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DEPARTMENT OF PUBLIC WORKS & PROPERTY
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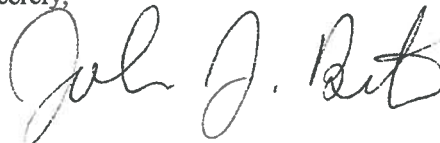
Mayor Michael Santiago
City Hall
12 S. High Street
P.O. Box 609
Millville, NJ 08332

RECEIVED
APR 01 2015
CITY CLERK'S OFFICE

Dear Mayor Santiago,

Enclosed you will find an information packet I have prepared for your municipality in compliance with the New Jersey Pesticide Control Regulations (N.J.A.C. 7:30-9.10). Included is a Question and Answer sheet explaining the activities of the Cumberland County Mosquito Control Division, tips for the general public on how they can help us control mosquitoes, which pesticides are used, and various important phone numbers. In addition, I have included the New Jersey Department of Environmental Protection-approved Fact Sheets for each pesticide used in our mosquito control program. It is the intention of NJDEP that this information be shared with all residents in your community. Some examples of how this may be accomplished are: providing copies at your office, placing copies in other public buildings such as libraries, or by direct-mailing them. If you have any questions, or need any further information, do not hesitate to contact me at 856-453-2197 between 7:00 am and 3:30 pm Monday-Friday.

Sincerely,



John J. Betz
Biologist
Cumberland County Mosquito Control Division

Enclosures

LEGAL NOTICE

Mosquito control is everyone's responsibility; please do your part by preventing mosquitoes from inhabiting your property. For more information on mosquitoes & mosquito control, contact The Cumberland County Mosquito Control Division at 856-453-2192, and visit our website at www.co.cumberland.nj.us.

In compliance with section 9.10 & 9.15 of the New Jersey Pesticide Control Code (N.J.A.C. Title 7, Chapter 30), the Cumberland County Mosquito Control Division may be applying pesticides for the control of adult mosquito populations on an area-wide basis, as needed, throughout Cumberland County during the period of May 1, 2015 through October 31, 2015.

The pesticides used will be those recommended by the New Jersey Agricultural Experiment Station (NJAES), Rutgers University, for the control of adult mosquitoes, which include: tau-Fluvalinate (Mavrik®), Malathion (Fyfanon®), and Etofenprox (Zenivex®). Products will be applied by truck and/or by aircraft, using Low-Volume or Ultra-Low Volume techniques. The applications will be made according to product labeling.

Contact the National Pesticide Information Center at 1-800-858-7378 for routine pesticide-related health inquiries. Call the New Jersey Pesticide Control Program at 1-609-984-6507 for pesticide regulation information, pesticide complaints, and health referrals. In case of any pesticide emergency, please contact the New Jersey Poison Information and Education System at 1-800-222-1222.

Upon request, the Cumberland County Mosquito Control Division shall provide a resident with notification at least 12 hours prior to the application, except for quarantine and disease vector control only, when conditions may necessitate pesticide applications sooner.

Those seeking further information regarding the Cumberland County Mosquito Control Division activities are requested to contact:

Heather A. Lomberk, M.S.
Superintendent
NJCPA License # 29915A
Telephone # 856-453-2170
800 E. Commerce Street
Bridgeton, New Jersey 08302

CUMBERLAND COUNTY MOSQUITO CONTROL DIVISION QUESTIONS AND ANSWERS

What does our agency do?

Cumberland County Mosquito Control is a division of the Department of Public Works and Property of Cumberland County and is involved in all aspects of mosquito control. We have two full-time inspectors who inspect known mosquito habitats for the presence of mosquitoes and apply pesticides to those areas as necessary. In addition, they respond to service requests by inspecting and treating any mosquito habitats found at residents' homes or businesses. Our Superintendent is a graduate-level entomologist, and we have a Biologist who assists in inspections and control, is responsible for mosquito surveillance through the use of various types of mosquito traps, and is responsible for mosquito identification. In addition, the Biologist is responsible for public education, and will conduct educational programs for schools, civic groups, and other organizations upon request.

Our agency also participates in a vector surveillance program coordinated by Rutgers University and the Office of Mosquito Control Coordination, a division of the New Jersey Department of Environmental Protection. This program involves sampling mosquitoes from various areas throughout the County and sending them to the New Jersey Department of Health and Senior Services to have them tested for both West Nile Virus and Eastern Equine Encephalitis. If any sampled mosquitoes test positive for either virus, we will intensify our inspection and control efforts in those areas in an attempt to minimize possible risk to County residents, their pets, and their livestock.

How does our agency control mosquitoes?

Cumberland County Mosquito Control Division uses an integrated pest management (IPM) approach to control mosquitoes. This approach utilizes several methods of pest control, including mechanical, biological, and chemical.

We also employ heavy equipment operators who use various types of large machinery to engage in water management practices, or source reduction, to remove or modify mosquito habitats.

Source reduction is the largest component of our mosquito control program, and in many cases, can permanently affect mosquito population levels. Biological control can also be quite effective in eliminating mosquitoes. In this aspect of our program, we identify isolated, permanent bodies of water and introduce minnows and other types of fish to feed on mosquito larvae. Our chemical control program consists of the application of larvicides and pupicides to kill the immature stages, and adulticides to kill the flying adults. Typically, the non-chemical methods are preferred since they are the most effective; however, pesticide applications are necessary if the other methods are ineffective or not feasible.

What can the general public do to help us with our mosquito control program?

It is very important for us to get as much help from the general public as possible to make our program a success. It can be a futile endeavor employing various mosquito control methods if our residents are allowing mosquitoes to use their own properties as habitats!

Here are some tips to prevent mosquitoes from breeding on your property:

- keep rain gutters free of debris
- clean birdbaths at least once a week
- keep yard and surrounding areas free of artificial containers, which can collect rainwater
- eliminate standing water from crawl spaces and basements

Examples of artificial containers include:

- unused wading pools
- opened trash cans
- tires
- pool covers
- wheel ruts
- large, deep mud puddles
- buckets

- wheelbarrows
- ornamental ponds without proper aeration or fish
- empty planting pots

Anything holding water for at least four days can become a mosquito habitat. In addition, if you find a mosquito habitat, or if you think you might have an area conducive to the placement of fish, do not hesitate to call our office.

Which pesticides are used to control mosquitoes in Cumberland County and how are they applied?

In Cumberland County we use larvicides, larvicide/pupicides, and adulticides to control mosquitoes.

The larvicides we use include:

Abate 2-BG – active ingredient is temephos

Altosid – active ingredient is methoprene

Spheratax SPH 50G – active ingredient is *Bacillus sphaericus*

Teknar CG/Vectobac 12AS – active ingredient is *Bacillus thuringiensis israelensis*

The larvicide/pupicides we use include:

Agnique MMF – active ingredient is ethoxylated alcohol (mineral oil)

CoCo Bear- active ingredient is mineral oil

The adulticides we use include:

Mavrik Perimeter – active ingredient is tau-Fluvalinate

Zenivex E20 – active ingredient is etofenprox

Abate 2-BG is used in granular form and is applied directly to water with a seed spreader, or may be applied by aircraft. Altosid is used as a 30-day or 150-day briquet and is placed directly in water. Spheratax SPH 50G and Teknar CG are used in granular form and are applied directly to water with a seed spreader. Vectobac 12AS is applied as a liquid directly to water with a hand-held compressed air sprayer, or may be applied by aircraft.

Agnique MMF and CoCo Bear are applied as liquids directly to water with a hand-held compressed air sprayer. Mavrik Perimeter is applied to foliage in a coarse mist created by a truck-mounted mist blower. Zenivex E20 is applied directly into the air to contact mosquitoes while on the wing as an Ultra-Low-Volume (ULV) spray by ground equipment. All products used are registered with both the USEPA and NJDEP, which means they are legal for use in New Jersey.

In addition, our Division Superintendent, inspectors, heavy equipment operators, and Biologist are all licensed certified pesticide applicators by the NJDEP. For further information about the pesticides and their use, please refer to the accompanying NJDEP-approved Fact Sheets.

How do I contact Cumberland County Mosquito Control Division and get more information?

If you would like us to inspect your property, if you want to report a mosquito habitat, or you would like help with anything else mosquito-related, please call 856-453-2192 Monday – Friday between 8:30 a.m. and 4:30 p.m. If you would like to speak directly to the Superintendent, call 856-453-2170 Monday – Friday between 7:30 a.m. and 4:00 p.m. If you would like to speak directly to the Biologist, Assistant Chief Inspector, or Supervising Heavy Equipment Operator, call 856-453-2197 Monday – Friday between 7:00 a.m. and 3:30 p.m. To report a dead or ill bird, call the Health Department at 856-327-7602.

For general information:

For overall pesticide-specific information – 9:30 a.m. to 7:30 p.m.
National Pesticide Information Center 800-858-7378

For pesticide health information and possible exposures – 24 hours
NJ Poison Information & Education System 800-222-1222

For New Jersey pesticide regulation and misuse complaints
NJDEP Pesticide Control Program 609-984-6507

For Federal pesticide regulation
USEPA Region 2 Office of Pesticide Programs 732-321-6759

For mosquito control insecticide recommendations
Rutgers University, Department of Entomology 732-932-9459

For state-wide mosquito control information
NJDEP Office of Mosquito Control Coordination 609-292-3649

Where can I find more specific information on pesticide applications in Cumberland County and how will I be notified?

Call the Cumberland County Mosquito Control Division at 856-453-2192 or check the website for the spray schedule, which is updated daily, at www.co.cumberland.nj.us. Attached is an example of a newspaper notice the Division places in two local newspapers throughout the mosquito control season. The two newspapers we use are the Bridgeton Evening News and the Daily Journal. A citizen has the right to ask the Cumberland County Mosquito Control Division for specific information about a planned application prior to the pesticide treatment.

Municipalities are encouraged to share this information with all residents in their community.

Fact Sheet

Abate® 2-BG

This sheet answers some basic questions about a mosquito control product in use in your county. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Abate and how is it used?

Abate is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called Temephos. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Temephos**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Abate is a granular pesticide product used to prevent adult mosquitoes from emerging from lakes, ponds, and other bodies of water. It acts on the larva, or immature stage of the mosquito, within water, immediately before the flying mosquito emerges. **Abate** is part of a mosquito management approach, using habitat management and other measures, to control immature mosquitoes in order to reduce the need to spray for adults.

How can I avoid exposure to Abate?

Risk to the general public from the use of **Abate** is minimal. Avoiding exposure is always the safest course of action, particularly for populations whose members may be at higher risk such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with treated bodies of water.
- ❖ Avoid direct contact with the granules. If there is contact with your eyes or skin, immediately flush and rinse with water.
- ❖ Stay away from application equipment, whether or not it is in use.

What are the symptoms of exposure to Abate?

Symptoms of exposure can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing, and a runny nose. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How long will Abate last in the environment?

Temephos has a low persistence and will break down in water within a few days. In soil, it breaks down in approximately 30 days.

Where can I get more information on Abate?

The following are resources for more information regarding **Abate** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

NJ Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **732-321-6768**

For statewide mosquito control information:
NJDEP Office of Mosquito Control Coordination 609-292-3649

For local mosquito control information:
Cumberland County Mosquito Control Division 856-453-2192

For mosquito control recommendations:
Rutgers University, Department of Entomology 732-932-9774

For local health information:
Cumberland County Health Department 856-327-7602

Fact Sheet

Altosid®

This sheet answers some basic questions about a mosquito control product in use in your county. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Altosid and how is it used?

Altosid is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Methoprene**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Methoprene**-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Altosid is used to prevent mosquitoes from emerging into adults from lakes, ponds, and other bodies of water. It acts on the larva, or immature stage of the mosquito, within water, immediately before the flying mosquito emerges. **Altosid** is part of a mosquito management approach, using habitat management and other measures, to control immature mosquitoes in order to reduce the need to spray for adults.

How can I avoid exposure to Altosid?

Risk to the general public from the use of **Altosid** is minimal. Avoiding exposure is always the safest course of action, particularly for populations whose members may be at higher risk such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with treated bodies of water.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

What are the symptoms of exposure to Altosid?

Methoprene is not a skin irritant or a sensitizer. The chance of experiencing symptoms of exposure with proper use is very low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience any symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How long will Altosid last in the environment?

Methoprene has a low persistence and breaks down in water within a few days. In soil, it breaks down in less than 10 days.

Where can I get more information on Altosid?

The following are resources for more information regarding **Altosid** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

NJ Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **732-321-6759**

For statewide mosquito control information:

NJDEP Office of Mosquito Control Coordination **609-292-3649**

For local mosquito control information:
Cumberland County Mosquito Control Division 856-453-2192

For mosquito control recommendations:
Rutgers University, Department of Entomology 732-932-9437

For local health information:
Cumberland County Health Department 856-327-7602

Fact Sheet

Spheratax® SPH 50G

This sheet answers some basic questions about a mosquito control product in use in your county. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Spheratax and how is it used?

Spheratax is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called *Bacillus sphaericus (Bsph)*. The U.S. Environmental Protection Agency's (EPA) current evaluation considers *Bsph*-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Spheratax is used to prevent mosquitoes from emerging into adults from lakes, ponds, and other bodies of water. It acts on the larva, or immature stage of the mosquito, within water, before the flying mosquito emerges. **Spheratax** is part of a mosquito management approach, using habitat management and other measures, to control immature mosquitoes in order to reduce the need to spray for adults.

How can I avoid exposure to Spheratax?

Risk to the general public from the use of **Spheratax** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Avoid direct contact with water bodies that have been treated.

- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.
- ❖ Stay away from application equipment, whether or not it is in use.

What are the symptoms of exposure to Spheratax?

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How long will Spheratax last in the environment?

Because *Bsph* is a biological agent, it tends to break down quickly in the environment. Its breakdown in water or soil usually occurs within hours of use.

Where can I get more information on Spheratax?

The following are resources for more information regarding **Spheratax** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

NJ Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **732-321-6768**

For statewide mosquito control information:

NJDEP Office of Mosquito Control Coordination **609-292-3649**

For local mosquito control information:

Cumberland County Mosquito Control Division **856-453-2192**

For mosquito control recommendations:

Rutgers University, Department of Entomology

732-932-9774

For local health information:

Cumberland County Health Department

856-327-7602

Fact Sheet

Teknar[®] and Vectobac[®]

This sheet answers some basic questions about mosquito control products in use in your county. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What are Teknar and Vectobac and how are they used?

Teknar and Vectobac are insecticide products recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. They contain the pesticide called *Bacillus thuringiensis israelensis (Bti)*. The U.S. Environmental Protection Agency's (EPA) current evaluation considers *Bti*-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Teknar and Vectobac are used to prevent mosquitoes from emerging into adults from lakes, ponds, and other bodies of water. They act on the larva, or immature stage of the mosquito, within water, immediately before the flying mosquito emerges. **Teknar and Vectobac** are part of a mosquito management approach, using habitat management and other measures, to control immature mosquitoes in order to reduce the need to spray for adults.

How can I avoid exposure to Teknar and Vectobac?

Risk to the general public from the use of **Teknar and Vectobac** is minimal. Avoiding exposure is always the safest course of action, particularly for populations whose members may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

For local mosquito control information:

Cumberland County Mosquito Control Division

856-453-2192

For mosquito control recommendations:

Rutgers University, Department of Entomology

732-932-9774

For local health information:

Cumberland County Health Department

856-327-7602

Fact Sheet

Agnique™ MMF

This sheet answers some basic questions about a mosquito control product in use in your county. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Agnique and how is it used?

Agnique is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Ethoxylated Alcohol**. It is a monomolecular film that spreads thinly on the surface of water. It is registered for use as both a larvicide and a pupicide, but is usually applied as a pupicide with a hand-held compressed air sprayer.

How does Agnique work?

When the film spreads on the surface of the water, mosquito larvae, pupae, and emerging adults find it difficult to attach to the water's surface, causing them to drown. The film remains active for typically 10-14 days, and is used in standing water, ponds, swamps, ditches, and floodwater areas.

Is Agnique toxic to humans?

Agnique is only slightly toxic to humans, with minimal potential risk, when used properly as part of an integrated mosquito control program. Since the material is applied directly to areas of standing water, there is little opportunity for human exposure. In addition, it has a very low persistence in the environment.

What are the general symptoms of exposure to Agnique?

Agnique may cause minor eye irritation with prolonged or repeated contact with the eyes. It does not irritate skin, nor has it been shown through animal tests to be toxic by inhalation or ingestion. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How can I reduce my exposure to Agnique?

- ❖ Stay away from application equipment, whether or not it is in use.

Where can I get more information on Agnique?

The following are resources for more information regarding **Agnique** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30 a.m. to 7:30 p.m.:

National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

NJ Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticides Programs **732-321-6768**

For statewide mosquito control information:

NJDEP Office of Mosquito Control Coordination **609-292-3649**

For local mosquito control information:

Cumberland County Mosquito Control Division **856-453-2192**

For mosquito control recommendations:

Rutgers University, Department of Entomology **732-932-9774**

For local health information:
Cumberland County Health Department

856-327-7602

Fact Sheet

CocoBear[®]

This sheet answers some basic questions about a mosquito control product in use in your county. Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is CocoBear and how is it used?

CocoBear is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Mineral Oil**. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Mineral Oil**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

CocoBear is used to prevent mosquitoes from hatching in lakes, ponds, and other bodies of water. It acts on the larva or pupa (immature stages), of the mosquito in water immediately before the flying mosquito emerges. **CocoBear** is part of a mosquito management approach using habitat management and other measures to control immature mosquitoes in order to lessen the need to spray for adult mosquitoes.

How can I avoid exposure to CocoBear?

Risk to the general public from the use of **CocoBear** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Plan your activities to limit time spent outside during times of possible pesticide treatments.
- ❖ Move children's toys out of application areas.
- ❖ Move animals and their food and water dishes out of application areas.

- ❖ Stay away from application equipment, whether or not it is in use.

What are the symptoms of exposure to CocoBear?

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spray. Bring this sheet with you if you visit a physician or other medical provider.

Where can I get more information on CocoBear?

The following are resources for more information regarding **CocoBear** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:
National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:
New Jersey Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:
NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:
USEPA Region 2 Office of Pesticide Programs **732-321-6759**

For statewide mosquito control information:
NJDEP Office of Mosquito Control Coordination **609-292-3649**

For local mosquito control information:
Cumberland County Mosquito Control Division **856-453-2192**

For mosquito control recommendations:
Rutgers University, Department of Entomology **732-932-9437**

For local health information:
Cumberland County Health Department **856-327-7602**

Fact Sheet

Mavrik Perimeter®

This sheet answers some basic questions about a mosquito control product in use in your County. Your Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Mavrik and how is it used?

Mavrik is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **tau-Fluvalinate**, a member of the category of pesticides called synthetic pyrethroids. These are synthetic versions of pesticides called pyrethrins, which are produced by plants. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **tau-Fluvalinate**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Mavrik is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes are the preferred method of control, the application of adulticides is sometimes necessary when biting populations reach critical levels, or when a disease organism is present in adult mosquitoes. A coarse mist is applied to foliage surrounding an area in need of protection. The product produces a residue, which delivers extended control beyond that achieved with conventional adulticide applications.

How can I avoid exposure to Mavrik?

Risk to the general public from the use of **Mavrik** is minimal. Avoiding exposure is always the safest course of action, particularly for populations whose members may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Pay attention to notices about pesticide applications found through newspapers, websites, automated telephone messages or distributed by municipal, county, or state agencies.
- ❖ Plan your activities to limit time spent outside during times of possible pesticide applications.
- ❖ Move animals and their food and water dishes inside during applications.
- ❖ Move clothing and children's toys inside during applications.
- ❖ Stay away from application equipment, whether or not it is in use.
- ❖ Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during application of pesticides.
- ❖ Avoid direct contact with surfaces still wet from pesticide applications. Do not allow children to play in treated areas until they have completely dried (approximately one hour).
- ❖ If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.

What are the symptoms of exposure to Mavrik?

Symptoms can include salivation, nausea, vomiting, initial excitation followed by sedation, skin irritation, and eye irritation. Sensitive individuals may temporarily experience an itching or burning sensation at the area of exposure, with or without a rash. The chance of experiencing these symptoms with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How long will Mavrik last in the environment?

The **Mavrik** spray stays in the air for a short time until it lands on surfaces. **tau-Fluvalinate** persists for less than 15 days in soil. Currently, there is no information available regarding the persistence of **tau-Fluvalinate** in water, nor is there information available on the effects of sunlight on the compound.

Where can I get more information on Mavrik?

The following are resources for more information regarding **Mavrik** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:
National Pesticide Information Center 800-858-7378

For pesticide health information & possible exposures – 24 hours:
NJ Poison Information & Education System 800-222-1222

For New Jersey pesticide regulation & misuse complaints:
NJDEP Pesticide Control Program 609-984-6507

For Federal pesticide regulation:
USEPA Region 2 Office of Pesticide Programs 732-321-6759

For statewide mosquito control information:
NJDEP Office of Mosquito Control Coordination 609-292-3649

For local mosquito control information:
Cumberland County Mosquito Control Division 856-453-2192

For mosquito control recommendations:
Rutgers University, Department of Entomology 732-932-9437

For local health information:
Cumberland County Health Department 856-327-7602

Fact Sheet

Zenivex™ E20

This sheet answers some basic questions about a mosquito control product in use in your County. The Cumberland County Mosquito Control Division, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Zenivex and how is it used?

Zenivex is an insecticide product recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called **Etofenprox**, which is a member of the category of pesticides called non-ester pyrethroids. These are synthetic versions of pesticides called pyrethrins, which are produced by plants. Since **Zenivex** is a non-ester pyrethroid, it does not require a synergist such as piperonyl butoxide, which is found in traditional synthetic pyrethroid-based ULV pesticides. The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Etofenprox**-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program. As formulated in **Zenivex** adulticide, **Etofenprox** is considered a non-carcinogen, non-teratogen and non-mutagen.

Zenivex is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes are the preferred method of control, the application of adulticides is sometimes necessary when biting populations reach critical levels, or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air during peak flight times of the adult mosquitoes since they must directly contact the pesticide in order for it to be effective.

How can I avoid exposure to Zenivex?

Because of very small amounts of active ingredient released per acre, risk to the general public from the use of **Etofenprox**-containing products is minimal.

Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk, such as pregnant women, children, the elderly, and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- ❖ Pay attention to notices about pesticide applications found through newspapers, websites, automated telephone messages or distributed by municipal, county, or state agencies.
- ❖ Plan your activities to limit time spent outside during times of possible pesticide applications.
- ❖ Move animals and their food and water dishes inside during applications.
- ❖ Move clothing and children's toys inside during applications.
- ❖ Stay away from application equipment, whether or not it is in use.
- ❖ Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during application of pesticides.
- ❖ Avoid direct contact with surfaces still wet from pesticide applications. Do not allow children to play in treated areas until they have completely dried (approximately one hour).
- ❖ If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, immediately flush and rinse with water.

What are the symptoms of exposure to Zenivex?

Symptoms of exposure can include irritation to skin and eyes. The chance of experiencing these symptoms with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide application. Bring this sheet with you if you visit a physician or other medical provider.

How long will Zenivex last in the environment?

Etofenprox has a half-life of 1.7 days in water and 4.4 days in soil. It rapidly degrades in sunlight at the soil and water surface into its constituent elements: Carbon, Hydrogen, and Oxygen.

Where can I get more information on Zenivex?

The following are resources for more information regarding **Zenivex** and mosquito control in your area (unless otherwise noted, available during normal business hours):

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National Pesticide Information Center 800-858-7378

For pesticide health information & possible exposures – 24 hours:
NJ Poison Information & Education System 800-222-1222

For New Jersey pesticide regulation & misuse complaints:
NJDEP Pesticide Control Program 609-984-6507

For Federal pesticide regulation:
USEPA Region 2 Office of Pesticide Programs 732-321-6768

For statewide mosquito control information:
NJDEP Office of Mosquito Control Coordination 609-292-3649

For local mosquito control information:
Cumberland County Mosquito Control Division 856-453-2192

For mosquito control recommendations:
Rutgers University, Department of Entomology 732-932-9774

For local health information:
Cumberland County Health Department 856-327-7602