Guidance Document

Insecticide Misting Systems
For Use On
Lake Tyler and Lake Tyler East

Revision Date: 09-30-2015
I. Purpose

The City of Tyler is committed to maintaining water quality in Lake Tyler and Lake Tyler East, which are used as both a primary water supply and for recreational purposes. The purpose of this document is to provide guidelines for the installation and use of outdoor residential misting systems in or around boathouses on Lake Tyler and Lake Tyler East.

II. System Components

Outdoor residential misting systems (sometimes called "mosquito misters") are application systems designed to spray pesticides in a fine mist to kill mosquitoes and other insects outdoors. Misting systems include spray nozzles that are mounted around the perimeter of a house or boathouse in the lawn or landscaping, on parts of the house/boathouse or along a fence. The spray nozzles are connected by tubing to a supply of insecticide. Some misting systems may be turned on at preset intervals using a timer. Others may be turned on using a remote controller, while others may be activated using a switch.

III. General Guidelines for Installation and Use

When using a misting system, following a few simple guidelines will minimize potential exposure to people, pets, and the environment.
A. When Having a System Installed

- Always use installers and service technicians that comply with the state's license, certification and registration requirements.
- Make sure that the installer has calibrated the system to apply no more than the maximum daily application rate as specified on the pesticide label.
- Make sure the nozzles are directed to spray toward the target area and away from eating and cooking areas and any water body including the lake.
- Placing nozzles less than 10 feet from the ground will reduce chemical drift. Chemical drift may affect other people, animals and surrounding environment not in your yard area.
- Set nozzles to direct mist away from outside air conditioners or other home air intakes.
- Make sure both the reservoir and operating system are securely locked and inaccessible to children at all times to avoid potential poisoning accidents.
- When practical, install wind, rain, and motion sensors to reduce unnecessary pesticide usage and inadvertent application when people or pets are present.

B. When Using a System:

- Do not apply the pesticide when people, pets, or foods are present.
- Set automatic timers for times when people and pets are unlikely to be sprayed.
- Only use the system when pests are most active. For example, certain varieties of mosquitoes are most active in the early morning and evening hours.
- Avoid using the system during high wind (greater than 10 mph), rainfall, fog, when outside air temperatures fall below 50° Fahrenheit or other times when insects are generally not active.
- Obtain and read the pesticide label to know the pesticide precautions and its appropriate use in the system.
• Be aware of the maximum daily rate specified on the product label and how your system operates.
• Be a good neighbor - some neighbors may have sensitivities to the pesticides or object to drift of chemicals onto their property.
• Avoid damage or misuse from a leaking or malfunctioning system. Regularly maintain and inspect it.
• Turn the system off when not needed for extended periods of time.

IV. City of Tyler Requirements for Installation and Use

A. City of Tyler Approval Required
The City of Tyler shall approve the design and installation of, and the chemicals used in, all outdoor misting systems to be installed in or around boathouses on Lake Tyler and Lake Tyler East. Residents must submit a Lake Tyler/Lake Tyler East Approval for Construction form to the City of Tyler Building Services Department, along with the following minimum information:

1. Installation diagram or schematic of misting system.
2. Copy of manufacturer’s product label.
3. List of targeted pests.
4. Copy of installation and maintenance contract.
5. Copy of installer’s State-issued pesticide permit.

Outdoor misting systems will not be approved in conjunction with the approval of initial construction of a boathouse.
B. Protection of Water Supply

All outdoor misting system will be installed and operated in such a manner so as to protect the City’s raw water supply, i.e. Lake Tyler and Lake Tyler East. No unapproved fogging system will be used as a substitution for an approved misting system. All outdoor misting systems shall meet the following requirements:

1. **Equipment Safety Devices** – All outdoor misting systems shall include equipment safety devices which will shut down the system when the system malfunctions and activate the exterior audible and visual alarm system.

2. **Containment Tank** – All chemical supply tanks will be located inside a containment tank which will be one and one-half times larger than the chemical supply tank. Both the containment tank and chemical supply tank shall be protected from rain exposure.

3. **Alarms** – The outdoor misting system, including the containment tank, shall be equipped with an audible and visual alarm device to alert the owner that a malfunction has occurred. For misting systems located in a boathouse, the alarm system will be located on an exterior wall of the boathouse.

4. **Locking Devices** – All systems shall be secured in a manner to restrict unauthorized access.

5. **Setback Requirements** – All outdoor misting system chemical supply tanks shall meet the setback requirements as established by the City of Tyler Code of Ordinances, Chapter 19, Article VI, Division 5. All misting system chemical supply tanks with containment tanks shall either be: 1) installed or constructed outside the 100’ setback line (100’ from the 378’ elevation), or 2) located a minimum of 48” above the spillway elevation of 375.5’ MSL.

6. **System Repairs** – Damaged or malfunctioning systems shall be repaired within 14 calendar days. If repairs cannot be completed within 14 calendar days, the misting system shall be disabled until such repairs can be completed.
C. Approved Insecticides/Pesticides

Only EPA-approved insecticides/pesticides will be approved for use by the City of Tyler. Insecticides/pesticides shall be subject to random chemical analysis by the City of Tyler. All insecticides/pesticides shall be used in accordance with the manufacturer’s product label. It is illegal to use an insecticide/pesticide in a misting system if the insecticide/pesticide label contains a prohibition against its use in these systems. In addition, the product label must not specifically prohibit the use of the insecticide/pesticide in or around waterways and/or water bodies as evidenced by the following, or similar, language:

> Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

At this time, the following products are authorized for use on Lake Tyler and Lake Tyler East:

- EcoExempt MC

Other products may be approved by the City upon review of the manufacturer’s product label.

D. Licensed Installer Required

All outdoor misting systems shall be installed by an installer licensed by the Texas Structural Pest Control Board. A copy of the State-issued license must be submitted to the City of Tyler with the Approval for Construction prior to installation.

E. Inspection Requirements

All outdoor misting systems will be inspected by the City of Tyler, or its agents, during installation. The installer shall notify the City when installation begins and the installer must be
present during the installation inspection by the City. Inspection by the City will confirm that installation is in accordance with the submitted application for Approval for Construction.

Following installation, the City of Tyler, or its agents, may inspect the misting system annually in conjunction with an inspection of the boathouse plumbing system, in accordance with City of Tyler Code of Ordinances. Fees may be assessed for the annual misting system inspection and will be billed the following October along with the billing for annual lease payments (Lake Tyler) or annual registration payments (Lake Tyler East). During annual inspections, the City may request copies of annual maintenance records for the time period since the last inspection.

F. System Deficiencies
If during any inspection, the City determines that a misting system has been modified or is operating outside of its original design or is damaged or malfunctioning, written notice will issued to the Lessee or property owner with a description of the system deficiencies. The Lessee or property owner will be responsible for correcting the noted deficiencies within 14 calendar days. If the deficiencies cannot be corrected within 14 calendar days, the misting system shall be disabled until such deficiencies can be corrected.

G. Document Updates
This Guidance Document is subject to periodic review and update by the City of Tyler.