

The Municipal Primer

Your Guide to
Creating a
"Green and Growing"
Community



Gina McCarthy Commissioner



Public Works



Pictured — Road Maintenance, Farmington, Connecticut

Includes: Waste Materials Management, Infrastructure and Property Management

The authorities and responsibilities of local public works officials vary from municipality to municipality; however, they typically include overseeing and maintaining municipal facilities and infrastructure and providing certain public services. Depending upon the municipal structure, these duties may include oversight of the operation and management of: municipal buildings; facilities for managing solid and other wastes (landfill or transfer station); streets and roads; stormwater and flood control components; the municipal vehicle fleet; municipal parks and grounds; and/or urban forests, including street trees.

Municipal public works officials also often provide a number of public services including waste and recycling collection, street sweeping and cleaning, leaf collection and clean up of vacant properties. In virtually all these efforts, there is a link between actions of the local public works officials and the responsibilities and authorities of the CT DEP. To aid in coordination between municipal public works officials and the CT DEP, this section of *The Municipal Primer* includes fact sheets on the following topics:

• CT DEP Permitting Overview for Public Works Officials

Waste Materials Management

- Municipal Solid Waste Management
- Disaster Debris Management Planning
- Recycling
- Composting and Organics Recycling
- Brush, Stump and Untreated Wood Waste Management
- Hazardous and Universal Wastes

Stormwater

- Stormwater Management
- Small Municipal Separate Storm Sewer Systems (MS4) Stormwater Program
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- Dams
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- Indoor and Outdoor Lighting and Appliances
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- Renovation, Demolition and Construction
- Streets and Road Management
- Underground Storage Tank Systems

Public Works

Municipal wastewater collection and treatment facilities, parks and recreation, board of education facilities, and public safety issues are discussed under other sections of *The Municipal Primer*. In some instances, these activities may be related to the municipal public works responsibilities. Other related fact sheets in *The Municipal Primer* are:

Nonpoint Source Pollution Management (Boards, Commissions, Agencies and Committees)

Aquifer Protection Area Program (Boards, Commissions, Agencies and Committees)

Low Impact Development (Boards, Commissions, Agencies and Committees)

Potable Water Program (Public Health)



CT DEP Permitting Overview for Public Works Officials

Description

The CT DEP administers many different permitting programs, each of which protects the state's resources by regulating the emission of pollutants, facility operations, or land-use activities. The CT DEP also administers many recreational and natural resource licenses that regulate boating, fishing, activities in state parks and activities affecting wildlife. Professional and occupational licenses in the environmental field, such as commercial arborist, solid waste facility operator, Licensed Environmental Professional (LEP), commercial fishermen, forest practitioner and taxidermist are also administered by the CT DEP.

Municipal Connection

Many routine, day-to-day operations of municipalities are subject to CT DEP permitting and/or licensing requirements.

Municipal Responsibility

Municipalities are responsible for acquiring any necessary CT DEP authorizations prior to the conduct of any CT DEP-regulated activities.

Statutory Citation

Various

Discussion

It is the policy of the State of Connecticut "to conserve, improve and protect its natural resources and environment and to control air, land and water pollution in order to enhance the health, safety and welfare of the people of the state" (CGS Section 22a-1). The CT DEP carries out this policy by regulating activities that may impact these natural resources and the environment. Activities may be regulated through the issuance of individual permits, general permits or other short authorization processes.

Individual Permits

Individual permits are issued directly to an applicant for specific activities, generally at a specific site(s). Individual permits are written to control a proposed activity in a manner that is protective of the environment. Therefore, if a municipal activity might in some way impact the environment or the state's natural resources, the municipality will likely need to apply for and obtain a permit. In the event of a complex project, several permits may be required.

General Permits

General permits are used to authorize a group of similar activities by one or more registrants throughout a prescribed geographic area. General permits also streamline the permitting process and are cost-effective for both the CT DEP and the registrant. A general permit establishes mandatory operating conditions for conducting an activity using procedures that protect human health and the environment. Authorization of an activity under a general permit is governed by the specific conditions and requirements of that general permit. A list of activities authorized by general permits can be found in the User's Guide to Environmental Permitting (See the Web site information, below.)

There are three basic types of general permits or ways of authorizing activities using a general permit:

- an activity described in a general permit may be initiated without prior registration (some of these permits may require later registration);
- 2) registration is required prior to initiation of the activity (this registration frequently requires certification of a professional engineer); or
- CT DEP approval is required prior to initiation of the activity (in some cases, this approval will contain site-specific conditions in addition to those already contained in the general permit).

CT DEP Permitting Overview for Public Works Officials

The applicable method of authorization is specified in each general permit. In almost every case of an eligible minor activity, general permits are quicker and more cost-effective for both the Department and the applicant.

Other Short Permit Processes

Certain activities can be authorized through shortened permit processes. These abbreviated processes include emergency and temporary authorizations and Certificates of Permission (COP). The Short Permit Process Fact Sheet found in the *User's Guide* provides information on these authorizations.

User's Guide to Environmental Permitting

The "User's Guide to Environmental Permitting" is posted on the CT DEP Web site to aid prospective permittees in identifying specific permits needed for a given activity. In the event of a complex project, multiple permits may be required. Questions regarding the need for a permit should be directed to the appropriate program staff, or the Department's Permit Assistance Office.

Refer to the permit guide chapter of *The* Municipal Primer for a more comprehensive description of CT DEP permits and licenses, and information on the permit process.

Potential CT DEP Permits, Registrations and/or Certifications

For information on permits and licenses that may apply to specific municipal activities, Refer to the Municipal Activity / CT DEP Permit Matrix in the Permit Guide chapter of The Municipal Primer.

Financial Assistance

Permit application fees are typically 50 percent of the fees that private individuals would pay for the same activity. Other financial assistance

Model Regulations for Municipal Consideration

No.

Web Pages

CT DEP Main Permitting Web Page www.ct.gov/dep/permits&licenses

General Permit List

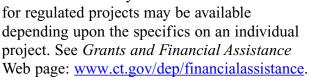
www.ct.gov/dep/permitguide Select "List of General Permits"

Users Guide to Environmental Permitting www.ct.gov/dep/permitguide

Grants and Financial Assistance www.ct.gov/dep/financialassistance

Contact

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



Public Works

Waste Materials Planning and Management



Description

Municipal solid waste (MSW) is defined as material thrown away from homes and commercial establishments (commonly called rubbish, trash, refuse, or garbage).

Municipalities or municipal authorities in

Municipal Connection

Connecticut are required by law to provide for the safe and sanitary disposal of all solid waste generated within their boundaries. Municipalities must also make provisions for recycling of mandated items. There are specific waste management and disposal issues raised by both typical municipal operations and by materials brought to a municipal waste disposal facility (transfer facility or landfill)

Municipalities or municipal authorities in Connecticut have specific responsibilities related to managing solid waste and recyclables generated within their boundaries (including those related to municipal ownership or operation of solid waste facilities such as transfer stations, composting sites, and landfills).

that cities and towns must address.

Municipal Responsibility

Municipalities or municipal authorities in Connecticut are required by law to provide for the safe and sanitary disposal of all solid waste generated within their boundaries.

Municipalities must also make provisions for recycling of the state-mandated recyclables (see fact sheet on *Recycling* under Public Works).

Statutory Citation

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

Discussion

There are many different items that, together, constitute municipal solid waste. According to the US EPA 2006 national figures, the major MSW material types generated nationwide in

the US (by weight) were:

- paper and paperboard products (34 percent)
- yard trimmings and food scraps (25 percent)
- plastics (12 percent)
- metals (8 percent)
- rubber, leather, and textiles (7 percent)
- wood (6 percent)
- glass (5 percent)
- other miscellaneous wastes (3 percent)

Waste streams can exhibit variability community by community depending upon demographics and can vary seasonally as well.

Municipal Role

Under the Connecticut state law, the management and disposal of solid waste is the responsibility of individual municipalities. MSW management involves a variety of activities related to solid waste disposal or processing activities (storage, transfer, volume reduction, recycling, incineration, etc.); however, most final disposal of MSW currently occurs at resource recovery (wasteto-energy) plants. Few Connecticut municipalities have active landfills or resource recovery plants, but rather cities and towns generally operate solid waste transfer stations where waste is collected and transferred to an appropriate disposal, reuse, or recycling location.

Most Connecticut cities and towns have historically been members of regional solid waste and recycling authorities or committees to facilitate their solid waste management responsibilities. Municipalities are encouraged to

- continue to play an active role in the proper and efficient management of solid waste in their communities;
- expand their source reduction and recycling efforts;

Municipal Solid Waste Management

- increase enforcement of local recycling ordinances;
- enact or amend ordinances to reflect new state programs; and
- change purchasing practices to create less waste and purchase environmentally preferred products (see fact sheet on *Purchasing Practices* under Financial Assistance)

CT DEP Role

The CT DEP has responsibilities and authorities related to planning for solid waste management and permitting solid waste facilities. The Department offers a wide range of technical information regarding solid waste management and disposal online at www.ct.gov/dep/solidwaste.

Planning – In December 2006, the CT DEP adopted an updated *Solid Waste Management Plan* which advocates a long-range vision for solid waste management that includes: 1) increasing source reduction, reuse, and recycling and shifting away from a "throwaway society" toward a society that recognizes and manages solid wastes as valuable raw materials; and 2) managing solid waste requiring disposal in an efficient, equitable, and environmentally protective manner, consistent with the state statutory solid waste hierarchy presented in the *Solid Waste Management Plan* (see page 13 of this plan).

The CT DEP State Solid Waste Management Advisory Committee was established to help guide the implementation of the Plan, identify emerging issues and solutions, and participate in any revisions to the Plan as necessary. This advisory committee is open to all and can be joined at any time by subscribing to the CT DEP SW Advisory Committee list serve. A link to the subscribing page can be found by selecting "Solid Waste Plan" at www.ct.gov/dep/solidwaste.

Solid Waste Facility Permitting – Historically, municipalities were required to obtain:

- individual solid waste permits for the construction and operation of their solid waste landfills, transfer stations, and other solid waste facilities;
- recycling general permits for specific types of recycling facilities; and
- registrations for their leaf composting sites.

In January 2008 the Department adopted the General Permit for a Municipal Transfer Station for solid waste and recyclables. Any municipality seeking to construct and/or operate a municipal transfer station that can comply with the General Permit requirements can file to register a facility. This General Permit applies to municipal transfer stations that process less than 120 tons per day and provide only limited processing of certain wastes. Please see the General Permit for additional information. Facilities currently operating under an individual permit for a solid waste facility or under a recycling general permit may be eligible for this General Permit. This General Permit is not applicable to landfills. More information can be found on-line or in the Permit Guide chapter of The Municipal Primer.

Operators of landfills, transfer stations, volume reduction facilities, resources recovery facilities and material resource recovery facilities in Connecticut must be certified through the CT DEP. For more information check on-line at www.ct.gov/dep/solidwaste and follow the link for "Solid Waste Operator Certification" or look in the Permit Guide chapter of The Municipal Primer under

Solid Waste Facility Operator Certification –

Role of the Connecticut Resources Recovery Authority – Approximately two-thirds of Connecticut's municipalities contract with the Connecticut Resources Recovery Authority (CRRA), a quasi-public agency, for their

"Professional and Occupational Licensing."

Municipal Solid Waste Management

municipal solid waste management needs. The CRRA was established to serve the interests of its municipal customers and is a critical player in MSW management in Connecticut. See Section 5.2.5 of the December 2006 *CT State Solid Waste Management Plan* for a more detailed discussion of the role of CRRA.

Potential CT DEP Permits, Registrations and/or Certifications

Individual Permit for a Solid Waste Facility

General Permit for a Municipal Transfer Station

Solid Waste Facility Operator Certificate.

Financial Assistance

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

Model Regulations for Municipal Consideration

No

Web Page

www.ct.gov/dep/solidwaste

Contact

Bureau of Materials Management and Compliance Assurance Engineering and Enforcement Division Phone: 860-424-3366



Disaster Debris Management Planning

Description

Disaster Debris Management Planning is preparing for the management of debris generated by natural disasters before such a disaster strikes.

Municipal Connection

Local governments will be the first to respond to a natural disaster situation making it prudent for municipalities to plan for effective debris removal.

Municipal Responsibility

Each municipality is responsible for coordinating the clearance, removal, storage and disposal of all debris deposited on or moved to municipal properties within their boundaries and jurisdictions. Though not mandated, it is recommended by both federal and state emergency response programs that local governments develop a comprehensive Disaster Debris Management Plan to be better prepared to manage disaster debris and to qualify for the financial incentives offered under the Federal Emergency Management Agency (FEMA) Pilot Program (see FEMA 325 Debris Management Guide, July 2007, for more details).

Statutory Citation

Not applicable.

Discussion

There is a high probability that the State of Connecticut will be affected by a natural disaster such as a hurricane, a nor'easter, ice storm and/or flood event. Recognizing that it is critical to return municipalities back to normal for economic and quality-of-life reasons, the goal and role of the state is to facilitate prompt and efficient recovery. Implementing emergency waste management practices that are reasonable and cost effective and, at the same time, protective of human health and the environment is an essential component of any post-disaster recovery effort. Without advanced

planning, it will be impossible to efficiently respond to a natural disaster.

To facilitate the management of disaster debris the CT DEP prepared the *State of Connecticut's Disaster Debris Management Plan* (DDMP), an addendum to the State's Natural Hazard Mitigation Plan. The DDMP establishes the framework for state agencies and municipalities to properly manage debris generated by a natural disaster. Additional preevent planning by municipalities will ensure prompt recovery.

The effectiveness of all activities associated with massive debris clearance, removal, and disposal activities depends upon pre-event preparation and planning and efficient operations. Typical activities that should be considered in a disaster debris management plan include, but are not limited to

- identifying sources of staff, equipment, and funds to devote to debris removal;
- having contracts in place for debris removal and for monitoring those involved in that removal;
- identifying staging areas for the storage, handling and reduction of debris ("Temporary Debris Storage and Reduction Sites," TDSRS); and
- consideration of how to phase clean-up activities.

Such activities will rely on debris disposal strategies and policies developed by the CT DEP and, if necessary, will be implemented under the Governor's emergency powers. The CT DEP will provide municipalities with the necessary technical assistance and oversight to assure proper debris management, recycling and disposal. In the event of a catastrophic natural disaster, if the municipalities cannot effectively manage debris removal or are overwhelmed by the magnitude of the task, the State will respond to requests for assistance.

Disaster Debris Management Planning

A critical step in the planning process is the identification and preparation of TDSRS prior to a natural disaster event. Debris management guidance from FEMA strongly recommends that both state and local governments be responsible for pre-identifying TDSRS, preferably on public property. This will allow post-disaster cleanup efforts to begin quickly and efficiently. Municipalities are required to obtain CT DEP permits for the TDSRSs.

Planning ahead by thinking through the various steps of the municipal response efforts (and how to appropriately document them for FEMA reimbursement) is key to minimizing confusion, maximizing organizational efficiency, implementing an appropriate response, and receiving a timely reimbursement. Guidance material explaining the planning process is available on CT DEP's Web site, as well as the FEMA Web site, http://www.fema.gov/government/grant/pa/policy.

Municipalities are encouraged to contact the CT DEP and the CT Department of Emergency Management and Homeland Security (860-256-0800 or toll free 1-800-397-8876) to request assistance with the local planning process.

Potential CT DEP Permits, Registrations and/or Certifications

CT DEP permitting programs apply to the location of Temporary Debris Storage and Reduction Sites. Implementation of the local plan may require other state and local permits.

Financial Assistance

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

Model Regulations for Municipal Consideration

None

Web Page

www.ct.gov/dep/solidwaste Follow the link for "Disaster Debris Management Preparedness."

Contact

Bureau of Materials Management and Compliance Assurance Division of Enforcement and Engineering Solid Waste Enforcement Program Phone: 860-424-3130



Description

Recycling is the separation or diversion of an item or items from the solid waste stream and the processing of those items into a material product. Recycling includes the production of compost.

Municipal Connection

Connecticut has designated several items as "recyclables." Connecticut's recycling laws require separation of state-designated recyclables by everyone who generates them. State laws include requirements for municipalities to have a mandatory recycling ordinance, to identify a municipal recycling contact, and to make provision for recycling of designated recyclables generated within town borders. Connecticut law also prohibits haulers from knowingly mixing separated (mandated) recyclables with other solid waste.

Municipal Responsibility

Each municipality is required to:

- make provision for the separation, collection, processing and marketing of designated recyclables generated within its borders;
- have a mandatory recycling ordinance;
- identify a municipal recycling contact; and
- make provision for recycling of designated recyclables generated within town borders.

Also, municipal actions with respect to solid waste and recyclables must be consistent with the current *Connecticut Solid Waste Management Plan* (adopted in 1991 and amended in 2006).

Statutory Citations

Various. See Web pages.

Discussion

The benefits of recycling include conservation of natural resources; reduction in the emission of air and water pollutants; reduction in energy and water use; reduction in greenhouse gas emissions; and reduction in the amount of solid waste requiring disposal, thereby reducing disposal capacity needs and waste disposal costs. Recycling also helps the economy through job creation, business development, and added product value.

The state's designated list of recyclables includes the following items:

- corrugated cardboard;
- glass and metal food and beverage containers;
- · newspaper;
- high-grade, white office paper (required for non-residential only);
- scrap metal;
- lead acid storage batteries;
- used crankcase oil from engines;
- nickel cadmium rechargeable batteries;
- leaves; and
- grass clippings (which are prohibited from other disposal options).

The enforcement of the state's recycling laws is a joint effort shared by municipalities, haulers, disposal facilities and the CT DEP.

Municipalities

Each municipality is required to make provisions for the separation, collection, processing, and marketing of designated recyclables generated within their boundaries. CGS Section 22a-220 mandates a minimum goal for municipalities to recycle and/or source reduce their waste by 40%, a goal that has been superseded by the most recent *State Solid Waste Management Plan* (see below).

Recycling

Municipalities are also statutorily required to adopt a recycling ordinance, designate a municipal recycling contact, and submit an annual recycling report to the CT DEP.

The State Solid Waste Management Plan, amended December 2006, increases the recycling/source reduction goal for municipalities to 58%. To achieve this goal, the plan recommends municipalities increase the amount of waste diverted through source reduction, reuse, recycling and composting. The plan also calls for municipalities to enforce their local recycling ordinances and explore strategies to increase recycling rates.

The CT DEP is authorized to issue orders against any city or town not in compliance with these requirements. Municipalities have statutory authority to establish fines for violations of their recycling ordinances and should both enforce local recycling ordinances and explore strategies to increase recycling rates.

Generators

By statute, all generators of solid waste, including residents, businesses, institutions, and government must separate or provide for separation of designated recyclables.

Haulers

Waste haulers are subject to several recycling requirements. Examples include registration in the municipalities in which they operate and helping municipalities enforce local recycling ordinances. Haulers are prohibited from knowingly mixing solid waste with separated recyclables. Haulers are subject to a civil penalty up to \$2,500 for each violation and up to \$10,000 for a subsequent violation of this prohibition (CGS Section 22a-220a(f)).

Solid Waste Facilities

An owner or operator of a resources recovery facility or other solid waste transfer or disposal facility who observes significant quantities of designated recyclables in the loads received at their facility is required by statute to provide prompt notification to the driver of the vehicle delivering the load and to the recycling contact of the municipality from which the load originated. The owner or operator of each such facility is also required to conduct periodic, unannounced inspections of loads delivered to these types of solid waste facilities to assist municipalities and the Commissioner of the CT DEP in accurately assessing compliance with recycling requirements. Such owners or operators are also required to conduct additional inspections upon the request of the Commissioner of the CT DEP. Facility owners or operators of resource recovery facilities and landfills who fail to comply with the requirements are subject to civil penalties of \$500 to \$5,000 for each violation.

CT DEP

The CT DEP has statutory and regulatory authorities to enforce state recycling statutes and regulations. The CT DEP can seek penalties and may issue an order or take legal action under the solid waste statutes. The CT DEP undertakes site investigations of all solid waste facilities and responds to complaints.

Potential CT DEP Permits, Registrations and/or Certifications

Construction and Operation of a Solid Waste Facility

General Permit to Construct and Operate Certain Recycling Facilities

General Permit for a Municipal Transfer Station

General Permit for the Addition of Grass Clippings at Registered Leaf Composting Facilities

Leaf Composting Registration

Material Resources Recovery Facilities Operator Certification.

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Pages

General recycling information

www.ct.gov/dep Select "Recycling" under "Programs and Services" at the top of the page.

State Solid Waste Management Plan (amended 2006)

www.ct.gov/dep Select "Publications" at the top of the page, then select "Planning Documents" and select "State Solid Waste Management Plan."

Laws and regulations governing recycling www.ct.gov/dep/recycle Select "General Information" on the left navigation bar, then select "Recycling Laws and Regulations."

Contact

Bureau of Materials Management and Compliance Assurance Recycling Program

Phone: 860-424-3365



Description

Composting is a biological process during which naturally occurring microorganisms, bacteria and insects break down organic materials such as leaves, grass clippings and food scraps into a soil-like product called compost.

Municipal Connection

Municipalities are responsible for managing the wastes generated within their boundaries. Leaves are a part of the municipal solid waste stream and are a designated recyclable item. Under the state's latest *Solid Waste Management Plan*, the goal for waste reduction has been increased to 58%. Removing compostable organic materials from the waste stream through a municipal composting project will help achieve this goal and will provide valuable compost for municipal landscaping needs.

Municipal Responsibility

Municipalities are required to recycle leaves, a designated recyclable, and are encouraged to recycle other organic materials as a means to minimizing the amount of solid waste that otherwise must be disposed of.

Statutory Citations

CGS Section 22a-220(f) and CGS Section 22a-229(a)

Discussion

Organic materials that are kept separate from the trash are easily recycled and should be thought of as a resource, not a waste. Significant increases in recycling rates can be achieved through composting and other organics recycling efforts. The CT DEP has successfully focused efforts on establishing large-scale leaf-composting facilities; promoting home composting and grasscycling; and sponsoring pilot programs to compost organics at CT DEP headquarters, schools and other institutions, including a bi-town pilot

project in southeast Connecticut. These programs help keep food scraps, yard trimmings and grass out of the waste stream, reduce waste handling and disposal costs, return valuable nutrients to the soil, and reduce the need for chemical fertilizers, thereby decreasing non-point source pollution.

Approximately 60 municipalities operate leafcomposting facilities, and several elementary schools have composting programs. The City of Middletown is establishing a vermicomposting (composting with worms) project for local and institutional generators.

The CT DEP has developed a manual on composting for schools to help municipalities address these important issues. The information contained in the manual may also be useful to other large municipal institutions with high levels of organic waste.

Potential CT DEP Permits, Registrations and/or Certifications

The need for a CT DEP permit varies depending upon the specifics of the project.

Municipal permits may be required.

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep/recycle Select "Composting" under "Featured Links" on the right side.

Contact

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

Brush, Stump and Untreated Wood Waste Management

Description

"Brush" is defined in the recycling general permit as "tree stumps and cut or broken branches and shrubs."

"Untreated wood," as defined in the recycling general permit, is "wood to which no adhesives, paints, stains, fire retardants, pesticides, or preservatives have been applied."

Municipal Connection

Municipalities generate brush and untreated wood as part of their day-to-day operations.

Municipal Responsibility

Brush, stumps and untreated wood are part of the municipal solid waste stream. Each municipality is required make provisions for the disposal of solid waste generated within its borders.

Statutory Citation

CGS Section 22a-220(a)

Discussion

Storm events, landscape maintenance, and the clearing of land for development are a sampling of the activities that generate untreated organic materials (e.g., brush and stumps). CT DEP promotes the chipping and reuse of source-separated clean wood as an efficient use of natural resources, reducing disposal needs at landfills and resource recovery facilities. Chipped land-clearing debris can be used in landscaping applications, as compost bulking agents and soil amendments, and in temporary land stabilization projects done in a manner that poses no threat to surface or ground waters of the state.

CT DEP cautions that only untreated wood is suitable for such reuse. Treated wood such as plywood, furniture, wood waste from construction, renovation and demolition, pressure treated timber, painted or stained wood, or any other surface-treated wood should not be chipped and reused directly on land, or used as a compost-bulking agent. Treated wood should only be disposed of at permitted solid waste facilities.

To facilitate the chipping of untreated wood for reuse, CT DEP has developed a recycling general permit that allows certain recycling facilities to process brush and untreated wood. Under this permit, a registered facility can store up to 2,500 cubic yards of unprocessed clean wood and no more than 1,000 cubic yards of processed clean wood.

Wood processing requires large, specialized equipment. There are businesses that have invested in this equipment to provide chipping and grinding services to developers, municipalities, state agencies, and homeowners. For information on brush and stump grinding facilities and services, see the *Brush and Stump Fact Sheet* at www.ct.gov/dep/recycle (Follow the "Information for Municipalities" link on the left navigation bar). Or visit the CT Department of Administrative Services (www.das.state.ct.us) state contract for grinding services, or check your local Yellow Pages.

Potential CT DEP Permits, Registrations and/or Certifications

General Permit to Construct and Operate Certain Recycling Facilities.

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep/recycle Select "Information for Municipalities and State Agencies" on the left navigation bar then select the link to "Brush and Stump Management."

Brush, Stump and Untreated Wood Waste Management

Contact

Bureau of Materials Management and Compliance Assurance Waste Engineering and Enforcement Division

Phone: 860-424-3366



Hazardous and Universal Wastes

Descriptions

Hazardous waste is waste that is dangerous or potentially harmful to human health or the environment. Hazardous wastes can be liquids, solids, contained gases, or sludges (e.g. vehicle fluids, fluorescent lamps, pesticides, etc.).

Certain hazardous wastes can be classified as "universal waste" which includes the following:

- batteries;
- pesticides;
- · thermostats;
- · lamps; and
- used electronics.

Universal wastes are:

- generated in a wide variety of settings other than the industrial settings usually associated with hazardous wastes;
- generated by a vast community (typically greater than 1,000 sources); and
- may be present in significant volumes in non-hazardous waste management systems.

Municipal Connection

Municipalities generate hazardous and universal wastes during normal operational activities. Among municipal facilities, public works departments are typically the main generators and managers of hazardous waste. Many municipal facilities generate some amount of universal waste.

Municipalities that collect household hazardous waste and/or universal waste must properly manage the collection and disposal of these waste materials.

Municipal Responsibility

Municipalities must properly handle and store the hazardous and/or universal waste they generate until it can be transported for proper disposal. For hazardous waste, a permitted hazardous waste hauler must be hired to manifest and transport the waste to a licensed RCRA treatment, storage or disposal facility. Municipalities that collect household hazardous waste must obtain the proper CT DEP permit and safely manage its collection and disposal according to the permit. Universal waste must be stored, transported and disposed of in accordance with the "Universal Waste Rule."

Statutory Citations

Hazardous Waste: CGS Sections 22a-114 to 22a-134z

Universal Waste: Section 22a-449(c)-113 of the Regulations of Connecticut State Agencies (RCSA),

Discussion

Hazardous waste is a waste that is dangerous or potentially harmful to human health or the environment. It can be the by-product of a manufacturing process or simply a discarded commercial product, like cleaning fluid or pesticide.

In Connecticut, hazardous waste is regulated under the state's Hazardous Waste
Management Regulations, which are often referred to as "RCRA" (pronounced reck'·ra), after the federal Resource Recovery and Conservation Act. Basically, the regulations define two types of RCRA hazardous waste: "listed wastes," which are those specifically listed in the regulations; and "characteristic wastes," which are those that are ignitable, corrosive, reactive, or toxic.

Universal wastes may be present in significant volumes in non-hazardous waste management systems. Because contaminants are present in the items identified as universal wastes, they require special handling for disposal. The CT DEP subscribes to the U.S. EPA's "Universal Waste Rule," which governs the handling and disposal of these waste materials. The primary

Hazardous and Universal Wastes

goal for the universal waste program is to encourage recycling. However, batteries, thermostats, pesticides, lamps and used electronics being sent for disposal may also be managed under the universal waste rule. In addition to defining universal waste, this rule establishes requirements that include: how long universal waste can be stored, the labeling and marking of containers, storage area standards, shipping, tracking, and employee training. For more information, see the "Universal Waste" link on the drop down list at www.ct.gov/dep/waste.

Most municipal facilities, including public works garages, parks facilities, schools and offices, generate RCRA hazardous waste and/or universal waste during normal operations. Municipalities that collect hazardous and/or universal wastes from households must manage them appropriately. Common RCRA and universal wastes generated by municipalities and households include: vehicle fluids, contaminated absorbents, paint, cleaning fluids, aerosol cans, batteries, fluorescent lamps, pesticides, laboratory waste and pool chemicals.

Potential CT DEP Permits, Registrations and/or Certifications

Hazardous Waste:

Hazardous Waste Land Disposal Facility Permit

Hazardous Waste Generator Notification ("EPA ID Number") or a solid waste permit that has provisions for managing household hazardous waste (i.e. General Permit for the One Day Collection of Household Hazardous Waste and Certain Generators, General Permit for a Municipal Transfer Station, or an individual solid waste transfer station permit)

Universal Waste:

Universal Waste Rule

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep Under "Programs and Services" at the top of the page, select "Hazardous Waste" or "Universal Waste."

Contacts

Hazardous Waste

Bureau of Materials Management and Compliance Assurance Waste Engineering and Enforcement Division Hazardous Waste

Phone: 860-424-3023

Universal Waste

Bureau of Materials Management and Compliance Assurance Waste Engineering and Enforcement Division Compliance Assistance

Phone: 1-888-424-4193 (toll free)



Public Works

Stormwater
Planning and
Management



Description

Stormwater is water resulting from rain or snowmelt that runs off surfaces such as rooftops, paved streets, highways and parking lots. The water eventually flows directly into a local stream, river, lake, or Long Island Sound; or it may be diverted into a storm drain and continue through storm pipes until it is released into a local body of water.

Municipal Connection

Municipal decisions about land use and the design and management of municipal facilities (streets, roads, buildings, athletic fields, etc), especially stormwater management systems, impact the quality and quantity of surface and ground waters. If stormwater is properly considered, mitigated and managed, these decisions can alleviate a major threat to water resources.

Municipal Responsibility

One hundred and thirteen Connecticut municipalities are subject to the Stormwater from Small Municipal Separate Storm Sewer Systems General Permit and the specific requirements it contains (also see the fact sheet on *Small Municipal Separate Storm Sewer Systems (MS4)* under Public Works). Nonparticipating municipalities are encouraged to amend their operations and management plans for municipal facilities and their zoning regulations to incorporate stormwater best management practices.

Some municipal activities may require other stormwater general permits for construction or operation.

Statutory Citation

CGS Section 22a-430b

Discussion

The CT DEP Role

The U.S. Environmental Protection Agency (EPA) has mandated a number of permit

programs to deal with stormwater pollution. In Connecticut, these programs are administered by the CT DEP. Not all of them apply to municipal activities, but municipal officials should be aware of them and ensure they meet all pertinent requirements.

- The General Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) requires industrial facilities to cover or remove materials whose exposure to precipitation could produce polluted stormwater. Certain municipal activities, such as the public works or highway garage and municipal landfill or transfer station, require industrial general permits.
- The General Permit for the Discharge of Stormwater Associated with Construction Activities (Construction General Permit) requires developers and builders to implement stormwater management plans and practices that will prevent the movement of soil and sediments off construction sites and into nearby streams and water bodies. Municipal construction activities could require construction general permits depending on the area of disturbance.
- The General Permit Associated with the Discharge of Stormwater from Commercial Activities (Commercial General Permit) requires operators of commercial sites with large paved areas, such as malls, movie theaters, and supermarkets, to undertake actions such as parking lot sweeping and catch basin cleaning to keep stormwater clean before it reaches water bodies.
- The General Permit for the Discharge of Stormwater Associated with Small Municipal Separate Storm Sewer Systems (MS4 General Permit), only recently implemented in Connecticut, requires each affected municipality to take steps to keep the stormwater entering its storm sewer systems clean so that contaminated stormwater is not discharged to the receiving waters. One important element of this permit

Stormwater Management

is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.

The CT DEP is working to engage stakeholders to prevent the introduction of pollutants into stormwater through its Nonpoint Source Pollution Management and Coastal Nonpoint Source Pollution Control Programs. Through these programs, the CT DEP is encouraging municipalities to help mitigate (or lessen) the impacts of urban runoff by adopting regulations that require the use of best management practices when designing, constructing, operating and/or maintaining land development projects (i.e., anything that disturbs or alters the land).

Municipal role

The MS4 General Permit applies to MS4-listed municipalities, which must comply with the terms and conditions of the permit. Municipalities do not have direct authority to regulate nonpoint source pollution (NPS) discharges; however, they can influence NPS discharges both through their land use regulations and by establishing an inspection and pump-out schedule for subsurface sewage treatment (septic) systems (a contributor to NPS). The CT DEP offers technical assistance for this effort to cities and towns. There is additional information on the MS4 Program in the fact sheet on Small Municipal Separate Storm Sewer System (MS4) Stormwater Program under Public Works.

Potential CT DEP Permits, Registrations and/or Certifications

General Permit for the Discharge of Stormwater Associated with Small Municipal Separate Storm Sewer Systems (MS4)

General Permit for the Discharge of Stormwater Associated with Construction Activities General Permit Associated with the Discharge of Stormwater from Commercial Activities

General Permit for the Discharge of Stormwater Associated with Industrial Activities

Financial Assistance

None available at this time (6/2008).

Model Regulations for Municipal Consideration

Yes. See Appendix C of the 2004 Connecticut Stormwater Management Manual.

Web Pages

General Stormwater Information

www.ct.gov/dep/stormwater

MS4 List

www.ct.gov/dep/stormwater Select "Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)" general permit. The list is an addendum to the general permit.

Stormwater Manual

<u>www.ct.gov/dep/stormwater</u> Scroll down to select the link to the *2004 Connecticut* Stormwater Quality Manual.

Contacts

Statewide NPS Program

Bureau of Water Protection and Land Reuse Planning and Standards Division Phone: 860-424-3020

Coastal NPS Program

Bureau of Water Protection and Land Reuse Office of Long Island Sound Programs

Phone: 860-424-3034

Stormwater Permitting

Bureau of Materials Management and Compliance Assurance Water Permitting and Enforcement Division Stormwater Group

Phone: 860-424-3018

Small Municipal Separate Storm Sewer Systems (MS4) Stormwater Program

Description

The Small Municipal Separate Storm Sewer System (MS4) Stormwater Program is a national stormwater management program developed by the U.S. EPA and delegated to the states for implementation. In Connecticut, this program is overseen by the CT DEP. The MS4 Stormwater Program contains standards related to how cities and towns manage their stormwater infrastructure, systems that collect, transport and discharge stormwater, and what measures are taken to reduce or eliminate the discharge of pollutants to those systems.

Municipal Connection

Phase I of the MS4 Stormwater Program affected municipalities with populations of 100,000 or greater and with separate storm sewer systems. In Connecticut, only the City of Stamford qualified for this phase of the MS4 program.

Phase II of the MS4 Stormwater Program affects municipalities with Urbanized Areas as determined by the U.S. Census Bureau. In Connecticut, this affects another 113 cities and towns. The Phase II Program requires affected municipalities to develop a Stormwater Management Plan addressing how they manage and maintain their stormwater infrastructure.

Municipal Responsibility

There are five cities in Connecticut with populations over the 100,000 threshold for the Phase I involvement; however, only Stamford has separate sanitary and storm sewers allowing them to participate in Phase I. Stamford is required to continue to implement their stormwater management plan, submit annual reports to CT DEP and annually sample stormwater discharges during a rainstorm event.

The 113 municipalities included in Phase II of the MS4 Program, including the other four cities with populations of 100,000 or greater, must develop a Stormwater Management Plan, submit annual reports and take stormwater discharge samples during a rainstorm once a year.

The Connecticut municipalities not involved in Phase I or Phase II are not required to follow the MS4 Stormwater Program; however, they are encouraged to consider minimizing stormwater impacts through the adoption of stormwater best management practices. Stormwater management is further discussed in the fact sheets on *Stormwater Management* under Public Works and *Nonpoint Source Pollution Management* and *Low Impact Development* in the Land Use Commissions, Boards and Committees section.

Statutory Citation

CGS Section 22a-430b

Discussion

Polluted stormwater runoff is often transported to municipal separate storm sewer systems and eventually discharged into local rivers and streams without treatment. This can cause significant water quality problems. CT DEP's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, commonly called the MS4 Permit, requires each municipality to take steps to ensure that the stormwater entering its storm sewer systems is clean before entering water bodies. One important element of this permit is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday living activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.

Compliance with the MS4 general permit initially required the submission of a Part A Registration (due April 9, 2004) and a Part B Registration (due July 9, 2004). Each affected municipality was then required to prepare and implement a Stormwater Management Plan. The Stormwater Management Plan must

Small Municipal Separate Storm Sewer Systems (MS4) Stormwater Program

include a series of Best Management Practices (BMPs) to address six specific topics: 1) public education and outreach; 2) public participation; 3) illicit discharge detection and elimination; 4) construction stormwater management; 5) post-construction stormwater management; and 6) pollution prevention and good housekeeping. Each January, the affected municipalities must submit an annual report discussing their compliance progress for the previous year. Annually, each municipality must also sample at least six drainage outfalls for 12 parameters and submit the results with their annual reports. The intent of this program is to improve water quality through the management of nonpoint source pollution. For further information, see the fact sheets noted under Municipal Responsibility, above.

Potential CT DEP Permits, Registrations and/or Certifications

General Permit for the Discharge of Stormwater Associated with Small Municipal Storm Sewer Systems (MS4)

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep/stormwater

Contact

Bureau of Materials Management & Compliance Assurance
Water Permitting Division
Stormwater Section
Phone: 860-424-3018



Planning for a Flood & Other Natural Hazards (Natural Hazard Mitigation Plan)

Description

A Natural Hazard Mitigation Plan examines the history and risk of natural disasters, evaluates geographic vulnerability, outlines which hazard mitigation measures merit the greatest priority, and identifies long-term measures to reduce losses from future disasters.

Municipal Connection

Municipalities are vulnerable to property and monetary losses and loss of life due to natural hazards. Developing, adopting and implementing a natural hazards mitigation plan can aid in identifying and reducing these risks. Once a local plan is approved by the Federal Emergency Management Agency (FEMA) and the Connecticut Department of Emergency Management and Homeland Security, the municipality will be eligible for pre-disaster mitigation and post-disaster mitigation funding to aid in implementing the plan.

Municipal Responsibility

Municipalities must develop and adopt hazard mitigation plans in order to receive pre-disaster and post-disaster mitigation funding.

Statutory Citation

Not applicable.

Discussion

In December of 2007, Connecticut adopted an updated Natural Hazard Mitigation Plan that identifies natural hazards, including flooding, hurricanes and winter storms. The Plan examines Connecticut's history and risk of natural disasters, evaluates geographic vulnerability, outlines which hazard mitigation measures merit the greatest priority, identifies long-term measures to reduce losses from future disasters and identifies the State's capability to recover from the impact of each hazard.

Flooding is the number one cause of damage and fatalities resulting from natural disasters in Connecticut each year. Flooding can occur at any time of the year from rainfall associated with various types of weather events. The next most damaging natural hazard in Connecticut is high wind events that down trees and power lines causing damage to buildings and communications and transportation infrastructure. High winds can result from hurricanes, tornadoes, and severe thunderstorms. Severe winter storms that bring heavy snow, ice and coastal flooding also occur and cause heavy damage in Connecticut. Other less frequent natural hazards include droughts, forest fires, hail, and minor earthquakes. The impacts from each of these natural hazards can be lessened through proper planning.

In order to receive pre-disaster and post-disaster mitigation funding, municipalities must draft and adopt local hazard mitigation plans. Once a community has a FEMA-approved local hazard mitigation plan, the municipality is then eligible to apply for federal grant monies for activities outlined in the plan. Such activities may include public education, purchasing floodplain property, culvert upgrades, storm shutters for wind mitigation, and dry hydrants in forest fire areas. Natural hazard mitigation plans must be updated every 5 years.

As a companion to natural hazard mitigation plans, the Department is also encouraging all municipalities to develop disaster debris management plans. Please see the fact sheet on *Disaster Debris Management Planning* under Public Works for more information.

Potential CT DEP Permits, Registrations and/or Certifications

This is a planning program. There are no permits specific to this program.

Planning for a Flood & Other Natural Hazards (Natural Hazard Mitigation Plan)

Financial Assistance

Natural hazard planning and management grants are typically offered by the Federal Emergency Management Agency (FEMA). Information is available online at www.fema.gov. Select "Grants" in the left navigation bar.

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep Select "Flood Management" under "Programs and Services" at the top of the page.

Contact

Bureau of Water Protection and Land Reuse Inland Water Resources Division Flood Management Program

Phone: 860-424-3706



Public Works Municipal Facilities



Dams are man-made or artificial barriers constructed to impound water. Dams are typically provided with spillway systems to safely pass a broad range of flows over, around or through the dam.

Municipal Connection

Numerous municipalities own or are otherwise responsible for maintaining and managing dams. Recent changes to the general statutes (P.A. 07-61, now codified) authorize the chief executive official of a municipality, or their designee, to inspect any dam when the official reasonably believes that a public safety concern exists, provided the dam is subject to the CT DEP's jurisdiction (see below) and it is located within the municipality. A report of any such inspection must be filed with the Commissioner of CT DEP as required by statute. This inspection authority includes dams on private property.

Municipal officials also field questions from dam owners and are encouraged to forward those questions to CT DEP.

Municipal Responsibility

Municipalities that own or are otherwise responsible for maintaining and managing dams have specific responsibilities for inspection, maintenance, repair and emergency operation under this program.

Statutory Citation

CGS Sections 22a-401 to 22a-415

Discussion

Dams and their associated reservoirs have been and continue to be an important resource and economic factor in Connecticut's economy. These structures have provided mechanical and hydroelectric power, municipal water supply sources, flood control protection and recreational amenities. In the future, dams will continue to provide these benefits and services to Connecticut's citizens.

Dams are characterized based on their hazard classification as either: 1) those dams whose failure might endanger life or property downstream; and 2) all other dams. The CT DEP generally regulates the construction and major repair of dams that fall under the first category. Other dams are typically regulated by local inland wetlands agencies and, in some instances, other municipal authorities.

Dams and their associated dikes should not be thought of as a part of the natural landscape, but rather as artificial structures requiring continuing inspection and maintenance.

Maintenance is an ongoing process that not only involves such routine items as mowing grass and clearing spillways, conduits, channels, trash racks, etc., but also requires regular inspections of the structure and its various components. Dams also have specific operational requirements. For example, in the cases of high hazard and significant hazard dams, carefully developed emergency operation plans should be in place.

CT DEP's efforts are directed to ensuring the safety of dams through a program of periodic inspections and the administration and enforcement of Connecticut's dam safety statutes and regulations. During storm events, municipal officials can assist CT DEP by calling the Dam Safety Section (see below) when a problem is detected or a citizen reports something about a dam that poses a public safety concern.

Potential CT DEP Permits, Registrations and/or Certifications

Permit for Dam Construction, Alteration, Repair and Removal.

Financial Assistance

Design and construction of dam repairs for existing municipally-owned dams are eligible for a state/local cost-sharing program. Contact the Dam Safety Program for more information.

Dams

Model Regulations for Municipal Consideration

None.

Web Page

www.ct.gov/dep Under "Programs and Services" at the top of the page, select "Lakes Management" then look for the link to "Dams"

Contact

Bureau of Water Protection and Land Reuse Inland Water Resources Division Dam Safety Section

Phone: 860-424-3706 or 860-424-3019

In an emergency after normal business hours, call 860-424-3333



Dredging is the removal of sand, silt, mud, etc. from the bottom of a lake, pond, river, bay, Long Island Sound, or other body of water.

Municipal Connection

Many municipalities own or operate marinas, boat launches, public swimming beaches or other marine facilities. These facilities may require dredging to maintain operational water depths. Lakes and ponds, particularly those dependent upon dams to maintain water levels, may also require dredging to maintain the viability of the waterbody and/or the integrity of the dam.

Municipal Responsibility

Dredging in inland wetlands and watercourses is subject to dual regulation by the local inland wetlands and watercourses commission and by the CT DEP under the statutes regarding water diversion.

Dredging in tidal, coastal and navigable waters is subject to CT DEP regulation to the exclusion of local regulatory authorities.

Dredging activities, whether inland or coastal, also typically require authorization from the U.S. Army Corps of Engineers (ACOE).

Municipal officials are encouraged to refer citizens requesting authorization for dredging in tidal, coastal or navigable waters to the CT DEP.

Statutory Citations

Inland: CGS Sections 22a-37 through 22a-45d and CGS Sections 22a-365 through 22a-378a

Coastal: CGS Sections 22a-359 through 22a-363f

Discussion

Dredging can be carried out mechanically with an excavator or crane, either of which may be fitted with a clamshell bucket or dragline. Dredging can also be accomplished hydraulically by a barge-mounted pump that sucks up a slurry of water and sediment and pumps it to a settling basin or dewatering location.

Impacts

Dredging is disruptive to the bottom of a waterbody within the actual "footprint" being dredged. Any aquatic resources present, such as submerged aquatic vegetation, shellfish beds, spawning areas, intertidal flats, and tidal wetlands, are directly and adversely impacted by dredging activities. Sediments suspended in the water column by the dredging operation have the potential to drift outside of the dredging footprint and impact other resources such as spawning fish and shellfish.

Appropriate management of the dredged sediments after dredging depends upon the physical component (gravel, sand, silt, clay) and chemical characteristics of the dredged sediment. Physical and chemical testing of the sediments will determine suitable management options. Clean sediment may be reused in accordance with applicable state statutes; contaminated sediments may be suitable for limited reuse in accordance with the Remedial Standard Regulations (RSRs) Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies.

Potential CT DEP Permits, Registrations and/or Certifications

Inland Permits:

General or Individual Permit for Lake, Pond and Basin Dredging under CGS Sections 22a-45a and 22a-378a (General Permit valid for projects affecting less than 6,000 c.y. and 1 acre) (CT DEP)

Inland 401 Water Quality Certification (CT DEP)

Municipal inland wetlands permits

Dredging

Coastal Permits:

Coastal 401 Water Quality Certification (CT DEP)

Structures, Dredging and Fill under CGS Sections 22a-359 through 22a-363f (CT DEP)

Other: A federal permit from the U.S. Army Corps of Engineers is typically required for dredging regardless of the location of the activity. Contact the Corps' New England District Regulatory Branch at 1-800-343-4789 for more information on federal dredging permits.

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Pages

Inland

www.ct.gov/dep Select "Programs and Services" at the top of the page, then select "Water" then select "Regulating Water" on the left navigation bar.

Coastal

www.ct.gov/dep/coastalmanagement Follow the link to "Coastal Permitting."

401 Water Quality Certification

www.ct.gov/dep/permitguide Scroll down to and select "410 Water Quality Certification."

Contacts

Inland Wetlands or Watercourses

Bureau of Water Protection and Land Reuse Inland Water Resources Division

Phone: 860-424-3019

Coastal, Tidal or Navigable Waters

Bureau of Water Protection and Land Reuse Office of Long Island Sound Programs Permitting Section



Fleet selection and operation pertains to the selection, operation and maintenance of municipal motor vehicles, including passenger cars, light trucks, and heavy equipment.

Municipal Connection

Municipalities typically have a fleet of municipal vehicles, ranging from passenger cars to heavy construction equipment. How these vehicles are selected, operated and maintained can significantly reduce a municipality's impact on the environment.

Municipal Responsibility

Municipalities are encouraged to select, equip, operate and maintain all vehicles in a manner that minimizes their environmental impact.

Statutory Citation

Not applicable.

Discussion

Driving any vehicle has a significant impact on the environment, from the resources used for its manufacture, to how and how much it is driven, to the final disposal of the vehicle. This impact is compounded for municipalities which typically have a fleet of vehicles ranging from cars to light trucks to heavy construction equipment, and often, school buses. There are many ways to reduce the environmental impact of motor vehicles. These include retrofitting diesel exhaust systems to reduce air pollution; choosing the smallest, most energy efficient vehicle to meet the need; slowing down or turning off the engine if stopped for more than a minute or two (except at a traffic light or stop sign); making other driving-style changes and properly maintaining tire pressure and engines.

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.

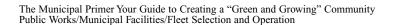
Web Pages

www.ct.gov/dep/p2 Select "State/Local Governments" on the left navigation bar, and then select "Public Works Garages & Fleet Maintenance."

Selecting a green vehicle www.epa.gov/greenvehicle

Contact

Office of the Commissioner Policy and Program Development Pollution Prevention Program Phone: 860-424-3297



Mobile air emission sources include a variety of vehicles and mobile equipment (trucks, buses, passenger cars, motorcycles, construction equipment, lawn and garden equipment, marine vessels, etc.) that utilize a motor or engine powered by fossil fuel.

Municipal Connection

Municipalities own and/or operate a number of mobile air emission sources, including municipal passenger cars, light duty trucks, school buses, lawn care equipment, and heavy duty equipment for waste collection, road construction and maintenance, and other routine municipal functions.

Municipal Responsibility

Municipalities are strongly encouraged to take the steps outlined below to limit mobile air emissions.

Statutory Citation

CGS Sections 22a-170 through 22a-206

Discussion

Mobile air emission sources contribute a significant amount of the emissions that cause air quality concerns in Connecticut and across the country. Connecticut's air quality attainment efforts involve a balanced strategy that includes reductions in emissions from the stationary, area and mobile source sectors. Municipalities play a critical role in achieving air quality goals, particularly with respect to mobile air emissions.

Using motor vehicle air emission controls reduces ozone precursors, fine particulate matter, toxics and carbon dioxide. These pollutants contribute to air quality problems. Connecticut's reduction strategy focuses on:

 maintaining an effective motor vehicle inspection and maintenance program to ensure that motor vehicles are kept tuned to meet emission standards;

- reducing the amount of fuel burned and the amount of evaporation of these fuels;
- requiring only the "cleanest" new vehicles be sold in the state;
- making efforts to clean up older diesel vehicles through either fleet turnover or retrofitting with emission reduction technology; and
- decreasing the number of vehicle miles traveled (VMT).

Municipalities can assist in these efforts by:

- participating in programs to retrofit school buses and other mobile sources;
- buying the lowest-emission vehicles possible that suit the intended purposes when replacing fleet vehicles;
- expediting the replacement of older fleet vehicles:
- reminding all municipal staff and contractors to avoid idling for more than three minutes; and
- supporting reductions in VMT by adopting land use regulations that promote walk-able communities and development densities that can support mass transit.

Potential CT DEP Permits, Registrations and/or Certifications

None specific to this program.

Financial Assistance

Grants are available through CT DEP when funding allows. See www.ct.gov/dep/financialassistance and select "Air."

Model Regulations for Municipal Consideration

No.

Mobile Air Emission Sources

Web Page

www.ct.gov/dep Select "Air" under "Programs and Services" at the top of the page then select "Mobile Air Sources" on the left navigation bar.

Contact

Bureau of Air Management Planning and Standards Division Toxics and Mobile Source Program



Indoor and Outdoor Lighting and Appliances

Municipal Connection

In their day-to-day functions, municipal facilities utilize a wide variety of indoor and outdoor lighting, appliances and machinery that consume electricity.

Municipal Responsibility

Municipalities must meet the standards set forth in the Connecticut General Statutes 13a-110a for outdoor lighting. Beyond that, municipalities are strongly encouraged to utilize environmentally-friendly, energy saving lights, appliances and machinery wherever practicable.

Statutory Citation

CGS Section 13a-110a

Discussion

Outdoor Lighting

Since 2000, several new state laws have been enacted related to outdoor lighting. Currently the following requirements apply:

- all new streetlights must be "full cutoff," a classification in which no direct light is visible from the fixture above the 90-degree horizontal;
- utility companies are required to shield all floodlights leased by the utility company for private property illumination; and
- all new commercial construction must utilize full cutoff light fixtures.

At the local level, a number of Connecticut municipalities have ordinances to control lighting. An example is the Town of Branford ordinance passed in 1997 to control site lighting through a zoning amendment. Its purpose is to maximize the effectiveness of site lighting while avoiding unnecessary upward illumination and illumination of adjacent properties, and to reduce glare.

Fluorescent Lights

Even actions as simple as changing the types of light bulbs used in municipal buildings can reduce environmental impacts and, typically, save money. Fluorescent lights are an energy efficient lighting option when compared to incandescent lights; however, fluorescent bulbs are categorized as "mercury-added lamps." As such, they must be properly recycled to prevent mercury from entering the environment. Towns are required to dispose of these bulbs as "universal waste," and therefore, they cannot be thrown out with the regular trash (see the fact sheet on Hazardous and Universal Wastes under Public Works more information). Some lamp wholesalers and distributors have established programs to take the spent bulbs or lamps back from their customers and send them off for recycling. This system is commonly referred to as reverse distribution. Municipalities should encourage their residents to dispose of compact fluorescent bulbs appropriately, either by taking advantage of reverse distribution opportunities or disposing of them at household hazardous waste collections.

Fluorescent Ballasts

A second caution when converting to or using fluorescent lights involves the handling and disposal of the ballasts. In older models of fluorescent light fixtures, the ballasts typically contain small amounts of PCBs (a known carcinogen). The CT DEP encourages switching these older ballasts out for new PCB-free ballasts. The old ballasts must be handled and disposed of properly.

Light Emitting Diodes Traffic Signals

Traffic Signals utilizing Light Emitting Diodes (LEDs) use approximately 85% less energy, are brighter and longer lasting than incandescent lights, and have a payback period of between 2 to 3.5 years. A number of cities and towns, including Stamford, Hamden, Hartford, and New Haven, have installed LED traffic signals for their intersections. Municipalities can utilize existing state contracts to purchase environmentally

Indoor and Outdoor Lighting and Appliances

preferable traffic signals by contacting the Connecticut Department of Administrative Services (DAS) at 860-258-0347.

Appliances

According to the U.S. EPA, the cities and towns in New England spend nearly one billion dollars every year on energy for buildings and schools. Further, energy used in buildings is the number one source of greenhouse gas (GHG) emissions in most communities. There are energy efficient models of virtually everything from exit signs, water coolers, and copy machines, to computers, vending machines and heating and cooling systems. Most of these appliances are available in energy-saving versions that have earned an Energy Star from the U.S. Environmental Protection Agency and the U.S. Department of Energy. When installing new appliances or switching out old ones, choose such high energy efficiency appliances.

Machinery

Certain types of machinery used at municipal facilities (e.g., water pumps used at sewage treatment plants, HVAC equipment) may also be high users of energy. To the extent practicable, such machinery should be selected, maintained and operated to maximize its energy efficiency.

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). Municipalities are encouraged to contact their utility provider to see what assistance programs they may have available.

Model Regulations for Municipal Consideration

No.

Web Pages

Fluorescent Light Bulbs, LED Traffic Signals and Energy Efficient Appliances

www.ct.gov/dep/p2 Select "State/Local Governments" on the left navigation bar, and then select "CT DEP Energy Resource Guide for Municipalities" under "Energy Efficiency, Conservation and Climate Change."

PCBs

www.ct.gov/dep/pcb

Contacts

Fluorescent (mercury-added) Lights

Office of the Commissioner Planning and Program Development Pollution Prevention Program Phone: 860-424-3297 Toll-free Mercury Hotline: 1-877-537-2488

Fluorescent Ballasts

Bureau of Materials Management and Compliance Assurance PCB Program

Phone: 860-424-3368

Energy Efficient Appliances

Office of the Commissioner Planning and Program Development Pollution Prevention

Landscape and Lawn Care

Description

Landscape and lawn care includes the design, planting and tending of outdoor areas primarily for aesthetic reasons or for active or passive recreation. Areas subject to landscaping and lawn care are often proximate to buildings, roads or other aspects of the built environment.

Municipal Connection

Municipalities own and/or manage properties with landscaping and lawns. There are environmentally responsible methods of maintaining landscaping and lawns that municipalities are encouraged to incorporate into their operation and management plans.

Municipal Responsibility

Starting July 1, 2009, municipalities are prohibited from routinely using pesticides on grounds of schools with students in grade 8 or under.

It is unlawful to import, move, sell, purchase, transplant, cultivate or distribute any of the invasive plants listed in CGS Section 22a-381d (see Web link below).

Municipalities are encouraged to consider the other issues discussed below.

Statutory Citations

Public Shade Trees: CGS Sections 23-58

through 23-65e

Pesticides: CGS Sections 22a-46 to 22a-66z

Invasive Species: CGS Sections 22a-381

through 22a-381d

Discussion

Trees and Urban Forestry

Increasing plantings of street trees not only improves aesthetics, but also can improve air quality and, by providing shade, reduce the heat generated by the sun hitting sidewalks, streets and roads, and buildings. Trees can also aid in stormwater management and the

mitigation of climate change by taking up (sequestering) carbon from the atmosphere.

Trees are also an important asset in most parks. They provide shade, buffer the outside world, provide food and shelter for wildlife, and are often attractive features by themselves. In addition, trees in the urban environment provide other benefits including reducing air pollution. The planting of trees in public parks should be carefully planned, from the selection of the tree to the manner of planting. Likewise, over their lifespan, park trees need maintenance to protect their health and to keep the space around them safe for public use.

The urban forestry program within the CT DEP Forestry Division works closely with tree wardens and others involved in street and park tree-maintenance efforts, providing educational opportunities, technical assistance and occasional financial support through a small urban forestry grant program.

Municipal Woodlands

The CT DEP Division of Forestry, through its Private and Municipal Land Program, is able to provide advice and direction to municipalities on the management of municipally-owned woodlands. The service foresters within this program are available to meet with municipal officials responsible for these woodlands and provide in-the-field, hands-on recommendations as to how the municipality might appropriately manage these lands.

Organic Land Care for Municipalities

Each year more people become concerned about the effect of chemicals on children, pets and the environment. Typical land care chemicals include pesticides and fertilizers. Many municipalities are rethinking their use of these chemicals in an effort to minimize their impacts. In fact, under state law effective July 1, 2009, municipalities are prohibited from routinely using pesticides on grounds and fields of schools with students in grade 8 or under. To address these issues, some municipalities have begun practicing a safe alternative to pesticide and fertilizer use called

Landscape and Lawn Care

organic land care. Organic land care involves a "whole systems approach" to maintaining the landscape without synthetic fertilizers and pesticides and starts with nurturing healthy and fertile soil. Healthy soil supports the development of healthy grass, which is naturally resistant to weeds, diseases and pests. The CT DEP's Office of Pollution Prevention, with input from the Connecticut Chapter of the Northeast Organic Farming Association (NOFA), and the UCONN Plant Science Department, has produced a short DVD for municipal officials who want to learn more about what it takes to "go organic." The 7 ½ minute DVD is available at no cost through CT DEP's Pollution Prevention Program (see contact information below).

Integrated Pest Management

Integrated Pest Management (IPM) is the use of all available pest control techniques including biological controls and the judicious use of pesticides, when warranted, to maintain a pest population at or below an acceptable level, while also decreasing the unnecessary use of pesticides. An IPM program can be implemented to maintain landscapes as well as to control structural pests and rodents. When the application of pesticide is necessary as part of an IPM protocol, the least toxic product is used first.

Rain Gardens

A rain garden is a depression (usually about 6 inches deep) that collects runoff from a roof, driveway or yard and allows it to infiltrate into the ground. Rain gardens are typically planted with shrubs or perennials, and can be colorful, landscape highlights that will also provide important environmental benefits (adapted from Rain Gardens in Connecticut, UCONN Cooperative Extension System, College of Agricultural and Natural Resources). Rain gardens can help manage runoff by providing opportunities for infiltrating stormwater into the soils. For more information on stormwater, see the fact sheets on Stormwater Management in Public Works, Nonpoint Source Pollution Management and Low Impact Development in

Land Use Boards, Commissions, Agencies and Committees.

Invasive Plant Species

Invasive plant species are non-native plants that are disruptive in a way that causes environmental or economic harm, or harm to human health. In minimally-managed areas, invasive plants crowd out native plants. The presence of invasive plants alters the way plants, animals, soil, and water interact within native ecosystems, often causing harm to other species in addition to the plants that have been crowded out.

Characteristics that make plants invasive include:

- the ability to establish new plants and grow rapidly under a wide variety of site conditions;
- a high reproductive rate;
- the ability to disperse wide distances, often by the spreading of vegetative fragments as well as seeds;
- the lack of the natural controls on growth and reproduction that would be found where the invader is native.

In Connecticut, the Connecticut Invasive Plants Council has developed a list of non-native invasive plants that cause (or have the potential to cause) environmental harm in minimally-managed areas. Unfortunately, several plant types that were popular landscaping species in the past are now recognized as invasive (examples include: Norway maples, Russian and Autumn olive, burning bush, barberry and many of the honeysuckle species). Removing non-native invasive plants and replacing them with native species of trees, shrubs and herbaceous plants can provide improved foraging areas for birds and other wildlife.

It is unlawful to import, move, sell, purchase, transplant, cultivate or distribute any of the listed non-native invasive plant species in Connecticut.

Potential CT DEP Permits, Registrations and/or Certifications

Any person performing pesticide applications on school grounds must have pesticide applicator (supervisory and/or operator) certification.

A permit is required for application of pesticides to the waters of the State to control aquatic vegetation.

Financial Assistance

Financial assistance is available for certain landscaping projects. For more information, select the "Forestry" link at www.ct.gov/dep/financialassistance.

Model Regulations for Municipal Consideration

None.

Web Pages

Urban Forestry www.ct.gov/dep/forestry

Integrated Pest Management

www.ct.gov/dep/ipm

Organic Lawn Care

www.ct.gov/dep/p2 Select the "State/Local Governments" link on left navigation bar, and then select "Organic Land Care & Integrated Pest Management."

Invasive Species

www.ct.gov/dep/invasivespecies

Contacts

Trees and Urban Forestry

Bureau of Natural Resources Urban Forestry Program Phone: 860-424-3178

Organic Lawn Care and Integrated Pest Management

Office of the Commissioner Planning and Program Development Pollution Prevention Program Phone: 860-424-3297

Organic Lawn Care

Bureau of Materials Management and Compliance Assurance Pesticides Division Phone: 860-424-3369

Invasive Species

Bureau of Natural Resources Wildlife Division Phone: 860-424-3011



Renovation, Demolition and Construction

Description

Renovation is the repair, remodeling, rehabilitation or reconstruction of structures and/or infrastructure.

Demolition is the razing or removal of structures, roads, parking lots and other facilities and infrastructure.

Construction is the building of new structures, roads, parking lots and other facilities and infrastructure.

Municipal Connection

Municipal officials may be directly involved in renovation or demolition of out-dated or damaged municipal facilities, or the construction of new facilities or infrastructure. Alternatively, they may have responsibilities related to permitting such activities proposed by others (e.g., building official or fire marshal). Either way, there are specific issues related to renovation, demolition and construction that must be properly addressed in order to protect human health and the environment.

Municipal Responsibility

Municipal officials directly involved in renovation, demolition and construction, or those responsible for permitting or inspecting such activities proposed by others, must be aware of the state's environmental, health and safety requirements and should be aware of the "red flag" issues discussed below.

Statutory Citations

Solid Waste: CGS Sections 22a-207 through 22a-256ee

Hazardous Waste: CGS Sections 22a-114

through 22a-134z

Discussion

There are a number of environmental, health, and safety requirements that apply to those individuals or entities that hire, oversee, or conduct renovation, demolition and/or

construction work. Some of the most common requirements relate to: asbestos, lead-based paint, fugitive dust and air emissions, dewatering, sandblasting and power-washing, construction and demolition waste, treated wood, land-clearing debris, chemical products, mercury, Polychlorinated Biphenyls (PCBs), used electronics and batteries, underground storage tanks, spills and other contamination, and site clean-up issues. Situations involving these items or activities must be properly managed in order to adequately protect human health and the environment.

The CT DEP has also developed a list of "red flag" issues to aid local officials involved in renovation and demolition in determining applicable requirements and key contacts for more information.

Potential CT DEP Permits, Registrations and/or Certifications

Depending on the specific activities involved in the project, a permit or permits from CT DEP may be required.

Financial Assistance

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

Model Regulations for Municipal Consideration

No.

Web Pages

www.ct.gov/dep/constructioncontractors

Environmental, Health and Safety Requirement

www.ct.gov/dep/solidwaste Select "Information for Municipalities" then "Construction, Renovation and Demolition Waste Management and Recycling."

"Red Flag" List

www.ct.gov/dep/solidwaste Select "Information for Municipalities" on the left navigation bar then select "Red Flag List."

Renovation, Demolition and Construction

Contact

Office of the Commissioner Planning and Program Development Pollution Prevention Program Phone: 860-424-3365



As used here, street and road management includes maintenance and repair activities such as street sweeping and plowing, the maintenance of stormwater collection and disposal systems as they relate to streets and roads, and the management of debris from road construction and demolition projects.

Municipal Responsibility

Municipalities are responsible for the layout, construction, repair and maintenance of local streets and roads. Many typical maintenance activities relate to CT DEP responsibilities, including: winter anti-icing and de-icing; snow management; street and parking lot sweeping; stormwater system maintenance (including catch basin inspection and cleaning); and highway construction and demolition debris management.

Statutory Citations

Stormwater: CGS Sections 22a-416 through

22a-438

Solid Waste: CGS Sections 22a-207 through

22a-256ee

Hazardous Waste: CGS Sections 22a-114

through 22a-134z

Discussion

Municipal street and road maintenance practices may adversely affect Connecticut's environment. When done properly, these effects can be minimized. Winter anti-icing and de-icing, the management of plowed snow, the maintenance of the stormwater management system, and the disposal of waste from highway construction and demolition are all potential threats to Connecticut's environment. Each of these is discussed below and the preferred and/or required management methods are identified.

Street and Road Anti-icing and De-icing

Traditionally, anti-icing (treatment to prevent icing) and de-icing (treatment to respond to icing) have primarily relied on a combination of sand and salt. However, the application of sand and salt has associated environmental impacts that include increased accumulation of sediment in nearby wetlands and watercourses, and in some instances, increased levels of salt in nearby drinking water supplies. The Department encourages municipalities to carefully manage the storage of these materials and adjust their road anti- and de-icing practices to minimize potential impacts to wetlands, watercourses and/or public or private drinking water supplies. Knowing the locations of sensitive resources in relation to the municipal road system is an essential component to environmentally sensitive materials management.

Recent evaluation by the Connecticut Department of Transportation (CT DOT) has revealed that under most circumstances, the use of sand is unnecessary as an ice treatment on roadways and results in additional costs in terms of energy, transportation, manpower, storage and environmental impacts. Although not a CT DEP program, the environmental implications are significant, so this information is included here. Additional information can be obtained from the CT DOT, Office of Intermodal and Environmental Planning at 860-594-2005.

Snow Management

Typical road maintenance activities include plowing snow accumulations from bridges, roads and parking areas for ease of travel and parking, and to provide more space for subsequent snow storms. Snow that accumulates on these areas routinely collects sand, salt, oils, grease, dirt, litter and other debris and contaminants.

Historically, snow clearing activities often included collecting accumulated snow and dumping it into surface waters; however, this mixture of snow, sand, debris, etc. can smother aquatic life in the bottom of streams and rivers

Street and Road Management

and degrade the aesthetics of the surface water with silt plumes and litter. Large quantities of snow (and the sand and debris it may contain) may also cause blockage of storm drainage systems, resulting in increased chance for localized flooding.

To avoid these potential environmental consequences, snow accumulations removed from roadways, bridges, and parking lots should be stockpiled only in upland areas, where sand and other debris will remain after the snow melts after which it can be removed for proper disposal. To prevent potential contamination or sedimentation problems, snow should not be deposited in the following areas:

- rivers, streams, lakes, ponds or other waterbodies, regardless of their degree of ice cover;
- freshwater or tidal wetlands or in areas immediately adjacent to wetlands;
- on top of storm-drain catch basins;
- in storm drainage swales;
- on stream or river banks that slope toward the water; or,
- in areas immediately adjacent to (within at least 100 feet of) private or public drinking water well supplies.

Street and Parking Lot Sweeping

Sediment and debris that collects on paved parking lots, roads and other paved surfaces may contain low levels of chemical compounds such as lead, sodium and compounds associated with asphalt and motor oils that can subsequently contaminate stormwater. Removal of the sediment and debris reduces the potential for these materials to contribute nonpoint source pollution. Street sweeping is highly recommended as a removal technique; however, its effectiveness varies considerably and is particularly dependent upon the type of sweeper used. In addition to low levels of

pollutants, the sediment and debris collected and removed by street sweeping may contain debris such as leaves, broken glass, and small pieces of metal. The presence of these materials makes the proper reuse or disposal of street sweepings more critial. The potential for reuse depends upon the intended purpose and whether or not street sweepings have been tested for contaminants. For more information, please see CT DEP's *Guideline for Municipal Management Practices for Street Sweepings & Catch Basin Cleaning*. This document can be found by following the "Information for Municipalities" link on www.ct.gov/dep/waste.

Stormwater System Maintenance/Catch Basin Inspection and Cleaning

In order to maintain their intended function, stormwater drainage and treatment system components should be inspected and cleaned at least annually. Structural deterioration of any part of the system should be repaired immediately. Annual inspection and cleaning of catch basins and stormwater inlets preserves the sediment-trapping function of these devices and also prevents accumulated sediment, trash, and other pollutants in the storm drain system from reaching receiving waters. Removal of sediment and decaying debris from catch basin sumps and other sediment trapping system components yields aesthetic and water quality benefits, including a reduction in foul odors, suspended solids and bacteria, while also preventing the introduction of substances in the receiving waters that compete with native fish and other aquatic organisms for oxygen. For more information, please see CT DEP's Guideline for Municipal Management Practices for Street Sweepings & Catch Basin Cleaning, noted above. This document can be found by following the "Information for Municipalities" link on www.ct.gov/dep/waste.

Highway Construction and Demolition Debris Management

Asphalt, concrete, brick and block, and clean fill earthen materials, referred to as construction and demolition aggregate debris (C&D), are generated during most construction and renovation projects and some demolitionrelated activities. Asphalt, concrete and other inert materials can be considered clean fill. The CT DEP promotes recycling construction and demolition aggregate to conserve resources and diminish potential illegal dumping in environmentally sensitive areas. Municipalities have found a cost-saving opportunity and private companies have discovered a growing business in processing and recycling C&D materials. In fact, many construction companies now operate mobile crushing, screening, and sorting facilities for custom recycling work on construction and demolition sites. On-site recycling at construction and demolition projects has many economic advantages. C&D rubble crushed and reused on site as sub-base and backfill material reduces costs for disposal, transportation and fill-replacement on some projects. As an alternative to on-site recycling of C&D, municipalities or private companies can stockpile C&D in a centralized location and periodically crush and sort the aggregate materials into reusable, locally-generated construction products. In either case, all associated equipment should be properly permitted.

If recycling is not a viable option, surplus concrete generated during road construction, repair or reconstruction may often be managed as clean fill. In some cases, however, it must be managed as solid waste or hazardous waste. There is a fact sheet on *Renovation*, *Demolition and Construction* under Public Works.

Potential CT DEP Permits, Registrations and/or Certifications

Small Municipal Separate Storm Sewer Systems (MS4) General Permit

General Permit for Storage and Processing of Asphalt Roofing Shingle Waste and/or for the Storage and Distribution of Ground Asphalt Aggregate for Beneficial Reuse

Financial Assistance

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

Model Regulations for Municipal Consideration

See Appendix 4 of the 2004 Connecticut Stormwater Management Manual (Web link is provided below).

Web Pages

Street Sweeping and Catch Basin Cleanings www.ct.gov/dep/waste Select "Information for Municipalities" on the left navigation bar.

Stormwater Maintenance (Stormwater Manual)

www.ct.gov/dep/stormwater Select 2004 Connecticut Stormwater Quality Manual.

Snow Management

www.ct.gov/dep/stormwater Scroll down to "Related Guidance" and select the "Snow Disposal" link.

Highway Construction and Demolition Debris Management

www.ct.gov/dep/waste Select "Information for Municipalities" on the left navigation bar, then select "Construction, Renovation and Demolition Waste Management and Recycling."

Street and Road Management

Contacts

Snow Management

Bureau of Water Protection and Land Reuse Water Permitting Division Stormwater Section

Phone: 860-424-3020

Storage, Disposal and Reuse of Street Sweepings and Catch Basin Cleanings

Bureau of Materials Management and Compliance Assurance Recycling Program

Phone: 860-424-3366

Stormwater Best Management Practices

Bureau of Water Protection and Land Reuse Water Permitting Division Stormwater Section Phone: 860-424-3018

Highway Construction and Demolition Debris Management

Office of the Commissioner
Planning and Program Development
Pollution Prevention Program



Underground Storage Tank Systems (Tanks and Piping)

Description

An underground storage tank (UST) system is a vessel designed to contain liquids such as petroleum products, the volume of which (including the volume of any connected underground pipes) is 10 percent or more beneath the surface of the ground and is invisible for inspection.

Municipal Connection

Municipalities are responsible for underground storage tank systems at their various public facilities such as schools, public works facilities, administrative buildings, libraries, senior centers and/or other public buildings.

Municipal Responsibility

Municipalities that own or operate a nonresidential UST system that: 1) is currently in use; 2) will be brought into use; or 3) was taken out of service (even if empty), must file a notification with the CT DEP and the local fire marshal (see CT DEP Web site for notification forms) unless such notification has previously been filed. Subsequent notifications must be submitted within thirty days following changes in any of the information required on the notification form. Most UST systems are subject to requirements for regular monitoring and maintenance.

Statutory Citation

CGS Sections 22a-449 et. seq.

Discussion

Underground storage tanks and associated integral piping sometimes leak, and when they do, they can create a pollution problem in both soil and groundwater. Because they are hidden from sight, it may take a long time to realize that they are leaking. In terms of property management, one of the best actions that can be taken is the removal of old or non-corrosion-protected underground storage tank systems. For nonresidential UST systems subject to the filing requirements identified above, filing the appropriate notification form

with CT DEP and the local fire marshal will also comply with both state and U.S. EPA requirements for UST registration and notification. For information about current UST registrations, please call the number in the Contact section below.

The tanks and piping in nonresidential UST systems must be protected from corrosion. Most UST systems require some regular testing and/or monitoring. Spill and overfill controls are required for gasoline, diesel, waste oil and CERCLA-regulated, hazardous material UST systems.

The Underground Storage Tank Petroleum Clean-Up Account Program (UST Account) provides financial assistance for the investigation and clean-up of sites impacted by leaking underground petroleum storage tanks, enabling owners to meet the requirements of federal regulations for financial responsibility. The UST Account provides coverage of up to one million dollars per release, for taking corrective actions and for third-party liability costs. Notwithstanding this financial coverage, the responsible party for a release must bear all corrective action and third-party liability costs when less than ten thousand dollars. Note that environmental damage caused by UST systems containing heating fuel used for on-site heating purposes is ineligible for reimbursement under the UST Account.

Potential CT DEP Permits, Registrations and/or Certifications

CT DEP registration/notification of nonresidential, underground storage tanks is required. Note that heating fuel UST systems with less than 2100 gallons capacity are exempt from the registration/notification requirements, as long as they are used solely for on-site heating.

Registration with the local fire marshal is required.

Check with the local building official and/or land use office regarding whether other municipal permits are required.

Underground Storage Tank Systems (Tanks and Piping)

Financial Assistance

Information on the Underground Storage Tank Clean-up Account Program is available online at: www.ct.gov/dep/financialassistance. Select "Site Clean-up."

Model Regulations for Municipal Consideration

No.

Web Page

www.ct.gov/dep/ust

Contact

Bureau of Materials Management and Compliance Assurance Storage Tank and PCB Enforcement Unit Phone: 860-424-3374

