

Managing Environmental Compliance in Connecticut



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Gina McCarthy
Commissioner

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Connecticut Department of Environmental Protection
Office of Enforcement Policy and Coordination

Issue 8

State Supreme Court Affirms Trial Court Decision in Case Against Light Sources, Incorporated

In September 2005, the Connecticut Supreme Court ordered Light Sources, Incorporated (“LSI”) and its affiliates LS Neon, Incorporated (“LS Neon”) and LCD Lighting, Incorporated (“LCD Lighting”) to pay a civil penalty of \$857,000 and clean up two sites in Milford and one in Orange, which were contaminated with mercury. The enforcement case against the defendants was initiated by the Department of Environmental Protection (“Department”) in March 1998 in response to numerous violations of water pollution control and hazardous waste management laws at the three sites.

Since 1983, LSI and its affiliates have engaged in the manufacture of mercury containing lamps in Milford at 11 Cascade Road and 70 Cascade Road. In May 1997, the companies relocated some lamp manufacturing operations to a third site located at 37 Robinson Avenue in Orange. The lamp manufacturing process used by LSI and its affiliates has involved coating the insides of the light bulbs with phosphor and injecting the bulbs with mercury. A byproduct of the manufacturing process is the generation of off-spec mercury containing bulbs, which the companies began sending to a lamp recycling company for disposal in 1996. Prior to that date, however, the companies disposed of off-spec bulbs either as municipal solid waste or by crushing the bulbs on-site using glass compactors.

In 1998, following a reported release of mercury to a catch basin at the 70 Cascade Boulevard facility in Milford, the Department investigated all three company locations and found the sites and surrounding areas to be contaminated with

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Commissioner Rules That Mercury Reduction Act Does Not Ban Use of Mercury Amalgam Fillings

In a declaratory ruling formally stating the Department’s position, Commissioner McCarthy ruled that the Mercury Reduction Act does not prohibit dentists from using mercury in their practices. The ruling followed a comprehensive review of the law. In addition, an analysis of the legislative history of the Act shows that to be the clear intent of the General Assembly. The Commissioner issued the ruling in response to questions about whether the law – which prohibits or phases out a wide variety of uses of mercury – also prevents the use of mercury by dentists.

Commissioner McCarthy noted that the purpose of the declaratory ruling was “to clarify this issue for both public interest groups and dental practitioners alike.” The ruling, she wrote, is not intended to “assess the general health or environmental impacts from the use of mercury in dentistry or to determine whether as a general policy matter mercury-containing amalgam should or should not be allowed.” Consumers for Dental Choice has said it will appeal the Commissioner’s ruling.

While ruling that the law permits the continued use of mercury for dental fillings, Commissioner McCarthy noted concerns about the presence of mercury in the environment and the need for greater public awareness that amalgam fillings

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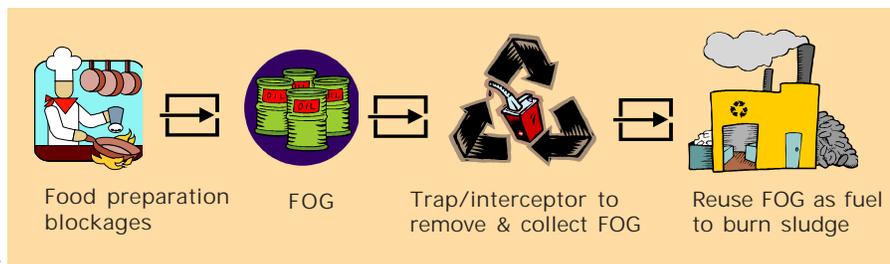
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General Permit Issued to Prevent the Discharge of Fats, Oils and Grease (FOG) to the Sanitary Sewer

On September 30, 2005, the Department issued a new general permit to prevent the discharge of fats, oils and grease (FOG) from food preparation establishments to the sanitary sewer system. The uncontrolled and/or inadequately controlled discharge of FOG into municipal sanitary sewage systems has been a cause of significant numbers of raw sewage overflows and backups into basements resulting in both public health risks and negative impacts to Connecticut waterways. An average of six overflows occur every month across the state due to excessive FOG hardening in sewer lines and causing blockages.

The general permit requires food preparation facilities to install either a passive 1,000-gallon minimum grease interceptor outside the facility, or have an automatic grease interceptor unit installed inside



the facility. Either method collects fats, oils and greases before they enter the sewer system. The waste is then taken to regional disposal sites by a grease trap/interceptor cleaner where it can be further treated and used as a fuel source in regional sewage sludge incinerators.

Food preparation facilities have until July 1, 2011, to comply with the conditions of the permit. However, facilities that are new, change ownership or are renovated must now include the equipment to be compliant with the permit. Additionally, a municipality can require a facility to implement these changes if FOG is deemed to be a problematic issue in a sewer system area. The permit gives municipalities the authority to exempt establishments that have small discharges with minimal FOG due to the nature of the food prepared.

The issuance of this general permit will provide a statewide mechanism to address the FOG discharge at the source, will reduce the number of raw sewage overflows and provide a beneficial reuse of FOG as a source of fuel to burn Connecticut's sewage biosolids. With the FOG General Permit, the Department is optimistic that the impacts from grease and its associated problems will diminish significantly and the volume of "pure" grease will substantially rise as a fuel to augment or even replace current fuel sources for burning sewage biosolids.

Wal-Mart to Pay \$1.15 Million for Environmental Violations

In September 2005, Wal-Mart entered into a Stipulated Agreement with the State of Connecticut to resolve stormwater and wastewater discharge violations at 22 Wal-Mart and Sam's Club stores across the state. Wal-Mart operated without appropriate permits needed for photographic wastewater and vehicle maintenance activities, as well as discharged wastewater from several dumpsters and garden centers. The alleged violations threatened to expose the environment to sediments, fertilizers, oil and other pollutants – products often stored outside the stores and carried by rain into nearby bodies of water. Wal-Mart also sold an illegal sewer additive at several stores.

The Agreement requires Wal-Mart to pay a civil penalty of \$600,000 and to pay \$500,000 to a dedicated supplemental environmental project ("SEP") account for the Small Municipal Separate Storm Sewer System Program and \$50,000 to the Department's Central Connecticut Region SEP account.

Wal-Mart has also agreed to correct the improper discharges; submit plans to address stormwater management; hire a consultant to address stormwater management for all Wal-Mart construction sites in Connecticut and hire a consultant to conduct seven bi-annual stormwater management compliance audits at the cited stores.

Requirements for Outdoor Wood Burning Furnaces

As fuel prices rise, many people will burn wood this winter to heat their homes and may consider purchasing outdoor wood burning furnaces (OWFs) for that purpose. An OWF is a unit separated from the building or appliance it serves. An OWF burns wood to provide heat for the residence or for heating household, swimming pool, hot tub or Jacuzzi water. Pollution from wood burning can have serious health consequences. Wood smoke consists of small airborne particles (fine particulates) that can exacerbate breathing problems and contribute to longer term health problems including asthma, respiratory or heart conditions, or other illnesses. Preliminary and monitoring analyses indicate 38% of the fine particulate emissions in Connecticut in 2002 came from wood burning. Therefore, the environmental impact of wood burning is very significant and can cause a localized public health concern.

In recent years, municipalities and the Department have received many complaints regarding impacts on neighbors from the operation of OWFs. Due to the concern over OWFs, the Connecticut General Assembly passed Public Act 05-227 to try to reduce the public risk to neighbors from operation of an OWF. This new statute, effective July 11, 2005, relies upon both the Department and municipalities to enforce the siting and installation requirements set forth in the legislation.

Public Act 05-227 sets minimum distance requirements between OWFs and residences, establishes minimum stack heights, and imposes some operational constraints. In addition to compliance with Public Act 05-227, there are other applicable statutes and regulations that address this issue and must be adhered to. State laws concerning opacity levels (smoke density) or emission of smoke and odors that cross the property lines are likely to be implicated with the use of OWFs. Additional work is being done to characterize emissions so public health officials can quantify public health risk and determine appropriate risk management criteria.

For information on OWFs or the Public Act please see our website <http://www.dep.state.ct.us/air2/consumer/index.htm> or the New York Attorney General's website <http://www.oag.state.ny.us/press/2005/aug/August%202005.pdf>.

Aquifer Protection Area Program Update

On September 1, 2005, the technical amendments to the Level A Mapping Regulations (R.C.S.A. 22a-354b-1) for aquifer protection areas became effective. The amendments were in response to suggestions from the regulated community to improve the methodology for ground water modeling that defines the boundary of aquifer protection areas. The amendments will result in smaller, more accurate land areas that will be regulated under the Department's Aquifer Protection Program. The Aquifer Protection Program protects major public water supply wells in sand and gravel aquifers to ensure a plentiful supply of drinking water.

Aquifer protection areas are mapped by the water companies. Towns must adopt the mapped areas as aquifer protection areas and impose land use restrictions within those areas. All areas are to be mapped by June 2008 and currently there are 20 approved Level A (final) mapped aquifer protection areas. The mapping regulations, combined with the completion of the model municipal regulations in June, give water companies and municipalities the basic tools they need to move forward with adopting protection areas and local regulations. Once local regulations are adopted, existing regulated businesses will be required to register with the local aquifer protection agency, and new regulated activities will be restricted from developing within these areas.

The Department has added a town tracking table to its web site to indicate each town's progress. Additionally, maps are available online to help businesses determine if their facility is located in an aquifer protection area. For the tracking table, maps, and other information please visit our aquifer protection web site at: www.dep.state.ct.us/wtr/aquiferprotection/index.htm.

State Supreme Court Affirms Trial Court Decision in Case Against Light Sources, Incorporated *(continued from page 1)*

mercury. In particular, mercury contamination was found in a tributary of Oyster River that receives stormwater discharges from the 37 Robinson Boulevard site in Orange. The Department also found mercury present in wetland and stream sediments surrounding the 70 Cascade Boulevard and 11 Cascade Boulevard sites, both of which are located within surface and groundwater areas designated as class A. Sediment collected from an unnamed stream near 70 Cascade Boulevard contained a mercury level over 3,500 times greater than sediment upgradient of the site. Further, concentrations of mercury bearing sludge nearly 10,000 times greater than background were found in septic systems at both Milford sites, threatening pollution of potable groundwater.

In addition to mercury contamination, LSI and its affiliates had other water pollution control and hazardous waste violations including failure to have a stormwater pollution prevention plan, failure to perform stormwater discharge monitoring, failure to perform hazardous waste determinations, unpermitted treatment and disposal of hazardous waste, and improper management and disposal of hazardous waste.

In 1998, the Department referred these violations to the State Attorney General for civil action in Superior Court. Following a 1999 hearing, the trial court issued a temporary injunction against the defendants requiring remediation of mercury contamination on all three sites and ordering that all mercury discharges be ceased. In April 2003, the trial court issued a permanent injunction directing the defendants to remediate all contaminated soil and sediment, and to pay a \$1,059,902

civil penalty. Later in 2003, the trial court modified its decision in order to clarify requirements for mercury clean up and to adjust the civil penalty to \$904,000.

Settlement With Industrial Laundry Results in Discontinued Use of Toxic Detergent

Cintas Corp. of Branford has agreed to pay a \$450,000 penalty to the state to settle several water pollution violations going back a decade. From the monetary fine, \$93,500 will fund the company's switch from laundering chemicals containing alkylphenol ethoxylate (APE) to more environmentally safe chemicals. APE, which is banned in Europe and being phased out in Canada, is harmful to fish life. Commissioner Gina McCarthy said, "It is the first time we know of that a commercial laundry has agreed to use a detergent that does not contain APEs. This product substitution will protect the quality of water and the presence of fish and other important wildlife in Long Island Sound."

Additionally, Cintas has agreed to implement spill control training to all employees and maintain a spill team member at the facility during all work hours. The company has also agreed to restrictions on its policy for transporting soiled textiles in the state to provide better protection for drivers.

The defendants subsequently appealed the trial court's decision to State Supreme Court. At issue before the supreme court was whether the trial court had acted improperly in assessing certain penalties, imposing more stringent mercury clean up criteria in a modified judgment, and determining without direct evidence that the defendants violated water pollution control laws for certain periods. In its September 2005 decision, the State Supreme Court concluded that the trial court had acted

properly in clarifying the criteria for mercury clean up, and in determining when the defendants had violated water pollution control laws. In addition, the Supreme Court largely affirmed the trial court assessment of civil penalties, except that it agreed with the defendants that certain penalties assessed for violations at the 11 Cascade Boulevard site should be made consistent with those assessed for violations at the 70 Cascade Boulevard site. The State Supreme Court's decision effectively upheld the decision of the trial court, except that the total civil penalty assessment was adjusted to \$857,000.

Commissioner Rules That Mercury Reduction Act Does Not Ban Use of Mercury Amalgam Fillings *(continued from page 1)*

contain mercury. As a result, the Commissioner has directed the Department to take action to:

- Ensure that dental offices install and properly maintain and operate separators now required to capture excess amalgam and the mercury it contains;
- Amend the agency's "Best Practices" to require dentists to display material providing patients with information about amalgam fillings and possible alternatives.

In her ruling, the Commissioner noted that Section 22a-622 of the Mercury Reduction and Education Act, specifically permits the use of "elemental" mercury in dentistry.

While dental practitioners can purchase elemental mercury and the powders needed to create amalgam in bulk form, they typically purchase pre-packaged capsules. In these capsules, the mercury on one side is separated from alloy metal powders contained on the other. When amalgam is needed for a filling, the separation is breached and the mercury and powder are mixed in appropriate amounts. Commissioner McCarthy said it is illogical to conclude that section 22a-622 of the Act was intended to allow dentists to purchase elemental mercury in bulk form but not capsules containing mercury. If the law were interpreted in this way, she wrote: "...Practitioners would then be forced to handle and mix mercury and the components of amalgam outside of an enclosed capsule or in a manner that would lead to greater spillage and its attendant exposure to mercury. This could not have been the intent of the General Assembly; it simply makes no sense to say that section 22a-622 applies to elemental mercury in bulk form, but does not apply to the elemental mercury, which is separated from the other components of amalgam in capsules sold to dental practitioners."

Connecticut Department of Environmental Protection

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Solid Waste Management Plan Moving Forward

In May 2005, the Department's Bureau of Waste Management began the task updating the *State's Solid Waste Management Plan*. The Department has contracted with R.W. Beck, one of the nation's leading consulting engineering firms, to assist in the effort.

In developing the plan, we will look for opportunities to reduce the amount of waste generated in the State and increase the amount of recycling and reuse in an environmentally protective manner. There are several major tasks that have been completed or are well under way:

- A statewide Stakeholder Forum was held on June 29th and approximately 200 people attended, representing non-profits, businesses, institutions and the public. All shared their vision and opinions about solid waste issues such as reducing municipal solid waste, disposal of electronics, and recycling.
- An External Stakeholder Working Group has been established and is currently meeting.
- The first phase of the project - data gathering, verification and validation - was completed in October 2005.
- The Department has created a website to keep the public informed about the process - www.dep.state.ct.us/wst/solidw/swplan/index.htm.

For more information, contact the Department's Project Administrator, Tessa Gutowski at (860) 424-3096 or tessa.gutowski@po.state.ct.us