
lsahr@mail.nysed.gov.**

2013 Annual Visual Inspection (AVI) Data Submission Process

The 2013 Annual Visual Inspection (AVI) Form is now available. Please remember that the actual AVI is supposed to be completed by November 15, 2013, and the data is required to be submitted to NYSED by January 15, 2014.

The 2013 AVI submission form has not changed from the 2012 version. We hope to post PDF versions of 2012 AVI inspection data shortly - in case you wish to review this information.

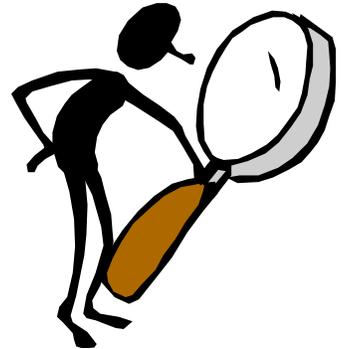
Please remember in an effort to reduce your submission burden, only that information which has changed since the last AVI must be entered. If you have facilities where no information has changed, please complete the first page and the last page of the form in order to submit the data. This will record the facility information data in the database indicating that the facility was inspected and submitted, but the lack of specific system data will indicate that conditions have not changed from the last submission.

Of course remember that conditions may have deteriorated or improved since the last AVI. If conditions have improved because a system was replaced or improved, that is equally important to record. Improvement of a health and safety system could result in a facility rating upgraded to satisfactory.

For those of you who may have mistakenly submitted the 2013 data under the 2012 link, unfortunately your data has been lost and you will be required to resubmit your facilities again under the new 2013 link provided below.

Questions regarding the AVI process may be directed to your project manager at NYSED Office of Facilities Planning.

The 2013 AVI can be accessed at:



Flag Display Policies

Did you know that there are specific federal and State rules about the display of the American Flag, including dates and times when the flag should be lowered to half-staff?

The New York State Office of General Services (OGS) has an official flag display policy which can serve as a guide for schools. Their policy is posted at: www.ogs.ny.gov/FlagPolicy.asp.

An OGS Flag Policy FAQ section is also available at: www.ogs.ny.gov/FlagFAQ.asp. This includes valuable information related to the display of flags at schools, when and why flags are lowered to half-mast, and more.



Renovating Roofs

The Office of Facilities Planning reviews numerous school roof replacement projects every year where architects and engineers recommend a “complete replacement”. Districts and Architects believe that if there has been a long term leak or multiple leaks, the entire system must be at the end of its useful life and the prudent action would be a total replacement. However, by completing a thorough investigation and survey design professionals may determine that many roofs can be repaired or preserved instead of completely replaced.

Removing an existing roofing system with only isolated issues and replacing it with a new roof, is unnecessary and wasteful. Often times roofing details such as flashing and attachments fail while the roofing system itself remains serviceable.

If school districts can reduce the expense of maintaining a serviceable roof system, the result will ultimately save taxpayers and the State of New York significant amounts of money.

School Districts and design professionals have a responsibility to provide economical and environmentally sound solutions to the ongoing challenge of maintaining serviceable roofs. A greater effort at reducing construction waste and school costs must be made to address these important issues



www.epa.gov/iaq/schooldesign/index.html

1. Hundreds of thousands of square feet of sound roofing and dry insulation is replaced every year and taken to landfills. This is an expensive and unsustainable construction practice.
2. School Building Aid is under stronger scrutiny and areas of wasteful spending must be eliminated.

The first obligation for the district is to perform regular maintenance and repairs on roofs for the duration of the life of the roof. When a roof has reached the end of its useful life many roofs selected for replacement actually do need to be replaced in their entirety.

However, before that decision is made every design professional should make the following steps part of their normal due diligence process:

- a. Detailed deck inspection from beneath (where possible)
- b. Roof core sampling
- c. Asbestos testing
- d. Infra-red / moisture meter / capacitance study of the roof
- e. Make recommendations for roof preservation or recover if investigations show the roof is a quality candidate for a sustainable option

Typically, when a design professional examines a roof there are four options to be considered:

Repair, Preservation, Recover or Replacement. We are all familiar with the **Replacement** option. However, the other three options — **repair, preservation, and recover** have been largely ignored.

Timely “repairs” can do much to extend the service life of a roof if done as part of an ongoing maintenance plan. There are a large number of manufacturers and contractors who offer such services. Routine maintenance and “repair” is a responsibility of the district and is not eligible for state aid.

Recommendations for **“recover”** projects are being reviewed more and more. A “recover” is loosely defined as installing a roof over a roof. Before this can be done, the same forensic effort must be undertaken.

It is imperative that existing wet insulation and the roof membrane above the wet areas be removed and be replaced. An engineering study should be performed to make sure the existing deck is capable of supporting whatever weight the recover system will add to the assembly. Perimeter blocking may need to be increased and roof top units may have to be raised. Once this is done, a new roof membrane and flashings is installed over the existing roofing.

The fourth option, **“roof preservation”** is becoming more relevant as roofing prices soar. After the inspection work is done, including the infra-red scan, and inspecting the deck, a decision is made to preserve the existing roofing system. Many manufacturers supply a variety of roof preservation systems and many contractors are familiar with the installation of these systems.

Recommended preservation systems include asphalt based, high performance polyurethanes, and others. Wet insulation is replaced and the surface prepared for the preservation system. Finally a new waterproofing system is applied directly to the existing roof system. These applications are F.M. and U.L. approved and lower roofing costs up to 50%.

Both Recover and Roof Preservation Systems can be obtained with 10 year or longer warranties. **NYSED will provide Building Aid for both Recover and Roof Preservation Systems as long as a minimum 10 year warranty is provided by the manufacturer and the existing roof has exceeded its original warranty period.** Depending on the type of roofing system selected longer warranties with minimal additional costs are available.

Every roof is different. In many cases a full roof system replacement is the right solution. However, the options described above should be considered prior to deciding on a total roof replacement. The potential savings to schools and to the taxpayers of New York State are enormous.

Questions related to roof **repair, preservation, and recover y** projects can be directed to your school district’s architect or engineer — or the Office of Facilities Planning.



<http://wnyt.com/article/stories/s2874680.shtml>



The Demystification of Integrated Pest Management (IPM) and Rules Related to Pesticide Use



- Every child and school employee has a right to an environmentally safe and healthy learning environment which is clean and in good repair.
- Every child, parent, and school employee has a “right-to-know” about environmental health issues and hazards in their school environment.
- School should serve as role models for environmentally responsible behavior.

From the New York State Board of Regents Advisory Committee on Environmental Quality in Schools (January 1995)

Integrated pest management (IPM) is one of those topics which may mean different things to different people. Is IPM required? What do we need to do to comply? Can we hire someone to do IPM for us? The intent of this article is to clarify some common misconceptions associated with IPM, as well as recently enacted laws related to the use of pesticide products in schools and on school grounds.

IPM is required pursuant to Commissioner’s Regulation 155.4(d)(2). A comprehensive maintenance plan must be established and “shall include provisions for a least toxic approach to integrated pest management...”

IPM is something we all need to do. Its not something we can simply hire someone to do for us. This means school administrators, faculty, staff, and students all share the responsibility for creating and maintaining a successful IPM program.

At the most basic level, this means cleaning up after oneself.

Don’t provide a smorgasbord for unwanted pests by leaving food in lockers, desks (student and teacher), under sinks, etc. If a cup of juice spills—wipe it up. Ensure dumpsters are located away from the building and have a lid which is closed. These examples of simple actions should be integrated into the school culture and community.

The following steps “*IPM In A Nutshell*” were developed by the New York State IPM Program at Cornell University:

Step 1: Be prepared. What pests can you expect and how can you avoid them? Learn about the beneficial organisms that can help you out. Learn which tactics work and under which conditions should pests show up in your yard or on your doorstep.

Step 2: Think prevention. It’s the first step in IPM. **Keep pests out:** caulk and seal cracks and holes from cellar to attic. **Don’t feed pests:** keep it clean, inside and out. Fix all leaks in water/ drainage systems.

Step 3: No surprises. Scout routinely and keep tabs on potential pests.

Know your threshold—the point when a few pests become a few too many.

Step 4: Think strategy: Every tactic costs something. Will your benefits justify the costs? Know all the options before you commit.

Step 5: Choose and use: Choose tactics and tools that provide the best results while keeping environmental costs as low as possible and staying within your budget. Whatever option you settle on, do it right!

Step 6: Think again: How did it work? What did you learn? How much has the situation changed? Integrated pest management rarely relies on just one tactic—it integrates tactics to prevent pests entirely or reduce them to levels you can live with. Good science. Good sense. IPM.

http://nysipm.cornell.edu/ipm_is/nutshell.asp

The next two pages provide a detailed description of IPM—courtesy of the New York State IPM Program at Cornell University and J. Gangloff-Kaufmann.

Community IPM

Integrated Pest Management for School and Municipal Buildings, Part I

J. Gangloff-Kaufmann, New York State Integrated Pest Management Program, Cornell University

What is integrated pest management (IPM)?

IPM is a proactive approach that uses a wide range of methods to solve pest problems while minimizing risks to people, property, and the environment.

Generally, in an IPM program pest prevention begins with identifying the pests correctly. Next, determine their origin and assess any risks posed by their presence. Eliminate sources of food and water, points of entry and shelter for long-term suppression of pests. Identify conditions that invite infestations early, document them and modify these conditions by improving sanitation, maintenance, and storage practices. Only consider the use of pesticides once these methods have been fully explored and, where feasible, used.

One of the most important aspects of IPM is that it involves the use of several control options—not just one—to manage existing pests.

IPM: A step-by-step strategy

To conduct a successful IPM program in your facility, you'll need to routinely check the conditions of your building and keep track of your findings. Even if no pests are present, routine inspections, maintenance, and cleaning activities occur. If a problem is discovered, then the pests are identified, the problem is diagnosed, and a combination of IPM techniques is used to deter the pests.

The elements of an IPM program

1. Develop an integrated pest management plan.
2. Keep records using site plans, scouting records, and a log book.
3. Inspect and monitor for conditions that encourage pests.
4. Keep the facility sanitary and well maintained.
5. Identify and diagnose the problem correctly. Decide if control is needed.
6. Combine low-risk methods to manage pests.
 - a. Cultural—change human behaviors and habits.
 - b. Physical and mechanical—exclude, catch and remove pests.
 - c. Chemical—kill or repel pests directly.
7. Work effectively with a pest management professional.
8. Focus on education of staff and build awareness.
9. Evaluate the IPM program to identify gaps and areas for progress.



Photo by Jody Gangloff-Kaufmann, NYSIPM

House centipedes are common in school and municipal buildings.



Photo by Jody Gangloff-Kaufmann, NYSIPM

Inspection is the first step in pest control.

IPM step one: Develop an integrated pest management plan

The pest management plan provides an organized framework and chain of command for the IPM program. If your workplace has no written IPM policy, a plan can still be created within the facilities maintenance department to outline what is to be done and by whom. A good plan helps you avoid haphazard pest management and emergencies and provides backup when pest management practices are questioned. The plan can help you demonstrate that only the most appropriate actions are taken. It will also encourage the necessary cooperation needed from all building occupants.

A successful integrated pest management plan will include several elements. Select an IPM coordinator who is willing to make the program a success. Raise awareness of workers involved, so they can cooperate with pest management and participate more fully in reporting pest sightings. Training workshops are often available from pest management industry groups or local cooperative extension offices. Employee training should cover IPM-related subjects such as building maintenance, pest reporting, sanitation, pest prevention, and physical methods of pest control, such as trapping. When employees understand why certain strategies are used, they are more likely to cooperate.

If pest management is performed through in-house staff, each worker applying pesticides must be a NYS DEC-licensed commercial pesticide applicator. The place of business must also be a licensed pesticide business (see www.dec.ny.gov for more information). All professional pest management technicians must be licensed to apply pesticides. Ask if technicians have received IPM training. Repairs and building maintenance are vital to successful pest management. Be aware that most often, the contracted service will not include building maintenance and repairs. Some companies may offer these services, so ask about it and get prices.

If pest management is handled by a pest management vendor, the signed contract should reflect the policy or plan established at your workplace. The New York State Office of General Services has examples of IPM bid specifications on its website. Search for "IPM" at www.ogs.ny.gov/.

Other elements of a successful IPM plan include developing a site plan, inspecting and monitoring for pests, keeping records of pest and pest management activities, maintaining good communication and cooperation between the IPM coordinator and all parties, and evaluating the program annually. These and other topics are covered in additional fact sheets.



Photo by Jody Gangloff-Kaufmann, NYSIPM

The IPM coordinator can raise awareness among employees and explain why IPM is important.



Photo by Jody Gangloff-Kaufmann, NYSIPM

Simple modifications, like this gravel barrier around the building, can reduce pest activity inside.



Cornell University
Cooperative Extension



New York State
Integrated Pest Management
Program

Produced by the New York State Integrated Pest Management Program, which is funded through Cornell University, Cornell Cooperative Extension, the NYS Department of Agriculture and Markets, the NYS Department of Environmental Conservation, and USDA-CSREES. Design by Karen English, New York State IPM Program. Cornell Cooperative Extension provides equal program and employment opportunities. © 2012 Cornell University and the New York State IPM Program. Posted 4/2012 at www.nysipm.cornell.edu/factsheets/buildings/municipal_ipm_step1.pdf

www.nysipm.cornell.edu



U.S. Department of Education Green Ribbon Schools Recognition Award— Application News and Reminder



The Green Ribbon Schools award is part of a larger U.S. Department of Education (ED) effort to identify and disseminate knowledge about practices that are proven to result in improved student engagement, higher academic achievement and graduation rates, and workforce preparedness, as well as a government wide goal of increasing energy independence and economic security.

www2.ed.gov/programs/green-ribbon-schools/index.html

The U.S. Department of Education (ED) Green Ribbon Schools program (ED-GRS) recognizes BOCES, public schools, and non-public schools which are taking a comprehensive approach to greening their schools. **The Green Ribbon Schools program is building-specific.**

A comprehensive approach incorporates environmental learning with improving environmental and health impacts.

ED selects honorees from those presented by eligible nominating authorities nationwide. Selection is based on the documentation of each nominee's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills, and green career pathways.

More information about ED-GRS can be obtained at the following web site:

www2.ed.gov/programs/green-ribbon-schools/index.html

[green-ribbon-schools/index.html](http://www2.ed.gov/programs/green-ribbon-schools/index.html)

The timeline for the 2014 NYS Green Ribbon Schools program is:

- NYS-GRS Application Deadline: 3:00 PM December 13, 2013
- NYS-GRS Application Review: December 2013 – January 2014
- Submission of NYS Nominees to the ED-GRS: February 1, 2014
- ED-GRS Announces Honorees: April 22, 2014 ([Earth Day](#))

New York State's **2013 Green Ribbon honorees** were the:

- Crompond School Yorktown Heights, NY
- Hubert Humphrey School (PS 57) in Staten Island, NYC, NY
- Rye Country Day School, Rye, NY

Please visit **NYSED's Green Ribbon Schools program web site** at www.p12.nysed.gov/facplan/GreenRibbonSchools.html for additional information.

Questions regarding the **2014 NYS Green Ribbon Schools program** can be addressed to:

[Rosanne T. Groff](#)

Senior Architect
NYSED Office of Facilities Planning at: 518-474-3906 or nysgreen-ib@mail.nysed.gov.



Security Guards in Schools

“Greeters” are often the person hired to welcome a visitor to a school, ask them to sign a visitor log, issue them a visitor badge, and direct them to the appropriate location within the school. This process has become the norm in most schools. However when that person’s duties move from simply “greeting” to actual “protection” (as defined below), they are likely serving as a security guard rather than a “greeter.”

In light of recent events throughout the country, this is an issue well worth considering by your local school board and school district administration.

A security guard, as defined in Article 7A of the New York State General Business Law [§89-f (6)], is a person (other than an active police officer) employed to principally perform one or more of the following duties, and the person is not performing the functions of a private investigator as defined in Section 71 of Article 7 of the General Business Law:

- **protection of persons and/or property from harm, theft, and/or unlawful activity;**
- **deterrence, observation, detection, and/or reporting unlawful or unauthorized activity;**
- street patrol service;
- response to, but not installation or service of, a security system alarm.

In addition, Section 89-G of Article 7A requires all persons engaged in security guard activities be registered with the **New York Department of State (DOS)** and complete all training (unless exempt) at schools approved by the **Division of Criminal Justice Services (DCJS)**. The following links provide detailed information on these licensing requirements:

[Overview of the State Security Guard Licensing Requirements](http://www.criminaljustice.ny.gov/index.htm)<http://www.criminaljustice.ny.gov/index.htm>

www.dos.ny.gov/licensing/securityguard/sguard.html

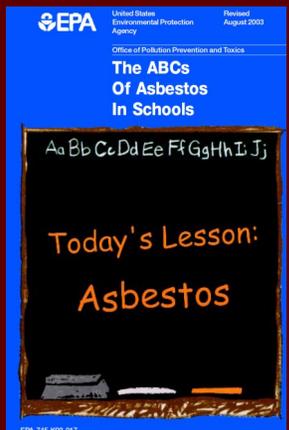
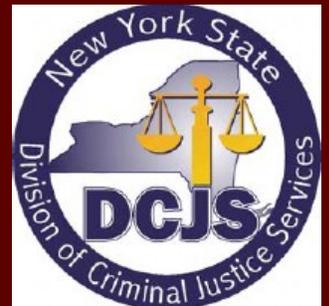
AHERA Triennial Reporting Reminder

A quick reminder— the federal Asbestos Hazard Emergency Response Act (AHERA) triennial reinspection should have been completed (by July 9, 2013) and fully documented in both copies of the AHERA Management Plan (one copy in the school district office and an identical copy in the school building office).

In conjunction with the reinspection, the 2013 AHERA triennial **on-line** report should have been submitted to NYSED by September 1, 2013. **At this point, only 77% of school districts have reported their 2013 AHERA data to NYSED.** If this hasn’t been completed for your district, please access the reporting tool at: www.surveymonkey.com/s/WKRB9D2.

Only ONE 2013 AHERA Triennial Reinspection Report needs to be completed for each BOCES, school district, or charter school.

For further information and assistance on AHERA, contact your BOCES Health and Safety Office, the Office of Facilities Planning at 518-474-3906, or see www2.epa.gov/asbestos/school-buildings#requirements.



www2.epa.gov/sites/production/files/documents/abcsfinal.pdf

Annual Notifications to.....

Several Federal and State school facility-related laws include requirements for annual notifications to specific members of the school community at various times of the year. The following are **just a few** of those annual notifications.

Federal: 40 CFR Part 763 Asbestos Hazard Emergency Response Act (AHERA)

At least once each school year, the local education agency (LEA) must provide written notification to parent, teacher, and employee organizations regarding the availability of the Asbestos Management Plan and any response actions taken or planned.

This notice must be dated and a copy placed in the Asbestos Management Plan for that school. The Plan must also include information detailing the steps taken to notify parent, teacher, and employee organizations. Acceptable methods include placing a notice in the school handbook, mailing a letter to each household, or placing an ad in the local paper.

For more information see:
www2.epa.gov/sites/production/files/documents/aherarequirements_1_0.pdf

New York State: 8 NYCRR 155.24—School Pesticide Neighbor Notification

Schools shall establish written pesticide notification procedures to provide information on pesticide applications at relevant facilities—as follows:

The school shall provide written notification to all staff and persons in parental relation at the beginning of each school year or summer school session. If a child enrolls after the beginning of the school year or summer session, written notification shall be provided to the person in parental relation within one week of their enrollment. The written notification shall include at a minimum the following:

- (i) a statement that pesticide products may be used periodically throughout the school year or summer school session;
- (ii) a statement that schools are required to maintain a list of staff and persons in parental relation who wish to receive 48-hour prior written notification of pesticide applications at relevant facilities, and instructions on how to register with the school to be on such list for prior notification; and
- (iii) the name/phone number of a school pesticide representative who may be contacted for further information.

For more information see:

www.p12.nysed.gov/facplan/Laws_Regs/8NYCRR155.htm#_155_24_SchIPesticideNeighborNotification

New York State: State Education Law 807-a(3)(b) - Notification of Annual Fire Inspection

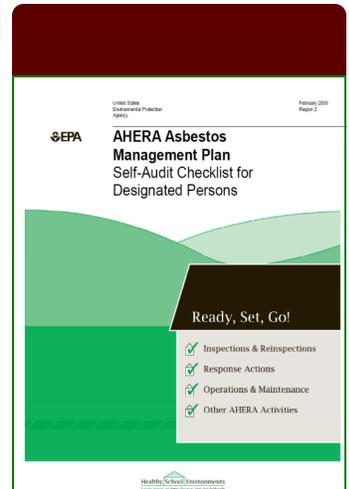
School authorities are required to notify the chief or comparable officer of any fire department or fire corporation, which has the regular duty of fighting fire in the building to be inspected.

The authorities are to provide reasonable notice of the date and time the inspection is to be made.

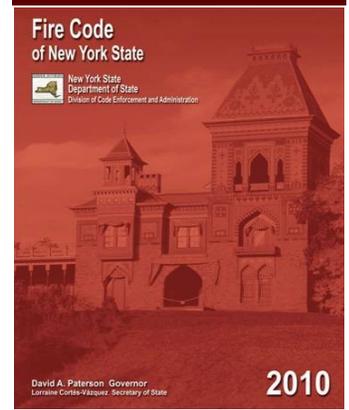
The officer notified, or any subordinate designated by the officer, may be present during the inspection and may also file a report of inspection.

The officer shall also be notified of the scheduled post-inspection meeting.

For more information see:
www.p12.nysed.gov/facplan/documents/FireSafetyManual_01-2012.rev2.doc



www2.epa.gov/sites/production/files/documents/ampauditchecklist_0.pdf



<http://public-codes.cyberregs.com/stny/st/b300v10/index.htm>

Facilities Planning: True or False



Managing a school facility requires a skilled professional adept at understanding and interpreting a wide variety of requirements. This article addresses issues which school facility directors often need to address. This is a regular feature in the Facilities Planning newsletter.

True or False?

Schools in New York State must adhere to a rule which stipulates a minimum indoor temperature.

True.

The *Property Maintenance Code of New York State* (section 602.4) for "Occupiable work spaces", requires that "indoor occupiable work spaces be supplied with heat during the period from **September 15th to May 31st** to maintain a temperature of not less than **65°F** (18°C) during the period the spaces are occupied." The only exceptions are for processing spaces (coolers or freezers) and vigorous physical activities areas (gymnasiums).

True or False?

Public and nonpublic school floor plans and schematics must be

shared with local emergency responders.

True. State Education Law §408-B requires every public and nonpublic school to submit copies of school building plans and specifications to their respective local fire and law enforcement officials. Plans and specifications mean schematics and/or floor plans. The plans and specifications noted in the law do not refer to construction documents. The purpose of providing these documents to local fire and law enforcement is to ensure that both agencies are familiar with the school's layout before an emergency happens.

True or False?

Anyone may use a pesticide product in a school building or on school grounds classified as exempt or minimum risk under section 25(b) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

False.

Only individuals certified by the State Department of Environmental Conservation (NYSDEC) as a pesticide applicator may apply products, including 25(b), in schools and on school grounds.

Questions From the Field:

This section will address an actual question which has been raised by a school facility professional in the field.

Can you give any guidance on the acceptance of using propane powered floor burnishers in schools?

We cannot endorse the use of propane powered floor maintenance equipment in schools, however, neither will we prevent their use in accordance with the Fire Code of New York State and NFPA 58.

It is our opinion that there are many potential hazards to be considered in connection with these machines especially in light of today's concerns of indoor air quality and safety in schools. We therefore believe that each school district and local board of education must make an individual determination on whether to permit their use based on full knowledge of the risks and responsibilities associated with their use as well as each districts particular circumstances and level of maintenance skill and oversight .

As the authority having jurisdiction, we have determined that the use of propane powered floor maintenance equipment is only allowed when the building is not occupied by people other than maintenance (custodial) personnel.

General provisions:

- Appropriate ventilation and combustion air must be provided in spaces where the machine is being used.
- Storage of an LPG container, greater than a single 2 lb (LPG) container, used for the floor maintenance equipment, whether connected to the equipment, or stored separately is not allowed in a school building.
- Equipment must be listed/labeled for use.
- Equipment must have automatic fuel shut off.

