



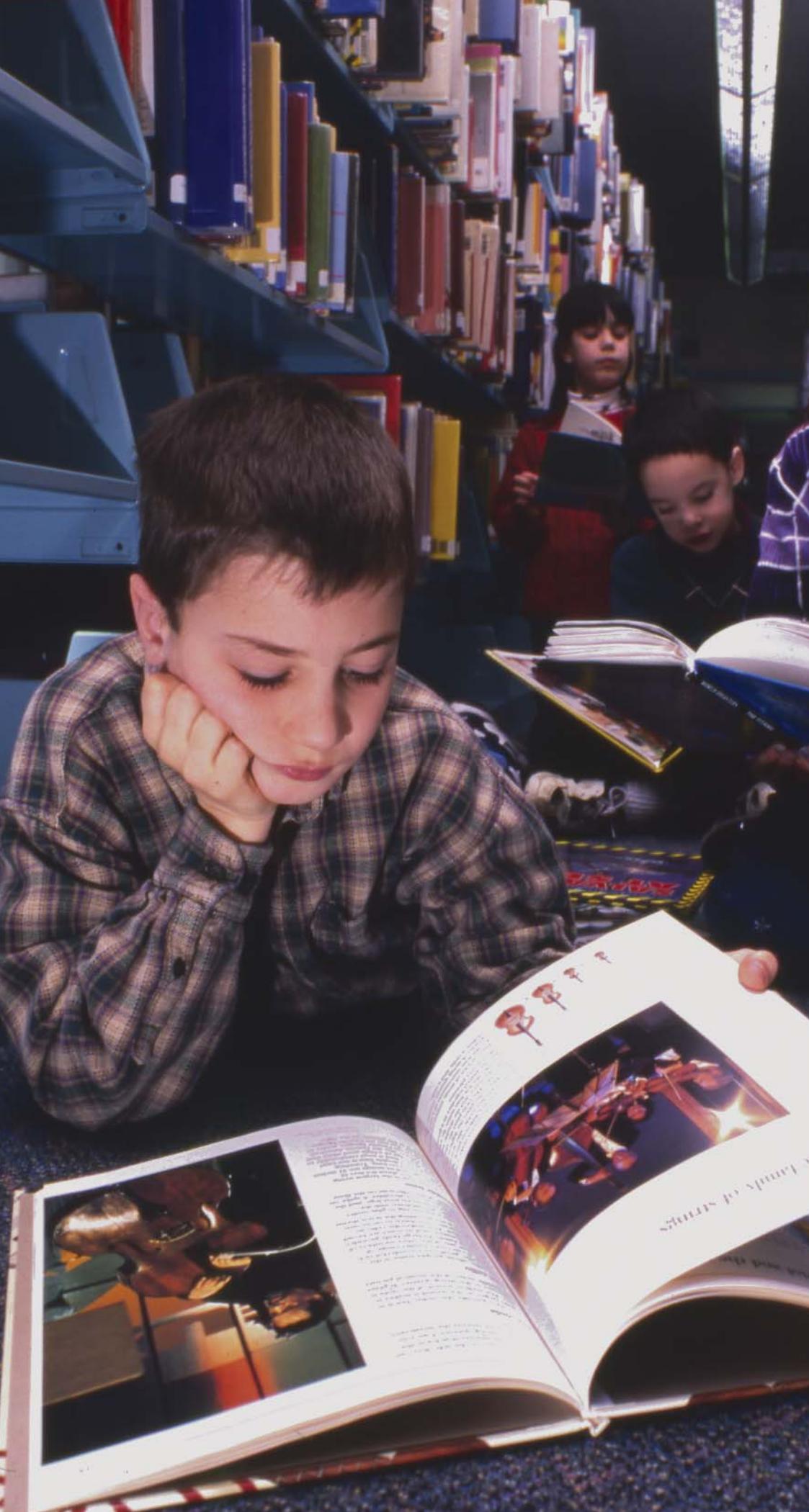
The Municipal Primer

Your Guide to
Creating a
"Green and Growing"
Community



Gina McCarthy
Commissioner





Schools and Education



Pictured — Welles Library,
Newington, Connecticut

The CT DEP is intent on working with local school districts to ensure that Connecticut educators have opportunities for training in a variety of environmental topics, and that public school facilities provide a safe environment for students, educators and other staff. To meet the first goal, the CT DEP offers teacher training workshops on a wide range of environmental topics. To achieve the second goal, certain standards have been established regarding the operation and management of existing schools, as well as standards to be applied in the design and construction of new schools. To aid in coordination among municipal schools, education departments, and the CT DEP, this section of *The Municipal Primer* provides fact sheets on the following topics:

- *Environmental Education and Outreach*
- *Green Building Requirements for Schools*
- *Operations and Maintenance for Schools*

Other school-related fact sheets in *The Municipal Primer* are:

Landscaping and Lawn Care (Public Works)

Fleet Selection and Operation (Public Works)

Mobile Air Emissions (Public Works)



Description

Environmental education and outreach is an effort by the CT DEP to teach, and provide support for teaching, about our natural and man-made environment.

Municipal Connection

Schools, families and youth groups can participate in programs at sites throughout Connecticut. The CT DEP provides professional development to municipal nature center staff and other non-formal educators, and to formal education professionals. Municipalities can co-sponsor environmental, historical and cultural programs (e.g. Valley Rivers Celebration, SPLASH).

Municipal Responsibility

There are no specific responsibilities beyond those required of the general public. Sometimes there are fees for programs and bus permits.

Statutory Citation

Not applicable.

Discussion

The CT DEP can help with information and resources for use in the classroom, at home, or in the local community, including educator workshops, student field trips, educational resources and public education courses. There are a number of year-round education facilities operated by the CT DEP, including Kellogg Environmental Center in Derby and Dinosaur State Park in Rocky Hill, as well as seasonal programs offered at 25 parks and forests throughout the state. Programs can be arranged through CT DEP's Education & Outreach staff.

The CT DEP offers teacher workshops and provides Continuing Education Units (CEU's). State parks and forests are wonderful venues for school field trips enhancing the classroom curriculum. Bus permits must be obtained in advance and, in certain areas, other fees apply.

School classes and families can visit environmental centers, historical museums and state parks to learn more about Connecticut's natural, historical and cultural assets.

The CT DEP's *No Child Left Inside* is a major state initiative designed to reconnect youngsters with the outdoors, build the next generation of environmental stewards, and showcase Connecticut's state parks and forests. As part of the *No Child Left Inside* initiative, Connecticut state park day passes are provided annually to the main branches of the libraries in all 169 towns and cities.

Potential CT DEP Permits, Registrations and/or Certifications

None specific to this program.

Financial Assistance

Financial assistance is not available at this time (6/2008).

Model Regulations

No.

Web Page

www.ct.gov/dep/education

Contact

Bureau of Outdoor Recreation
Division of State Park
Education & Outreach
Email: dep.stateparks@ct.gov
Phone: 860-424-3973

Description

A “green building” is one for which the indoor and outdoor (building and landscape setting) environmental qualities have been considered and protected during its design, construction, maintenance and use.

Municipal Connection

Connecticut municipalities are responsible for providing public education and the facilities (schools) necessary to house public education activities.

Municipal Responsibility

As of January 1, 2009, minimum standards for green buildings will be imposed on construction of certain school facilities, depending upon type and cost of the project and the level of state funding. Affected projects will be:

- new construction of a school facility that is projected to cost \$5 million or more, of which \$2 million or more is state funding; and/or
- renovation of a public school facility that received \$2 million or more in state funding.

Statutory Citation

CGS Sections 16a-38 through 16a-38k

Discussion

Connecticut is supporting responsible growth which, in general terms, is: economic, social, and environmental development that uses land and resources in ways that enhance the long-term quality of life for Connecticut’s current and future generations.

Green building is one of the tools used to advance responsible growth. There is a lot of information available on green building and not all authors agree on all aspects, but almost everyone agrees that green buildings are:

- energy efficient;
- site responsive;
- water conserving;
- materials sensitive; and
- healthy for their occupants.

Under current state law and associated regulations that are under development, municipalities are required to ensure that all persons associated with school construction both know about green design, construction and maintenance, and follow the applicable regulations. If a proposed school construction project is not in compliance with these regulations, state law requires that state funds be withheld.

While the CT DEP plays only a supportive role in implementing this program, the green building requirement for schools is included here due to its strong environmental connection. Complying with these regulations will result in schools that consume less energy and conserve natural resources. These schools will be more comfortable, and easier and less costly to maintain.

Potential CT DEP Permits, Registrations and/or Certifications

None specific to this program.

Financial Assistance

Financial assistance is not available at this time (6/2008).

Model Regulations for Municipal Consideration

No.

Green Building Requirements for Schools

Web Pages

General Green Building

www.ct.gov/dep/landscapestewardship Select “Tools for Towns and Cities” and scroll down to select the “Green Building” link,

CT Green Building Council

www.ctgbc.org For Green Schools information, select “Events” on the left side, then select “Events Archive” in the pop-up box.

Contact

Office of the Commissioner
Planning and Program Development
Pollution Prevention Program
Phone: 860-424-2071



Description

The upkeep, servicing, repair and running of municipal educational facilities.

Municipal Connection

Connecticut municipalities have primary responsibility for education in grades K-12 (kindergarten through grade 12). This responsibility includes the operation of school facilities. There are several major environmental issues that should be addressed in school facilities operation plans, including air quality; the use of pesticides; composting; and the disposal of fats, oils and greases from cafeterias.

Municipal Responsibility

Municipalities are required to comply with statutory restrictions on the use of pesticides on school grounds and with the CT DEP general permit requirements for the discharge of wastewater from food preparation establishments (including school cafeterias).

In addition, municipalities are encouraged to establish and enforce “no-idling zones” for diesel vehicles and school buses and develop school composting programs.

Certain school programs (e.g., vocational-agricultural, mechanical shop) may require specific CT DEP permits.

Statutory Citations

Air Pollution Control

CGS Sections 22a-170 through 22a-206

Pesticides

CGS Sections 22a-46 through 22a-66z

Solid Waste

CGS Sections 22a-207 through 22a-256ee

Water Pollution Control

CGS Sections 22a-416 through 22a-599

Discussion

Air Quality

Children breathe 50% more air per pound of body weight than adults. This makes children more sensitive to air pollution. Most of the ground-level air pollution in Connecticut is generated by motor vehicles. Monitoring studies have shown that a line of idling school buses waiting to drop off or pick up students is a significant source of motor vehicle exhaust affecting school children.

One approach to limiting the effects of school bus exhaust emissions on air quality is through retrofitting the exhaust systems on the buses. However, this is a costly project and there is only limited funding available. Unless and until school buses are provided with up-to-date emission controls, prohibiting or limiting idling (anti-idling efforts) can be an effective, low-cost way to significantly and immediately reduce exposure to diesel pollution.

Research has shown that constant reminders significantly improve compliance with an idling restriction. To effectively promote awareness of the environmental and health effects of bus idling on school children, and to reduce unnecessary idling, the CT DEP provides free anti-idling signs to Connecticut public schools that agree to post them. The CT DEP also encourages school systems to conduct an outreach effort to employees, students and parents on the idling impacts of all motor vehicles on health and air quality. (See fact sheet on *Fleet Selection and Operation* under Public Works for more information on idling.)

School bus idling is not only an outdoor air quality problem, but it also frequently affects air quality within the schools. The typical proximity of school bus queuing locations to the air intakes for school buildings can draw diesel exhaust into school ventilation systems. School buildings frequently have lower air exchange rates so once diesel exhaust enters a school building it is slow to dissipate. This can be a prime contributor to elevated indoor

Operations and Maintenance for Schools

pollution levels in school buildings. While this can be readily addressed by anti-idling efforts, it is only one source of poor indoor air quality in schools. The CT Department of Public Health is primarily responsible for indoor air quality issues and offers a “Tools for Schools” program to address most other causes of poor indoor air quality.

Use of Pesticides at Schools

Prior to 2007, Connecticut banned the use of lawn care pesticides at pre-schools and elementary schools. In 2007, the General Assembly expanded that State-wide ban to schools with students through grade eight (K-8). There is an emergency provision that allows a school superintendent, in coordination with other appropriate authorities, to authorize emergency applications of lawn care pesticides when the problem is related to health emergencies at K-8 schools.

If pesticides are being applied to a school (or school grounds) serving grades 9 or higher, pesticide certification is required, except if an emergency application is necessary, or the pesticide is in the form of baits or general use sanitizers.

Composting for Schools

Organic materials such as cafeteria food waste are highly recyclable if kept separate from the trash. These materials should be thought of as a resource, not a waste. Composted organic materials can be used to mulch landscaped areas and reduce the need for fertilizers. Schools have a ready source of compostable materials in the food wastes from their cafeterias. The Town of Mansfield, with financial and technical assistance from the CT DEP, developed a manual that outlines the steps necessary for establishing and maintaining a successful, school-wide composting program for cafeteria school scraps. It is available for download on the CT DEP Web site at www.ct.gov/dep/recycle. Follow the link for “Schools.”

Fats, Oils and Greases

Schools are the primary municipal facilities that include commercial-type kitchens (also known as food preparation establishments). Any such kitchen produces a significant amount of fats, oils and greases (FOG). Discharging these wastes to wastewater collection and treatment systems (i.e., pouring them down the drain) creates significant environmental and public health problems throughout much of Connecticut. In recognition of this issue and to assist both municipalities and private facilities that generate FOG, the CT DEP created a *Fats, Oils, and Grease (FOG) Model Program* for discharges to sanitary sewerage system and a FOG general permit that requires the installation and maintenance of grease traps or automatic grease recovery units. The general permit covers facilities that have the potential to discharge wastewater containing fats, oils and greases above 100 mg/L (milligrams per liter) as a result of preparing or serving food prepared by hot processes. Facilities generating FOG discharges below this threshold are exempt from the permitting requirements. Any municipal school with FOG discharge above this threshold is subject to the requirements of the *General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments*.

Potential CT DEP Permits, Registrations and/or Certifications

Pesticides Operator Certification

General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments (FOG)

Other permits may apply for specific schools programs (e.g., vocational-agricultural, mechanical shop). Additional information is available through the CT DEP Permit Assistance Office at 860-424-3003.

Financial Assistance

Financial assistance is not available at this time (6/2008).

Model Regulations for Municipal Consideration

No.

Web Pages

Anti-idling

www.ct.gov/dep/air

CT Department of Public Health (DPH)

www.ct.gov/dph Select “Environmental Health” on the left side of the DPH home page, then select “Indoor Environmental Quality” in the center of the page then scroll down and select “Tools for Schools.”

Organic Land Care

www.ct.gov/dep/p2

Composting for Schools

www.ct.gov/dep/recycle

Fats, Oils and Greases

www.ct.gov/dep/permits&licenses Follow the “Air, Waste, Water and Land Use” link, select “Water Discharge Permits and General Permits” then scroll down to “Food Preparation Establishment Wastewater” in the General Permits section and select the link to the “Fats, Oils and Greases Model Program.”

Contacts

Pesticides

Bureau of Materials Management and Compliance Assurance
Pesticide Management Program
Phone: 860-424-3369

Anti-idling

Bureau of Air Management
Enforcement Section
Phone: 860-424-3702

Composting for Schools

Bureau of Materials Management and Compliance Assurance
Recycling Program
Phone: 860-424-3365

Fats, Oils and Grease

Bureau of Water Protection and Land Reuse
Municipal Facilities Section
Phone: 860-424-3018

General Permit Questions

Office of the Commissioner
Planning and Program Development
Permit Assistance Office
Phone: 860-424-3003

