



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY  
BOARD OF PESTICIDES CONTROL  
28 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB  
COMMISSIONER  
HENRY S. JENNINGS  
DIRECTOR

**BOARD OF PESTICIDES CONTROL**

**July 26, 2013**

**Maine Organic Farmers and Gardeners Association,  
294 Crosby Brook Road, Unity, Maine, Main Building**

**AGENDA**

**8:30 AM**

1. Introductions of Board and Staff

2. Minutes of the May 24, 2013, Board Meeting

Presentation By: Henry Jennings  
Director

Action Needed: Amend and/or approve

3. Public Forum (limited to one hour)

At this time, the Board invites anyone interested to address its members with questions or concerns about any pesticide-related issues.

Presentation By: Henry Jennings  
Director

Action Needed: None required

4. Final Adoption of Major Substantive Rule Amendments to Chapter 27, Standards for Pesticide Application and Public Notification in Schools

The Board held a public hearing on proposed amendments to Chapter 27 on September 7, 2012, and provisionally adopted the amendments on December 7, 2012. The Joint Standing Committee on Agricultural, Conservation and Forestry held a public hearing on the proposed amendments on February 7, 2013, and held work sessions on April 9 and May 22, 2013, before reporting the resolve out as ought-to-pass. Resolve 2013, Chapter 63 was enacted by the Legislature and became law on June 22. The Board will now decide whether to finally adopt the amendments.

Presentation By: Henry Jennings  
Director

Action Needed: Final Adoption of the Rule, Basis Statement, Rulemaking Statement of Impact on Small Business, and Response to Comments for Chapter 27

5. Consideration of the Canyon Group’s Special Local Need (FIFRA Section 24[c]) Registration Request for GWN 1715 (EPA #81880-4) to Control Mites and Whiteflies on Greenhouse Tomatoes

In 2008, the Board approved a Special Local Need (SLN) registration for the use of Nexter to control mites and whiteflies on greenhouse tomatoes. The 2008 registration expires this year. The Canyon Group is now requesting an SLN registration to allow use of GWN 1715, which has the same formulation as Nexter. Backyard Farms supports the use of this formulation. EPA has established a tolerance for the active ingredient pyridaben.

Presentation By: Mary Tomlinson  
Registrar and Water Quality Specialist

Action Needed: Approve/disapprove 24(c) registration request

6. Review of Draft Policy on Exclusion Areas for Potential Aerial, Public-Health-Related Mosquito-Control Programs

At the May 24, 2013, meeting, the Board provisionally adopted amendments to Chapters 20, 22, and 51. The amendments were intended to allow for potential public-health-related mosquito-control programs conducted by governmental entities. During the development of the Chapter 20 amendments, the Board determined it was preferable to define “exclusion areas,” in the context of potential aerial applications, via policy, instead of codifying them in rule. Such a strategy allows the Board greater flexibility should new concerns arise. When the Board adopted the rule amendments, it directed the staff to bring a draft policy on exclusion areas to the next meeting in order to address concerns voiced by concerned parties. The staff has drafted a policy which the Board will now consider.

Presentation by: Henry Jennings  
Director

Action Needed: Revise/amend draft policy and adopt, if appropriate

7. Consideration of a Chapter 29 Variance Request from Boyle Associates to Treat *Phragmites* in Jordan Park Marsh in Old Orchard Beach

Chapter 29 allows the Board to grant variances from the 25-foot setback required from surface water under Section 6 of Chapter 29. Boyle Associates of Gorham, Maine, has contracted to control two invasive *Phragmites* stands which are part of a wetland area at Jordan Marsh Park in Old Orchard Beach. The control plan calls for a late summer/early fall application of glyphosate and imazapyr, coupled with repeated mowing. Applications will take place when there is no standing water present. The Board will now consider the request

Presentation By: Anne Bills  
Pesticides Safety Educator

Action Needed: Approve/disapprove variance request

8. Consideration of a Consent Agreement with Sea Urchin Cottage of York

On June 3, 1998, the Board amended its Enforcement Protocol to authorize staff to work with the Attorney General and negotiate consent agreements in advance in matters not involving substantial threats to the environment or public health. This procedure was designed for cases where there is no dispute of material facts or law, and the violator admits to the violation and acknowledges a willingness to pay a fine and resolve the matter. This case involved application of pesticides to a rented cottage by an unlicensed applicator.

Presentation By: Raymond Connors  
Manager of Compliance

Action Needed: Approve/disapprove the consent agreement negotiated by staff

9. Consideration of a Consent Agreement with the Northeast Agricultural Sales, Inc., of Detroit

On June 3, 1998, the Board amended its Enforcement Protocol to authorize staff to work with the Attorney General and negotiate consent agreements in advance in matters not involving substantial threats to the environment or public health. This procedure was designed for cases where there is no dispute of material facts or law, and the violator admits to the violation and acknowledges a willingness to pay a fine and resolve the matter. This case involved the operation of a major pesticide storage facility in Connor Township that did not conform to the Board's Chapter 24 rules and sales of restricted-use pesticides to unlicensed applicators.

Presentation By: Raymond Connors  
Manager of Compliance

Action Needed: Approve/disapprove the consent agreement negotiated by staff

10. Other Old or New Business

- a. Legislative Update—H. Jennings
- b. Legislative Hearing on Rule Amendments to Chapters 20, 22, and 51—H. Jennings
- c. Staff Submission of Loveland Products Request for a 24(c) Registration Request for Malathion 8 Aquamul for Use on Lowbush Blueberries—M. Tomlinson
- d. Variance Permit for Green Thumb Lawn Service—H. Jennings
- e. Other?

11. Schedule of Future Meetings

September 6, October 18, and December 6, 2013, are tentative Board meeting dates. The September 6 meeting is tentatively slated to include a planning session. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

12. Adjourn

## NOTES

- The Board Meeting Agenda and most supporting documents are posted one week before the meeting on the Board website at [www.thinkfirstspraylast.org](http://www.thinkfirstspraylast.org).
- Any person wishing to receive notices and agendas for meetings of the Board, Medical Advisory Committee, or Environmental Risk Advisory Committee must submit a request in writing to the Board's office. Any person with technical expertise who would like to volunteer for service on either committee is invited to submit their resume for future consideration.
- On November 16, 2007, the Board adopted the following policy for submission and distribution of comments and information when conducting routine business (product registration, variances, enforcement actions, etc.):
  - *For regular, non-rulemaking business*, the Board will accept pesticide-related letters, reports, and articles. Reports and articles must be from peer-reviewed journals. E-mail, hard copy, or fax should be sent to the attention of Anne Bills, at the Board's office or [anne.bills@maine.gov](mailto:anne.bills@maine.gov). In order for the Board to receive this information in time for distribution and consideration at its next meeting, all communications must be received by 8:00 AM, three days prior to the Board meeting date (e.g., if the meeting is on a Friday, the deadline would be Tuesday at 8:00 AM). Any information received after the deadline will be held over for the next meeting.
- During rulemaking, when proposing new or amending old regulations, the Board is subject to the requirements of the APA (Administrative Procedures Act), and comments must be taken according to the rules established by the Legislature.



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**BOARD OF PESTICIDES CONTROL**

**May 24, 2013**

**AMHI Complex, 90 Blossom Lane, Deering Building, Room 319, Augusta, Maine**

**MINUTES**

Present: Stevenson, Morrill, Eckert, Jemison, Bohlen, Granger, Flewelling

1. Introductions of Board and Staff

- The Board, Assistant Attorney General Randlett and staff introduced themselves.
- Staff present: Schlein, Jennings, Tomlinson, Hicks, Fish, Connors, Bills

2. Minutes of the March 1 and April 12, 2013, Board Meetings

Presentation By: Henry Jennings  
Director

Action Needed: Amend and/or approve

- Jemison suggested that in Item 2, page 3, the word “toleration” should be replaced with “tolerances.”
  - **Flewelling/Morrill: Moved and seconded that the March minutes be accepted as amended, and the April minutes accepted as written**
  - **In favor: Unanimous**

3. Gowan Company, Inc., Request for FIFRA Section 24(c) Registration for Malathion 8 Flowable on Cane Berries

Gowan Company, Inc., is requesting a Special Local Need [24(c)] Application to increase the number of allowable applications of Malathion 8 Flowable agricultural insecticide to control spotted wing drosophila (SWD) on cane berries. This request is supported by University of Maine Blueberry Extension Specialist David Handley. Research indicates that Gowan Malathion 8 Flowable is highly effective against the SWD and the extra application will be critical to controlling this invasive pest. In addition, Gowan Malathion 8 Flowable offers growers the advantage of very short preharvest and reentry intervals. Available data indicate that residues are expected to be below the established tolerance.

Presentation By: Mary Tomlinson  
Pesticides Registrar/Water Quality Specialist

Action Needed: Approve or disapprove the request

- Tomlinson explained that the EPA has not given approval nor worked out the details for cane berries in time to include with the blueberry request. The difference is an increase in the number of applications rather than the rate.
- Eckert asked why the tolerance was decreased; Hicks said that she did not know.
- Granger questioned whether elderberries are covered; Fish said they are not considered cane berries, and Tomlinson agreed they would not be covered by this registration.
  - **Granger/Eckert: Moved and seconded to approve the request**
  - **In favor: Unanimous**

4. Adoption of the Proposed Amendments to Chapters 20, 22, and 51

*(Note: No additional public comments may be accepted at this time.)*

On February 13, 2013, a Notice of Agency Rulemaking Proposal was published in Maine's daily newspapers, opening the comment period on the proposed amendments to Chapters 20, 22, and 51. A public hearing was held on March 1, 2013, at the AMHI Complex, Deering Building, in Augusta, and the written comment period closed at 5:00 PM on March 15, 2013. Four people spoke at the public hearing and 88 written comments were received by the close of the comment period. The Board reviewed the comments at its April 12, 2013, meeting and directed the staff to make some minor revisions. It will now determine whether to adopt the proposed amendments.

Presentation by: Henry Jennings  
Director

Action Needed: Decision on whether to adopt the proposed amendments and their respective response to comments, basis statement, and statement of impact on small business

- Jennings said that the staff had gone through the rules as requested by the Board to determine which parts of the rules should/should not be exempted in a public health emergency. The only part of Chapter 51 that made sense to keep, since multiple forms of notice are already required, is the notice to the Board and Poison Control Center. If aerial spraying is done, it will be a very carefully conducted program; there are lots of reasons to be careful and a lot of standards built in, especially with the use of onboard GPS navigation, real-time weather, etc. Some of the sections of Chapter 22 are important in order for the public to be confident that standards are met. However, much of Chapter 22 was designed to prevent movement of the spray to residential areas, but in this circumstance, the goal is to focus the application on residential areas. Consequently, it doesn't make sense in this context to shut down the operation if people are in the spray area, so those standards were left as exemptions. The equipment and weather-related standards were removed from the list of exemptions.
- Hicks said she had reviewed the labels of products that might be used for adulticiding. They all have language about agricultural areas and tolerances. If there is a situation requiring aerial spraying we will be looking at the labels carefully to determine which product is best used where.
- Jennings pointed out that the summary of comments and responses is the same for all three chapters; most comments were general in nature. Randlett reviewed them and did not see a problem with that.

- Jennings said that because there are notification elements in all the rules they are major substantive, which means they wouldn't go into effect until after legislative review is complete, probably in 2014; therefore we need to do both provisional adoption and emergency rulemaking at the same time.
- Randlett said that he had reviewed the documents and they looked fine; the basis statements are good.
- Jemison remarked that the basis statements did a good job of pointing out that the Board is not promoting spraying. Jennings pointed out that it was Eckert who requested that specific language making clear the Board's position be in the basis statements. Eckert said she'd like to reiterate that the Board hopes there never has to be any spraying.
- Jennings said the weather this spring is in our favor; not 80 degrees in March. Last year the virus was present in pools early in the year; they were spraying in July in Massachusetts. Hopefully we won't get into a situation where we need to spray this year. Information from the Maine Vector-borne Disease Working Group indicates that Maine has a higher percentage of vector mosquitoes than other areas of the country.
- Morrill questioned the wording of Chapter 20 Section C(3). Jennings explained that it was changed from "sensitive sites" to "exclusion areas" because people were confusing "sensitive sites" with "sensitive areas," a term used in other rules. Here we're talking about areas that are going to be mapped and not sprayed; this is different than a sensitive area that is mapped out to avoid drift. Morrill said it sounds like we're creating another policy for the exclusion areas. Jennings replied that the Board has to adopt a policy at some point of what should be excluded. In Massachusetts there are four types of exclusion areas: certified organic farms, surface water supplies, fish hatcheries/aquaculture, and potentially affected endangered species.
- Hicks said that all the products have aquatic warnings: do not apply over bodies of water, etc., except to target where adult mosquitoes are present in a public health emergency. They are also highly toxic to bees and say "Do not apply to blooming plants", etc., except to control adult mosquitoes in a public health emergency. All the labels have prohibition, except in the case of a public health emergency. EPA recognized that that needed to be on the label.
- Eckert asked whether the exclusion areas should be set now or later. Jennings replied that it needed to be done as soon as possible because people want a chance to review it, but that it shouldn't be put in rule because it takes too long to make changes to rules. He suggested that the staff come back with some ideas to discuss at the next meeting. Randlett noted that if there was a discussion about policy (as opposed to rule), there would be an opportunity for public comment about what should be excluded.
- Hicks said she would also have a label review summary ready for review/discussion at the next meeting.
  - **Eckert/Stevenson: Moved and seconded to adopt the rule amendment, the basis statement, the impact on small business, and the summary of comments and responses for Chapter 20 as written**
    - **In favor: Unanimous**
  - **Eckert/Stevenson: Moved and seconded to adopt the rule amendment, the basis statement, the impact on small business, and the summary of comments and responses for Chapter 22 as written**
    - **In favor: Unanimous**
  - **Eckert/Stevenson: Moved and seconded to adopt the rule amendment, the basis statement, the impact on small business, and the summary of comments and responses for Chapter 51 as written**
    - **In favor: Unanimous**

## 5. Consideration of a Consent Agreement with TruGreen Lawncare of Westbrook

On June 3, 1998, the Board amended its Enforcement Protocol to authorize staff to work with the Attorney General and negotiate consent agreements in advance in matters not involving substantial threats to the environment or public health. This procedure was designed for cases where there is no dispute of material facts or law, and the violator admits to the violation and acknowledges a willingness to pay a fine and resolve the matter. This case involved an unauthorized pesticide application.

Presentation By: Raymond Connors  
Manager of Compliance

Action Needed: Approve/disapprove the consent agreement negotiated by staff

- Connors summarized the case, explaining that the company acknowledged the allegations in the consent agreement. They had an explanation of how it came about, but they did not have authorization nor documentation that they should have had and they did not have a system in place to catch it. Part of the consent agreement was requiring documentation that the gap had been closed. The document they ended up with, after discussion with staff, is taken right out of the Board policy.
- Jemison said it was a little unclear whether someone from the company would be required to talk to someone or if they would just be using a “robo-call.” After some discussion, it was determined that the plan calls for the company to actually talk to someone and get authorization and that the robo-call is only to let the customer know exactly what day they will be there.
- Bohlen remarked that when these kinds of issues come before the Board, it is because someone had authorized services earlier; he appreciated that the consent agreement required the company to come up with a plan to deal with that.
- Flewelling noted that there seems to be a lot of confusion around lawn care and asked if some of it is because of subcontracting. Connors said this was a case of the customer having a contract with a company that subcontracted with The Turf Doctor; this customer was never a direct customer of The Turf Doctor. When The Turf Doctor was purchased by TruGreen they thought this person was a customer. Morrill pointed out that it is the responsibility of the applicator to verify that services were contracted for. He said the policy covers all bases and tells applicators what they need to do.
- Bohlen said the policy doesn’t have anything about the frequency of conversations. Stevenson and Morrill said contracts have to be renewed annually. Jennings said it has to be annual unless it there is a written contract with a specified end date.
- Stevenson noted that, in this case, it was not a hole in the policy, but a case of the policy not being followed at all. Jennings said that the old model in lawn care was that once a customer was signed up, they’re signed up for life, but customers weren’t always aware of that; and this policy was an attempt to clarify the terms of those agreements.
- Stevenson said that while fines are gratifying, requiring a plan is great; if they follow it, it will really make a positive difference. Bohlen agreed that the best outcome of an enforcement action is to see a policy change to reduce a recurrence.
  - **Eckert/Flewelling: Moved and seconded to accept the consent agreement**
  - **In favor: Unanimous**

## 6. Other Old or New Business

### a. Legislative Update—H. Jennings

- Jennings gave a brief overview of legislation of interest:
  - LD 292 was voted out of committee as a Resolve directing the Department to prepare a plan for protecting the public from mosquito-borne diseases.
  - LD 718, the GMO bill, came out of committee ought-to-pass. The Board and staff spent some time discussing this bill.
  - LD 903 originally called for a \$15 increase in product registration fees, but that was reduced in committee to \$10. There was concern that some companies might stop registering some products because of the relatively small market in Maine. The bill guarantees \$135,000 to the Cooperative Extension, but it keeps it as a BPC fund and gives the Board latitude to assess whether the fee is providing enough for staff, department, and grants, and requires an annual assessment of the health of the fund.
  - LD 920—prohibiting spraying on abandoned railroad lines. The committee voted it out as ought-not-to-pass.
  - LD 961—split report out of committee, majority ought-not-to-pass.
  - Two bills were never submitted. The first, regarding certification of applicators who are also licensed as dealers applied to only 14 people; the staff made a determination to align the certification periods for these 14 and send them all letters. The second bill was about giving oral exams to commercial applicators whose native tongue was not English. Staff worked out a plan to work with English-as-a-second-language applicants who were having trouble passing exams.
  - LD 1430 was unopposed. It should pave the way for a general permit for pesticide applications.
  - LD 1531—trying to make it possible to use 25(b) products on medical marijuana, because they are exempt from federal registration. There was a long discussion about this. Dave Bell made the comment that he was very surprised at some of the comments made at the ACF Committee, and that there is a lot of education to be done.

### b. GMO Memo—L. Hicks

- Hicks explained that she had written this memo for the ACF Committee to answer some questions they had asked her.

### c. Dubois Contracting Variance—H. Jennings

- This was just a routine notice to the Board that this variance had again been processed by the staff.

### d. Department of Transportation Variance—H. Jennings

- This was just a routine notice to the Board that this variance had again been processed by the staff.

### e. Funding for Mosquito Monitoring—H. Jennings

- Jennings explained that in past years the Maine CDC had \$40,000 of federal grants for mosquito monitoring; this year they have \$20,000. The Commissioner is supportive of providing BPC funds to at least make up the \$20,000 they lost and possibly more in the future.

- Bohlen asked whether this would be an annual expense, stating that it is a public health responsibility to pay for monitoring, not a BPC responsibility. While he's okay with granting the money for next year, he said a long-term solution needs to be found. He would like to see a comprehensive plan, of which monitoring is a part. There was some discussion about mosquito monitoring and funding. Jennings stated that monitoring is also the first step to any credible IPM program, and the BPC is all about IPM.

f. Other?

- Jennings mentioned that a new inspector had been hired for the Downeast region; her name is Heidi Nelson and she lives in East Machias; she worked for the USDA for many years.

7. Schedule of Future Meetings

June 21, July 26, September 6, October 18, and December 6, 2013, are tentative Board meeting dates. The September 6 meeting is tentatively slated to include a planning session. The Board will decide whether to change and/or add dates.

Adjustments and/or Additional Dates?

- No additional dates were added.

8. Adjourn

- **Eckert/Bohlen: Moved and seconded to adjourn at 11:39 AM**
- **In favor: unanimous**

## **BASIS STATEMENT FOR AMENDMENTS TO CHAPTER 27—STANDARDS FOR PESTICIDE APPLICATION AND PUBLIC NOTIFICATION IN SCHOOLS**

### **Basis Statement**

Resolve 2011, Chapter 59, To Enhance the Use of Integrated Pest Management on School Grounds directed the Board, as part of a Report to the Joint Standing Committee on Agriculture, Conservation and Forestry, to make recommendations for amending Chapter 27 “for minimizing the use of pesticides in schools and on school grounds.” The Committee supported the recommendations contained in the report and encouraged the Board to amend Chapter 27 accordingly. The report highlighted observations that IPM coordinators have — in practice — failed to take a central role in pest management decisions on school grounds, and are often not even aware of outdoor pesticide use. This observation became the primary focus of the recommendations since the effectiveness of the rule is dependent upon the role of the IPM coordinator.

In its rulemaking proposal, the Board incorporated most of the recommendations to amend Chapter 27 contained in the Legislative Report, and also chose to include a more stringent annual notification requirement, as well as a statement discouraging pesticide use strictly for aesthetic purposes. Overall, the recommendations were developed with a goal of not increasing the regulatory burden while improving the effectiveness of school IPM programs. The proposed amendments included additional elements designed to:

- Strengthen the role of the IPM Coordinator
- Reduce and consolidate the school pesticide record-keeping requirements
- Require parents to sign and return the beginning of year notification form
- Address communication weaknesses between contractors and IPM coordinators
- Provide for a way to maintain accurate contact information for school IPM coordinators

Based on a review of the hearing record, the Board altered its proposed amendments by eliminating the annual beginning of the year notice to parents altogether. The Board reasoned that available evidence indicated that few schools ever make pesticide applications requiring notification, and therefore it was not logical to impose a significant burden on schools for such a rare event as opposed to simply notifying all parents if such an event does occur. In addition the Board struck the clause that sought to discourage pesticide use for aesthetic purposes. The Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and there was not consensus about whether it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose.

In adopting the revised amendments, the Board found it had struck a rational balance by ensuring that pesticides are used judiciously on school grounds in a manner designed to minimize risks while still allowing school districts sufficient flexibility to craft their own philosophy about the use of pesticides on school grounds for the sake of appearances.

### **Impact on Small Business**

In accordance with 5 MRSA §8052, sub-§5-A, a statement of the impact on small business has been prepared. Information is available upon request from the Maine Board of Pesticides Control office, State House Station #28, Augusta, Maine 04333-0028, telephone 207-287-2731.

**Provisional Adoption**

At its December 7, 2012 meeting, the Board provisionally adopted the major substantive amendments to Chapter 27.

**Legislative Approval**

On February 7, 2013 The Joint Standing Committee on Agriculture, Conservation and Forestry (ACF) held a public hearing on LD 33, the resolve authorizing final adoption of the amendments, and work sessions were held on April 9, 2013 and May 22, 2013. Subsequently the ACF reported the resolve out as ought-to-pass as amended. The Legislature enacted the resolve and it became law without the Governor's signature on June 22, 2013 (Resolve 2013, Chapter 63).

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

TESTIMONY GIVEN AT SEPTEMBER 7, 2012 PUBLIC HEARING		
Person/Affiliation	Summary of Testimony	Board Response
Deven Morrill, Lucas Tree	<p><b>Concerns:</b> Questions excluding golf courses from the definition of school grounds. The proposed requirement that parents sign and return the annual notification form. He feels IPM already minimizes the use of pesticides. Does not support the proposed requirement under 6.A(2) because it shifts responsibility for notification to the commercial applicator.</p> <p><b>Suggestions:</b> Make definition of school grounds only include property owned by the school. Delete the proposed statement in 5A about avoiding aesthetic applications.</p>	The Board clarified that it was attempting to narrow the definition of school grounds by exempting private property that is used primarily for non-school activities. The Board agreed that requirement to have parents sign and return a form about pesticide notification was unwarranted given the few times that schools make applications requiring notice. It also voted to strike the sentence about avoiding applications strictly for aesthetic purposes.
Heather Spalding, Maine Organic Farmers and Gardeners Association	<p><b>Concerns:</b> The harmful effects of pesticides on children. She reminded Board members about the original intent of the legislation which ultimately led to the report and this rulemaking effort.</p> <p><b>Supports:</b> Restrictions on the use of pesticides at schools and daycares and increased use of organic land care practices on school grounds.</p>	The Board was mindful of the concerns outlined and included provisions that should strengthen the use of IPM principles on school grounds.

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Lisa Roy, Health Inspection Program, State of Maine	<p><b>Suggestions:</b> Require schools to follow Maine Food Code requirements; require notification to parents following an incident.</p>	The Board noted that the rule already states that a commercial pesticide applicator's license is required in the school setting, but it did not find the rule a logical place to reference food handling rules.
June Boston, Boston Co. Golf & Athletic Fields	<p><b>Concerns:</b> Contractor should not have to do the job of the IPM Coordinator.</p> <p><b>Suggestion:</b> Remove Section 6.A(2).</p>	The Board agreed and removed Section 6.A(2).

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Laurie Wolfrum	<b>Concerns:</b> Rule does not do enough to ensure safety of children. <b>Suggestions:</b> Do not exempt agricultural fields, nursery plot and greenhouses. If left exempt, require advance notification. Do not allow pesticide applications for cosmetic purposes.	The Board noted that the proposed exemption for agricultural activities requires that students and parents be informed about the potential for pesticide applications and that any applications be posted consistent with the rule. The Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and was not sure it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose. Consequently, it voted to strike reference to aesthetic (cosmetic) use of pesticides.
Julie Forbes, ND, North Bridgton, Maine	<b>Supports</b> proposed amendments; feels they strengthen the protections for children.	The Board agreed.
Amy Dietrich, Camden, Maine	<b>Suggestions:</b> No pesticides at school; do not exempt agricultural fields, nursery plots or greenhouses; do not allow IPM Coordinator to choose to use pesticides.	The Board observed that the Maine Legislature had the opportunity to eliminate most pesticide use on school grounds and elected not to. Consequently, it believed it was not its role to ban pesticide use on school grounds.

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Jody Spear, Brooksville, Maine	<p><b>Concerns:</b> Allowing pesticide use on school grounds for cosmetic purposes is bad policy. Believes that organic pest management and land management practices will result in lower costs and a safer environment for children. Cites a study in Florida in which sanitation and maintenance practices reduced indoor use of pesticide over 90%. Section 5.A states aesthetic uses should be avoided, while 5.C states the aesthetic threshold must be met. Does not support any exemptions for agricultural/horticultural areas. Questions the consequences when a school fails to adopt an IPM policy. Wonders what the training will consist of for IPM Coordinators. The Pest Management Activity Log is not required to describe reasons why pesticides are applied. Questioned why MSDSs are no longer part of the required records. Section 3.B(3) is unclear as to the actual meaning. Questioned the intention of exemptions and disagreed with exempting agricultural facilities from the notification requirements.</p> <p><b>Suggestions:</b> Believes that parents should receive advance notice of all pesticide applications made at schools. Section 3.C should make it clear that unlicensed school employees are not allowed to make mosquito control applications. Believes that “cosmetic” is the more accurate word to use when describing the Board’s policy on pesticide use on school grounds. The IPM Coordinator should inform the commercial applicator about the notification requirements, and not vice versa. Monitoring results should be the basis for pesticide applications and routine applications should be prohibited in the rule. Promotes the use of organic pest management practices on school grounds and sanitation and maintenance to reduce the need for indoor pesticide use.</p>	<p>The Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and was not sure it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose.</p> <p>The Board agreed that sanitation and maintenance are key components of IPM. It noted that the proposed exemption for agricultural activities requires that students and parents be informed about the potential for pesticide applications and that any applications be posted consistent with the rule. The Board agreed that the IPM Coordinator should take full responsibility for the notification requirements.</p> <p>The Board did not agree that low risk pesticide applications should require notification of parents. It supports the use of lowest risk/sustainable land care practices, but did not feel it is appropriate to limit practices to organic approaches only.</p> <p>The Board reordered the Pest Management Activity Log so that non-pesticide strategies are listed before pesticide applications are.</p>

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Leora Rabin, MD, Maine Medical Center, Portland, Maine	<b>Concerns:</b> Amendments decrease restrictions on the use of pesticides at schools. <b>Suggestions:</b> Increase regulations and minimize the use of pesticides.	The Board believes the proposed amendment will further promote use of IPM on school grounds.
Margery Forbes, Blue Hill, Maine	<b>Concerns:</b> Pesticides should not be used on school grounds; IPM Coordinator may not be interested in non-toxic methods. <b>Suggestions:</b> Revise rule to include non-toxic methods used to manage weeds and bugs.	The Board observed that the Maine Legislature had the opportunity to eliminate most pesticide use on school grounds and elected not to. Consequently, it believed it was not its role to ban pesticide use on school grounds. It also believes that the current rule promotes use of the lowest risk pest management approaches.
Ann Mullen, Belfast, Maine	<b>Concerns:</b> Students should not be treated as mini adults, subject to the Worker Protection Standard, which do not go far enough to protect adults; children are vulnerable to chemicals. <b>Suggestions:</b> Do not allow pesticides for aesthetic reasons; only allow pesticides for emergencies; require the use of safer, least-toxic products; no exceptions for parental notification; do not allow students to be trained as agricultural workers.	The Board reviewed the question of WPS training and concluded that it is valuable for students learning agricultural skills. WPS training is intended for people working long hours in direct contact with treated crops. Students are not allowed to apply pesticides in school settings and any contact with treated foliage will likely be minimal.  The Board observed that the Maine Legislature had the opportunity to eliminate most pesticide use on school grounds and elected not to. Consequently, it believed it was not its role to ban pesticide use on school grounds. Further, the Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and was not sure it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose.
Beedy Parker, Camden, Maine		
Carol Howell, Jefferson, Maine		
Erica Rudloff, Exeter, Maine		
Heather Evans, South Portland, Maine		
Paul Breeden, Sullivan, Maine		
Scott Gaiason, Lisbon Falls Maine		
Suzanne Hachey, Stetson Maine		

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Jayne Chase, Marlborough, New Hampshire		
Kathryn Stevens, Brunswick Maine		
Mary Owen, Augusta, Maine		
Molly Stone, Camden, Maine		
Natalie Lounsbury, Auburn, Maine		
Prescott McCurdy, Harpwell, Maine		
Read McNamara, Alfred, Maine		
Alice Sheppard, Presque Isle, Maine		
Alyssa Owens, Keene, New Hampshire	<p><b>Concerns:</b> Pesticides are not safe; testing does not include synergistic effect of multiple pesticides; pesticides are ineffective long-term solutions.</p> <p><b>Suggestions:</b> Be prudent with the use of synthetic pesticides.</p>	The Board believes that the IPM/BMP guidance minimizes the risks of pesticide use in school settings.
Marsha Smith, Camden, Maine	<p><b>Concerns:</b> Teaching students that it's okay to poison environment; teachers are as susceptible to health hazards as students.</p>	The Board believes that the IPM/BMP guidance minimizes the risks of pesticide use in school settings

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Abigail King, Natural Resources Council of Maine, Augusta, Maine	<p><b>Supports:</b> Improvements around notification, record-keeping and training.</p> <p><b>Concerns:</b> Statement about aesthetic purposes is not strong enough.</p> <p><b>Suggestions:</b> Ban the use of pesticides for aesthetic purposes; require schools to use only organic land care.</p>	<p>The Board agreed that the proposed amendments will improve the operation of the rule.</p> <p>The Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and was not sure it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose.</p>
Nichelle Harriott, Staff Scientist, and Jay Feldman, Executive Director, Beyond Pesticides	<p><b>Concerns:</b> Children are especially vulnerable to the harmful effects of pesticides. Opposed to aesthetic use of pesticides. Section 5.A states aesthetic uses should be avoided, but 5.C states pesticides should only be used when the aesthetic threshold has been exceeded. They oppose the substitution of WPS worker training for proper notification.</p> <p><b>Suggestions:</b> IPM guidance should be clearer about eliminating unnecessary pesticide use and promoting the least toxic approach to pest management. Training for IPM Coordinators is not defined and should stress pest prevention and cultural strategies with least toxic pesticide use as a last resort. The proposed pest management activity log should focus on the steps taken before the application and the reason for using a pesticide. Notification should cover all pesticide applications and should be provided to all staff, student and parents.</p>	<p>The Board agrees that children constitute a sensitive population and that’s why there is a rule designed to minimize the risks of pesticide use in the school setting. The Board decided it was not practical to determine what constitutes “aesthetic” use of pesticides and was not sure it was the Board’s role to determine whether municipalities and private schools should be allowed to use pesticides for that purpose. Use of the least toxic approach does not adequately evaluate the true risk, which is also dependent on the level of exposure and any risks associated with non-pesticidal approaches. The Board agreed that non-pesticide strategies should be listed on the log sheet before pesticide application entries.</p>

SUMMARY OF COMMENTS—CHAPTER 27—SEPTEMBER 2012

WRITTEN COMMENTS RECEIVED BY SEPTEMBER 28, 2012		
Person/Affiliation	Summary of Comments	Board Response
Ed Antz, Maine School Management Association	<p><b>Concerns:</b> The proposed training requirements for IPM Coordinators are not clearly defined and are potentially unreasonably burdensome. Notifying the BPC about the identity of the IPM Coordinator within two weeks of the beginning of the school year is not a customary approach, and the timing coincides with the busiest period of the school year. Requiring the IPM Coordinator to authorize pesticide applications is unnecessary and burdensome because applications are already authorized through written contracts. Opposes the new proposal to have parents sign and return the annual notification form and questions the purpose of Section 4.B of the amendment “when school is in session.”</p> <p><b>Supports:</b> Shifting responsibilities to the commercial applicators, since they are paid professionals and are familiar with pesticide laws.</p> <p><b>Suggestions:</b> One-time 20-minute awareness training video should be sufficient for IPM Coordinators.</p>	<p>The Board altered the training requirement so that newly appointed IPM Coordinators will simply have to read an overview of the key requirements initially and will have one year to complete a comprehensive training course. Only high risk pesticide applications will need to be authorized by the IPM coordinator, which is logical because these applications require the Coordinator to implement notification requirements prior to the application. The Board agreed that the proposed requirement for parents to sign and return an annual notification form was unreasonable given that most schools are not having applications made that require notice. The Board agreed that commercial applicators should have some responsibilities under the rule.</p>

**01 DEPARTMENT OF AGRICULTURE, FOOD AND RURAL RESOURCES**

**026 BOARD OF PESTICIDES CONTROL**

**Chapter 27: STANDARDS FOR PESTICIDE APPLICATIONS AND PUBLIC NOTIFICATION IN SCHOOLS**

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**SUMMARY:** ~~These regulations establish~~ This rule establishes procedures and standards for applying pesticides in school buildings and on school grounds. ~~This chapter~~ rule also sets forth the requirements for notifying school staff, students, visitors, parents and guardians about pending pesticide applications.

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**Section 1. Definitions**

- A. **Integrated Pest Management.** For the purposes of this ~~regulation~~ rule, Integrated Pest Management (IPM) means the selection, integration and implementation of pest damage prevention and control based on predicted socioeconomic and ecological consequences, including:
- (1) understanding the system in which the pest exists,
  - (2) establishing dynamic economic or aesthetic injury thresholds and determining whether the organism or organism complex warrants control,
  - (3) monitoring pests and natural enemies,
  - (4) when needed, selecting the appropriate system of cultural, mechanical, genetic, including resistant cultivars, biological or chemical prevention techniques or controls for desired suppression, and
  - (5) systematically evaluating the pest management approaches utilized.
- B. **School.** For the purposes of this ~~regulation~~ rule, School means any public, private or tribally funded:
- (1) elementary school,
  - (2) secondary school,
  - (3) kindergarten or
  - (4) nursery school that is part of an elementary or secondary school.
- C. **School Building.** For the purposes of this ~~regulation~~ rule, School Building means any structure used or occupied by students or staff of any school.

- D. **School Grounds.** For the purposes of this ~~regulation~~rule, School Grounds means:
- (1) land associated with a school building including playgrounds, athletic fields and agricultural fields used by students or staff of a school, and
  - (2) any other outdoor area used by students or staff including property owned by a municipality or a private entity that is regularly utilized for school activities by students and staff. School grounds do not include land utilized primarily for non-school activities, such as golf courses and museums.
- E. **Integrated Pest Management Coordinator.** An employee of the school system or school who is knowledgeable about integrated pest management and is designated by each school to implement the school pest management policy.
- F. **School Session.** For the purposes of this rule, school is considered to be in session during the school year including weekends. School is not considered to be in session during any vacation of at least one week.

## Section 2. Requirements for All Schools

- A. All public and private schools in the State of Maine shall adopt and implement a written policy for the application of Integrated Pest Management techniques in school buildings and on school grounds.
- B. Each school shall appoint an IPM Coordinator who shall act as the lead person in implementing the school's Integrated Pest Management policy. The IPM Coordinator shall be responsible for coordinating pest monitoring and pesticide applications, and making sure all notice requirements as set forth in this ~~chapter~~rule are met. In addition, the IPM Coordinator shall:
- (1) complete Board-approved IPM Coordinator overview training within one month of his/her first appointment as an IPM Coordinator and obtain Board documentation thereof;
  - (2) complete Board-approved IPM Coordinator comprehensive training within one year of his/her first appointment as an IPM Coordinator and obtain Board documentation thereof;
  - (3) obtain at least one hour of Board-approved continuing education annually;
  - (4) maintain and make available to parents, guardians and staff upon request:
    - a. the school's IPM Policy,
    - b. a copy of this rule (CMR 01-026 Chapter 27),
    - c. records of all pesticide applications as required under CMR 01-026 Chapter 50—Record Keeping and Reporting Requirements a “Pest Management Activity Log,” which must be kept current. Pest

management information must be kept for a minimum of two years from date of entry, and must include:

- i. the specific name of the pest and the IPM steps taken, as described under Section 5C of this rule; and
  - ii. a list of pesticide applications conducted on school grounds, including the date, time, location, trade name of the product applied, EPA Registration number, company name (if applicable) and the name and license number of the applicator. If the product has no EPA Registration number, then a copy of the label must be included.
- (5) authorize any pesticide application not exempted under Sections 3A(2), 3A(3), 3B, 3C, or 3D made in school buildings or on school grounds and so indicate by completing and signing an entry on the Pest Management Activity Log prior to, or on the date on which the minimum notification requirements must be implemented; and
- (6) ensure that any applicable notification provisions required under this rule are implemented as specified.
- ~~(4) copies of labels and material data safety sheets for all products applied, and~~
- ~~(5) when pesticides not exempt under Section 3 are applied, records of the IPM steps taken as described in Section 5.B. of this chapter.~~
- C. By September 1, every school shall inform the Board of the identity and the contact information for the IPM Coordinator. This requirement can be fulfilled through a Board approved reporting system.
- ~~C. Each school shall provide an annual notice to parents or guardians and school employees. This notice must be provided within two weeks of the start of the school year regardless of whether there are plans to have pesticides applied in the coming year.~~

### **Section 3. Exemptions**

- A. The following pesticide uses are exempt from the requirements of Sections 4 and 5 of this ~~Chapter~~rule:
- (1) application of ready-to-use general use pesticides by hand or with non-powered equipment to control or repel stinging or biting insects when there is an urgent need to mitigate or eliminate a pest that threatens the health or safety of a student, staff member or visitor,
  - (2) application of general use antimicrobial products by hand or with non-powered equipment to interior or exterior surfaces and furnishings during the course of routine cleaning procedures, and
  - (3) application of paints, stains or wood preservatives that are classified as general use pesticides.

- B. The following pesticide uses are exempt from the requirements of Section 4 of this ~~Chapter~~rule:
- (1) pesticides injected into cracks, crevices or wall voids,
  - (2) bait blocks, gels, pastes, granular and pelletized materials placed in areas inaccessible to students,
  - (3) indoor application of a pesticide with no re-entry or restricted entry interval specified on its label but entry to the treated area is restricted for at least 24 hours.
- C. When the Maine Center for Disease Control has identified arbovirus positive animals (including mosquitoes and ticks) in the area, powered applications for mosquito control are exempt from Section 4B(1) and 5B. Applicators should post the treated area as soon as practical, in a manner consistent with Section 4C(3)(a) 4B(2).
- D. School education facilities utilized for agricultural or horticultural education, and not normally used by the general school population, such as, but not limited to, greenhouses, nursery plots or agricultural fields, are exempt from the application limitations contained in Section 5E and notification provisions contained in Section 4B(1) provided that parents, staff and students are informed about the potential for pesticide applications in such areas. The posting requirements contained in Section 4B(2) must be complied with. In addition, students entering treated areas must be trained as agricultural workers, as defined by the federal Worker Protection Standard.

#### Section 4. Notification

- A. ~~Within two weeks of the start of every school year, notice shall be given by all schools to all school staff and parents or guardians of students advising them~~ A notice shall be included in the school's policy manual or handbook describing the school's IPM program including that a school integrated pest management policy exists and where it may be reviewed, that pesticides may periodically be applied in school buildings and on school grounds and that applications will be noticed in accordance with Sections 4B-D 4B hereof. This notice shall describe how to contact the IPM Coordinator and shall also state that records of prior pesticide applications and labels and material safety data sheets for the pesticides used and the school's IPM Policy, a copy of the Standards for Pesticide Applications and Public Notification in Schools regulation rule (CMR 01-026 Chapter 27), and the Pest Management Activity Log, are available for review.
- B. ~~Notices given as required by Section 4C shall state, as a minimum: (a) the trade name and EPA Registration number of the pesticide to be applied; (b) the approximate date and time of the application; (c) the location of the application; (d) the reasons for the application; and (e) the name and phone number of the person to whom further inquiry regarding the application may be made. These notices must be sent to school staff and parents or guardians of students at least five days prior to the planned application.~~
- C.B. ~~During the school year when classes are regularly scheduled~~ When school is in session, schools shall provide notice of pesticide applications in accordance with either Sections 4C(1) or 4C(2) and with Section 4C(3) 4B(1) and 4B(2). When classes are not regularly

~~scheduled~~ school is not in session, notice shall be accomplished by posting of signs as described in Section ~~4C(3)~~ 4B(2) of this rule.

- (1) Notice may be given to school staff and parents or guardians of students using a school whenever pesticide applications not exempted by Section 3 are performed inside a school building or on the school grounds, or
- (2)(1) The school ~~may shall provide~~ establish a notification registry whereby persons wishing notification of each application not exempted by Section 3 performed inside a school building or on school grounds to all school staff and parents or guardians of students. may make a written request to be put on the registry list to receive notice whenever pesticide applications not exempted by Section 3 are performed. Notices given shall state, at a minimum: (a) the trade name and EPA Registration number of the pesticide to be applied; (b) the approximate date and time of the application; (c) the location of the application; (d) the reasons for the application; and (e) the name and phone number of the person to whom further inquiry regarding the application may be made. These notices must be sent at least five days prior to the planned application.
- (3)(2) In addition to the notice provisions above, whenever pesticide applications not exempted by Section 3 are performed in a school building or on school grounds, a sign shall be posted at each point of access to the treated area and in a common area of the school at least two working days prior to the application and for at least forty-eight hours following the application. Posting of the notification signs as required by this ~~Chapter rule~~ satisfies the posting requirements of Chapter 28 of the Board's regulations rules (CMR 01-026 Chapter 28).
- a. The signs shall ~~be:~~
- i. ~~at least 8.5 inches wide by 11 inches tall for indoor applications;~~
  - ii. ~~at least 5 inches wide by 4 inches tall for outdoor applications;~~
  - iii. ~~made of rigid, weather resistant material that will last at least ninety six (96) hours when placed outdoors; and~~
  - ~~iv.~~i. be light colored (white, beige, yellow or pink) with dark, bold letters (black, blue, red or green).
- b. The signs for indoor applications must bear:
- ~~i.~~ii. bear the word CAUTION in 72 point type,
  - ~~ii.~~iii. bear the words PESTICIDE APPLICATION NOTICE in 30 point type or larger,
  - ~~iii.~~iv. state any reentry precautions from the pesticide labeling in at least 12 point type,

- iv. ~~the trade name and EPA Registration number(s) of the pesticide(s) to be applied in at least 12 point type,~~
- v. state the approximate date and time of the application in at least 12 point type, and
- vi. state the name of the company or licensed applicator making the pesticide application and a contact telephone number in at least 12 point type,
- b. The signs for indoor applications must:
- i. be at least 8.5 inches wide by 11 inches tall,
- ii. state the trade name and EPA Registration number(s) of the pesticide(s) to be applied in at least 12 point type,
- ~~vi.iii.~~ state the location of the application in at least 12 point type, and
- ~~vii.iv.~~ state the reason(s) for the application in at least 12 point type, and
- ~~viii.~~ the name and phone number in at least 12 point type of the person to whom further inquiry may be made regarding the application.
- c. The signs for outdoor applications must bear:
- i. ~~the word CAUTION in 72 point type,~~
- ii. ~~the words PESTICIDE APPLICATION in 30 point type or larger,~~
- i. be at least 5 inches wide by 4 inches tall,
- ii. be made of rigid, weather-resistant material that will last at least ninety-six (96) hours when placed outdoors,
- iii. bear the Board designated symbol (see appendix A), and
- ~~iv.~~ any reentry precautions from the pesticide labeling in at least 12 point type,
- v. ~~the trade name and EPA Registration number(s) of the pesticide(s) to be applied in at least 12 point type,~~
- vi. ~~the approximate date and time of the application in at least 12 point type,~~
- ~~vii.iv.~~ the location of the application in at least 12 point type, state a date and/or time to remove the sign.

- viii. ~~the reason(s) for the application in at least 12 point type, and~~
- ix. ~~the name and phone number of the person to whom further inquiry regarding the application may be made in at least 12 point type.~~

## **Section 5. Integrated Pest Management Techniques**

- A. All pest management activities shall be undertaken with the recognition that it is the policy of the State to work to find ways to use the minimum amount of pesticides needed to effectively control targeted pests in all areas of application. In all cases, applications should be conducted in a manner to minimize human risk to the maximum extent practicable using currently available technology.
- B. All pest management activities should be conducted using appropriate elements of integrated pest management as described in the latest Cooperative Extension or Department of Agriculture training manuals for pest management in and/or on school property. Pest management activities should also be conducted in accordance with the Best Management Practices for Athletic Fields & School Grounds, or other applicable Best Management Practices approved by the Board. ~~In all cases, applications should be conducted in a manner to minimize human risk to the maximum extent practicable using currently available technology.~~
- BC. Prior to any pesticide application the following steps must be taken and recorded:
  - (1) monitor for pest presence or conditions conducive to a pest outbreak,
  - (2) identify the pest specifically,
  - (3) determine that the pest population exceeds acceptable safety, economic or aesthetic threshold levels, and
  - (4) utilize non-pesticide control measures that have been demonstrated to be practicable, effective and affordable.
- ED. When a pesticide application is deemed necessary, the applicator must comply with all the requirements of CMR 01-026 Chapter 31–Certification and Licensing Provisions/Commercial Applicator. The applicator must also take into account the toxicity of recommended products and choose lowest risk products based on efficacy, the potential for exposure, the signal word on the pesticide label, the material safety data sheet, other toxicology data and any other label language indicating special problems such as toxicity to wildlife or likelihood of contaminating surface or ground water.
- DE. Indoor pesticide use must be limited to placement of baits and wall void or crack and crevice and pool and spa disinfectant treatments unless the pest threatens the health and safety of persons in the buildings as determined by the school's integrated pest management coordinator.

- ~~EF.~~ Pesticide applications must not be conducted when people are in the same room to be treated except that applicators may set out bait blocks, pastes or gels when only informed staff members are present. When space, spot, surface or fumigation applications are conducted the ventilation and air conditioning systems in the area must be shut off or the entire building must be evacuated. Applications should be planned to occur on weekends or vacations to allow maximum time for sprays to dry and vapors to dissipate.
- ~~FG.~~ Outdoor applications should be scheduled so as to allow the maximum time for sprays to dry and vapors to dissipate and shall not occur when unprotected persons are in the target area or in such proximity as to likely result in unconsenting exposure to pesticides. Applications must also be conducted in accordance with all other applicable Board rules designed for minimizing pesticide drift and posting of treated sites. Spot treatments should be considered in lieu of broadcast applications.
- ~~H.~~ ~~The Integrated Pest Management Coordinator must maintain records of pest monitoring as well as the same pesticide application information required in Section 1.A. of Chapter 50—Record Keeping & Reporting Requirements for a period of two years following all pesticide applications performed along with the labels and material safety data sheets for all products used in or on school property.~~

**Section 6. Requirements for Commercial Pesticide Applicators Making Applications in School Buildings or on School Grounds**

- A. Prior to conducting a pesticide application not exempted in Section 3 in a school building or on school grounds, commercial pesticide applicators shall obtain written authorization from the IPM Coordinator. Authorization must be specific to each application and given no more than 10 days prior to the planned application.
- B. Commercial pesticide applicators shall, within one business day of each pesticide application, provide the IPM Coordinator with a written record of the application including the date, time, location, trade name of the product applied, EPA Registration number and the name of the licensed applicator. If the product has no EPA Registration number then the applicator will provide a copy of the label.
- C. Commercial pesticide applicators shall inform the IPM Coordinator about any pest monitoring activity and results. If it is acceptable to the IPM Coordinator, this may be achieved by recording them in the Pest Management Activity Log.

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STATUTORY AUTHORITY: 7 M.R.S.A. §§ 601-625 and 22 M.R.S.A. §§ 1471-A-X.

EFFECTIVE DATE:

August 30, 2003, filing 2002-408 accepted October 24, 2002.

AMENDED:

July 5, 2005 – filing 2005-266

March 4, 2007 – Section 3(C), filing 2007-67

**Appendix A**

**Board Designated Symbol for Posting Outdoor Pesticide Applications to School Grounds**



# **Rulemaking Statement of Impact on Small Business 5 MRSA §8052, sub-§5-A**

## **Agency**

Department of Agriculture, Conservation and Forestry—Maine Board of Pesticides Control

## **Chapter Number and Title of Rule**

CMR 01-026, Chapter 27—Standards for Pesticide Application and Public Notification in Schools

## **Identification of the Types and an Estimate of the Number of the Small Businesses Subject to the Proposed Rule**

Approximately 25 small businesses commonly provide pest management/grounds management services to schools in Maine.

## **Projected Reporting, Record Keeping, and Other Administrative Costs Required for Compliance with the Proposed Rule, including the Type of Professional Skills Necessary for Preparation of the Report or Record**

The Board estimates that small businesses that have monthly service contracts (structures) will require an additional 10 minutes per visit to make entries in the log book, or about two hours per year for an annual administrative cost of approximately \$100 per school. Small businesses generally would service no more than 15 schools. Consequently, the maximum additional administrative cost could amount to \$1,500/year for a small business.

Grounds maintenance contractors conducting pesticide applications and monitoring services generally do not make as many visits to a school as structural pest managers. The Board estimates that the additional record keeping requirements may require up to two additional hours per year to complete for annual administrative cost of approximately \$100. Small businesses generally would service no more than 15 schools. Consequently, the maximum additional administrative cost could amount to \$1,500/year for a small business.

It should be noted that - for practical reasons - most companies that have been providing pest management/grounds maintenance services to schools have already been providing assistance with the administrative/record keeping requirements, thereby already spending more effort than the current amendments will require.

## **Brief Statement of the Probable Impact on Affected Small Businesses**

A few small businesses will incur minor additional administrative costs as a result of this amendment. However, most of the affected businesses have already been assisting schools with the record keeping requirements for practical reasons.

## **Description of Any Less Intrusive or Less Costly, Reasonable Alternative Methods of Achieving the Purposes of the Proposed Rule**

The Board sought to minimize administrative burdens associated with the amendments and was unable to identify any less intrusive or less costly alternatives.

STATE OF MAINE

—  
IN THE YEAR OF OUR LORD  
TWO THOUSAND AND THIRTEEN

—  
H.P. 26 - L.D. 33

**Resolve, Regarding Pesticide Applications and Public Notification in Schools**

**Emergency preamble.** Whereas, acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

**Whereas**, the Maine Revised Statutes, Title 5, chapter 375, subchapter 2-A requires legislative authorization before major substantive agency rules may be finally adopted by the agency; and

**Whereas**, the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control has submitted a major substantive rule regarding a portion of Chapter 27: Standards for Pesticide Applications and Public Notification in Schools to the Legislature for review; and

**Whereas**, appropriately designed and constructed school grounds, particularly athletic playing fields, are integral to minimizing the use of synthetic pesticides on school grounds; and

**Whereas**, immediate enactment of this resolve is necessary to record the Legislature's position on final adoption of the rule; and

**Whereas**, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore, be it

**Sec. 1. Adoption. Resolved:** That final adoption of portions of Chapter 27: Standards for Pesticide Applications and Public Notification in Schools, a provisionally adopted major substantive rule of the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control that has been submitted to the Legislature for review pursuant to the Maine Revised Statutes, Title 5, chapter 375, subchapter 2-A, is authorized; and be it further

**Sec. 2. Landscaping design. Resolved:** That the Commissioner of Education shall collaborate with the Department of Agriculture, Conservation and Forestry, Board

of Pesticides Control to develop standards and guidelines related to school grounds construction that would minimize or avoid the necessity of the use of pesticides on school grounds for new construction. The Commissioner of Education and the director of the Board of Pesticides Control shall report on their recommendations for school ground construction standards and guidelines to the Joint Standing Committee on Education and Cultural Affairs and the Joint Standing Committee on Agriculture, Conservation and Forestry by March 15, 2014.

**Emergency clause.** In view of the emergency cited in the preamble, this legislation takes effect when approved.



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY  
BOARD OF PESTICIDES CONTROL  
28 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB  
COMMISSIONER

HENRY JENNINGS  
DIRECTOR

To: Board of Pesticides Control Members  
From: Mary Tomlinson, Pesticides Registrar/Water Quality Specialist  
RE: EPA Special Local Need (SLN) [FIFRA, Section 24(c)] application to approve the use of GWN-1715, EPA Reg. No. 81880-4, to control mites and whiteflies in greenhouse tomatoes  
Date: July 26, 2013

\*\*\*\*\*

Enclosed is the above referenced Special Local Need (SLN) [FIFRA, Section 24(c)] application and supporting documents for your consideration.

In 2008, the Board of Pesticides Control approved a Section 24(c) for use of Nexter, a supplementally distributed product produced by Gowan Company, to control mites and whiteflies on greenhouse tomatoes. It has come to light that an SLN may only be issued by the basic registrant on the parent product. The SLN for Nexter, will be canceled and a new SLN registration for GWN-1715, the parent product produced by Canyon Group, will be submitted to the EPA with Board approval.

Following approval of the GWN-1715 SLN, Maine is then permitted to issue a supplemental SLN for Nexter based on the SLN for GWN-1715. That request will be submitted as a separate package.

Backyard Farms continues to require Nexter, as part of its IPM program, in order to effectively control mites and whiteflies in the greenhouse tomatoes. A tolerance of 0.15 ppm has been established by the EPA, for the active ingredient, pyridaben.

Please review the attached documents and let me know if you have any questions.

- FIFRA, Section 24(c) application
- Letter of support from Kyla Smith, Registration Specialist, Canyon Group/Gowan Company
- GWN-1715 draft Maine SLN label
- GWN-1715 Section 3 label
- GWN-1715 MSDS



United States Environmental Protection Agency  
Office of Pesticide Programs, Registration Division (7505C)  
Washington, DC 20460

**Application for/Notification of State Registration  
of a Pesticide To Meet a Special Local Need**  
(Pursuant to section 24(c) of the Federal Insecticide,  
Fungicide, and Rodenticide Act, as Amended)

For State Use Only  
Registration No. Assigned  
Date Registration Issued

<b>1. Name and Address of Applicant for Registration</b> Canyon Group 370 S Main Street Yuma, AZ 85365		<b>2. Product is (Check one)</b> <input checked="" type="checkbox"/> EPA-Registered EPA Registration Number 81880-4 <input type="checkbox"/> New (not EPA-registered) Attach EPA Form 8570-4, Confidential Statement of Formula for new products. EPA Company Number	
<b>4. Product Name</b> GWN-115		<b>3. Active Ingredient(s) in Product</b> Pyridaben	
<b>6. Type of Registration (Give details in Item 13 or on a separate page, properly identified and attached to this form):</b> <input type="checkbox"/> a. To permit use of a new product. <input checked="" type="checkbox"/> b. To amend EPA registrations for one or more of the following purposes: <input type="checkbox"/> (1) To permit use on additional crops or animals. <input checked="" type="checkbox"/> (2) To permit use at additional sites. <input type="checkbox"/> (3) To permit use against additional pests. <input type="checkbox"/> (4) To permit use of additional application techniques or equipment. <input type="checkbox"/> (5) To permit use at different application rates. <input type="checkbox"/> (6) Other (specify below)		<b>5. If this is a food/feed use, a tolerance or other residue clearance is required. Cite appropriate regulations in 40 CFR Part 180, 185, and/or 186.</b> 180.494	
<b>10. Has FIFRA section 24(c) registration for this use of the product ever, by another State, been (check appropriate box(es), if known):</b> <input type="checkbox"/> Sought <input type="checkbox"/> Issued <input type="checkbox"/> Denied <input type="checkbox"/> Revoked If any of the above are checked, list States in Item 13 below. <input type="checkbox"/> No FIFRA section 24(c) Action		<b>7. Nature of Special Local Need (check one)</b> <input type="checkbox"/> There is no pesticide product registered by EPA for such use. <input checked="" type="checkbox"/> There is no EPA-registered pesticide product which, under the conditions of use within the State, would be as safe and/or as efficacious for such use within the terms and conditions of EPA registration. <input type="checkbox"/> An appropriate EPA-registered pesticide product is not available.	
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		<b>8. If this registration is an amendment to an EPA-registered product, is it for a "new use" as defined in 40 CFR 152.3 ?</b> <input type="checkbox"/> Yes (discuss in Item 13 below) <input checked="" type="checkbox"/> No	
Signature of Applicant or Authorized Representative  Title Kyla S Smith, Agent for Canyon Group		<b>9. Has an EPA Registration or Experimental Use Permit for this chemical ever been (check applicable box(es), if known):</b> <input type="checkbox"/> Sought <input checked="" type="checkbox"/> Issued <input type="checkbox"/> Denied <input type="checkbox"/> Cancelled <input type="checkbox"/> Suspended <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Experimental Use Permit <input type="checkbox"/> No Previous Permit Action	
Telephone Number 928-819-1531		Date 7-9-13	
<b>Determination by State Agency</b> This registration is for a Special Local Need and is being issued in accordance with section 24(c) of FIFRA, as amended. To the best of our knowledge, the information above is correct, except as noted in "Comments" below or in attachments.			
<b>Name, Title, and Address of State Agency Official</b> Mary Tomlinson Maine Board of Pesticides Control 28 State House Station Augusta, ME 04333		<b>Comments (by State Agency Only)</b>	<b>Received by EPA</b>
Title Pesticides Registrar/Water Quality Specialist			
Telephone Number (207) 287-2731		Date July 26, 2013	

# Canyon Group LLC™

370 S. Main Street • Yuma, AZ 85364 • ph 928.783.8844 • fax 928.343.9255

July 9, 2013

Attention: Mary E. Tomlinson  
Department of Agriculture  
Maine Board of Pesticides Control  
28 State House Station  
Augusta, ME 04333

RE: GWN-1715, EPA Reg. No. 81880-4  
SLN No. ME-13XXXX for Greenhouse Tomatoes

Dear Ms. Tomlinson:

Canyon Group is requesting SLN ME-13XXXX, for use of Nexter (active ingredient pyridaben) on greenhouse tomatoes.

Backyard Farms in Madison, Maine originally supported this SLN for Gowan Company. They have confirmed that GWN-1715 (ABN Nexter) continues to be a product that they rely on to fight mites and whitefly. They will be following this letter with an updated letter of support; however, all of the reasons they originally supported this SLN still apply today.

Canyon Group gives permission to Gowan Company to issue a supplemental SLN for Nexter, EPA Reg. No. 81880-4-10163, and distribute product to growers.

In support of this transfer / extension, I have enclosed the following:

1. EPA application for State Registration of a pesticide to meet a Special Local Need (8570-25)
2. Proposed SLN No ME-13XXXX including an expiration date of 12/31/18

If you need any additional information, please feel free to contact me at [kssmith@gowanco.com](mailto:kssmith@gowanco.com).

Sincerely,



Kyla S. Smith, Agent for Canyon



July 9, 2013

Attention: Mary Tomlinson, Registrar  
28 State House Station  
Augusta, ME 04333-0028

RE: Nexter, EPA Reg. No. 81880-4-10163, SLN in Maine

Dear Ms. Tomlinson:

At Backyard Farms, we follow a biologically based integrated pest management program in managing all of our pests. We have successfully incorporated Nexter (EPA Reg. 81880-4-10163), a product manufactured by Gowan, to gain control over our whitefly and mite populations for several years through your support of a SLN label.

The basis of our whitefly pest management program is the weekly introduction of the beneficial insects *Encarsia formosa* and *Eretmocerus eremicus*. These introductions do a good job curbing the whitefly life cycle. However, corrections are periodically needed to help keep the balance between pest and beneficial populations.

Nexter has a very strong knock down of adult whiteflies with minimum residual effect and minimum residues. Because our beneficial insects parasitize the larval stages, Nexter complements our integrated pest management program by killing the adults and creating a situation where our beneficial insects are able to gain control of the problem again. Nexter also aids in the control of mites for which there is no effective biological control in tomatoes. In years prior to using Nexter, mites had affected nearly 15% of our growing area and many other measures taken to control mites decreased the efficacy of the beneficial insects working to control the whitefly- therefore causing significant interruption to our biological balance. With Nexter we have found a chemical that can help to effectively control both pests and allow us a smooth transition back to a biologically based IPM system.

Since our original request for the SLN for Nexter was approved, we have found it highly effective at controlling both whitefly and mites. We would like your continued support for the use of Nexter in greenhouse tomatoes in Maine. Please continue to support this critical submission for Nexter to be used at our greenhouse.

Sincerely,

Erika Verrier

IPM Manager  
Backyard Farms  
131 River Road  
Madison, ME 04950  
(T) 207-696-5200 Ext. 2148  
(F) 207-696-5322  
(C) 207-612-8911



# Section 24(c) Special Local Need Label

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF MAINE

## GWN-1715

EPA Reg. No 81880-4 / EPA SLN NO. ME-13XXXX  
Expires 12-31-2018

### For Control of Mites and Whiteflies on Greenhouse Tomatoes

ACTIVE INGREDIENT:	% By Wt.
[2- <i>tert</i> -butyl-5-(4- <i>tert</i> -butylbenzylthio)-4-chloropyridazin-3(2 <i>H</i> )-one].....	75.0%
OTHER INGREDIENTS:.....	25.0%
	<b>Total 100.0%</b>

### KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### DIRECTIONS FOR USE

- It is a violation of Federal law to use this labeling in a manner inconsistent with its labeling.
- All applicable directions, restrictions and precautions on the EPA-registered label are to be followed.
- This labeling must be in the possession of the user at the time of the pesticide application.

CROP	RATE	PEST	COMMENTS
Greenhouse tomatoes	4 oz per 100 gallons of water Or 0.09 oz per 1000 sq. ft.	European red mite, Citrus red mite, Twospotted spider mite, Broad mite	Apply when mites first appear and before a threshold of five spider mites per leaf is reached.
	4-6 oz per 100 gallons of water Or 0.09 - 0.14 oz per 1000 sq. ft.	Whiteflies	
<ul style="list-style-type: none"> <li>• Do not apply within 2 day of harvest (PHI)</li> <li>• Do not make more than 2 applications per crop cycle</li> <li>• Do not apply more than 8 oz of product per crop cycle</li> <li>• Do not enter a treated greenhouse or a treated indoor area without protective equipment for <b>12 hours</b> unless one of the following items is completed: <ul style="list-style-type: none"> <li>○ 10 air exchanges</li> <li>○ 2 hours of system ventilation</li> <li>○ 4 hours of ventilation using vents, windows or other passive ventilation</li> <li>○ All required PPE is worn.</li> </ul> </li> <li>• Allow a minimum of 30 days between sequential applications of <b>GWN-1715</b> in crops that allow more than 1 application per season.</li> <li>• Do not apply this product through any type of irrigation system.</li> <li>• Do not apply this product aerially.</li> </ul>			

**Coverage:** Apply GWN-1715 in sufficient water to ensure thorough coverage of foliage and fruit. Thorough coverage is required for optimum control.

24(c) Registrant: Canyon Group  
C/O Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

SLN: ME-13XXXX GWN-1715 Greenhouse tomatoes (approved X-X-13)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460-0001

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 16, 2010

Ms. Kyla S. Smith,  
Agent for Canyon Group  
c/o Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

**Subject: Amended Labeling, Response to PR Notice 2007-4  
GWN-1715 Miticide/Insecticide, EPA Reg. No. 81880-4  
Your Submission Dated January 18, 2010**

Dear Ms. Smith:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable with the following label revision provision(s):

General Comment(s):

1. Delete all text throughout the label marked with "strikethrough."

First Aid section comment(s):

2. Revise the 2<sup>nd</sup> sentence within the "HOT LINE NUMBER" subsection to read "**For additional information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), you may call 1-888-478-0798.**"<sup>1</sup>

Precautionary Statements, Hazards to Humans & Domestic Animals subsection comment(s):

3. Revise the 10<sup>th</sup> sentence to read "Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet."

Directions for Use section comment(s):

4. Revise the existing subsection title "**GENERAL INFORMATION**" to read "**USE INFORMATION.**"
5. Revise the existing subsection title "**RESTRICTIONS AND LIMITATIONS**" to read "**USE RESTRICTIONS AND PRECAUTIONS.**"

Storage and Disposal section comment(s):

6. To facilitate inclusion of language from PR Notice 2007-4, revise the 4<sup>th</sup> sentence within the "**Container Disposal:**" subsection to read "The outer case and inner overwrap packaging of the water-soluble bag should be offered for recycling, if available or disposed of in a sanitary landfill, or by other procedures approved by state and local authorities."

<sup>1</sup> Please note that the "1-888-478-0798" telephone number listed must be available twenty-four (24) hours per day, seven (7) days per week for answering and responding to any medical emergencies or health concerns.

A copy of your label stamped "Accepted with Comments" is enclosed for your records. Please submit two (2) copies of the final printed labeling, incorporating the above changes, before releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with section 6(e) of FIFRA. Your release for shipment of the product bearing amended labeling constitutes accepting of these conditions.

If you have any questions about this label review, please contact Mr. Carmen Rodia at (703) 306-0327 or via e-mail at [Rodia.Carmen@epa.gov](mailto:Rodia.Carmen@epa.gov).

Sincerely yours,

*FOR*  


Richard J. Gebken  
Product Manager (10)  
Insecticide Branch  
Registration Division (7504P)

Enclosure: *Copy of label stamped "Accepted with Comments"*

081880-00004 D430848

# GWN-1715

## Miticide/Insecticide

<b>ACTIVE INGREDIENT:</b>		<b>% By Wt.</b>
[2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one]	.....	75.0%
<b>OTHER INGREDIENTS:</b>	.....	25.0%
		<b>Total 100.0%</b>

### KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
If inhaled	•Move person to fresh air. •If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. •Call a poison control center or doctor for further treatment advice.
If swallowed	•Call a poison control center or doctor immediately for treatment advice. •Have person sip a glass of water if able to swallow. •Do not induce vomiting unless told to do so by a poison control center or doctor. •Do not give anything to an unconscious person.
If on skin or clothing	•Take off contaminated clothing. •Rinse skin immediately with plenty of water for 15-20 minutes. •Call a poison control center or doctor for treatment advice.
If in eyes	•Hold eye open and rinse slowly and gently with water for 15-20 minutes. •Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. •Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. <b>FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL 1-888-476-0798.</b>	

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

May be fatal if inhaled. Do not breathe dust or spray mist. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with a N, P, R, or HE pre-filter. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves. Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eye wear
- For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with a N, P, R, or HE pre-filter.
- Chemical resistant headgear for overhead exposure.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statement:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

NET CONTENTS \_\_\_ POUNDS

EPA Reg. No. 81880-4  
EPA Est. No.

ACCEPTED

With COMMENTS  
In EPA Letter Dated:

June 16, 2010

Under the Federal Insecticide, Fungicide  
and Rodenticide Act, As amended, for the  
pesticide Registered under EPA Reg. No:

81880-4

**Gowan**  
The Go To Company

Produced For:  
Canyon Group  
C/O Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366-5569

## USER SAFETY RECOMMENDATIONS

### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Keep out of lakes, ponds, or streams. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. Do not apply when weather conditions favor drift from target area. Drift or runoff from treated areas may be hazardous to fish in adjacent sites. This product is highly toxic to bees. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Application early in the morning or at dusk is suggested.

## ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

## DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

All applicable directions, restrictions, precautions and **Notice of Conditions of Sale and Warranty and Liability Limitations** are to be followed.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of **12 hours**. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

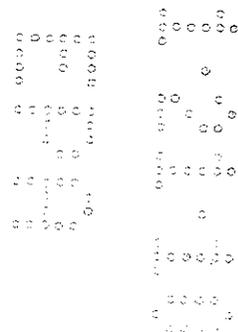
- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eye wear
- For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with a N, P, R, or HE pre-filter.
- Chemical resistant headgear for overhead exposure.

## GENERAL INFORMATION

This package contains **GWN-1715 Miticide/Insecticide**, a 75% wettable powder, in water-soluble bags. **GWN-1715** is a selective contact Miticide/Insecticide that controls pests in apples, almonds, apricots, cherries, citrus groves and non-bearing citrus nursery beds or greenhouses, cranberries, grapes, nectarines, peaches, pears, pistachio, plums, prunes and tree nut group when used at recommended rates. (Refer to **Table 1. GWN-1715 Application Rate Table**.) **GWN-1715** provides knockdown and residual control. A good performance evaluation can be made 4-7 days after treatment. For optimum results, **GWN-1715** should be applied as pest populations build and prior to reaching economic thresholds.

### Mite Resistance Management

Naturally occurring strains of mites and insects listed on this label may not be effectively controlled due to reduced sensitivity. If insensitive strains are present in a field, use a product with a different mode of action to ensure control. **GWN-1715** use should be alternated with other miticides as part of a mite management program to minimize resistance. Repeated use of the same miticide has been documented to result in the buildup of resistant strains of mites. To limit the potential for **GWN-1715** insensitivity development, do not make more applications than those specified under the maximum per-season in **Table 2. Crop-Specific Restrictions and Limitations**. Consult with your local or state extension personnel for advice on miticide use and selection.



**Table 1. GWN-1715 Miticide/Insecticide  
Application Rate Table**

Pests Controlled	Rate per Acre
European red mite	4.4 - 5.2 oz
Southern red mite	4.4 - 7.0 oz
Apple Rust mite Blackmargined aphid Broad mite Citrus Bud mite Citrus red mite Citrus rust mite Eastern grape leafhopper (nymphs) False spider mite (Citrus leaf mite) Grape leafhopper (nymphs) Peach silver mite Pear Rust Mite Pink citrus rust mite Silverleaf whitefly <sup>2</sup> Sixspotted mite Sweet potato whitefly <sup>2</sup> Texas citrus mite Variegated leafhopper (nymphs) Virginia creeper leafhopper (nymphs) White apple leafhopper (nymphs) <sup>2</sup> Willamette spider mite Yellow pecan aphid	5.2 - 10.67 oz
McDaniel spider mite Pacific spider mite Pear Psylla	6.6 - 10.67 oz
Twospotted spider mite	8.8 - 10.67 oz
Pests Suppressed	Rate per Acre
Apple aphid Brown citrus aphid Citrus root weevil	5.2 - 10.67 oz
<sup>1</sup> Allow a minimum of 30 days between sequential applications of GWN-1715 in crops that allow more than 1 application per season. For rates above 5.2 ounces per acre on citrus, apply GWN-1715 on a 90 day interval. <sup>2</sup> Silverleaf whitefly, White apple leafhopper (nymphs), and Sweet potato whitefly are only considered to be suppressed in California.	

**Cleaning Spray Equipment**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and by triple rinsing the equipment before and after applying this product.

**APPLICATION INSTRUCTIONS**

**GWN-1715** may be applied by ground equipment using either diluted or concentrated sprays. Apply recommended rates of **GWN-1715** as instructed by section VII. **Crop-Specific Information**. Spray the last 3 rows windward of surface water using nozzles on only one side with the spray directed away from surface water. Avoid spraying over the tops of trees by adjusting or turning off the top nozzles. Shut the nozzles on the side away from the grove off when spraying the outside row. Shut the nozzles off when turning at the ends of the rows and when passing tree/vine gaps in rows.

**Coverage**

Apply **GWN-1715** in sufficient water to ensure thorough coverage of foliage and fruit. Thorough coverage is required for optimum control. Spraying alternate rows may reduce **GWN-1715** performance. **GWN-1715** must be applied to each row for optimum control. To achieve adequate coverage, use proper spray pressure, nozzles, nozzle spacing, volume per acre, and tractor speed. Consult spray nozzle and accessory guide for information pertaining to proper equipment calibration.

**Ground Application (Broadcast)**

**Water Volume:** Use 100-400 gallons of spray solution per broadcast acre for optimal performance. In Florida, a minimum of 20 gallons of water per acre in citrus may be used.

**ADDITIVES**

In general, no additives or adjuvants are necessary for effective use of **GWN-1715**. However, the use of additives may be considered for certain conditions such as obtaining better spray distribution, adhesion or penetration of product onto leaf or plant surfaces. Consult a Canyon representative or local agricultural authorities for more information concerning additives.

**—GENERAL TANK MIXING INFORMATION**

The phytotoxic potential of **GWN-1715** has been assessed on a wide variety of plants with no phytotoxicity observed. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match the information under which testing had been conducted. Therefore, before using **GWN-1715** test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

**Compatibility Test for Mix Components**

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** (see below) using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

**Mixing Order**

1. **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
2. **Agitation.** Maintain constant agitation throughout mixing and application.
3. **Products in PVA bags.** Place any product contained in water-soluble PVA bags such as **GWN-1715 miticide/insecticide** into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
4. **Water-dispersible products** (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
5. **Water-soluble products.**
6. **Emulsifiable concentrates** (such as oil concentrate when applicable).
7. **Water-soluble additives** (such as AMS or UAN when applicable).
8. **Remaining quantity of water.** Maintain constant agitation during application.

Carefully remove the recommended number of water-soluble bags from the inner overwrap packaging and carefully place them into the spray water in the mixing tank. Reseal the outer package making sure that no moisture contacts the water-soluble bags. Do not open the water-soluble bags. Allow the bags to completely dissolve. Use the maximum agitation while mixing **GWN-1715** in the spray tank.

A defoaming agent may also be necessary. Do not attempt to dissolve the water-soluble bags directly in diesel oils or summer spray-type oils. The bags are water-soluble, not oil soluble.

Boron will prevent the water-soluble bags from dissolving. If boron-containing products are to be used, the water-soluble bags containing **GWN-1715** must be dissolved completely before the boron-containing product can be added to the spray tank. If boron-containing products have been used in previous applications, thoroughly wash the spray tank before using **GWN-1715**. Always reseal the overwrap package to protect the remaining unused bags.

**RESTRICTIONS AND LIMITATIONS**

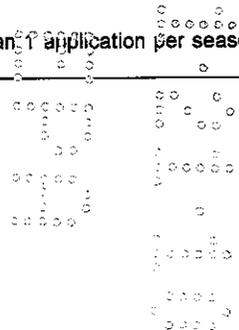
- **Preharvest Interval (PHI):** Refer to Table 2 Crop Specific Restrictions and Limitations
- **Restricted Entry Interval (REI):** 12 hours.
- Do not apply **GWN-1715** by air.
- Except for cranberries, do not apply through any type of irrigation equipment.
- Do not use less than 100 gallons of water per acre except the following:
  - 50 gallons on grapes and pistachios
  - 20 gallons on citrus grown in Florida
- Do not apply **GWN-1715** to apricots and cherries in California
- **Drift:** Do not apply **GWN-1715** when weather conditions favor drift to surface water. Do not apply within 110 feet upwind of surface water or when windspeed is above 8 mph. Do not apply during a temperature inversion.
- Allow a minimum of 30 days between sequential applications of **GWN-1715** in crops that allow more than 1 application per season. For rates above 5.2 ounces per acre on citrus, apply **GWN-1715** on a 90 day interval.
- **GWN-1715** is not for sale, distribution, or use in Nassau and Suffolk counties in New York State. In the remainder of the state, read and follow all applicable directions, restrictions and precautions on this label

Crop	Minimum Time from Application to Harvest (PHI)(Days)	Maximum Rate Per Acre Per Application (oz)	Maximum Number of Applications Per Season <sup>3</sup>	Aircraft Application
Apples	25	10.67	1	No
Apricots <sup>1</sup>	300	10.67	2	No
Cherries <sup>1</sup>	300	10.67	2	No
Citrus	7	10.67	2	No
Cranberries <sup>2</sup>	21	10.67	2	No
Grapes	7	10.67	2	No
Nectarines	7	10.67	2	No
Peaches	7	10.67	2	No
Pears (including oriental)	7	10.67	1	No
Pistachio	7	10.67	2	No
Plums	7	10.67	2	No
Prunes	7	10.67	2	No
Tree Nut Group (Almond, Beech, Brazil, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory, Macadamia, Pecan, Black Walnut and English Walnut)	7	10.67	2	No

<sup>1</sup> Do not Apply GWN-1715 to apricots and cherries in California

<sup>2</sup> Use GWN-1715 in cranberries in CT, DE, ME, MA, NH, NJ, NY, RI AND VT only.

<sup>3</sup> Allow a minimum of 30 days between sequential applications of GWN-1715 in crops that allow more than 1 application per season. For rates above 5.2 ounces per acre on citrus, apply GWN-1715 on a 90 day interval.



## CROP-SPECIFIC INFORMATION

### APPLES

See Table 1 for application rates for specific pests. Apply **GWN-1715 Miticide/Insecticide** in 100-400 gallons of water per acre. **GWN-1715** must be applied to each row for maximum coverage. Use the higher rate of **GWN-1715** to ensure adequate concentration in mature orchards with dense foliage.

### CITRUS

Apply 5.2-10.67 ounces of **GWN-1715 Miticide/Insecticide** in sufficient water to achieve thorough coverage. For rates above 5.2 ounces per acre, apply **GWN-1715** on a 90-day interval. Use the higher rate of to ensure adequate concentration in full size trees with dense foliage.

When combining **GWN-1715** with summer oils, use a minimum of 5 gallons of oil and 6.6 ounces of **GWN-1715** per acre.

- **In Florida Only**, **GWN-1715** may be applied in low volume application equipment with a minimum water volume of 20 gallons of water per acre. It is the user's responsibility to ensure thorough spray coverage in these low volume applications.

### CRANBERRIES

**GWN-1715** is registered for use on cranberries in the states of Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont.

**GWN-1715** is a selective Miticide/Insecticide that controls southern red mite in cranberries when used at recommended rates. Complete spray coverage of both upper and lower leaf surfaces is essential for optimal performance.

Applications should be made either early season (mid-May to mid-June) or after fruit set (mid-July through August). Do not apply **GWN-1715** when bees are actively foraging. The preharvest interval of 21 days must be observed.

**GWN-1715** may be applied by chemigation or by ground equipment. Sufficient water volume is necessary to obtain complete coverage of the spray target. Apply 3.5-7.0 ounces of **GWN-1715** in no less than 100 gallons and no more than 600 gallons of water per acre. If using chemigation, use an injection system protected by backflow equipment.

**Chemigation:** Apply this product only through solid set or hand-move sprinkler systems. Do not apply this product through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water. Use only in sprinklers that apply uniformly and have appropriate check valves. When application of pesticide is complete thoroughly flush out the injection system and sprinkler lines with a minimum volume of water for complete rinse-out. The system must contain a functional check valve or appropriate gooseneck pipe loop, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or, in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a Venturi injector on the discharge side of the pump, or a metering pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

#### Chemigation Systems Connected to Public Water Systems:

Public water system means a system for the provision of piped water to the public for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional reduced pressure zone (RPZ) backflow preventor, or the functional equivalent, in the water supply upstream from the point of pesticide introduction. As an additional option to the RPZ, the water from a public water system can be discharged into a reservoir tank prior to pesticide introduction. There should be a complete physical break (air gap) of at least twice the inside diameter of the pipe between the outlet end of the pipe and the top of the overflow rim of the reservoir tank.

### GRAPES

See Table 1 for application rates for specific pests. Apply **GWN-1715 Miticide/Insecticide** in 50-400 gallons of water per acre. **GWN-1715** must be applied to each row for maximum coverage. Use the higher rate of **GWN-1715** to ensure adequate concentration in mature vineyards with dense foliage.

### PEARS

#### Pear (Including Oriental)

See Table 1 for application rates for specific pests. Apply **GWN-1715** in 100-400 gallons of water per acre. **GWN-1715** must be applied to each row for maximum coverage. Use the higher rate of **GWN-1715** to ensure adequate concentration in mature orchards with dense foliage.

In pears, applications may be made early from pink through petal fall to control eggs, early pear psylla instars and mobile mites. **GWN-1715** is also effective when applied after petal fall as mite populations begin to build.

### STONE FRUIT

#### Apricots, Cherries, Nectarines, Peaches, Plums and Prunes

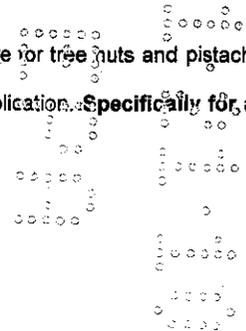
See Table 1 for application rates for specific pests. Apply **GWN-1715** in 100-400 gallons of water per acre. **GWN-1715** must be applied to each row for maximum coverage. Use the higher rate of **GWN-1715** to ensure adequate concentration in mature orchards with dense foliage. For best control, pest populations must be building with primarily immature stages present at time of application.

**CHERRIES AND APRICOTS ARE TREATED AFTER SPRING HARVEST AND HAVE A 300-DAY PHI. GWN-1715 CANNOT BE USED ON THESE TWO CROPS IN CALIFORNIA.**

### TREE NUT GROUP AND PISTACHIOS

See Table 1 for application rates for specific pests. Apply **GWN-1715** in 100-400 gallons for water per acre for tree nuts and pistachios. Use the higher rate of **GWN-1715** to ensure adequate concentration in full sized trees with dense foliage.

For best control, pest populations must be building with primarily immature stages present at time of application. **Specifically for almonds:** Applications may be made earlier from shuck split through midsummer.



**Crops**

This product can be used on the following Crops:

Almond	Chestnut	Nectarines
Apples	Chinquapin	Peaches
Apricots	Citrus	Pear
Beech	Cranberries	Pecan
Blackwalnut	English Walnut	Pistachio
Brazil Nut	Filbert	Plums
Butternut	Grapes	Prunes
Cashew	Hickory	
Cherries	Macadamia	

Look inside for complete Restrictions and Limitations and Application Instructions.

**Pests listed in this label:**

Broad mite	<b>Family: Tarsonemidae</b> <i>Polyphagotarsonemus latus</i>
False spider mite	<b>Family: Tenuipalpidae</b> <i>Brevipalpus phoenicis</i>
Citrus flat mite	<i>Brevipalpus lewisi</i>
Apple Rust mite	<b>Family: Eriophyidae</b> <i>Aculus schlectendali</i>
Citrus bud mite	<i>Aceria sheldoni</i>
Citrus rust mite	<i>Phyllocoptruta oleivora</i>
Peach silver mite	<i>Aculus fockeui</i>
Pear rust mite	<i>Epitremerus pyri</i>
Pink citrus rust mite	<i>Aculops pelekassi</i>
Citrus red mite	<b>Family: Tetranychidae</b> <i>Panonychus citri</i>
European red mite	<i>Panonychus ulmi</i>
McDaniel spider mite	<i>Tetranychus mcdanieli</i>
Pacific spider mite	<i>Tetranychus pacificus</i>
Sixspotted mite	<i>Eotetranychus sexmaculatus</i>
Southern red mite	<i>Oligonychus ilicis</i>
Texas citrus mite	<i>Eutetranychus banksi</i>
Twospotted spider mite	<i>Tetranychus urticae</i>
Willamette spider mite	<i>Eotetranychus willamettei</i>
Citrus root weevil	<b>Family: Curculionidae</b> <i>Pachnaeus litus</i>
Apple aphid	<b>Family: Aphididae</b> <i>Aphis pomi</i>
Blackmargined aphid	<i>Monelia caryella</i>
Brown citrus aphid	<i>Toxoptera citricida</i>
Yellow pecan aphid	<i>Monelliopsis pecanis</i>
Sweet potato whitefly	<b>Family: Aleyrodidae</b> <i>Bemisia tabaci</i>
Silverleaf whitefly	<i>Bemisia argentifolii</i>
Pear Psylla	<b>Family: Psyllidae</b> <i>Cacopsylla pyricola</i>
Eastern grape leafhopper	<b>Family: Cicadellidae</b> <i>Erythroneura comes</i>
Grape leafhopper	<i>Erythroneura elegantula</i>
Variegated leafhopper	<i>Erythroneura variabilis</i>
Virginia creeper leafhopper	<i>Erythroneura ziczac</i>
White apple leafhopper	<i>Typhlocyba pomaria</i>

**STORAGE AND DISPOSAL**

**DO NOT** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in a cool, dry place. This package contains water-soluble bags inside a foil liner (overwrap). The water-soluble bags dissolve in water and the contents will disperse. If all the water-soluble bags are not used, carefully reseal the overwrap. Each overwrap contains five water-soluble bags. Do not remove the water-soluble bags from the overwrap except for immediate use. If exposed to moisture, the water-soluble bags may break.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. The outer case and inner overwrap packaging of the water-soluble bag should be incinerated or disposed of in a sanitary landfill, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not re-use the empty packaging.

**FOR 24 HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE). CALL CHEMTREC® (800) 424-9300**





## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Formulator:** Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(800) 883-1844

**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:**

**Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(888) 478-0798

**For Medical Emergency:**

**Product:** **GWN-1715**  
**EPA Signal Word:** Warning  
**Active Ingredient:** Pyridaben (75%)  
**Chemical Name:** 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one  
**Chemical Class:** Pyridazinone

**EPA Registration No.:** 81880-4  
**CAS No.:** 96489-71-3

### 2. HAZARDS IDENTIFICATION

#### Physical Properties

**Appearance:** Light tan powder  
**Odor:** Vanilla

#### Primary Routes of Exposure

May be fatal if inhaled. Do not breathe dust or spray mist. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21 C), or a NIOSH approved respirator with a NPR, or HE prefilter. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves. Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

#### Medical Conditions Likely to be Aggravated by Exposure

No information found for this mixture.

#### Unusual Fire, Explosion, and Reactivity Hazards

Explosive dust/air mixtures can form in atmospheres as low as 9% oxygen. Ignition energy required is as low as 15 millijoules. Typical dust/air mixtures capable of exploding contain 40 g per cubic meter. Exotherm initiation temperature (Grewer oven): 394° C

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Pyridaben (75%)	0.01 mg/m <sup>3</sup> *	Not Established	Not Established	None

\*Manufacturer's recommendation

Only the identities of the active ingredient(s) and any *hazardous* inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

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## 4. FIRST AID MEASURES

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<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have the person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment.  
**FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL 1-888-478-0798.**

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## 5. FIRE FIGHTING MEASURES

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**Flashpoint (test method):** Not determined  
**Flammable Limits (% in air):** Not determined  
**Autoignition Temperature:** Exotherm initiation temperature (Greiner oven): 394° C  
**Flammability:** Non flammable solid  
**Appropriate Extinguishing Media**

Use water fog, foam, CO<sub>2</sub>, or dry chemical extinguishing media.

### Fire Fighting Guidance

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Care should be taken to decontaminate firefighters and equipment.

### Unusual Fire, Explosion, and Reactivity Hazards

Explosive dust/air mixtures can form in atmospheres as low as 9% oxygen. Ignition energy required is as low as 15 millijoules. Typical dust/air mixtures capable of exploding contain 40 g per cubic meter. Exotherm initiation temperature (Greiner oven): 394° C

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## 6. ACCIDENTAL RELEASE MEASURES

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### In Case of Spills or Leaks

Emergency response workers should wear a SCBA with Level B protection if dusts will be generated. If possible, keep spilled material dry and recover for use. Spilled material may be carefully swept up and returned to original container.

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## 7. HANDLING AND STORAGE

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May be fatal if inhaled. Do not breathe dust or spray mist. For handling activities, use dust/mist-filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with N, P, R, or HE pre-filter. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves. Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

### Precautions in storing

Do not contaminate water, food, or feed by storage or disposal.

### Storage

Store in a cool, dry place away from heat or open flame. This package contains water-soluble bags inside a foil liner (overwrap). Do not remove the water-soluble bags from the overwrap except for immediate use. If all the water-soluble bags are not used, carefully reseal the overwrap. The water-soluble bags may break if they are exposed to moisture, handled excessively, or handled with wet hands or wet gloves.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Protective eyewear
- Shoes plus socks
- For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with a N, P, R, or HE pre-filter.
- Chemical-resistant headgear for overhead exposure.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statement:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Light tan powder  
**Melting Point:** N/A  
**Boiling Point:** N/A  
**Specific Gravity/  
Density:** 15.6 lb/ft(3) packed; 13.45 lb/ft(3) free fall

**Solubility in H<sub>2</sub>O:** Dispersible  
**Vapor Pressure:** Not determined

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## 10. STABILITY AND REACTIVITY

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**Stability:** Stable under normal conditions; relatively unstable to light.  
**Hazardous  
Polymerization:** Does not occur  
**Decomposition  
Products:** HCl, NO<sub>x</sub>, SO<sub>x</sub>, CO  
**Hazardous  
Mixtures:** Pyridaben is a reducing agent – AVOID OXIDIZERS  
**Conditions  
To Avoid:** Not applicable

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity/Irritation Studies

Rat, Acute Oral LD<sub>50</sub> = 1930 mg/kg  
Rat, Acute Dermal LD<sub>50</sub> > 2000 mg/kg  
Rat, Acute Inhalation LC<sub>50</sub> (4 hour) = 0.62 - 0.66 mg/L  
Rabbit, Eye Irritation - not irritating  
Rabbit, Skin Irritation - Non irritating to skin  
Guinea pig, Dermal Sensitizer - Not sensitizing

Pyridaben was found not to be teratogenic in two species tested, but at a maternally toxic dose the compound did produce only slight non-specific developmental effects in one species.

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## 12. ECOLOGICAL INFORMATION

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This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Keep out of lakes, ponds, or streams. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area. Drift or runoff from treated areas may be hazardous to fish in adjacent sites. This product is toxic to bees. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Application early in the morning or at dusk is suggested.

### For the active ingredient:

Bluegill sunfish, LC <sub>50</sub> (96-h):	1.8-3.3 3 µg/L
Rainbow trout, LC <sub>50</sub> (96-h):	0.73 µg/L
Green algae, EC <sub>50</sub> (48-h):	> 1 mg/L
<i>Daphnia magna</i> , EC <sub>50</sub> (48-h):	0.38 µg/L
Bobwhite Quail, Oral LD <sub>50</sub> :	> 2250 mg/kg
Mallard Duck, Oral LD <sub>50</sub> :	> 2500 mg/kg
Honeybees, LD <sub>50</sub> (contact):	0.024 µg/bee

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## 13. DISPOSAL CONSIDERATION

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### Pesticide Disposal:

Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### Container Disposal:

**Water-soluble packaging:** The outer case and inner overwrap packaging of the water-soluble bag should be incinerated or disposed of in a sanitary landfill, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not re-use the empty packaging.

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## 14. TRANSPORT INFORMATION

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### DOT Classification

UN 2588, Pesticides, Solid, Toxic, NOS (contains Pyridaben), 6.1, PG II

### International Maritime Organization

UN 2588, Pesticides, Solid, NOS (contains Pyridaben 75%), 6.1, PG II, Marine Pollutant

### International Civil Aviation Organization

UN 2588, Pesticides, Solid, NOS (contains Pyridaben 75%), 6.1, PG II

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## 15. REGULATORY INFORMATION

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### SARA Title III Classification

Section 302/304:	Not listed
Section 311/312:	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
Section 313 chemical(s):	Not listed

### Proposition 65

Not applicable

### CERCLA Reportable Quantity (RQ)

Not applicable

### RCRA Classification

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

### TSCA Status

Exempt from TSCA

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## 16. OTHER INFORMATION

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### NFPA Hazard Ratings

Health: 4  
Flammability: 3  
Reactivity: 1

0	Least
1	Slight
2	Moderate
3	High
4	Severe

### Prepared By:

Gowan Company  
(800) 883-1844

**Notice:** The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, CONSERVATION AND  
FORESTRY  
BOARD OF PESTICIDES CONTROL  
28 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB  
COMMISSIONER

HENRY S. JENNINGS  
DIRECTOR

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MEMORANDUM

Date: July 1, 2013  
To: Board  
From: Henry Jennings  
Subject: Policy on Exclusion Areas Relative to Chapter 20, Section 6 Rulemaking Amendments

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**Background**

The Board recently completed provisional adoption of a series of rulemaking amendments covering public-health-related mosquito-control efforts that may be conducted by governmental agencies. During the course of that effort, the Board determined that it was preferable to identify “exclusion areas”—as they relate to potential aerial applications to control adult mosquitoes—via Board policy as opposed to codifying them in rule. Using a Board policy allows the Board more flexibility to adjust to concerns as they arise. Adjusting requirements in rule takes several months to accomplish and costs more than a thousand dollars (not including staff time).

The staff reviewed the 2012 emergency rule, Massachusetts’s policy on exclusion areas, and comments received during the rulemaking process as a basis for proposing a Board policy. During the 2012 emergency rulemaking effort for Chapter 20, the Board identified certified organic farms and livestock operations as areas which should be excluded from aerial pesticide applications conducted for public health purposes. The 2012 Operational Response Plan to Reduce the Risk of Mosquito-borne Disease in Massachusetts specifies four types of “no-spray zones”:

1. Certified organic farms
2. Priority habitats for spray sensitive state-listed rare species
3. Surface water supply resource areas
4. Commercial fish hatcheries/aquaculture

In Maine, we have also heard concerns voiced about conventional agriculture, bee hives and lobsters. In addition, direct and intentional applications over surface water are prohibited under state law and applications which may result in aquatic residues must be covered by a waste discharge license. Information from Massachusetts indicates that state-sponsored public-health-related mosquito control programs do not present significant threats to bee hives or agricultural sites. Moreover, since excluding even a point from an aerial spray project results in a minimum of a 23 acre exclusion (due to the commonly used 500 foot buffers), buffering bee hives would present practical challenges and result in a significant reduction in mosquito control efficacy. Marine waters would also be appropriately buffered. This factor combined with the extremely low application rates and short persistence of the products commonly used in state-sponsored programs suggests that any potential risks to lobsters would be extremely low.

### **Board Policy**

Based on the considerations described above, the Board adopts the following policy. Areas listed below should be intentionally excluded from the targeted area for government-sponsored, public-health-related mosquito-control programs:

1. Certified organic farms for which digital maps of the crop or livestock areas have been provided to the Department in advance and in a file type that is compatible with Department software.
2. Other farmland for which the farm operator determines that the potential for pesticide residues presents economic risks and for which digital maps have been provided to the Department in advance and in a file type that is compatible with Department software.
3. Great ponds, rivers, marine waters and public water supplies derived from surface waters.
4. Fish hatcheries and aquaculture sites.
5. Mapped endangered species habitat for which the proposed application presents significant threats.

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

**Products**

In an effort to summarize the potential for human and environmental hazards associated with public health mosquito abatement programs a product search for Maine 2013 registration, followed by a search for active federal registrations for public health mosquito adulticide products. The search terms included: adult mosquito, and aerial or ultra-low volume (ULV) (NSPIR 2013).

For clarity and purposes of discussion, the products described here are defined by their EPA number instead of brand names. The first two sections of the EPA number indicate the company and the product number, these are the same for the same formulations distributed (sold) by the company making and distributing the products. If there is a distributor other than the company who owns the product a third portion to the EPA number is added, this is the federal company number for the distributor. The public health wide area mosquito adulticides are presented alphabetically by primary active ingredient with diluent and chemical class in Table 1. There are 24 products and several have more than one brand name. The only product in Table 1, with a distributor number is EPA number 1021-1688 made by McLaughlin Gormley King (MGK) and distributed by Clarke Mosquito Control under the EPA number 1021-1688-8329.

Three other synergized- pyrethroid products, not currently registered in Maine, and were identified in discussions with Vermont Department of Health (Hoffman personal communication). These are variations on the MGK phenothrin-PBO product which is marketed as Anvil by Clarke mosquito. These products will be included in this review and are:

- *Aqua Anvil, water based:* MGK's Fogging Concentrate 2807 (EPA# 1021-1807), Aqua Anvil (EPA# 1021-1870-8329), 10% phenothrin, 10 % PBO, marketed by Clarke mosquito designed to be diluted in water
- *Duet, oil based:* MGK's Multicide Fogging Concentrate 2798(EPA# 1021-1795) marketed by Clarke Mosquito as Duet (EPA# 1021-1795-8329), 5% phenothrin, 5 % PBO, 1% Prallethrin, designed to be diluted in oil
- *Aqua Duet, water based:* MGK's Fogging Concentrate 2922 (EPA# 1021-2562) marketed by Clarke Mosquito as Aqua Duet (EPA# 1021-2562-8329), 5% phenothrin, 5 % PBO, 1% Prallethrin, designed to be diluted in water

For those ME-2013 registered products identified by the search, the federally approved labels was done to identify products with *"For use only by federal, state, tribal, or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise, authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision"* on their labels. Portions of the pesticide product labels addressing human health and environmental risks were identified and extracted from the most current EPA approved federal label for the ME-2013 registered products.

The maximum use rates for public health mosquito adulticide are presented in Table 2.

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

Because there may be federally registered products, not currently registered in Maine a search of federally active products was done using the same criteria as the state registered products. The federal search identified 108 products, 24 of which are currently registered Maine. Of the remaining 84 products, 78 have the same mosquito adulticide active ingredients as those registered in Maine-2013. Under the assumption that rates and label hazard information, and use restrictions would be identical to those ME-2103 registered products, these labels were not reviewed.

The other six products, may be registered in Maine -2013, but do not have public health mosquito control uses on their labels. Four of these contain the active ingredients carbaryl (one home owner ()); three agricultural products), 2 contain the synthetic pyrethroid, lambda cyhalothrin. Wide area mosquito adulticiding public health uses are not on these federal labels (Bayer 2009, Tessendro-Kerley 2012, Tessendro-Kerley 2013, Loveland Chemical 2011, Syngenta 2010, LG Lifesciences 2009).

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

<b>Table 1. Public Health Adult Mosquito Products Registered in Maine for 2013 sorted by Active Ingredient (NSPIRS 2013, Label Review)</b>					
<b>Brand Names</b>	<b>EPA REG #</b>	<b>Active Ingredients</b>	<b>Chemical Class</b>	<b>Diluent</b>	<b>References</b>
Pyrofos 1.5 ULV <sup>(a)</sup> Vector Control Insecticide	53883-251	19.36% Chlorpyrifos	Organophosphate	Oil	Control Solutions 2009a, Control Solutions 2009b
Zenivex E4 RTU <sup>(b)</sup>	2724-807	4% Etofenprox	Pyrethroid	Ready to use	Wellmark 2010a, Wellmark 2010b
Zenivex E20	2724-791	20% Etofenprox	Pyrethroid	Oil	Wellmark 2010c, Wellmark 2010d
Fyfanon ULV	67760-34	96.5% Malathion	Organophosphate	Oil	Cheminova 2011a, Cheminova 2011b
Dibrom 8 Emulsive	5481-479	62% Naled	Organophosphate	Water	AMVAC 20012a, AMVAC 20012b
Trumpet EC	5481-481	78% Naled	Organophosphate	Ready to use	AMVAC 2010a, AMVAC 2010b
Dibrom Conc	5481-480	87.4% Naled	Organophosphate	Oil	AMVAC 2009a, AMVAC 2009b
Masterline Kontrol 2-2	73748-3	2% Permethrin	Pyrethroid	Ready to use	Univar 2013a, Univar 2013b
		2% PBO <sup>(d)</sup>	Synergist		
Prentox Perm-X UL 4-4	655-898	4% Permethrin	Pyrethroid	Oil	Prentiss 2012a, Prentiss 2012b
		4% PBO	Synergist		
Masterline Kontrol 4-4	73748-4	4.6% Permethrin	Pyrethroid	Oil	Univar 2013c, Univar 2013d
		4.6% PBO	Synergist		

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

<b>Table 1. Public Health Adult Mosquito Products Registered in Maine for 2013 sorted by Active Ingredient (NSPIRS 2013, Label Review)</b>					
<b>Brand Names</b>	<b>EPA REG #</b>	<b>Active Ingredients</b>	<b>Chemical Class</b>	<b>Diluent</b>	<b>References</b>
Aqua Permanone: Aqua-Reslin	432-796	20% Permethrin	Pyrethroid	Water	Bayer 2013a, Bayer 2013b
		20% PBO	Synergist		
Masterline AQUA Kontrol	73748-1	20% Permethrin	Pyrethroid	Water	Univar 2013e, Univar 2013f
		20% PBO	Synergist		
PBO/Permethrin: Vector flex 20:20	53883-274	20.6% Permethrin	Pyrethroid	Oil or Water	Control Solutions 2010a, Control Solutions 2010b
		20.6% PBO	Synergist		
Omen 30-30, Permanone 30-30	432-1235	30% Permethrin	Pyrethroid	Oil	Bayer 2011c, Bayer 2011d
		30% PBO	Synergist		
Prentox Perm-X UL 30-30	655-811	30% Permethrin	Pyrethroid	Oil	Prentiss 2012c, Prentiss 2012d
		30% PBO	Synergist		
Masterline Kontrol 30-30	73748-5	30% Permethrin	Pyrethroid	Oil	Univar 2013g, Univar 2013h
		30% PBO	Synergist		
Prentox Perm-X UL 31-66	655-812	31% Permethrin	Pyrethroid	Oil	Prentiss 2012e, Prentiss 2012f
		66% PBO	Synergist		
Permanone Insecticide Concentrate, Permanone 31-66	432-1250	31.28% Permethrin	Pyrethroid	Oil	Bayer 2011e, Bayer 2011f
		66% PBO	Synergist		
MULTICIDE® Mosquito Adulticiding Concentrate 2705, Anvil 10+10 ULV	1021-1688, 1021-1688-8329 <sup>(d)</sup>	10% Phenothrin <sup>(e)</sup>	Pyrethroid	Oil	MGK <sup>(f)</sup> 2012a, Clarke Mosquito Control 2013
		10% PBO	Synergist		

*DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013*

<b>Table 1. Public Health Adult Mosquito Products Registered in Maine for 2013 sorted by Active Ingredient (NSPIRS 2013, Label Review)</b>					
<b>Brand Names</b>	<b>EPA REG #</b>	<b>Active Ingredients</b>	<b>Chemical Class</b>	<b>Diluent</b>	<b>References</b>
Pyrocide 7067	1021-1199	5% Pyrethrins	Pyrethrins	Oil	MGK 2013a, MGK 2013b
		25% PBO	Synergist		
Pyrocide 7396	1021-1569	5% Pyrethrins	Pyrethrins	Oil	MGK 2013c, MGK 2013d
		25% PBO	Synergist		
Pyrocide 7395	1021-1570	12% Pyrethrins	Pyrethrins	Oil	MGK 2012b, MGK 2012c
		60% PBO	Synergist		
Scourge I	432-716	4.14% Resmethrin	Pyrethroid	Oil	Bayer 2012a, Bayer 2012b
		12.42% PBO	Synergist		
Scourge II	432-667	18% Resmethrin	Pyrethroid	Oil	Bayer 2012c, Bayer 2012d
		54% PBO	Synergist		

- a) ULV = Ultra-low Volume
- b) RTU = Ready to use
- c) Phenothrin = Sumithrin
- d) 8329 is the company number for Clarke Mosquito Products. They distribute MGK's Multicide Mosquito Adulticiding Concentrate 2705 as Anvil 10+10
- e) PBO = Piperonyl butoxide, pesticide synergist
- f) MGK = McLaughlin Gormley King

*DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013*

<b>Table 2. Use Rates (lbs ai/A and lbs ai/A/year) for Public Health Adult Mosquito Products Registered in Maine for 2013</b>			
<b>Active Ingredients</b>	<b>Rate (lbs ai/A)</b>	<b>Annual Rate (lbs ai/A/year)</b>	<b>Reference</b>
Chlorpyrifos	0.01	0.26	Control Solutions 2009a, Control Solutions 2009b
Etofenprox	0.007	0.18	Wellmark2010a, EPA 2009a
Malathion (air)	0.23	Not more than 3 times in any one week. More frequent treatments may be to control mosquito-borne diseases in animals or humans	Cheminova 2011a, EPA 2004a, EPA 2009b
Malathion (ground)	0.11		
Naled (air and ground)	0.1	10.73	AMVAC 2010a
Permethrin	0.007	0.18	Bayer 2011f, EPA 2009c
Phenothrin (Sumithrin),	0.0036	1	MGK 2012a, EPA 2007, EPA 2008
PBO	0.08	2	EPA 2004b
Pyrethrins	0.008	0.2	MGK 2013a, EPA 2006b
Resmethrin	0.007	0.2	Bayer 2012a

### **References**

- AMVAC 2009a, Dibrom Concentrate, EPA# 5481-480, containing 87.4% naled, EPA Label
- AMVAC 2009b, Dibrom Concentrate, EPA# 5481-480, containing 87.4% naled, ME-2013 Label
- AMVAC 2010a, Trumpet EC Insecticide, EPA# 5481-481, containing 78% naled, EPA Label
- AMVAC 2010b, Trumpet EC Insecticide, EPA# 5481-481, containing 78% naled, ME-2013 Label
- AMVAC 2012a, Dibrom 8 Emulsive, EPA# 5481-479, containing 62%, naled, EPA Label
- AMVAC 2012b, Dibrom 8 Emulsive, EPA# 5481-479, containing 62%, naled, ME-2013 Label
- Bayer CropSciences 2009, Sevin Brand RP4 Carbaryl Insecticide, EPA# 264-335, containing 43% Carbaryl EPA Label
- Bayer Environmental Services 2011a, Aqua-Permanone, EPA# 432-796, containing 20% permethrin-20% PBO, EPA Label
- Bayer Environmental Services 2011b, Aqua-Reslin, EPA# 432-796, containing 20% permethrin-20% PBO, ME-2013 Label
- Bayer Environmental Services 2011c, Omen 30-30 ULV, EPA# 432-1235, containing 30% permethrin-30% PBO, EPA Label
- Bayer Environmental Services 2011d, Permanone 30-30, EPA# 432-1235, containing 30% permethrin-30% PBO, ME-2013 Label
- Bayer Environmental Services 2011e, Permanone Insecticide Concentrate, EPA# 432-1250, containing 31.28% permethrin-66% PBO, EPA Label
- Bayer Environmental Services 2011f, Permanone 31-66, EPA# 432-1250, containing 31.28% permethrin-66% PBO, ME-2013 Label
- Bayer Environmental Services 2012a, Scourge Insecticide w/ Resmethrin/Piperonyl Butoxide 4%+12% MF FII, EPA# 432-716, containing 4.14% resmethrin-12.42% PBO, EPA Label
- Bayer Environmental Services 2012b, Scourge Insecticide w/ Resmethrin/Piperonyl Butoxide 4%+12% MF FII, EPA# 432-716, containing 4.14% resmethrin-12.42% PBO ME-2013 Label
- Bayer Environmental Services 2012c, Scourge Insecticide w/ Resmethrin/Piperonyl Butoxide 18% + 54% MF FII, EPA# 432-667, containing 18% resmethrin-54% PBO, EPA Label
- Bayer Environmental Services 2012d, Scourge Insecticide w/ Resmethrin/Piperonyl Butoxide 18% + 54% MF FII, EPA# 432-667, containing 18% resmethrin-54% PBO, ME-2013 Label
- Cheminova 2011a, Fyfanon ULV Mosquito Insecticide, EPA# 67760-34, containing 96.5% malathion, EPA Label
- Cheminova 2011b, Fyfanon ULV Mosquito Insecticide, EPA# 67760-34, containing 96.5% malathion, ME-2013 Label
- Clarke Mosquito Control 2013a, Anvil 10+10 ULV, EPA# 1021-1688-8329, containing 10% sumithrin (phenothrin)-10% PBO, ME-2013 Label

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

Clarke Mosquito Control 2013b, Duet EPA# 1021-1795-8329, containing 1% Prallethrin 5% sumithrin (phenothrin)-5% PBO, Label from Clarke mosquito Website:  
[http://www.clarke.com/index.php?option=com\\_content&view=category&layout=blog&id=47&Itemid=126](http://www.clarke.com/index.php?option=com_content&view=category&layout=blog&id=47&Itemid=126)

Clarke Mosquito Control 2013c, Aqua Anvil Water Based Adulticide, EPA# 1021-1807-8329, containing 10% sumithrin (phenothrin)-10% PBO, Label from Clarke mosquito Website:  
[http://www.clarke.com/index.php?option=com\\_content&view=category&layout=blog&id=47&Itemid=126](http://www.clarke.com/index.php?option=com_content&view=category&layout=blog&id=47&Itemid=126)

Clarke Mosquito Control 2013d, Aqua Duet, EPA# 1021-2562, containing 1% Prallethrin 5% sumithrin (phenothrin)-5% PBO, Label from Clarke mosquito Website:  
[http://www.clarke.com/index.php?option=com\\_content&view=category&layout=blog&id=47&Itemid=126](http://www.clarke.com/index.php?option=com_content&view=category&layout=blog&id=47&Itemid=126)

Control Solutions 2010a, PBO/Permethrin 20:20, EPA# 53883-274, containing 20.6% permethrin-20.6% PBO, EPA Label

Control Solutions 2010b, Vector-Flex 20:20, EPA# 53883-274, containing 20.6% permethrin,-20.6% PBO, ME-2013 Label

Control Solutions 2009a, Pyrofos, EPA# 53883-251, containing 19.36% chlorpyrifos (1.5 lbs/gal) EPA Label

Control Solutions 2009b, Pyrofos, EPA# 53883-251, containing 19.36% chlorpyrifos (1.5 lbs/gal) ME-2013 Label

LG Lifesciences 2009, Lamdastar 1 CS-PCO, EPA# 71532-27, containing 12% lambda cyhalothrin Fed Label

Loveland Chemical 2011, Carbaryl 4L, EPA# 34704-447, containing 43% Carbaryl EPA-Label

McLaughlin Gromley King 2012a, Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7395, EPA# 1021-1570, containing 12% pyrethrins-60% PBO, ME-2013 Label

McLaughlin Gromley King 2012b, Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7395, EPA# 1021-1570, containing 12% pyrethrins-60% PBO, EPA Label 2012

McLaughlin Gromley King 2012c, Multicide Mosquito Adulticiding Concentrate for ULV Fogging 2705, EPA# 1021-1688, containing 10% sumithrin (phenothrin)-10% PBO, EPA-2012 Label

McLaughlin Gromley King 2012d, Multicide Mosquito Adulticiding Concentrate for ULV Fogging 2795, EPA# 1021-1795, containing 1% Prallethrin 5% sumithrin (phenothrin)-5% PBO, EPA-2012 Label

McLaughlin Gromley King 2012c, Multicide Mosquito Adulticiding Concentrate for ULV Fogging 2705, EPA# 1021-1807, containing 10% sumithrin (phenothrin)-10% PBO, EPA-2012 Label

McLaughlin Gromley King 2012d, Multicide Mosquito Adulticiding Concentrate for ULV Fogging 2795, EPA# 1021-2562, containing 1% Prallethrin 5% sumithrin (phenothrin)-5% PBO, EPA-2012 Label

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

McLaughlin Gromley King 2013a, Pyroicide Fogging Formula 7067, EPA# 1021-1199, containing 5% pyrethrins-25% PBO, EPA Label

McLaughlin Gromley King 2013b, Pyroicide Fogging Formula 7067, EPA# 1021-1199, containing 5% pyrethrins -25% PBO, ME-2013 Label

McLaughlin Gromley King 2013c, Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7396, EPA# 1021-1569, containing 5% pyrethrins-25% PBO, EPA Label

McLaughlin Gromley King 2013d, Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7396, EPA# 1021-1569, containing 5-pyrethrins-,25% PBO, ME-2013 Label

Prentiss 2012a, Prentox Perm-X UL 4-4, EPA# 655-898, containing 4% permethrin-4% PBO, EPA Label

Prentiss 2012b, Prentox Perm-X UL 4-4, EPA# 655-898, containing 4% permethrin-4% PBO, ME-2013 Label

Prentiss 2012c, Prentox Perm-X UL 30-30, EPA# 655-811, containing 30% permethrin, 30% PBO, EPA Label

Prentiss 2012d, Prentox Perm-X UL 30-30, EPA# 655-811, containing 30% permethrin-30% PBO, ME-2013 Label

Prentiss 2012e, Prentox Perm-X UL 31-66, EPA# 655-812, containing 31% permethrin-66% PBO, EPA Label

Prentiss 2012f, Prentox Perm-X UL 31-66, EPA# 655-812, containing 31% permethrin-66% PBO, ME-2013 Label

Syngenta 2010, Demand Pest Tabs, EPA# 100-1082, containing 10% lambda-cyhalothrin, EPA Label

Tessendro-Kerley 2013 Sevin Brand 85 Sprayable Carbaryl Insecticide, EPA# 61842-33, containing 85% Carbaryl, EPA-Label

Tessendro-Kerley 2012 Sevin Brand 4F Carbaryl Insecticide, PA# 61842-38, containing 43% Carbaryl, EPA-Label

Univar Environmental Services 2013a, Masterline Kontrol 2-2, EPA# 73748-3, containing 2% permethrin-2% PBO, EPA Label

Univar Environmental Services 2013b, Masterline Kontrol 2-2, EPA# 73748-3, containing 2% permethrin-2% PBO, ME-2013 Label

Univar Environmental Services 2013c, Masterline Kontrol 4-4, EPA# 73748-4, containing 4.6% permethrin-4.6% PBO, EPA Label

Univar Environmental Services 2013d, Masterline Kontrol 30-30 Concentrate, EPA# 73748-5, containing 30% permethrin-30%PBO, EPA Label

Univar Environmental Services 2013e, Masterline Kontrol 4-4, EPA# 73748-4, containing 4.6% permethrin-4.6% PBO, ME-2013 Label

Univar Environmental Services 2013f, Masterline Kontrol 30-30 Concentrate, EPA# 73748-5, containing 30% permethrin-30, PBO, ME-2013 Label

***DRAFT Label Review section of Human Health and Environmental Concerns for the Products Registered in Maine with Directions for Public Health Adult Mosquito Control, LRH July 18, 2013***

Univar Environmental Services 2013g, Masterline Aqua Kontrol Concentrate, EPA# 73748-1, containing 20% permethrin-20% PBO, EPA Label

Univar Environmental Services 2013h, Masterline Aqua Kontrol Concentrate, EPA# 73748-1, containing 20% permethrin-20% PBO, ME-2013 Label

Wellmark International 2010a, Zenivex E4 RTU, EPA# 2724-807, containing 4% etofenprox, EPA Label

Wellmark International 2010b, Zenivex E4 RTU, EPA# 2724-807, containing 4% etofenprox, ME-2013 Label

Wellmark International 2010c, Zenivex E20, EPA# 2724-791, containing 20% etofenprox, EPA Label

Wellmark International 2010d, Zenivex E20, EPA# 2724-791, containing 20% etofenprox, ME-2013 Label



Boyle Associates  
Environmental Consultants  
Mailing Address:  
25 Dundee Rd.  
Gorham, Maine 04038  
Phone: (207) 591-5220  
[www.boyleassociates.net](http://www.boyleassociates.net)

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7/8/2013

Board of Pesticides Control  
28 State House Station  
Augusta, Maine 04333

**RE: Application for Variance Request (Pursuant to Chapter 29) - Jordan Park Marsh, Old Orchard Beach**

Dear Board Representative:

Attached you will find Boyle Associates application for a variance request pursuant to Chapter 29 of the Board of Pesticides Control regulations. If you have any questions regarding this application, please do not hesitate to contact me. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Brenneman', with a long horizontal flourish extending to the right.

David R. Brenneman  
Environmental Scientist

Attachment (3): Application, Excerpt of Proposal, Photolog

**BOARD OF PESTICIDES CONTROL  
APPLICATION FOR VARIANCE PERMIT  
(Pursuant to Chapter 29, Section 6 of the Board's Regulations)**

I. \_\_\_\_\_ (\_\_\_\_\_) \_\_\_\_\_  
Name Telephone Number

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address City State Zip

II. Area(s) where pesticide will be applied:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

III. Pesticide(s) to be applied:  
\_\_\_\_\_  
\_\_\_\_\_

IV. Purpose of pesticide application:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

V. Approximate dates of spray application:  
\_\_\_\_\_  
\_\_\_\_\_

VI. Application Equipment:  
\_\_\_\_\_  
\_\_\_\_\_

VII. Standard(s) to be varied from:

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VIII. Reason for variance:

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IX. Method to assure equivalent protection:

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Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Return completed form to: **Board of Pesticides Control, 28 State House Station, Augusta, ME 04333-0028**

**OR E-mail to: [pesticides@maine.gov](mailto:pesticides@maine.gov)**

Below is an excerpt from Boyle Associate’s proposal submitted to the Town of Old Orchard Beach in October of 2012.

## Phragmites Control Protocol

**Timing:** In general, effective chemical control of common reed (*Phragmites australis*) can be achieved by application after flowering has commenced, but before the first killing frost; thus, mowing and herbicide application will take place between late August and early October. The timing of application will be dependent on field conditions at the time of application (i.e. lack of standing water and little to no wind, no rain forecasted for 24 hours, etc.) and plant life stage. Mowing will take place after the application, no sooner than three weeks following herbicide treatment, but before the threat of deep snow.

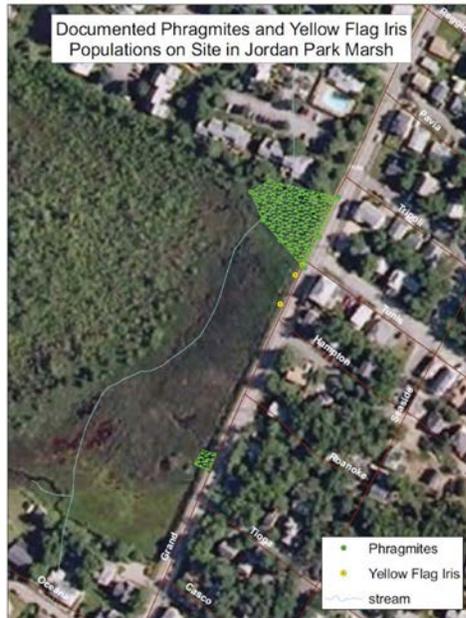
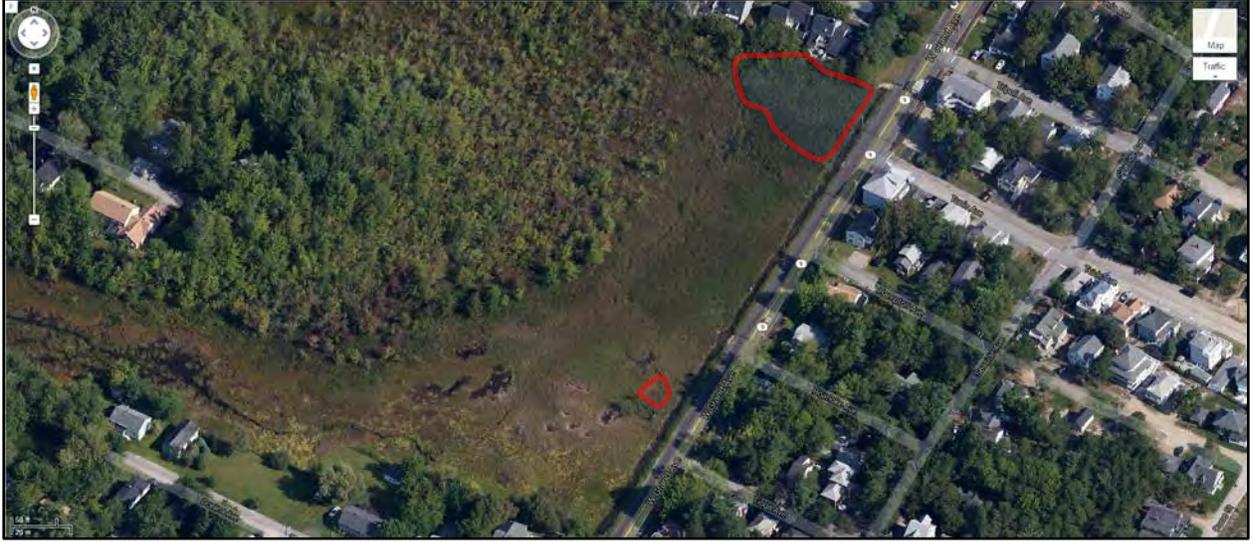


Figure 1. Common Reed stands mapped by YCSWCD

**Application:** Two-person field crews from Boyle Associates will conduct herbicide applications on common reed stands as approximately depicted within the two polygons mapped in Figure 1 and seen on the aerial image in attachment 2. It should be noted that the stream depicted in Figure 1 no longer exists; it has been diverted into the stormwater system and ditch along West Grand Avenue. In total, the stands cover an area of approximately 0.30 acre. An experienced invasive plant control specialist will examine the site and flag the approximate boundaries of the stands of common reed to be treated. A botanist from Boyle Associates will review the flagged areas for the presence of any rare or endangered plants in order to make sure there are no incidental impacts to those species known to occur in the marsh. If no special plants are identified within the areas thick with common reed, a low-volume, non-powered backpack sprayer will be used for application. The herbicide mix, as further outlined below, will be applied onto the common reed. Depending upon the conditions at the time of application a “Weed wiper”

treatment may be utilized to severely limit the chance of overspray entering a waterbody.

**Herbicide Mix:** The proposed herbicide mix will consist of a tank mix of herbicides with the active ingredients glyphosate and imazapyr. These specific products are labeled for use in aquatic sites and for the particular application methodologies chosen. A 0.75% solution of Accord Concentrate (active ingredient: glyphosate) and a 0.75% solution of Habitat (active ingredient: imazapyr) will be mixed with a 1% solution of the non-ionic surfactant Cide-Kick in accordance with the specifications on the herbicide labels. Herbicide will be pre-mixed at a safe and stable, off-site location using fresh water (pH buffered to labeled requirements). An anti-drift agent will be added to the mix to limit damage to non-target vegetation. A marker dye will be utilized to assist field crews in assuring that no target individuals are missed.



Aerial image of Jordan Park Marsh – common reed stands are outlined in red.



Photo looking west from West Grand Avenue at northerly common reed stand in October of 2012.



Looking north at marsh from West Grand Avenue. Common reed and Ocean Park Association condos in background.



Looking southwest at smaller southerly stand from West Grand Avenue. Weed wiping or similar application may be used if road ditch remains inundated.

## **Proposed Administrative Consent Agreement Background Summary**

**Subject:** William Burke  
Sea Urchin Cottage  
57A Long Beach Avenue  
York, Maine 03909

**Date of Incident(s):** July 12, 2012

**Background Narrative:** The Health Inspection Division of the Maine Centers for Disease Control called the Board of Pesticides Control to convey a complaint they received from vacationers renting a bed bug infested cottage. The renters alleged that due to the infestation, the owner of the property made pesticide applications to the interior of the cottage while they were renting it. A follow up inspection confirmed that the manager/significant other of the owner did apply an aerosol insecticide as well as a liquid insecticide to the interior of the cottage while the vacationers were renting the cottage.

**Summary of Violation(s):** Any person making a pesticide application that is a custom application, as defined under 22 M.R.S. § 1471-C(5-A), must be a certified commercial applicator or under the direct supervision of a certified applicator in accordance with 22 M.R.S. § 1471-D(1) (A) and CMR 01-026 Chapter 31 Section 1(A) III.

**Rationale for Settlement:** The staff compared the violation to similar cases settled by the Board and the applicator's lack of candor in formulating the penalty proposal.

**Attachments:** Proposed Consent Agreement

JUN 4 2013

CK# 114

Amnt: 500.00

Date: 5/31/13

STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, FOOD AND RURAL RESOURCES  
BOARD OF PESTICIDES CONTROL

William Burke )  
Sea Urchin Cottage ) ADMINISTRATIVE CONSENT AGREEMENT  
57A Long Beach Ave ) AND  
York, Maine 03909 ) FINDINGS OF FACT

This Agreement, by and between Sea Urchin Cottage (hereinafter called the "Cottage") and the State of Maine Board of Pesticides Control (hereinafter called the "Board"), is entered into pursuant to 22 M.R.S.A. §1471-M (2)(D) and in accordance with the Enforcement Protocol amended by the Board on June 3, 1998.

The parties to this Agreement agree as follows:

1. That the Cottage is located in York Maine and is rented to the public for overnight accommodations. The Cottage is co-owned by William Burke and is managed by his spouse, Cedar Gordon.
2. That the Board received an email from the Health Inspection Division of the Maine Centers for Disease Control ("CDC") on July 20, 2012, about a complaint the CDC received from renters concerning a bed bug infestation at the Cottage when they stayed there during July, 2012. The renters told CDC personnel that a pesticide fog application had been made to the interior of the Cottage during the interval when they were instructed to leave the cottage for a period of time and return later the same day.
3. That the email from the CDC to the Board further noted that in response to the complaint the CDC received in paragraph two, a CDC inspector from the Health Inspection Division went to the Cottage on July 20, 2012. The inspector found one live bed bug and some cast skins at that time.
4. That an email to the Board on July 23, 2012, from a CDC supervisor, indicated that when their inspector went to the Cottage as outlined in paragraph three, William Burke was making a pesticide application inside the Cottage at that time to address the bed bug problem.
5. That in response to the information the Board received in paragraphs two and four a Board inspector conducted a follow up inspection with Cedar Gordon on July 24, 2012.
6. That during the inspection in paragraph five, Gordon stated to the inspector that she applied two different insecticides to the interior of the Cottage on Thursday, July 12, 2012, to control a bedbug infestation. She used a liquid pesticide in a jug with a trigger type applicator to spray the beds, walls, and floors of the entire Cottage and later in the day followed up with 3 cans of an aerosol insecticide. Gordon told the inspector the Cottage was not rented and vacant at the time of her application, but was rented within a day or two after her application. Gordon described the pesticides that she applied and told the inspector where she purchased them. Gordon said she no longer had the containers.
7. That on September 18, 2012, a BPC staff member called the CDC inspector that went to the Cottage as described in paragraphs three and four. The CDC inspector said that when he was at the Cottage, Burke was making a pesticide application using a jug approximately one gallon in size with a built in retractable hose and a trigger type handle. The application was to mopboards in the dining area to control bed bugs. Burke showed the inspector a hand written receipt from an exterminator he hired on an earlier date to treat the Cottage for bed bugs. The inspector said rental customers had just left and he thought new people were coming later that day.

8. That on December 14, 2012, Board staff called one of the renters referred to in paragraph 2 concerning the complaint alleged in paragraph 2.
9. That the renter confirmed that she and her convalescing sister stayed at the Cottage starting on Saturday, July 7, 2012, but by the following Tuesday night and Wednesday morning (July 10 and 11) it was clear to them there was a bug problem.
10. That the renter also stated that on Wednesday morning, July 11, 2012, she contacted Gordon and showed Gordon some of the bugs she had in a baggie which the renter had collected from the mattress she was sleeping on in the Cottage.
11. That that the renter also stated that Gordon told her she had no idea what the bugs were, but showed the renter a spray bottle of insecticide with pictures on it of the same bug. The renter pointed out to Gordon they were the same bug. The renter and Gordon agreed they were bed bugs.
12. That the renter also stated that Gordon said she would have her husband go to the hardware store to get cans of fog to treat the inside of the Cottage and that the renters would have to stay somewhere else for 24 hours. Gordon instructed the renter where and how to launder their bedding and Gordon said she would also use the bottle product to spray the beds, walls, and cracks and crevices of the Cottage to treat for bed bugs.
13. That the renter also stated that she later called Gordon to inquire of the status of the bed bugs and treatment. Gordon informed the renter her husband had not returned from the hardware store.
14. That the renter also stated that by mid-afternoon Gordon called her to inform her that the fog they used would be completed in two hours and it would be safe to go back into the Cottage after that.
15. That the renter also stated that on Wednesday, July 11, 2012, at around 4 or 5 PM, she and her sister returned and entered the Cottage. A can of fogger was discovered on the lunch counter and there was a chemical smell inside the Cottage. One of the renters lifted a mattress and bed bugs were still scurrying around.
16. That the renter also stated that on Wednesday, July 11, 2012, after the sequence of events outlined in paragraphs nine through fifteen, she spoke with Burke to inform him the living conditions in the Cottage were unacceptable. Because Gordon was not present, the renter left Gordon a written note, and the renters collected their possessions and returned to their out of state home.
17. That any person making a pesticide application that is a custom application, as defined under 22 M.R.S. § 1471-C(5-A), must be a certified commercial applicator or under the direct supervision of a certified applicator in accordance with 22 M.R.S. § 1471-D(1)(A) and CMR 01-026 Chapter 31 Section 1(A)III.
18. That a custom application is defined in 22 M.R.S. § 1471-C(5-A) as any application of any pesticide under contract or for which compensation is received or any application of a pesticide to a property open to use by the public. Applications made to rented cottages are considered applications made to areas that are open to use by the public.
19. That the pesticide applications made to the Cottage in July, 2012 as described in that paragraphs above constitute custom applications under 22 M.R.S. § 1471-C(5-A) and, therefore, a commercial applicator's license was required for those applications.
20. That no one from the Cottage had a commercial pesticide applicator's license at the time of the pesticide applications described in paragraphs four, six, and fourteen.

21. That the circumstances described in paragraphs one through twenty constitute multiple violations of 22 M.R.S. § 1471-D(1)(A) and CMR 01-026 Chapter 31 Section 1(A)III.
22. That the Board has regulatory authority over the activities described herein.
23. That the Cottage expressly waives:
- a. Notice of or opportunity for hearing;
  - b. Any and all further procedural steps before the Board; and
  - c. The making of any further findings of fact before the Board.
24. That this Agreement shall not become effective unless and until the Board accepts it.
25. That, in consideration for the release by the Board of the causes of action which the Board has against the Cottage resulting from the violations referred to in paragraph twenty- one, the Cottage agrees to pay to the State of Maine the sum of \$500. (Please make checks payable to Treasurer, State of Maine.)

IN WITNESS WHEREOF, the parties have executed this Agreement of three pages.

SEA URCHIN COTTAGE

By: Cedar Gordon Date: 5/31/13

Type or Print Name: Cedar Gordon

BOARD OF PESTICIDES CONTROL

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Henry Jennings, Director

APPROVED

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Mark Randlett, Assistant Attorney General

# Proposed Administrative Consent Agreement

## Background Summary

**Subject:** Justin Choiniere  
Northeast Agricultural Sales, Inc.  
PO Box 190  
Detroit, Maine 04929-0190

**Date of Incident(s):** The 2012 growing season.

**Background Narrative:** The Board received information that Northeast Agricultural Sales, Inc. was operating a non-compliant major pesticide storage facility in Connor Township that is located in Aroostook County. An investigation confirmed this allegation. Board staff documented that this company used a section of a building at 1189 Madawaska Road to operate a non-compliant major pesticide storage facility and distribute pesticides from this facility to end users.

### Summary of Violation(s):

- CMR 01-026 Chapter 24, Section 4(K)I(b) requires a design certification.
- CMR 01-026 Chapter 24, Section 3(C)III(a) requires that doors to a major pesticide storage facility have a fire rating of one hour.
- CMR 01-026 Chapter 24, Section 3(C)III(b) requires a major pesticide storage facility to have at least one standard door on which panic hardware is installed. The standard door must latch shut when closed and open outward from where products are stored when a person depresses the horizontal bar on the panic hardware.
- CMR 01-026 Chapter 24, Section 4(D)III requires that floor drains in a major pesticide storage facility must be sealed or be connected to a waste storage tank of sufficient size to hold 25% of the liquid volume stored.
- CMR 01-026 Chapter 24, Section 4(E)II requires a major pesticide storage facility to have a battery powered emergency lighting system that automatically activates during power outages and illuminates all exits.
- CMR 01-026 Chapter 24, Section 4(I)I requires that all major pesticide storage facilities be equipped with an automatic heat and smoke detector alarm system connected to a supervised central station. The system must have both audible and visible devices and have a backup power system so it will operate during power outages.
- CMR 01-026 Chapter 24, Section 4(J) requires that all major pesticide storage facilities have emergency showers available. These emergency showers must be located either in the facility or in an adjacent building on the premises within 200 feet of the major pesticide storage facility. There must also be a plan for collecting any water used in emergency showers
- CMR 01-026 Chapter 24, Section 6(B) requires that each entrance to a pesticide storage facility be prominently posted with the words, "Danger - Pesticide Storage - Keep Out."
- CMR 01-026 Chapter 24, Section 6(C) requires that all entrances to a pesticide storage facility be posted with signs indicating smoking is not allowed.
- CMR 01-026 Chapter 24, Section 6(E)I requires that all pesticide storage facilities be equipped with at least one eye wash station capable of flushing eyes for a minimum of fifteen minutes.
- CMR 01-026 Chapter 24, Section 6(E)III requires that all pesticide storage facilities be equipped with spill response and clean-up equipment, including, but not limited to absorbents, empty containers, brooms and shovels and personal protective equipment for employees.
- CMR 01-026 Chapter 24, Section 3(B)III(a) prohibits the siting of a new major pesticide storage area closer than 250 feet of a residential building.

- M.R.S. 22 § 1471-D(3)(B), states that no pesticide dealer shall distribute limited or restricted use pesticides to any person who is not licensed or certified by the Board.

**Rationale for Settlement:** The company realized a competitive advantage over other pesticide dealers by their non-compliance. Additionally, the staff took into account the violation history of this company, which included violations of many of these same regulations.

**Attachments:** Proposed Consent Agreement

**STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, FOOD AND RURAL RESOURCES  
BOARD OF PESTICIDES CONTROL**

Justin Choiniere	)	
Northeast Agricultural Sales, Inc.	)	ADMINISTRATIVE CONSENT AGREEMENT
PO Box 190	)	AND
Detroit, Maine 04929-0190	)	FINDINGS OF FACT

This Agreement by and between Northeast Agricultural Sales, Inc. (hereinafter called the "Company") and the State of Maine Board of Pesticides Control (hereinafter called the "Board") is entered into pursuant to 22 M.R.S.A. §1471-M (2)(D) and in accordance with the Enforcement Protocol amended by the Board on June 3, 1998.

The parties to this Agreement agree as follows:

- 1) That the Company operates as a pesticide dealer and distributor with existing major pesticide storage facilities in both Detroit and Wales, Maine.
- 2) That the Board received information indicating the Company was operating a non-compliant major pesticide storage facility in Connor Township in Aroostook County.
- 3) That in response to the information received in paragraph two, Board staff conducted a follow up investigation of the Company's pesticide storage and sales practices at 1189 Madawaska Road in Connor Township. During surveillance on multiple days in August of 2012, Board inspectors observed a Company double axle box truck arrive at this facility, Company personnel operating a fork lift, and smaller Company trucks leaving the premises. Inspectors tracked one of these loads as outlined in paragraphs four through six.
- 4) That on August 13, 2012, a Board inspector observed Marvin Hedstrom, a licensed restricted use pesticide dealer (RPD 5059) employed by the Company arrive at the warehouse described in paragraph three with an empty pickup truck, back the truck inside the warehouse and exit with a white mini-bulk container in the back of the truck.
- 5) That a second Board inspector observed Hedstrom deliver the same white mini bulk container described in paragraph four, to Wayne and Wade Levitt (W&W Farms) in Connor Township on August 13, 2012.
- 6) That on August 29, 2012, Board inspectors approached Hedstrom at the Company Warehouse described in paragraph two to conduct an inspection of the warehouse to check compliance with the Board's pesticide storage regulations and document pesticide sale and distribution practices at this site. During this inspection a Board inspector collected Company sales order number 000584 (documentary sample number 120829JRH01H ), which confirms the Company's delivery of a 120 gallon mini-bulk container of Bravo ZN Fungicide to W&W Farms on August 13, 2012.
- 7) That from the inspection described in paragraph six, Board inspectors collected a Company inventory sheet (sample #120829JRH01F) that listed the pesticides being stored at the warehouse on June 5, 2012. The total volume of pesticides in inventory on that date was 4,775 pounds of dry pesticides and 667 gallons of non-exempted liquid pesticides. This volume included two, 270 gallon mini-bulk containers of Manzate Flowable Fungicide.

- 8) That during the inspection described in paragraph six, Board inspectors also inventoried the pesticides in storage on August 29, 2012, and determined that the Company had 2,736 gallons of non-exempted liquid pesticides. This volume included three 330 gallon Bravo ZN mini-bulk containers, two 120 gallon mini-bulk containers of this same product, and two 250 gallon MH 30 Xtra mini-bulk containers. In addition there were 374.4 pounds of non-exempt dry pesticides (itemized inventory list documentary sample # 120829JRH01F).
- 9) That the definition of a major pesticide storage facility found in CMR 01-026 Chapter 10 Section (2) AA, includes a facility operated by a pesticide distributor that:
- contains at any one time an amount greater than or equal to 600 gallons of liquid pesticide product, other than liquid formulations of products listed in Chapter 24, Section 2, "Exempted Products," or
  - contains liquid pesticides in containers that are thirty (30) gallons or greater in size, other than liquid formulations of products listed in Chapter 24, Section 2, "Exempted Products."
- 10) That from the inspection described in paragraph six the following sales orders (sample # 120829JRH01I) were collected documenting additional sales of mini-bulk containers from the Company's Connor Township pesticide storage facility in 2012:

Sales order #	Pesticide	Volume	Sales Date	Farm Town
000570	Bravo Zn	120 gal	July 30, 2012	New Sweden
000520	Bravo Zn	120 gal	June 18, 2012	Limestone
000519	Manzate Flowable	270 gal	June 18, 2012	Limestone
000517	Bravo Zn	120 gal	June 15, 2012	Caribou

- 11) That in a written statement signed by Hedstrom at the time of the inspection described in paragraph six (sample # 120829JRH01E), Hedstrom acknowledged the Company stored and distributed pesticides during the 2012 growing season from the Connor Township warehouse as described in paragraphs two through ten.
- 12) That all sales orders summarized in paragraph ten were on Company letterhead listing 1189 Madawaska Road in Connor Township, ME 04736, as the address of the Company.
- 13) That the facts described in paragraphs one through twelve demonstrate that the Company was operating a major pesticide storage facility at 1189 Madawaska Road in Connor Township during the 2012 growing season.
- 14) That to ensure that siting, construction, and operational activities of major pesticide storage facilities are compliant with Board pesticide storage regulations, CMR 01-026 Chapter 24, Section 4(K)I(b) requires a design certification when an existing building or portion of an existing building is converted to a major pesticide storage facility. The Company's Connor Township major pesticide storage facility is an existing building that was converted to a major pesticide storage facility.
- 15) That the Company had no design certification for its Connor Township major pesticide storage facility when the facility was inspected on August 29, 2012.
- 16) That the circumstances in paragraphs one through fifteen, constitute a violation of CMR 01-026 Chapter 24, Section 4(K)I(b).

- 17) That CMR 01-026 Chapter 24, Section 3(C)III(a) requires that doors to a major pesticide storage facility have a fire rating of one hour.
- 18) That based on the inspection in paragraph six, it was determined that the doors of the Company's Connor Township major pesticide storage facility did not have a fire rating of one hour.
- 19) That the circumstances in paragraphs six through eighteen, constitute a violation of CMR 01-026 Chapter 24, Section 3(C)III(a).
- 20) That CMR 01-026 Chapter 24, Section 3(C)III(b) requires a major pesticide storage facility to have at least one standard door on which panic hardware is installed. The standard door must latch shut when closed and open outward from where products are stored when a person depresses the horizontal bar on the panic hardware.
- 21) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have a standard door that latched shut when closed and opened outward from where products are stored when a person depresses the horizontal bar on the panic hardware.
- 22) That the circumstances in paragraphs six through sixteen and paragraphs twenty and twenty-one, constitute a violation of CMR 01-026 Chapter 24, Section 3(C)III(b).
- 23) That CMR 01-026 Chapter 24 section 4(D)III requires that floor drains in a major pesticide storage facility must be sealed or be connected to a waste storage tank of sufficient size to hold 25% of the liquid volume stored.
- 24) That based on the inspection in paragraph six, it was determined that the floor drains in the Company's Connor Township major pesticide storage facility were not sealed or connected to a waste storage tank of sufficient size to hold 25% of the liquid volume being stored.
- 25) That the circumstances in paragraphs six through sixteen, twenty-three and twenty-four, constitute a violation of CMR 01-026 Chapter 24 section 4(D)III.
- 26) That CMR 01-026 Chapter 24 section 4(E)II requires a major pesticide storage facility to have a battery powered emergency lighting system that automatically activates during power outages and illuminates all exits.
- 27) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have an emergency lighting system as required in paragraph twenty-six.
- 28) That the circumstances in paragraphs six through sixteen, twenty-six and twenty-seven, constitute a violation of CMR 01-026 Chapter 24 section 4(E)II.
- 29) That CMR 01-026 Chapter 24 section 4(H)II requires that a major pesticide storage facility have an automatic alarm system that is connected to a supervised central station. This system must have a backup power system so it will operate during power outages.
- 30) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have an automatic alarm system as required in paragraph twenty-nine.

- 31) That the circumstances in paragraphs six through sixteen, and twenty-nine, and thirty, constitute a violation of CMR 01-026 Chapter 24 section 4(H)II.
- 32) That CMR 01-026 Chapter 24 section 4(I)I requires that all major pesticide storage facilities be equipped with an automatic heat and smoke detector alarm system connected to a supervised central station. The system must have both audible and visible devices and have a backup power system so it will operate during power outages.
- 33) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have an automatic heat and smoke detector alarm system as required in paragraph thirty-two.
- 34) That the circumstances in paragraphs six through sixteen, thirty-two and thirty-three, constitute a violation of CMR 01-026 Chapter 24 section 4(I)I.
- 35) That CMR 01-026 Chapter 24 section 4(J) requires that all major pesticide storage facilities have emergency showers available. These emergency showers must be located either in the facility or in an adjacent building on the premises within 200 feet of the major pesticide storage facility. There must also be a plan for collecting any water used in emergency showers.
- 36) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have an emergency shower available as required in paragraph thirty-five.
- 37) That the circumstances in paragraphs six through sixteen, thirty-five and thirty-six constitute a violation of CMR 01-026 Chapter 24 section 4(J).
- 38) That CMR 01-026 Chapter 24 section 6(B) requires that each entrance to a pesticide storage facility be prominently posted with the words, "Danger - Pesticide Storage - Keep Out."
- 39) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility did not have the words, "Danger - Pesticide Storage - Keep Out" posted at any entrances as required in paragraph thirty-eight.
- 40) That the circumstances in paragraphs six through sixteen, thirty-eight and thirty-nine, constitute a violation of CMR 01-026 Chapter 24 section 6(B).
- 41) That CMR 01-026 Chapter 24 section 6(C) requires that all entrances to a pesticide storage facility be posted with signs indicating smoking is not allowed.
- 42) That based on the inspection in paragraph six, it was determined that the entrances to the Company's Connor Township major pesticide storage facility were not posted as required in paragraph forty-one.
- 43) That the circumstances in paragraphs six through sixteen, forty-one and forty two, constitute a violation of CMR 01-026 Chapter 24 section 6(C).
- 44) That CMR 01-026 Chapter 24 section 6(E)I requires that all pesticide storage facilities be equipped with at least one eye wash station capable of flushing eyes for a minimum of fifteen minutes.

- 45) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility was not equipped with at least one eye wash station capable of flushing eyes for a minimum of fifteen minutes as required in paragraph forty-four.
- 46) That the circumstances in paragraphs six through sixteen, forty-four and forty-five, constitute a violation of CMR 01-026 Chapter 24 section 6(E)I.
- 47) That CMR 01-026 Chapter 24 section 6(E)III requires that all pesticide storage facilities be equipped with spill response and clean-up equipment, including, but not limited to absorbents, empty containers, brooms and shovels and personal protective equipment for employees.
- 48) That based on the inspection in paragraph six, it was determined that the Company's Connor Township major pesticide storage facility was not equipped with spill response and clean-up equipment as required in paragraph forty-seven.
- 49) That the circumstances in paragraphs six through sixteen, forty-seven and forty-eight, constitute a violation of CMR 01-026 Chapter 24 section 6(E)III.
- 50) That on February 14, 2013, Board inspectors returned to the Company's Connor Township major pesticide storage facility and took measurements from the pesticide storage area to nearby properties.
- 51) That, from the measurements taken in paragraph fifty, it was determined that the Company's Connor Township major pesticide storage facility's storage area was within 250 feet of both Gaylin Hallett's residence and Harry Pelletier's residence.
- 52) That CMR 01-026 Chapter 24 section 3(B)III(a) prohibits the siting of a new major pesticide storage area closer than 250 feet of a residential building.
- 53) That the circumstances in paragraphs six through sixteen, and fifty through fifty-two, constitute a violation of CMR 01-026 Chapter 24 section 3(B)III(a).
- 54) That on April 27, 2012, a Board inspector conducted a routine restricted use pesticide dealer inspection at the Company's Detroit facility.
- 55) That from the inspection in paragraph fifty-four it was determined that the Company sold two 2 ½ gallons containers of the restricted use herbicide Gramoxone Inteon, to Daniel E. Brown (transaction # 1221), the owner of Gravelwood Farm in Blue Hill on April 13, 2010.
- 56) That from the inspection in paragraph fifty-four it was determined that on June 11, 2010, the Company sold two 2 ½ gallons of the restricted use herbicide Charger Max ATZ (EPA reg. # 100-817-1381, invoice # 48449) to Dan Davis who resides at 340 Bowden Road in Corrina.
- 57) That M.R.S. 22 § 1471-D(3)(B), states that no pesticide dealer shall distribute limited or restricted use pesticides to any person who is not licensed or certified by the Board.
- 58) That Daniel E. Brown and Dan Davis were not licensed pesticide applicators at the time the Company made the restricted use pesticides sales to them as outlined in paragraphs fifty-five and fifty-six.
- 59) That the circumstances in paragraphs fifty-four through fifty-eight, constitute two separate violations of M.R.S. 22 § 1471-D(3)(B)

- 60) That on April 22, 2004, the Company contacted the Board to inquire about storage requirements prior to opening their facility on the Leeds Junction Road in Wales and at that time was provided a copy of the Board's Chapter 24: Pesticide Storage Facility Standards/Pesticide Distributors.
- 61) That the Company opened and operated a non-compliant major pesticide storage facility on the Leeds Junction Road in Wales from approximately July 21, 2004 through February 1, 2007, in disregard of the Board's Chapter 24: Pesticide Storage Facility Standards/Pesticide Distributors requirement information they received as described in paragraph sixty.
- 62) That at its June 2007 meeting, the Board ratified a consent agreement with the Company to resolve the violations involving the non-compliant major pesticide storage facility in Wales.
- 63) That the violations cited in the consent agreement described in paragraph sixty-two included the following:
- CMR 01-026 Chapter 24, Section 3 (B) III (f), No new major pesticide storage facility may be located closer than 250 feet from any area used for livestock.
  - CMR 01-026 Chapter 24, Section 4 (K) I (b), Anyone converting an existing building or portion of an existing building ...shall obtain a certification...
  - CMR 01-026 Chapter 24, Section 4 (D) II, Floors, the outside edges of floors shall have at least a four inch, sealed concrete berm.
  - CMR 01-026 Chapter 24, Section 4 (E) II, Lighting, a battery powered emergency lighting system...
  - CMR 01-026 Chapter 24, Section 4 (H) II, Security, an automatic alarm system that is connected to a supervised central location....
  - CMR 01-026 Chapter 24, Section 4 (I) (I), Fire protection, all major pesticide storage facilities shall be equipped with an automatic heat and smoke detector....
- 64) That the Board determined that a fine of \$10,000 would have been appropriate for the violations described in paragraph sixty-three, but agreed to reduce that penalty to \$2,000 for the purpose of resolving the violations by Consent Agreement.
- 65) That the Company also entered into a Consent Agreement with the Board on April 20, 2011, for a drift violation in connection with an application made on May 17, 2010. Consequently, the violations described in paragraphs sixteen, nineteen, twenty-two, twenty-five, twenty-eight, thirty-one, thirty-four, thirty-seven, forty, forty-three, forty-six, forty-nine, fifty-three and fifty-nine are all subsequent violations for the purposes of the enhanced penalty provisions in 7 M.R.S. § 616-A (2)(A).
- 66) That the Board has regulatory authority over the activities described herein.
- 67) That the Company expressly waives:
- a) Notice of or opportunity for hearing;
  - b) Any and all further procedural steps before the Board; and
  - c) The making of any further findings of fact before the Board.
- 68) That this Agreement shall not become effective unless and until the Board accepts it.

69) That in consideration for the release by the Board of the causes of action which the Board has against the Company resulting from the violations referred to in paragraphs sixteen, nineteen, twenty-two, twenty-five, twenty-eight, thirty-one, thirty-four, thirty-seven, forty, forty-three, forty-six, forty-nine, fifty-three and fifty-nine, the Company agrees to pay to the State of Maine the sum of a \$15,000 . (Please make checks payable to Treasurer, State of Maine). Payments of \$1,000 a month will be made commencing in June of 2013 and will continue for consecutive months until the full penalty amount has been paid.

IN WITNESS WHEREOF, the parties have executed this Agreement of seven pages.

NORTHEAST AGRICULTURAL SALES, INC.

By: Justin Choiniere Date: 6/14/13  
Type or Print Name: JUSTIN CHOINIERE

BOARD OF PESTICIDES CONTROL

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Henry Jennings, Director

APPROVED:

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Mark Randlett, Assistant Attorney General

## STATE OF MAINE

—  
 IN THE YEAR OF OUR LORD  
 TWO THOUSAND AND THIRTEEN

—  
 H.P. 627 - L.D. 903

**An Act To Enhance the Development and Implementation of Integrated Pest Management Programs**

**Be it enacted by the People of the State of Maine as follows:**

**Sec. 1. 7 MRSA §607, sub-§6**, as repealed and replaced by PL 2007, c. 466, Pt. A, §25, is amended to read:

**6. Registration fee; programs funded.** The applicant desiring to register a pesticide must pay an annual registration fee of ~~\$150~~ \$160 for each pesticide registered for that applicant. Annual registration periods expire on December 31st or in a manner consistent with Title 5, section 10002, whichever is later.

The board shall monitor fee revenue and expenditures under this subsection to ensure that adequate funds are available to fund board and related department programs and, to the extent funds are available, to provide grants to support stewardship programs. The board shall use funds received under this subsection to provide:

A. An annual grant of no less than \$135,000 to the University of Maine Cooperative Extension, on or about April 1st, for development and implementation of integrated pest management programs. The University of Maine may not charge overhead costs against this grant; and

B. Funding for public health-related mosquito monitoring programs or other pesticide stewardship and integrated pest management programs, if designated at the discretion of the board, as funds allow after expenditures under paragraph A. The board shall seek the advice of the Integrated Pest Management Council established in section 2404 in determining the most beneficial use of the funds, if available, under this subsection.

By February 15th annually, the board shall submit a report to the joint standing committee of the Legislature having jurisdiction over agriculture, conservation and forestry matters detailing the grants funded by the fee under this subsection. The annual report must include a recommendation by the board as to whether the amount of the fee is adequate to fund the programs described in this subsection. The joint standing committee may report out a bill to the Legislature based on the board's recommendations.

Sec. 2. 7 MRSA §2406 is enacted to read:

**§2406. University of Maine Cooperative Extension integrated pest management programs**

The University of Maine Cooperative Extension shall develop and implement integrated pest management programs. The extension may seek the advice of the Integrated Pest Management Council established in section 2404 in establishing the programs. The extension shall use the funds deposited pursuant to section 607 for the purposes of this section. The extension shall administer the grant pursuant to section 607, subsection 6, paragraph A.

**Sec. 3. Appropriations and allocations.** The following appropriations and allocations are made.

**UNIVERSITY OF MAINE SYSTEM, BOARD OF TRUSTEES OF THE**

**University of Maine Cooperative Extension N147**

Initiative: Allocates funds for the University of Maine Cooperative Extension to develop and implement integrated pest management programs.

<b>OTHER SPECIAL REVENUE FUNDS</b>	<b>2013-14</b>	<b>2014-15</b>
All Other	\$135,000	\$135,000
<b>OTHER SPECIAL REVENUE FUNDS TOTAL</b>	<b>\$135,000</b>	<b>\$135,000</b>

**Sec. 4. Effective date.** This Act takes effect January 1, 2014.

# SECTION 24[c] REGISTRATION

## FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF MAINE

### MALATHION 8 AQUAMUL Organophosphate Insecticide

EPA Reg. No. 34704-474

EPA SLN No.

Expiration Date:

#### DIRECTIONS FOR USE

- IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.
- THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION.
- FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, WORKER PROTECTION STANDARD REQUIREMENTS, AND PRECAUTIONS ON THE EPA REGISTERED LABEL.

#### SPOTTED WING DROSOPHILA CONTROL IN BLUEBERRIES

CROP	PEST	RATE (Pts./A)	DIRECTIONS	PRE-HARVEST INTERVAL (PHI)
Blueberries	Spotted Wing Drosophila	Up to 2.5	<ul style="list-style-type: none"><li>• The maximum application rate is 2.5 lbs AI/A (2.5 pts Malathion 8 Aquamul); and the maximum number of applications per year is 2.</li><li>• Do not exceed a total maximum use rate of malathion from all sources of 5 lbs AI per acre per season.</li><li>• The minimum retreatment interval is 7 days.</li><li>• The Restricted Entry Interval (REI) is 12 hrs</li></ul>	1 Day

24[c] Registrant  
Loveland Products, Inc.  
PO Box 1286  
Greeley, Colorado 80632-1286



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY  
BOARD OF PESTICIDES CONTROL  
28 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB  
COMMISSIONER

HENRY S. JENNINGS  
DIRECTOR

July 15, 2013

Michael Legasse  
Green Thumb Lawn Service  
64 Stevens RD  
Brewer ME 04412

**RE: 2013 Chapter 22 Variance Permit**

Dear Mr. Legasse:

This letter will serve as your variance permit for your 2013 Vegetation Management Program along roadway curbing, guardrails, sidewalks, fire hydrants, and marker and traffic islands in various municipalities. As you may recall, the Board authorized staff to approve repeat variance requests when no problems were experienced the previous year. Your permit is based upon your company adhering to the precautions listed in Section X of your July 9, 2013 application.

We will be notifying the Board at their July 26, 2013 meeting that this permit has been issued. If you have any questions concerning this matter, please feel free to contact me at 287-2731.

Sincerely,

Henry Jennings  
Director  
Maine Board of Pesticides Control

Maine Board of Pesticides Control

# **Miscellaneous Pesticides Articles July 2013**

*(identified by Google Alerts or submitted by individuals)*

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## [Cooperative Extension at Highmoor Farm](#)

### Cooperative Extension at Highmoor Farm



#### Posts Tagged 'spotted wing drosophila'

##### [Fruit Growers Alert: Spotted Wing Drosophila Has Been Found In Maine!](#)

Wednesday, July 10th, 2013



Male (left) and Female (right) Spotted Wing Drosophila, photo by Griffin Dill.  
Actual size: 2-3 mm.

Fruit Growers Alert – July 9, 2013

For full page print version, please see link at the bottom. Click on photos to enlarge.

#### ***SPOTTED WING DROSOPHILA HAS BEEN FOUND IN MAINE!***

David Handley, Vegetable & Small Fruit Specialist; James Dill, Pest Management Specialist; Frank Drummond, Professor of Insect Ecology/Entomology

Male spotted wing drosophila flies were captured in traps in **Dresden** and **Whitefield** on July 3<sup>rd</sup> in wild blueberry fields. On Saturday, July

6<sup>th</sup>, a male fly was caught in a **Winterport** blueberry field. We have traps set out in raspberry and highbush blueberry fields in southern and central Maine, but have not yet captured any spotted wing drosophila in those fields. However, the presence of spotted wing drosophila in the wild blueberry fields indicates that this insect is now becoming active in the state, slightly earlier than our first captures last year. Research and Extension staff in Connecticut, Massachusetts, New Hampshire and New York have all reported captures of spotted wing drosophila over the past two weeks, although in all cases the numbers have been low.



Photo by David Handley



Photo by James Dill

Raspberries before and after infestation, 48 hours at room temperature after picked.

Spotted wing drosophila (*Drosophila suzukii*) is a new pest which is a concern for raspberries blueberries and day neutral strawberries, as well as many other soft fruits. This insect is a small fruit fly, similar to the type that fly around the over-ripe bananas in your kitchen. However, this species will lay its eggs on fruit before it ripens, resulting in fruit that is contaminated with small white maggots just as it is ready to pick. As a result, the fruit quickly rots and has no shelf life. This insect first came into Maine in 2011, and caused significant losses in raspberry and blueberry plantings last year. Spotted wing drosophila can complete a generation in less than two weeks, with each adult female laying hundreds of eggs, so populations can explode rapidly when conditions are right. This makes them very difficult to control, and frequently repeated insecticide sprays (1 to 3 times per week) are often needed to prevent infestations once the insect is present in a field. It appears that spotted winged drosophila can successfully overwinter here, although it has not been able to build up to damaging levels until late summer. June-bearing strawberries and early ripening varieties of raspberries and blueberries may escape infestation, but later ripening varieties and everbearing types of strawberries and raspberries will likely become infested if they are not protected. Now that spotted wing drosophila has been confirmed in Maine, growers should be on the alert and look for fruit flies on their fruit and symptoms of premature fruit decay. Products that provide good control of drosophila on berries include Delegate®, Brigade®, Bifenture®, Danitol®, Mustang Max®, malathion and Assail®. Research carried out at the Connecticut Agricultural Experiment Station suggests that adding table sugar to group 4A insecticides such as Assail®, may improve their effectiveness. The recommended rate would be 1-2 lb. sugar per 100 gallons of spray. Please check product labels for rates, post-harvest intervals and safety precautions. Keeping the fields clean of over-ripe and rotten fruit can also help reduce the incidence of this insect. For information on identifying spotted wing drosophila and making your own monitoring traps, visit the [Michigan State University's Spotted Wing Drosophila](http://www.maizecrops.com/extension/2012/06/06/spotted-wing-drosophila/) website. There is also a good fact sheet series on management of spotted wing drosophila on the [Penn State Extension](http://www.pennstate.edu/extension/2012/06/06/spotted-wing-drosophila/) website.

David T. Handley  
Vegetable & Small Fruit Specialist

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Monmouth, ME 04259	Orono, ME 04473
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#### IPM Web Pages:

<http://extension.umaine.edu/ipm/>

[http://www.pestwatch.psu.edu/sweet\\_corn.htm](http://www.pestwatch.psu.edu/sweet_corn.htm)

<http://www.umass.edu/umext/ipm/>

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Tags: [Maine Integrated Pest Management](#), [Maine spotted wing drosophila](#), [spotted wing drosophila](#), [SWD](#)  
Posted in [News](#) |

#### [Press Herald Interviews Handley, Kirby on Garden Insects](#)

Monday, June 24th, 2013

Yesterday at 6:35 PM

## [CMP gets flack for herbicide use on Oakland walking trail](#)

By Matt Hongoltz-Hetling [mhhetling@mainetoday.com](mailto:mhhetling@mainetoday.com)  
Staff Writer

**OAKLAND** — Central Maine Power's use of herbicides near a popular walking trail in Oakland has some residents upset, but the company says killing the vegetation around its transmission lines helps keep the power on for Maine's homes and businesses.



[click image to enlarge](#)

Central Maine Power recently used herbicides near a walking trail in Oakland to clear vegetation around its transmission lines, but some residents are concerned about notification of the chemical's use.

Photo by Emily Shaw

[Select images available for purchase in the  
Maine Today Photo Store](#)

### **Vegetation information**

Central Maine Power officials say those interested in learning more about the Vegetation Management Program can call the company at 1-800-750-4000 to speak to the vegetation management department, or visit the company website at [www.cmpco.com](http://www.cmpco.com).

In recent years, the power company has been more aggressive in attacking vegetation that threatens its lines, pruning and chemically treating the growth every five years instead of less frequently.

On July 3, a contractor working for the power company sprayed herbicide beneath a stretch of power lines that coincides with the Messalonskee Stream Trail, which runs along the stream. The spraying generated complaints at the town office from residents who were unsettled by the sight of a large tract of dying vegetation.

Oakland resident Emily Shaw, who frequently uses the trail, said she didn't know the work was happening until she saw a worker from the company's contractor, Lucas Tree Experts, enter the area on an ATV loaded with tanks of liquid.

Shaw, who also teaches political science at Thomas College, said she was concerned because she uses the trail with her child and dog, and because she could see the herbicide entering the stream.

"That entire area went from being summery and green to large swaths of it being killed off, being ugly and brown," Shaw said.

Shaw said she isn't opposed to maintenance, but she would have preferred a chance to trim the vegetation herself with hedge clippers to avoid the chemical treatment.

"To me, the big issue is that I didn't know it was happening," Shaw said.

### **Notifying the public optional**

The power company and the town disagree on how much notice was given before the spraying.

But under Maine law, the company isn't required to give any notice at all, according to John Bott, spokesman for the Maine Department of Agriculture, Conservation and Forestry, which oversees the Maine Board of Pesticides Control.

Neither the power company nor the division of Lucas Tree Experts that performs the work have any issues pending or on file with the board, Bott said.

"There is no public notification requirement on a public way," Bott said. "There is for lawns, and outdoor structures, and ornamental plants, and aerial spraying."

Gail Rice, a spokeswoman for Central Maine Power, said the company voluntarily notifies people to address potential concerns about herbicides and losing shade trees near their homes.

One way the company gets the word out is by sending annual mailings to each town, city and county in its service area, regardless of whether work is planned. Towns are given posters describing the program for display in the town office.

"Whenever we are going to do work in a municipality, we give that town notice," she said. Oakland Town Manager Peter Nielsen said he didn't get a notification of the work being done alongside the walking trail this year.

"I don't think there was a letter sent," Nielsen said. "I try to keep them, and I just checked in my folder."

Rice suggested that if Oakland didn't receive the letter, it could have been a problem with the postal delivery.

The power company's customers are also told about the program through annual notices in bill inserts, and through monthly bill messages, which mention the herbicides.

Advertisements in local newspapers do not generally mention herbicides. For instance, a May 29 ad in the Morning Sentinel and Kennebec Journal says tree pruning will happen in 2013 — with no mention of herbicide use — and says the pruning will occur in Gardiner, Pittston, Dresden, Richmond, Whitefield, Chelsea, Randolph, Readfield, Fayette, Mount Vernon, Chesterville, Vienna, Belgrade, Oakland, Mercer, New Sharon, Pittsfield and Rome.

Rice cited the ad as part of the public notification effort related to the company's vegetation work. Shaw, the Oakland resident concerned about the spraying, said the message may still not be heard, because the blanket notifications not tied to specific actions create a desensitizing effect.

"You have so much noise, the signal is lost," she said.

## **A giant on tiptoes**

Central Maine Power's vegetation management program is a large-scale enterprise, a \$25 million effort covering 2,400 miles of transmission line corridors throughout Maine, enough to extend from Augusta all the way to Albuquerque, New Mexico.

Rice said every effort is made to improve customer service while being environmentally sensitive.

"We don't do it aerially, we do it from the ground," Rice said of herbicide use. "We take care to spray only the vegetation that we need to."

Every year, the company targets growth within 25 feet of about 20 percent of its lines. Rice said the five-year cycle was begun just five years ago, replacing a less aggressive approach of managing the vegetation every seven or eight years.

With fewer tree branches growing close to power lines, Rice said, there are fewer outages during storms — since 2008, the number of tree-caused outages has gone down by 34 percent because of the program, according to company estimates.

"It's important," Rice said. "You think of someone who relies on electricity to keep their medical equipment running or businesses that rely on it to keep their machines humming."

Rice said the spray is 95 percent water, and includes a mixture of three herbicide products sold under the brand names Rodeo, Arsenal and Milestone. Arsenal is marketed by BASF, a North Carolina-based chemical company, as a low-volume herbicide that is gentle on wildlife habitats, but effective against a wide variety of grasses, flowers and trees. Rodeo and Milestone, both sold by chemical company DowAgroSciences, are effective against a variety of grass, weeds and brush.

Rice said contractors must meet strict qualifications, including getting a license from the state, posting notices of their work and following all state and federal laws. They are also closely overseen by the company's licensed arborists, she said.

Rice acknowledged public concerns about pruning or herbicide use, particularly in highly visible areas. She said when the company began a similar five-year cycle of trimming trees in roadside areas, "there was a significant impact on visuals" that also drew concerns.

But over time, she said, the company has received positive feedback from customers who are happy about the increased reliability of their power.

## **Avoiding herbicides**

Landowners who abut the power company's transmission line corridors can prevent herbicide spraying near their land if they are willing to sign a landowner maintenance agreement and take managing the vegetation themselves. Customers are regularly reminded of the opt out program in their billing statements.

She said the power company is willing to explore the idea of groups like Kennebec Messalonskee

Trails, which maintains the Messalonskee Stream Trail, taking over maintenance of areas like the one in Oakland, but only if the group owns the land. In some areas, the power company itself has an easement allowing it to run the lines over the land and someone else owns it, which, Rice said, does not allow the company to enter into such an agreement.

Rice said property tax maps in Oakland show CMP owns most, but not all, of the power lines that run along the stream.

Peter Garrett, president of the trails group, said its members have never talked about taking over the responsibility of keeping the vegetation away from the power lines. With the issue now raised, he said, it would consider the idea, possibly removing the need for future herbicide use.

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mhhhetling@centralmaine.com*

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# Ogunquit would be first to ban pesticides outright

## Residents will decide Tuesday whether to prohibit chemical fertilizers, pesticides and herbicides on all local property.

Posted: June 08, 2013 11:32PM

Written by [Beth Quimby](#), Staff Writer

Ogunquit could become the first community in Maine to impose a total ban on chemical fertilizers, pesticides and herbicides.

Voters in the coastal community will decide at the polls Tuesday whether an existing ordinance that prohibits the use of chemical fertilizers, pesticides and herbicides on town-owned land should be extended to cover private property as well. If they approve it, Ogunquit would join just a handful of communities in the country that have taken such a step.

So far, there has been little opposition to the proposal, said Michael Horn, chairman of the Ogunquit Conservation Commission. He said the commission reached out to landscapers and lawn service operators to alert them to the proposed ban, but no one showed up to oppose the measure at any of the three public hearings on the matter.

While some in the pesticide and lawn care industry warn the idea may backfire, Horn said chemical companies didn't appear to oppose the possible ban, either.

"We are probably not big enough," said Horn.

The 4.5-square-mile town has 1,200 residents, although the number is closer to half that in the winter when the snowbirds have moved back to Florida.

But some residents say the lack of opposition is due to the town's strong sense of



Gabe Souza/Staff Photographer The Meadowmere Resort in Ogunquit, pictured here Friday, uses environmentally friendly means to tend its gardens and pools. Ogunquit is considering an ordinance that would ban chemical pesticides, fertilizers and herbicides as a way to protect the town's natural resources.

environmentalism.

Ogunquit is one of only 25 communities in the state with a pesticide-control ordinance. It also has 11 restaurants and hotels certified as environmental leaders in the Department of Environmental Protection's Green Business Certification Program, more than any other community in the state. The town also has a high municipal recycling rate – 49 percent compared to the 38 percent state average.

“We are a green community,” said Karen Arel, president of the Ogunquit Chamber of Commerce.

Horn said the town's unusual demographic profile might be part of the reason it takes pride in being green.

“Our population is the oldest in the state and Maine is the oldest state in the country,” said Horn.

While health concerns are behind pesticide regulation in many communities, proponents in Ogunquit say the proposed ban is largely aimed at protecting the watershed and water quality in a town where tourism is the major economic sector. During a peak summer weekend, the town's population surges to as many as 40,000 people, most of whom descend on the town's 1.5-mile-long beach.

Allyson Cavaretta, director of sales and marketing for The Meadowmere Resort in Ogunquit, which won the Governor's Environment Excellence Award this year for generating 70 percent of its energy from solar panels and recycling all of its trash, said the business community is very supportive.

“It would be very hard to find anyone against it. We have a watershed, the beach and a lot of good things to take care of,” said Cavaretta.

Various exemptions and waivers would be allowed under the extended ban. Poison ivy control on the Marginal Way, a public footpath along the water, is exempt under the current ordinance.

Fines for violating the ordinance would range from \$100 to \$2,500.

However, Code Enforcement Officer Scott Heyland, on the job for a month, said he hasn't figured out how strictly the new ordinance would be enforced. “I don't think we are going to be out running and chasing people. It is all very new,” said Heyland.

Horn said he expects the enforcement will be a word-of-mouth process. “If you see a neighbor doing some spraying, you can say, ‘You know we got a law,’” said Horn.

Horn said if the ordinance passes, the conservation commission will try to spread the word to summer residents with mailings, messages on the town website and through articles in

newspapers and other media.

Outside the small seaside town, meanwhile, there are critics of the proposal. State and national pest management and landscape associations say banning all chemical pesticides, herbicides and fertilizers is not a good idea.

Gene Harrington, vice president of government affairs for the National Pest Management Association, said a total ban would be highly unusual and probably unenforceable.

“It will lead to neighbors snitching on neighbors as a result of years-long vendettas,” said Harrington.

He said the Maine Board of Pesticides Control already does a good job regulating pesticides in the state. “It is better left to the folks in the state that have the resources and expertise,” said Harrington.

Pesticides have already gone through a stringent regulatory process at the federal level, too, according to Harrington. He said people will resort to more desperate measures, which could be worse for the environment.

“It sounds poorly thought through,” said Harrington.

Don Sproul, executive director of the Maine Landscape and Nursery Association, which has 325 members across the state, said his group supports organic products and sustainable practices, but it does not support a total ban on chemical garden products.

“You need to keep your options open,” he said.

Sproul said one New Hampshire community that banned chemical applications on public property learned to regret it. He said the town ended up with a pest infestation on its high school athletic fields and had to shut them down for two years.

“They spent several hundred thousand dollars as a result,” said Sproul.

The Maine Organic Farmers and Growers Association lauded the proposed ban.

“It is bold for Ogunquit to be taking this on,” said Heather Spaulding, interim executive director.

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# Ogunquit won't outlaw pesticides on private property

## The measure was defeated by only 10 votes on Tuesday, 183-173

Posted: June 11, 2013 11:59PM

Written by [Randy Billings](#), Staff Writer

OGUNQUIT — Residents on Tuesday narrowly defeated a proposal to make the community the first in the state to ban the use of chemical fertilizers, pesticides and herbicides on private property.

The measure was defeated by only 10 votes, 183-173. Nineteen voters left the question blank.

Michael Horn, chairman of the conservation commission, was surprised by the result.

"It's kind of disappointing because we didn't get any negative feeling back," Horn said.

There was no organized opposition to the proposal heading into the election, though the Maine Landscape and Nursery Association and the National Pest Management Association weighed in against the ban when asked by a reporter. Residents attributed the lack of opposition to the town's environmental ethic.

Ogunquit is one of only 25 communities in the state with a pesticide-control ordinance that applies to public land. It also has 11 restaurants and hotels certified as environmental leaders in the Department of Environmental Protection's Green Business Certification Program, more than any other community in the state. The town also has a high municipal recycling rate – 49 percent compared to the 38 percent state average.

Only 375 of the town's 1,114 registered voters cast ballots at Dunaway Community Center in Ogunquit on Tuesday.



Gabe Souza/Staff Photographer The gardens and pools at Meadowmere Resort in Ogunquit, seen Friday, June 7, 2013, are environmentally friendly. Residents on Tuesday, June 11, 2013 narrowly defeated a proposal to make the community the first in the state to ban the use of chemical fertilizers, pesticides and herbicides on private property.

Voters seemed attracted to the environmental and health benefits of the ban, but concerned about private property rights.

Jim O'Connell, a 73-year-old retired electrical engineer, said he felt the ban was trying to accomplish something good, but that it reached too far and was a bit "like using a sledgehammer on a nail."

He was also concerned with how the ban would be enforced.

"I mean if somebody sneaks out in the middle of the night and spreads a bunch of pesticides, who's gonna catch them?" O'Connell asked.

While health concerns are behind pesticide regulation in many communities, proponents in Ogunquit say the proposed ban was largely aimed at protecting the watershed and water quality in a town where tourism is the major business.

During a peak summer weekend, the town's population surges to as many as 40,000 people, most of whom descend on the town's 1.5-mile-long beach.

Various exemptions and waivers would have been allowed under the extended ban. Also, emergency waivers could have been requested if a pest situation presented an immediate threat to public health or substantial property damage.

Fines for violating the ordinance would have ranged from \$100 to \$2,500.

The town's code officer was not immediately sure how the ban would have been enforced. But the conservation commission had planned to spread the word to summer residents with mailings, messages on the town website and through articles in newspapers and other media.

Now it appears the commission will regroup and focus its efforts on more educational outreach about the pitfalls of chemical pesticides, in hopes of one day re-introducing the ban.

"It's feasible. I guess it's going to take a measure and a half of educating the people and I think we will continue to do it," Horn said.

*Karen Antonacci contributed to this story.*

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# Scarborough Leader

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2013-05-17 / In the Know

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## In the Know

### Town leads on organic lawn care policy

It's the time of year again to think about lawn care. Scarborough is one of the few towns in Maine, and in the nation, to have adopted an organic grounds care policy for town and school properties.

The Scarborough Pest Management Policy was adopted by the Town Council in September 2011 and can be found on the town's Community Services website on the Community Information webpage.

The policy was primarily created to protect human health and our children's health, above all, but it also protects our watershed, including Scarborough's signature marsh and beaches; our shellfish economy; our wildlife, including our vast array of migratory birds; beneficial insects and pollinators such as bees; as well as pets.

The policy charges Town Manager, Tom Hall, with implementation of the policy, and further establishes a citizen's Pest Management Advisory Committee (PMAC). The Committee holds televised Community Channel 3 meetings, typically once a month, with its meetings open to the public, and minutes recorded on the Community Services website.

The PMAC acts in an advisory and problem-solving capacity, particularly during the transition period from conventional to organic grounds, a process of about three years. With only one year of experience with this new approach, the PMAC continues to monitor the effectiveness of the program, both in turf management success and cost, providing an important advisory role to the Town.

Go Green Landscaping of Scarborough currently serves as the town's major contractor with staff who are accredited organic lawn care professionals (AOLCPs), some of only a few such credentialed professionals in the state.

All of the documentation of the company's field scouting reports and photos, soil biology tests, care schedules, applications, and material data safety sheets regarding products used is available on the town's website.

The town's Community Services staff joins Go Green on the front lines of this transition, balancing never-ending sports field, playground, school grounds, and park use with organic cultural practices such as mowing, aerating, and watering.

The PMAC is further charged with encouraging the reduction of pesticide use on residential and commercial properties.

The social and cultural challenge involves shifting expectations from artificial perfection, chemical dependency, and soil depletion to a new paradigm of restorative soil health, horticultural science, living soil food webs, and an aesthetic that no longer comes at a price to human or environmental health.

The goal of an organic approach is to create a living soil, where a small number of weeds and pests are horticulturally acceptable and can be held in check with the natural predators, exchanges, and cycles of a biologically-diverse system.

Organic practices include: Soil testing; aerating; topdressing; overseeding with hardier blends of grass seed; amending soil with compost, compost teas, and grass clippings; wiser mowing practices (higher and when grass is not stressed or wet) and watering practices (deeply and infrequently); special organic pest management strategies or applications when pests or weeds get out of balance; and reduction of lawn area in favor of low maintenance ground covers or food production.

Once soil health is restored, such practices should save time, effort and money in the long run.

The PMAC collaborated with the town's Conservation Commission in January 2013 to host an educational forum about the policy, its history and purpose, its transition from conventional to organic practices, and successes and challenges in implementation.

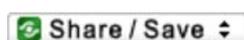
A tape of the forum is available through Community Services. Nationally-recognized organic sports field expert, Chip Osborne, was present to speak from a sports field and horticultural science perspective. The PMAC also hosted an educational booth at Summerfest and hopes to participate in future events.

Additional information for home and business owners considering an organic transition may be found at NOFA's website at [www.organiclandcare.net](http://www.organiclandcare.net).

Cumberland County Soil and Water District's Yardscaper website, through your local AOLCP, and through workshops offered through Scarborough's adult education program.

*Column contributed by the Scarborough Pest Management Advisory Committee.*

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Yesterday at 1:04 AM

## **Pest-killer, Maine law collide**

**Mainers find dragonflies useful for controlling mosquitoes, but some sellers aren't getting the permits required to import them.**

By [Eric Russellerussell@pressherald.com](mailto:Eric.Russellerussell@pressherald.com)  
Staff Writer

Mosquitoes, those pesky bloodsuckers that put a damper on summer barbecues and camping trips, have long been a problem for some Maine communities.



[click image to enlarge](#)

A dragonfly rests in a sunny spot last month in Scarborough. The town buys the insects and sells them to local customers for mosquito control, although it doesn't have a permit to import dragonflies from out of state.

Derek Davis/Staff Photographer

[click image to enlarge](#)



There are more than 150 dragonfly and damselfly species present in Maine, but more than 450 species nationwide.

Staff file photo

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## BRINGING IN DRAGONFLIES

- The Department of Inland Fisheries and Wildlife wants both a Wildlife Importation form and a Wildlife Possession form filled out for any wildlife brought into the state.

- The fee is \$27 for each permit.

Insect-slaying pesticides fell out of favor decades ago, but there is a mosquito control option that at first blush seems like the perfect alternative: dragonflies.

Some municipalities and business groups sell dragonfly nymphs in the spring directly to anyone who wishes to set them free.

The catch? If the dragonflies are coming from out of state, the practice is illegal.

Phillip deMaynadier, a wildlife biologist with the Maine Department of Inland Fisheries and Wildlife, said any introductions of non-native species into Maine from another state require a permit. It doesn't matter if it's a giraffe or a cockroach – the department wants to know about it. It's not that there is an acute risk with importing new species; it's just the effects are rarely studied before it's far too late.

However, few of the nymph sellers actually apply for a permit. Any individual or business that knowingly imports or possesses a restricted exotic species is subject to a fine of \$50 for each day the individual or business is in violation.

DeMaynadier acknowledged that the state has been less focused on enforcement and more on making people aware of the permitting process. He said non-permitted dragonflies are among the most common offenses.

The Wells Chamber of Commerce has been ordering dragonfly nymphs from a private dealer for more than 35 years, said Executive Director Eleanor Vadenais. This year, more than 13,000 nymphs were sold.

"Our dragonfly program has been a great success, otherwise we probably wouldn't continue to do it," she said.

The Wells program works like this: The chamber sends out applications to residents or businesses that want to purchase a group of dragonfly nymphs. Once the orders are taken, the chamber arranges to have the insects delivered in two shipments to be picked up by the person or business that ordered it.

The town of Scarborough, much of which is located in marshy areas, also buys dragonflies in bulk for resale. This year, 2,500 groups of insects were sold, said Steve Kramer, a scheduler in the town's community services department.

Gail Atkins, a property manager with Portland-based Dirigo Management Co., purchased dragonfly larvae from the town of Scarborough last year on behalf of Cider Hill Village, a 173-unit condominium complex she manages in Old Orchard Beach.

"The feedback among the condo association members was great. They said there were no mosquitoes and they enjoyed having the dragonflies around," Atkins said. "Who doesn't love dragonflies?"

Atkins said she would like to use dragonflies at other properties she manages, but the conditions have to be right.

"You really need standing water for the dragonflies to prosper," she said.

Even though the dragonflies appear to be a hit, neither the Wells chamber nor the town of Scarborough has requested a permit through the state. Scarborough purchases its dragonflies from Berkshire Biological, a Massachusetts company, Kramer said. Representatives of that company did not return calls for comment about what species it sends to Maine or how often it gets requests.

Vadenais would not say where the Wells Chamber of Commerce gets its nymphs. DeMaynadier said he's spoken with officials at the Wells chamber who told him they get their larvae from a commercial biological supply company. He knows of no such supplier in Maine.

Even if residents didn't buy from the town of Scarborough or the Wells chamber, there is nothing to stop someone from online purchases.

DeMaynadier said that's a problem. There are more than 150 dragonfly and damselfly species present in Maine, but more than 450 species nationwide. He said that's why people are supposed to get permits from the state, because otherwise it's not possible to tell whether any of the species being brought in are native to Maine.

Alysa Remsburg, an ecologist at Unity College whose research includes dragonflies and damselflies, agreed with the state biologist that importing new species into Maine could be a problem, but said she doesn't know if the actual impact of bringing in non-native dragonflies has been studied.

A permit is also required for the commercial collection of any species, meaning anyone who is collecting or breeding dragonflies for sale would need approval from the state. DeMaynadier said he is not aware of any state permits granted for insect collection.

Both deMaynadier and Remsburg questioned the efficacy of using dragonflies to control mosquitoes.

"We know dragonflies are voracious predators, but they will eat any kind of insect, usually whatever is most abundant," Remsburg said. "I don't know of any documented studies that says they are an effective control."

She said dragonflies undoubtedly help with mosquito control, but they are "not the silver bullet."

DeMaynadier said an influx of dragonflies in some areas could increase the competition and predation of other aquatic organisms. In some cases, that could lead to further endangerment of some insect species.

There also is no guarantee that transplanted dragonflies will adapt to a new ecosystem, he said.

The best option for handling mosquitoes, deMaynadier said, is to either use repellents to keep them at bay or just accept them as a part of life here.

"Learning to accept mosquitoes as an important, albeit annoying, component of our natural ecosystems is, hands down, the least risky alternative of all," he said.

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## Maine

# Hired bees play major role in Maine blueberry industry



Tom Walsh, Bangor Daily News

[Maine](#) | Sunday, May 26, 2013 at 9:25 pm

DEBLOIS — The continuing stretch of cold and wet weather has left billions of honeybees trucked into Down East Maine to pollinate the wild blueberry crop hunkered down in their hives for warmth instead of jump-starting the growing season.

Some 14,000 bee hives were recently placed across the thousands of acres of wild blueberry barrens owned in Washington County by Jasper Wyman & Son, the largest of Maine's commercial growers that collectively tend more than 60,000 acres statewide. Those growers are anxiously awaiting warmer temperatures and sunshine, as the bees they've rented won't forage in rain, winds above 20 miles per hour or temperatures under 53 degrees.

While Maine has more than 50 species of naturally occurring bees known to work the barrens, the level of pollination needed to convert blooms to fruit each spring requires the Down East and midcoast blueberry industry to import billions of bees "from away." Hives that can contain as many as 60,000 honeybees are trucked in from commercial bee operations located as far away as California, Florida and Texas.

"It's pretty likely that bees trucked into Maine from the West Coast to pollinate wild blueberries were pollinating California almond groves three months ago," said Frank Drummond, an entomologist and blueberry pollination expert who teaches within the University of Maine's Orono-based Graduate Program in Ecology and Environmental Science. "Almond pollination in California requires 1.4 million colonies, and there are only something like 2.6 million colonies in the whole country."

In recent years, Maine growers have imported about 55,000 hives, each home to a population of 30,000 to 60,000 bees, depending on hive quality. But hive numbers were up significantly last year and could go up again this year. State Apiarist Anthony Jadczyk, who serves as Maine's bee inspector, said the state is on track to exceed 70,000 imported hives this spring, which will provide mid-May to mid-June field housing for as many as 3 billion bees.

At a cost this year of at least \$105 per hive, bee hive rental represents a hefty industry-wide expense. At 70,000 hives, that cost could amount to nearly \$7.4 million.

“The most expensive production cost for growers is bringing in hives,” Drummond said. “The big growers will get volume discounts and also are willing to pay a 20 percent premium for quality hives with 60,000 bees. The smaller growers might pay \$150 for a quality hive or may be willing to pay less for a lesser-quality hive.”

Milbridge-based Wyman’s of Maine is paying about \$5 more per hive this spring than it did last year, according to Homer Woodward, the company’s vice president of operations. He’s not surprised.

“The commercial beekeepers are having a hard time keeping things going,” he said.

Since the fall of 2006, commercial beekeepers have been dealing with what’s been termed “colony collapse disorder,” or CCD. For reasons that remain largely unexplained, CCD has been killing off huge percentages of managed bee colonies. Preliminary results of a study recently released by the U.S. Department of Agriculture and industry groups show that 31.1 percent of managed honey bee colonies in the United States were lost during the 2012-13 winter. That represents a 42 percent increase in loss compared to the previous winter. The new loss figures are slightly higher than the six-year average total loss of 30.5 percent.

The USDA last fall convened a three-day “honeybee stakeholders conference” that attracted 175 public- and private-sector experts in the field from as far away as Europe. A USDA analysis of that conference said, in effect, there remain more questions than answers about colony collapse disorder and a “complex set of stresses and pathogens” may be at work, including parasitic mites, multiple viruses and bacterial diseases and pesticide exposure.

Despite what the USDA describes as a “remarkably intensive level of research efforts,” the report notes that “overall losses continue to be high and pose a serious threat to meeting the pollination service demands for several commercial crops.”

According to the American Beekeeping Federation, an estimated one-third of all food and beverages are made possible because of pollination, mainly by honey bees. In the United States, pollination contributes to crop production worth \$20-\$30 billion in agricultural production annually, the group said.

In Maine, Jadczyk said, such crops extend beyond the blueberry barrens to cranberry bogs, apple orchards and areas of Aroostook County that support canola and squash crops. After making their rounds in Maine, he said, these managed hives will be trucked to Wisconsin, Massachusetts and New Jersey

to work those states' cranberry crops.

Jadczak said he does spot checks on commercial hives, looking for bacterial diseases and parasitic Varroa mites that not only feed on honey bees but can infect bees with viral diseases, much like mosquitoes spread malaria.

"Things are coming in pretty clean," he said. "They all come into Maine with certificates of health issued at their points of origin. And it's in the best interest of the commercial beekeepers to make sure they are healthy."

Drummond was recently awarded a \$3.5 million federal grant to study Maine's native bee population at 16 blueberry growing operations in Washington and Hancock counties. His research supports a field management strategy that utilizes four hives per acre to maximize fruit production. Field studies done in Washington County and elsewhere in Maine have shown that blueberry yields can be increased by as much as 1,000 pounds an acre for each hive servicing that acre, up to five hives per acre. Those results presume good weather, adequate soil moisture and good fertilization and pest management.

Yields can range from under 1,000 pounds per acre to more than 15,000 pounds per acre, depending on a number of variables, including pollination, fruit set, weather and pests. Some Down East barrens consistently yield 10,000 pounds per acre.

Drummond said some growers find four hives per acre cost-prohibitive, while others will introduce as many as 10 hives per acre to ensure good pollination despite Down East Maine's changeable spring weather.

"You might bring in four hives and then have a week or more of cold and wet weather, like we're seeing now, when the bees won't forage and will stay in their hives to stay warm," Drummond said last week. "When there finally is ideal weather — with sun, temperatures above 50 and winds under 20 miles per hour — if you have eight hives working, instead of four, it can make up for the time lost to bad weather. It's a matter of capitalization and risk aversion."

Maine's 2012 wild blueberry crop was a good one, according to the USDA's post-harvest calculations. The department's National Agricultural Statistic Service put the total yield at 91.1 million pounds, well above Maine's five-year average of 84 million pounds. The 2011 yield weighed in at 79.9 million pounds. Valued at 76 cents per pound, the 2012 crop was worth \$69.1 million.

David Yarborough, the University of Maine Cooperative Extension Service's wild blueberry specialist, said growers are coming off a winter that provided plenty of snow cover and relatively mild temperatures, both limiting winter kill.

"The bloom looks good, but we're only 5 to 10 percent into it," Yarborough said. "We'll know more next week and the week after that."

Woodward said he likes what he's seen in Wyman & Son fields, some of which have been cleared of large rocks since last year's harvest to allow more mechanical harvesting this year.

"The cool spring will likely postpone the bloom, but the blossoms will get by the frost," he said. "We had frost here as late as last week."

Although Maine has 60,000 acres of blueberry barrens, only half of those acres are in production each year, given a two-year cultivation cycle. Jasper Wyman & Son is the largest of the six companies in Maine that process, freeze and package wild blueberries. There's also one fresh-pack cooperative in Maine. An estimated 99 percent of all the berries harvested in Maine are frozen for use as food ingredients.

# Maine hives indicate big die-off not to be

## The state's bees are mostly healthy and pollinating crops, avoiding the U.S. colony collapse epidemic.

Posted: June 03, 2013 12:16AM

Last modified: June 03, 2013 1:24AM

- By NORTH CAIRN

Staff Writer

A recent federal report has pinpointed some of the causes of rapid die-off of bee populations from colony collapse disorder, but Maine beekeepers say hives here are flourishing.

They credit healthy management by commercial beekeepers and the diversity of Maine's agricultural base with helping to avoid the threats posed by the disorder in many other states.

"We're in very good shape," said Tony Jadczak, state apiarist for the Department of Agriculture, Conservation and Forestry. "We have good bees, good bloom. Now we just need some (good) weather."

It will take more than good weather to counter the impacts of colony collapse disorder on bee populations elsewhere in the nation and across the globe, based on current trends.

According to a recent joint report of the U.S. Environmental Protection Agency and the U.S. Department of Agriculture, honeybee populations have been decimated by the disorder, a cluster of symptoms culminating in adult male bees suddenly fleeing the colony and dying elsewhere, causing the overall decline or total die-off of the hive.

Colony collapse disorder has killed millions of bees globally and devastated commercial beekeeping in many parts of the world.

Jadczak, who has been involved with bees and keepers for 40 years, said he believes the



Gregory Rec/Staff Photographer Peggy Pride holds a frame of beehive that had been abandoned by many of the bees at a farm in Lebanon. The bees leave in search of a new home when the hive becomes overcrowded.

origin of the collapse lies much further back than its apparent first occurrence in 2006 and its reported spread within a year to 24 states. He traces the problem back to 1985, when the first infestation by two species of mites affected the state's bee populations.

The mites carry immuno-suppressors in their saliva, reducing the disease-fighting capacity of bees. In addition, they serve as vectors of viruses that typically remain latent until the bees are weakened and the viruses surge forward, overwhelming affected hives.

Over the next 20 years, other stresses were heaped on honeybees, including a widespread intestinal parasite and extensive use of pesticides designed to kill the mites. But mites are difficult to eliminate, Jadczak said, because they quite quickly become immune to pesticides.

These factors have combined to drive honeybees to a tipping point, Jadczak said.

The potential losses from the disorder are enormous. An estimated one-third of all food and beverages -- worth \$20 billion to \$30 billion each year in crop production -- are made possible by pollination, mainly by honeybees, the federal report found.

In the last seven years, the disorder has caused the populations of an estimated 10 million beehives, valued at about \$200 each, to be wiped out, costing beekeepers roughly \$2 billion.

Compared with the nation's roughly 6 million honeybee colonies a half century ago, only 2.5 million remain, raising serious questions about whether U.S. farm crops will receive adequate pollination, the report said.

Erin Forbes, past president of the Maine State Beekeepers Association, said there's little doubt that pesticides play a significant role in damaging bee populations, partly because the toxic chemicals they contain blend with other pesticides in the environment.

"It's what humans are putting into the agricultural system," Forbes said. "It's like mixing bleach with ammonia. These chemicals are in soil, plants, groundwater."

Providing sufficient acreage for safe foraging and pasture for bees is critical to their survival, she said.

In Europe, several countries recently joined forces to enact a two-year ban on certain pesticides, in hopes of sidelining one of the presumed key factors in the bees' collapse.

But the federal report, issued in early May, did not single out one specific cause. Rather than calling for a ban on any pesticide, it called for more study into bees' exposure to toxic chemicals and their effects. The agencies and organizations contributing to the report determined the disorder to be the result of a combination of conditions -- biological, chemical, entomological and agricultural.

"It's multiple factors," Jadczak said. "There's no single smoking gun."

In the past five years, the disorder has wiped out nearly a third of hives in U.S. commercial beekeeping operations, 30 percent on average in the last year alone, said David Bell, executive director of the Wild Blueberry Commission of Maine. That's nearly twice the normal mortality rate.

"We're very concerned about pollinators," said Bell. "Actually, all human beings should be concerned about pollinators."

Prospects have been considerably brighter for well-managed enterprises among Down East blueberry growers and beekeepers, said Bell. Their reported losses ran about 11 percent last year -- far below the national average under the stresses of the disorder.

"The bees look fantastic; the colonies look fantastic," said Forbes.

Open communication between growers and beekeepers, coupled with attentive management, has ensured that no great economic loss hit the approximately 60,000 acres of wild blueberries in Maine, Bell said.

"There's a huge range in the skill of farmers," said Bell. "There's also a huge range in the skill of commercial beekeepers."

Paul Dumont, a commercial migratory beekeeper from Windsor, said poor management of hives can contribute to colony collapse disorder. "Part of the problem with these bees is ... not letting them rest ... to regroup their energies," he said.

Bees carted from place to place to do their work demand proper management, including enough food, water and time off. Without proper care, Dumont said, colonies become more susceptible to disease, parasites and other hardships.

In the course of a year, bees from Dumont's 1,800 hives travel from Florida to California, then on to Maine, New York and Massachusetts in truckloads of pallets spread out over fields and bogs.

That's not unusual in Maine, where the largest population of bees are migrants -- more than 70,000 hives, each carrying 35,000-40,000 bees, trucked in annually to pollinate 60,000 acres of the state's blueberry, raspberry, cranberry, canola, pumpkin and squash crops, as well as apple and other orchards.

"The health of bees is a definite concern," said Margie Hansel, president of the Maine State Pomological Society. Growers of the state's approximately 2,000 acres of apple orchards have experienced some problems associated with the disorder, but none has reported the entire cluster of symptoms that characterizes the problem.

The state's relatively colder climate and harsh winters may serve as a natural protection,

preventing the conditions under which some of the symptoms of the disorder become more virulent, Hansel said.

In addition to migrant bees, Maine has 12,000 to 18,000 resident hives, tended mostly by amateur beekeepers or hobbyists, said Jadczyk.

And more keep coming.

Incorporating bees into the backyard has become so popular in the last five years that the Cumberland County Beekeepers Association alone has grown to 225 members.

Forbes said as many as 300-400 new beekeepers begin operations each year in Maine, reinvigorating depleted bee colonies with backyard hives. Honey is selling for \$8 to \$20 a pound.

Peggy Pride of Lebanon started backyard beekeeping six years ago in hopes of getting better yields from a variety of homegrown food crops.

"We wanted better pollination of our fruit trees," she said, adding that she has been surprised at how great a boon the bees were, enhancing production in the apple orchard, as well as in raspberries, pears and peaches.

The Prides have experienced losses higher than 25 percent some years in their more than 30 hives; 20 percent just over the past winter. But the bees do rebound, she said.

"Every year is different when you're working with Mother Nature," she said. "You have to take what you get. With Mother Nature, you never know."

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# Oregon bumblebee die-off surpasses 50,000

Published: June 22, 2013 at 8:08 PM

WILSONVILLE, Ore., June 22 (UPI) --

WILSONVILLE, Ore., June 22 (UPI) -- A mass die-off of bumblebees in Wilsonville, Ore., blamed on pesticides, has reached 50,000 of the insects, say scientists who are investigating the deaths.

The (Portland) Oregonian reported Saturday a second city, Hillsboro, has discovered hundreds of dead bumblebees following the die-off in a Target parking lot in Wilsonville in recent days.

"We take it seriously," Hillsboro spokesman Patrick Preston said, Saturday. "We recognize the importance of bees."

Preston confirmed that trees in downtown Hillsboro were sprayed in March with the same pesticide, Safari, that was used in Wilsonville to kill aphids. State agricultural officials say the pesticide caused the bumblebee deaths in Wilsonville, where spraying took place June 15.

The Xerces Society, an invertebrate conservation group that has been investigating the bumblebee die-off, said it is likely the bees were members of more than 300 wild colonies, KGW-TV, Portland, reported.

"Each of those colonies could have produced multiple new queens that would have gone on to establish new colonies next year. This makes the event particularly catastrophic," Xerces Society biologist Rich Hatfield said in a release.

Efforts were under way to place bee-proof netting over trees that had been sprayed in an attempt to prevent more bees from dying, the TV station said.

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## Insecticide temporarily banned by Oregon Department of Agriculture after 50,000 bumblebees die in Wilsonville

25,000 bumblebees killed in Wilsonville

WILSONVILLE, OREGON -- June 18, 2013 -- A bumblebee dies after falling off a Landen tree at Town Loop Shopping Center parking lot. An estimated 25,000 bumblebees were found dead beginning Saturday, the largest known incident in the United States. *(Motoya Nakamura)*

**Elizabeth Case, The Oregonian** By **Elizabeth Case, The Oregonian**

**Email the author | Follow on Twitter**

on June 27, 2013 at 4:05 PM, updated June 28, 2013 at 7:04 AM

In response to a **massive bumblebee die-off blamed on pesticides**, the Oregon Department of Agriculture **issued a temporary restriction** Thursday on 18 insecticides with the active ingredient dinotefuran.

An estimated 50,000 bees and other insects died in a Wilsonville shopping center parking lot last week. A landscaper sprayed 55 flowering European linden trees with Safari pesticide on June 15. State officials confirmed the dinotefuran insecticide was responsible for the deaths. **Hundreds of dead bees in Hillsboro** are also being investigated.

"We're not trying to get it off the shelves, or trying to tell people to dispose of it, we're just telling people not to use it," said Bruce Pokarney, a spokesperson for the department of agriculture.

While Pokarney acknowledged it would be difficult to cite individual homeowners, he said licensed pesticide applicators would be violating Oregon regulations if they use dinotefuran-based insecticides on plants in the next 180 days.

The temporary ban only affects pesticide use that might harm pollinators, like bumblebees. Safari is one of the insecticides restricted by the Agriculture Department. Most of the restricted insecticides are used primarily for ornamental, not agricultural, pest control.

Dinotefuran use in flea collars, and ant and roach control will still be allowed.

The Department of Agriculture will reassess the temporary restriction after officials finish their investigation into the pesticide applications in Wilsonville and Hillsboro. These inquiries could take up to four months.

The Valent U.S.A. Corporation, which distributes Safari, could not be reached for comment, but the company **released a statement** earlier this week about the bee deaths.

"We are actively conducting outreach with our customers and industry partners to reinforce the importance of responsible use according to label guidelines," the statement said.

Dinotefuran is a member of a type of insecticides called neonicotinoids. Neonicotinoids can be broken down into two groups: the nitro-group and the cyano-group. Dinotefuran is a member of the nitro-group, which has been shown to be more poisonous to pollinators. The European Union **issued a temporarily ban** earlier this year on three other nitro-group neonicotinoids, which goes into effect this December.

The Washington state Department of Agriculture decided **against banning the ornamental use of neonicotinoids** earlier this month. Instead, the Washington department will "urge the U.S. Environmental Protection Agency to consider whether additional use restrictions are needed when the products are applied to ornamental plants."

The EPA is **currently reviewing the effects of neonicotinoids** on pollinators, since research and beekills incidents highlight "the potential direct and/or indirect effects of neonicotinic pesticides," its website said.

The Portland-based Xerces Society, who originally reported the Wilsonville bee deaths to the Department of Agriculture, is working with a congressional office on legislation about pollinators and pesticide use, said Scott Black, Xerces' executive director.

"We hope that this is just the start, that now we can take a look at this entire class of pesticides called neonicotinoids and really scrutinize them for their potential impact on these beneficial insects," Black said.

--Elizabeth Case

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**FOR IMMEDIATE RELEASE:** July 10, 2013

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**State Investigates Misuse of Pesticide for Bed Bug Control**

*Agriculture Agency and Health Department Working to Contact Customers*

The Agency of Agriculture, Food & Markets has summarily suspended the license of a pesticide applicator, Cary Buck of AAA Accredited Pest Control of North Clarendon, for misuse of a pesticide in treating a residence for bed bugs.

This action was taken after the Agency discovered that the company had wrongfully applied an organophosphate insecticide called chlorpyrifos to a home in the Rutland area. All indoor uses of this pesticide were cancelled by the U.S. EPA in 2001.

The Health Department is working together with the Agency of Agriculture to individually contact customers of this company who may have had their residence treated with this pesticide in 2012 or 2013, and is offering laboratory testing at no cost to determine if the pesticide is present. The Agency has collected a number of samples already, and will continue to sample in the coming weeks.

According to records obtained from the company, an estimated 50 or more residences may be affected, although the extent to which this pesticide was used in any application by the company, which operated in the greater Rutland region, is not presently known. Test results will indicate the presence of chlorpyrifos and any detected levels will determine the advice given by the Health Department for further action.

“The discovery of misuse of chlorpyrifos by an applicator in Vermont is troubling, and we are working quickly to identify any customers who may have been exposed through this company’s action,” said Secretary of Agriculture Chuck Ross.

“We are concerned about possible health effects,” said Health Commissioner Harry Chen, MD. “This pesticide can persist in the indoor environment, and exposure to high enough levels can affect the central nervous system and can be especially harmful to pregnant women and

children. While we don't have any indication at this time that health effects from such exposure caused by this company have been widespread, we do recommend testing the residence of any customer identified so that we can take proper steps in the event we discover chlorpyrifos in the environment."

Nationally, over the past 20 years, there has been a significant increase in the number of homes, hotels, schools and other settings that have been affected by bed bugs. From 2006 to 2010, the National Pesticide Information Center received reports of pesticides being misused to treat bed bugs that resulted in 129 mild or serious health effects, including one death.

The Agriculture Agency and Health Department recommend that any treatment plan for bed bugs includes non-chemical methods such as cleaning, laundering and heat treatments to reduce the need for chemical pesticides. Pesticides labeled for outside use only should never be used inside the home.

**If you think you have been overexposed to a pesticide**, or feel sick after a pesticide has been used in your home, call your doctor or the poison control center: 800-222-1222.

**If you have questions, dial 2-1-1** to call Vermont 2-1-1, United Ways of Vermont.

For more information on chlorpyrifos: <http://npic.orst.edu/factsheets/chlorpgen.html>

For more information for homeowners on treating bed bugs:  
<http://healthvermont.gov/prevent/bedbugs/>

# # #

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Article published Jun 2, 2013

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## Mosquito spraying fuels debate

By Donna Boynton TELEGRAM & GAZETTE STAFF

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This weekend brings the warm breath of summer — the heavy, humid air, the sizzle of backyard barbecues. It's not just summerlike weather; it's mosquito season.

Amid all there is to enjoy about summer, there is ear-piercing buzz and the itchy welts left by winged vampires. Break out the bug spray, or fire up the mosquito magnet.

Membership in the Central Massachusetts Mosquito Control Project is sanctioned, in most communities, by a town meeting vote. When communities join they are assessed a membership fee, which varies according to a Department of Revenue formula and is based mostly on size. The cost ranges from \$25,000 to \$80,000.

Not every region in the state is covered by a mosquito control program — Hampden, Hampshire and Franklin counties are not — and not every town within a district has signed on for the service.

For example, Bolton, Mendon and Upton voters declined joining the program this year. Bolton proposed a Proposition 2-1/2 override to fund the \$41,000 annual cost of joining, but it was met with much resistance from residents who were either concerned about the cost or the use of pesticides. Joining the CMMCP was rejected by 10 votes.

On the other hand, Uxbridge voted not to end its five-year relationship with CMMCP.

CMMCP was created by the state Legislature in 1973, after an outbreak of Eastern Equine Encephalitis, and it includes communities in both Worcester and Middlesex counties.

Timothy D. Deschamps, executive director of the CMMCP, located in Northboro, said a few municipalities have declined membership, but overall he said it is a "fairly rare occurrence."

"It's unfortunate," Mr. Deschamps said of Bolton's decision. "We did identify EEE in mosquitoes in Berlin, about a mile from the Bolton town line. In 2010, public health detected EEE in mammal-biting mosquitoes. We had a horse die in Lancaster that same time."

Mr. Deschamps said at that time, even though Bolton wasn't a member, CMMCP did spray in town. CMMCP didn't ask for monetary support; only that the town put an article before town meeting in 2011, which failed.

"We felt that the need of the public health outweighed any monetary consideration," Mr. Deschamps said. "We're a public health agency. We are always going to put that first."

Mr. Deschamps said Mendon and Upton each declined to join, even though EEE and West Nile Virus were found in every community that surrounds those two towns.

"We're about to come into a heat wave now," Mr. Deschamps said, adding that it is too early to predict what mosquito season will be like this year. "We're hoping we do not see West Nile Virus or EEE early."

For some, it has little to do with finances and more to do with the pesticides used by CMMCP and its overall impact beyond the insect it targets.

David Lewcon of Uxbridge, a member of the Conservation Commission and a local beekeeper, said the cost is not worth the

damage it does to the environment.

"Birds eat mosquitoes. Now, with no mosquitoes or anything resembling them, birds are not coming back to the area. Their food is not there and the habitat has been altered," Mr. Lewcon said.

Mr. Lewcon, a member of the Worcester Beekeepers Association, said there is also concern about the effect spraying has on hives. Mr. Lewcon said every year there is a pesticide kill on local colonies associated with mosquito spraying.

CMMCP's spraying is targeted and done at night, when bees are not expected to be out and about. But on nights as warm as recent ones, bees are outside the hive, using their wings to direct air into the hives to cool it. If sprayed pesticides find their way near a hive, it too gets fanned into the hive.

Another concern is that the CMMCP supersedes the Wetlands Protection Act, and this sometimes puts it at odds with the mission of Conservation Commissions, especially when it comes to CMMCP's wetlands restoration service. While CMMCP aims to increase water flow and prevent stagnation, it is not work that jibes with local Conservation Commissions, at least not in Uxbridge.

"They can do whatever they want to the wetlands without regard to us," Mr. Lewcon said. "They alter the course or path of streams and when they do that they prevent water from percolating in an aquifer. ... We protect the wetlands, and they come in and push aside all the hard work we have done. I know of a couple of cases where waterways, streams or brooks are flowing faster and flooding downstream properties."

While humans can — and have, locally — contracted mosquito-borne illness, the threat is minimal, at least compared to other regions, and not nearly as formidable as Lyme disease, which Mr. Lewcon argues does not get nearly as much aggressive preventive treatments.

"I don't know too many people who like mosquitoes," Mr. Lewcon said. "You can't discount the fact that there is potential harm from mosquitoes, but be careful how you treat them. You can't just randomly spray because you don't like bugs."

In Mendon, residents Shirley Smith and Ann Mazar spoke against joining the CMMCP at town meeting, saying mosquito-borne diseases are rare and that for the cost — \$38,200 per year — the town can do some of the same things as CMMCP, such as cleaning culverts, and treating standing water to kill mosquito larvae.

Ms. Smith said in an email that it is possible for a group of towns to form their own district under Massachusetts General Laws.

In the meantime, Ms. Smith said she is working with a representative from Mass Audubon to update the 40-year-old laws and is attending a meeting June 5 with the State Reclamation and Mosquito Control Board to start that process.

"I think we have to learn to live with the mosquitoes as we do the snow, rain and other environmental conditions," Mr. Lewcon said, adding that there are more organic means of fighting the mosquito by using things such as peppermint extract or garlic.

"There are things that are more benign than chemical warfare."

Contact Donna Boynton at [dboynton@telegram.com](mailto:dboynton@telegram.com) or follow her on Twitter @DonnaBoyntonTG. Reporter Elaine Thompson contributed to this report.

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NEWS | June 27, 2013

## Aerial mosquito spraying study finds no immediate public health risks

UC Davis researchers say emergency room visits remained stable during the last big Sacramento area-wide sprayings for West Nile virus

Editor's note:

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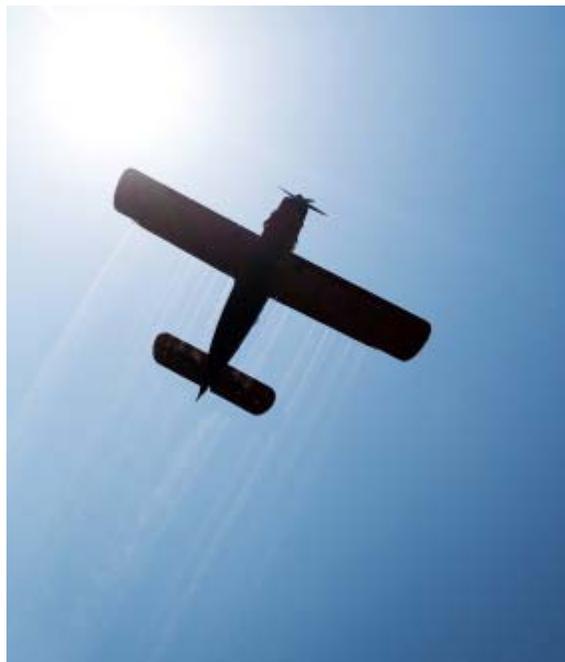
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In what researchers say is the first public health study of the aerial mosquito spraying method to prevent West Nile virus, a UC Davis study analyzed emergency department records from Sacramento area hospitals during and immediately after aerial sprayings in the summer of 2005. Physicians and scientists from the university and from the [California Department of Public Health](#) found no increase in specific diagnoses that are considered most likely to be associated with pesticide exposure, including respiratory, gastrointestinal, skin, eye and neurological conditions.



The study evaluated emergency room visits in Sacramento County hospitals on days that pesticides were sprayed as well as the three days following spraying.

The study appears in the [May-June 2013 issue of \*Public Health Reports\*](#).

This week, mosquito control officials said the region's recent rainstorms and warming temperatures have increased stagnant water and favorable conditions for mosquitoes, which will likely magnify the incidence West Nile virus and the risks of human transmission. The mosquito-borne disease first appeared in the state about 10 years ago. It already has been detected in dead birds and mosquitoes in at least 10 counties in recent weeks, including Sacramento and Yolo. However, the adult mosquito population has yet to increase to levels that require aerial spraying over heavily urbanized areas as was done in the Sacramento region in previous years.

"Unfortunately, West Nile virus is endemic in California and the United States, and the controversy of mosquito management will likely arise every summer," said [Estella Geraghty](#), associate professor of clinical internal medicine at UC Davis and lead author of the study. "Findings from studies such as this one help public health and mosquito control agencies better understand the risks and benefits of their practices."

West Nile virus has become an increasingly serious problem throughout the United States and may become more of a threat as the climate warms. According to the [Centers for Disease Control and Prevention](#), West Nile virus is the leading cause of viral encephalitis in the United States. The virus is transmitted to humans and animals through the bite of an infected mosquito. Mosquitoes become infected with the virus when they feed on infected birds.

In California around the time of the study — 2004 and 2005 — hundreds of people were sickened by West Nile virus and 48 died. Most people exposed to the disease do not have symptoms, but in about

1-in-150 people it can be fatal or result in permanent neurological effects.

The study evaluated emergency room visits in Sacramento County hospitals on days that pesticides were sprayed as well as the three days following spraying. Spraying was done in north Sacramento over three nights, and in south Sacramento over four nights in August 2005. Data were compared with emergency room visits on other days during the same period as well as from nearby areas that were not exposed to aerial spraying.

“Findings from studies such as this one help public health and mosquito control agencies better understand the risks and benefits of their practices.”

— Estelle Geraghty

Emergency room visits were classified by specific diagnostic categories, including respiratory, gastrointestinal, skin, eye and neurologic diseases. Importantly, they found that exposure to aerial spraying was not associated with increased rates of emergency department visits for any of these conditions.



Estelle Geraghty

More than 250,000 emergency room visits were analyzed and stratified by 785 diagnostic codes. According to Geraghty, because there were so many data points, statisticians predicted that by chance alone, two conditions would appear to have occurred too frequently or too infrequently. In fact, a type of abdominal hernia was found to occur more often than the background rate during the time of spraying, and death and disease due to unusual causes was found to occur less frequently. The authors concluded that because these conditions have no known plausible biological connection with aerial spraying, the results related to these conditions are indeed likely to have occurred by chance.

Integrated mosquito management — a method to control mosquitoes through targeted interventions based on mosquito biology that includes surveillance of mosquito activity, reducing breeding sites such as neglected swimming pools, and the killing of larval and adult mosquitoes — are all used in California to control the spread of mosquito-borne diseases such as West Nile virus. When local methods prove inadequate, aerial spraying is used to rapidly reduce large, adult mosquito populations.

During the time of the study, ultra-low volume of pyrethrin insecticide was used for spraying; the chemical is derived from an African chrysanthemum and acts by blocking chemical signals at nerve junctions in insects. It is the same pesticide used to treat head lice in children and to kill fleas and ticks in pets.

Exposure to the pesticide has been reported to pose risks to human health, including skin and eye irritation, respiratory and gastrointestinal disturbances, lethargy, fatigue and dizziness. According to the UC Davis researchers, the exposure to pyrethrin during the urban aerial sprayings in 2005 was minimal due to the use of ultra low volume technology. Coverage required only about three-quarters of an ounce or less of the chemical per acre.



Potential long-term effects of aerial spraying to combat mosquito-borne West Nile virus were not addressed in this UC Davis study.

Geraghty cautioned that potential long-term effects of aerial spraying were not addressed in the study and would be extremely difficult to investigate on human populations. She said it would be worthwhile to reproduce the study for other pesticides and spraying techniques.

The article is titled “Correlation between aerial insecticide spraying to interrupt West Nile virus transmission and emergency department visits in Sacramento County, California.” Other authors are Peter Franks and Helene Margolis of the UC Davis Center for Healthcare Policy and Research, Anne Kjemtrup of the California Department of Public Health, William Reisen of the UC Davis School of Veterinary Medicine.

The study was supported in part by a UC Davis, Clinical and Translational Science Center K12 Career Development Award (grant #UL1 RR024146) from the National Center for Research Resources of the National Institutes of Health to the lead author, Geraghty.

The Sacramento-Yolo Mosquito and Vector Control District provided the aerial spraying data.

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# HEALTH

## 2012 Texas West Nile Outbreak Linked to Mild Winter

Lessons learned in deadly resurgence may point the way to prevention, expert says

July 16, 2013



By Amy Norton

HealthDay Reporter

TUESDAY, July 16 (HealthDay News) -- An unusually mild winter and an early appearance of infected mosquitoes may have fueled a deadly outbreak of West Nile virus in Texas last summer, a new study finds.

Mosquitoes transmit West Nile virus to humans, and while most infections cause no serious problems, a small number of people suffer potentially fatal inflammation around the brain or spinal cord.

After several years of laying low, the West Nile virus resurged last summer in the United States, killing 286 people -- the most in one year since 1999. Texas accounted for one-third of all confirmed infections, with the Dallas area, where 19 people died, the hardest hit.

In the new study, published July 17 in the *Journal of the American Medical Association*, researchers tried to figure out why.

Using local weather data for the past decade, they found that the winters before the 2012 outbreak, and before a smaller 2006 outbreak, were unusually mild.

"Those two winters really stuck out," said senior researcher Dr. Robert Haley, of the University of Texas Southwestern Medical Center at Dallas.

Following those mild winters, West Nile infections in mosquitoes cropped up earlier in the year, and shot up at a faster rate. (Haley's team was able to track that pattern because the Dallas area has government surveillance programs that trap and test mosquitoes for the virus.)

"When you put it all together," Haley said, "you have a warmer winter and earlier spring, and more infected mosquitoes by June and July."

In 2012, the first infected mosquitoes were detected in late May, the study found. And by June and July, the number of infected mosquitoes caught in traps each night was substantially higher than in non-epidemic years.

Researchers call the average number trapped the "vector index." Until now, Haley said, it wasn't clear whether the vector index was a good predictor of a potential West Nile epidemic.

But based on what his team found, Haley said, "we're really convinced that it is."

The two epidemic years, 2006 and 2012, were the only years in which the vector index passed 0.5. In 2012, the index soared that high by the last week of June -- at which point the first 19 people with West Nile infections affecting the brain or spinal cord were already falling ill. Ultimately, 173 people contracted those serious infections.

Haley said the findings highlights the need for mosquito-testing programs, and for acting sooner rather than later when the vector index rises at an unusually fast pace.

West Nile may have slipped from many people's memories since it first hit North America in 1999, said Dr. Stephen Ostroff, a former official with the U.S. Centers for Disease Control and Prevention.

"But the 2012 outbreak shows us West Nile is not a 'has-been,'" said Ostroff, who wrote an editorial published with the study.

While the new findings are based on the situation in Dallas, the lessons can likely be applied elsewhere, Ostroff said. "If you've just had a mild winter, you may need to do more earlier in the year," he said.

That means an earlier start to mosquito-control measures, such as limiting mosquito breeding grounds -- including areas of stagnant water -- and spraying pesticides at ground level, said Ostroff. By the time the Dallas outbreak became apparent last year, officials had to use airplanes to spray pesticides on a wide scale.

Health officials say the amount of pesticide released during those aerial assaults is safe for humans. But some residents and environmental health advocates worried about the exposures. And from a budget standpoint, avoiding aerial spraying would be a good thing, Ostroff noted.

"If we act earlier," he said, "we may be able to avoid aerial application of pesticides."

In 2012, Dallas County spent an estimated \$1.6 million on aerial pesticide spraying. And the cost of treating West Nile infections reached about \$8 million, Haley's team noted.

That, Ostroff said, suggests that investing in local mosquito surveillance programs could end up saving money.

Haley agreed, and said that if global warming leads to more mild winters, West Nile epidemics could potentially become more common. "This is a serious disease that is going to be with us for a while," he said. "And it could get worse."

**More information**

The U.S. Centers for Disease Control and Prevention has more on [West Nile virus](#).

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**Tags:** [infections](#), [safety](#)

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May 24, 2013



## Marijuana Pesticide Contamination Becomes Health Concern As Legalization Spreads

Posted: 05/24/2013 7:44 am EDT

BELFAIR, Wash. -- Other than a skunky aroma, the waiting room at the Cannabis Care Foundation in Belfair, Wash., resembles your typical pharmacy. Chairs line walls next to stacks of magazines -- in this case, issues of Rolling Stone -- and a steady stream of patients step up to the counter with doctor's notes.

One by one, salesman Adam Dempsey leads them to the back of the shop, where they can choose from an [extensive weed menu](#) -- products with names such as Frankenstein, Garbage, Snoops Dream and Sour Diesel.

"I take it every day myself," said Dempsey, sporting a black hat with a green embroidered marijuana leaf and a plain white T-shirt over his tattooed arms. He works security and customer service at the non-profit store, which through a cooperative arrangement gets much of its cannabis crop from patients themselves.

Marijuana's primary mind-bending ingredient, tetrahydrocannabinol (THC), Dempsey suggested, helps tame his attention deficit disorder.

But experts warn that unwelcome chemicals, including pesticides, may be tagging along with the THC and threatening the health of marijuana users.

"There's a pretty considerable amount of contaminated cannabis," said Jeff Raber of [The Werc Shop](#), a Pasadena, Calif.-based lab that tests products primarily for California dispensaries.

"There are no application standards," he added. "Since we're not telling growers that they're allowed to use anything, they often use whatever they can get their hands on. And that's a lot of bad things."

Many of the chemicals applied to pot plants are intended only for [lawns](#) and other non-edibles. Medical cannabis samples collected in Los Angeles have been found to contain pesticide residues at levels 1600 times the legal digestible amount.

Because the product is generally inhaled rather than eaten, any toxins it carries have an even more direct route into the lungs and blood stream. Raber noted the situation is all the more concerning for patients smoking medical cannabis, whose health problems could make them more vulnerable to the risks pesticide exposure brings -- especially if they suffer from a liver disease.

Still illegal in the eyes of the federal government, marijuana use is [condoned by a growing number of states](#). Eighteen states and the District of Columbia now allow the medical use of cannabis, and Colorado and Washington recently approved pot for recreational use. Many of the states where some form of marijuana use is legal, including Washington, have begun [drafting regulations](#) that would require independent labs to test products before they are sold.

While efforts to legalize both medical and recreational cannabis could lead to "a greater awareness of and demand for clean, pesticide-free marijuana," said Raber, the burgeoning market remains troublesome.

Raber published a [study](#) this month that attempted to answer some lingering questions about pot and pesticide exposure. He and his colleagues investigated pesticides they'd commonly detected on marijuana products in their lab -- bifenthrin, diazinon, and permethrin -- as well as a plant growth regulator called paclobutrazol. One concern was whether those pesticides could actually get into a user's body.

The short answer: yes. However, amounts varied depending on how the pot was



smoked.

The researchers determined that as much as 60.3 percent to 69.5 percent of chemical residues would be inhaled with a hand-held glass pipe, but as little as 0.08 percent to 10.9 percent got through with a filtered water pipe.

"When you filter, you see a dramatic reduction in the amount of pesticides," said Raber.

Not all cannabis is the same, of course. Each strain comes with its own unique combination of chemical compounds, and scientists have yet to get a handle on how any of the chemicals applied to the plant might interact with those natural chemicals, especially when burned and inhaled together. Then there are all of the other forms in which cannabis is consumed -- from oils to teas to candies.

"This raises a lot of questions on how to set up better structures to provide clean, regulated supplies," Raber said.

Public health experts interviewed by The Huffington Post lamented the dearth of data on the subject. Some research has been done on pesticides and smoking tobacco, but since tobacco is not a food crop, the U.S. Environmental Protection Agency has not set tolerances on pesticide residue levels.

Tobacco is also generally smoked through filtered cigarettes, and for the most part not targeted for use by already unhealthy adults, as medical marijuana is.

"If the pesticide is inhaled, then this is quite worrisome," said Dr. Beate Ritz, an environmental health epidemiologist at the University of California, Los Angeles School of Public Health. "And these patients might be much more vulnerable."

"Pesticides affect the nervous systems of insects. Our nervous systems are similar to theirs," added Ritz, noting that for patients with terminal illnesses, the benefits of smoking marijuana might outweigh long-term risks of pesticide exposure, such as cancer and heart disease. But acute risks such as flu-like illnesses and respiratory problems, she said, would still be a serious concern.

Given all this, it seems reasonable to ask whether [pesticides are even necessary](#) to grow marijuana plants. The answer depends on whom you ask.

James Dill, a pest management specialist with the University of Maine's Cooperative Extension, explained that pests create difficulties in managing the crop. Too much moisture and growers face a fungus or mildew problem; too much dryness and spider mites can take over.

"All of the sudden you could be smoking a mold," said Dill. "That's not meant to be ingested."

It can be easy to see why growers motivated to fend off these foes, and by constraints on time and space to grow plants faster and taller, might resort to chemical help.

There are some alternatives.

"If they're smart, they use companion planting like garlic and onion chives to provide a natural barrier," said Dempsey, the Washington marijuana dispensary salesman.

Still, he admitted that his suppliers, many of whom are also his customers, are still just "learning how to grow."

The Cannabis Care Foundation doesn't have any special testing equipment, nor does it send marijuana out to a lab for analysis. But Dempsey suggested that he and his coworkers can "tell pesticides right away" by smell, taste, touch or by using a microscope. He added that they reject a good amount of cannabis due to mold, pests or pesticide contamination.

But Raber expressed doubt that such surface-level analysis would be sufficient.

"There is no way they could detect pesticide molecules inside of the plant that were put there through the roots," he said. "Nor could they smell the tens to hundreds of compounds you'd like to look for that could potentially be put on there by a cultivator."

Pesticides can be dangerous even at levels far lower than someone would be able to see with a microscope, he added. But he also emphasized that most dispensaries and cultivators want to provide a clean, safe product. In many cases, both seller and grower are unaware that a crop has become contaminated.

"Cannabis is well known to pull up a lot of crap out of the ground," he said.

Evan Mascagni stumbled across the issue of contaminated cannabis while filming his upcoming documentary, ["Toxic Profits,"](#) which highlights the [global sale of pesticides banned in the U.S.](#) He noted concern among many in California that because marijuana remains illegal under federal law, the U.S. Department of Agriculture doesn't allow any organic certification for its products.

Some independent efforts such as [Clean Green Certified](#) have sprouted, but even crops from growers who think they are complying with organic standards sometimes [test positive for pesticides.](#)

"You can only imagine the pesticides that are being used on marijuana grown elsewhere by profit-driven farmers" who may not care about the health of consumers or the environment, Mascagni told HuffPost in an email.



A medical marijuana dispensary outside of Seattle sells an array of cannabis products, generally grown by co-op members. (Lynne Peeples)

Pot-smokers aren't the only ones at risk from the application of pesticides on marijuana crops. Also potentially in danger are the people spraying the chemicals -- especially if the practice takes place indoors -- and others that may eat, drink or [breathe](#) downwind.

Dempsey maintained that growers can produce cannabis without using pesticides.

"This is a pharmacy," he said. "We need something that helps a patient get healthier, not something that kills them."

by Taboola



the salt

# As Biotech Seed Falter, Insecticide Use Surges In Corn Belt

by DAN CHARLES

July 09, 2013 3:39 AM

**Listen to the Story**

**Morning Edition**

**4 min 46 sec**



*Dan Charles/NPR*

Across the Midwestern corn belt, a familiar battle has resumed, hidden in the soil. On one side are tiny, white larvae of the corn rootworm. On the other side are farmers and the insect-killing arsenal of modern agriculture.

We've reported on earlier phases of this battle: The discovery of rootworms resistant to one type of genetically engineered corn, and an appeal from scientists for the government to limit the use of this new corn to preserve the effectiveness of its protection against rootworm.

It appears that farmers have gotten part of the message:

Biotechnology alone will not solve their rootworm problems. But instead of shifting away from those corn hybrids, or from corn altogether, many are doubling down on insect-fighting technology, deploying more chemical pesticides than before. Companies like Syngenta or AMVAC Chemical that sell soil insecticides for use in corn fields are reporting huge increases in sales: 50 or even 100 percent over the past two years.

This is a return to the old days, before biotech seeds came along, when farmers relied heavily on pesticides. For Dan Steiner, an independent crop consultant in northeastern Nebraska, it brings back bad memories. "We used to get sick [from the chemicals]," he says. "Because we'd always dig [in the soil] to see how the corn's coming along. We didn't wear the gloves and everything, and we'd kind of puke in the middle of the day. Well, I think we were low-dosing poison on ourselves!"

For a while, biotechnology came to his rescue. Biotech companies such as Monsanto spent many millions of dollars creating and inserting genes that would make corn plants poisonous to the corn rootworm but harmless to other creatures.

The first corn hybrids containing such a gene went on sale in 2003. They were hugely popular, especially in places like northeastern Nebraska, where the rootworm has been a major problem. Sales of soil insecticides fell. "Ever since then, I'm like, hey, we feel good every spring!" says Steiner.

But all along, scientists wondered how long the good times would last. Some argued that these genes — a gift of nature — were being misused. (For a longer explanation, read my post from two years ago.)

Those inserted genes, derived from genes in a strain of the bacterial *Bacillus thuringiensis*, worked well for a while. In fact, the Bt genes remain a rock-solid defense against one pest, the European corn borer.

In parts of Illinois, Iowa, Minnesota and Nebraska, though, farmers are running into increasing problems with corn rootworms.

"You never really know for sure, until that big rain event with the strong wind, and then the next morning the phone starts ringing

[and people ask]: 'What's going on out there?' " says Steiner.

Entire hillsides of corn, with no support from their eaten-away roots, may be blown flat.

Monsanto has downplayed such reports, blaming extraordinary circumstances. But in a half-dozen universities around the Midwest, scientists are now trying to figure out whether, in fact, the Bt genes have lost their power.



Dan Charles/NPR

At the University of Nebraska, entomologist Lance Meinke is turning colonies of rootworms loose on potted corn plants that contain different versions of the anti-rootworm gene, to see how well they survive.

The larvae get to feed on the corn roots for about two weeks. The soil from each pot then is dumped into a kind of steel container. If the larvae are still alive, a bright light will drive them into little glass jars filled with alcohol. "They try to escape from the heat," says David Wangila, a graduate student who is managing this experiment.

If the rootworm-fighting genes in the corn are working well, no larvae should emerge.

But some have. Wangila points to one of the little glass jars. Inside, there are three nice plump corn rootworm larvae.

This is not good. Those insects, originally collected from a cornfield in Nebraska, were feeding on corn that contained the first rootworm-fighting gene that Monsanto introduced ten years ago. Technically, it's known as the Cry 3Bb gene.

Meinke and Wangila will compare the survival rate of these rootworms with others that have never been exposed to Bt. They're looking for signs that rootworms in the corn fields of Nebraska have evolved resistance to genetically engineered crops.



An identical experiment in Iowa, carried out more than a year ago, found corn rootworms resistant to the Cry 3Bb gene.



Dan Charles/NPR

Nobody knows how widely those insects have spread, but farmers aren't waiting to find out. Some are switching to other versions of biotech corn, containing anti-rootworm genes that do still work. Others are going back to pesticides.

Steiner, the Nebraska crop consultant, usually argues for another strategy: Starve the rootworms, he tells his clients. Just switch that field to another crop. "One rotation can do a lot of good," he says. "Go to beans, wheat, oats. It's the No. 1 right thing to do."

Insect experts say it's also likely to work better in the long run.

Meinke, who's been studying the corn rootworm for decades, tells farmers that if they plant just corn, year after year, rootworms are likely to overwhelm any weapon someday.

The problem, Meinke says, is that farmers are thinking about the money they can make today. "I think economics are driving everything," he says. "Corn prices have been so high the last three years, everybody is trying to protect every kernel. People are just really going for it right now, to be as profitable as they can."

As a result, they may just keep growing corn, fighting rootworms with insecticides — and there's a possibility that those chemicals will eventually stop working, too.

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## USDA: Unapproved modified wheat in Oregon field

**AP** By NIGEL DUARA and MARY CLARE JALONICK | Associated Press – Thu, May 30, 2013

PORTLAND, Ore. (AP) — Field workers at an Eastern Oregon wheat farm were clearing acres for the bare offseason when they came across a patch of wheat that didn't belong.

The workers sprayed it and sprayed it, but the wheat wouldn't die. Their confused boss grabbed a few stalks and sent it to a university lab in early May.

A few weeks later, Oregon State wheat scientists made a startling discovery: The wheat was genetically modified, in clear violation of U.S. law, although there's no evidence that modified wheat entered the marketplace.

They contacted federal authorities, who ran more tests and confirmed their discovery.

"It looked like regular wheat," said Bob Zemetra, Oregon State's wheat breeder.

No genetically engineered wheat has been approved for U.S. farming. U.S. Department of Agriculture officials said the wheat is the same strain as a genetically modified wheat that was legally tested by seed giant Monsanto a decade ago but never approved. Monsanto stopped testing that product in Oregon and several other states in 2005.

How the modified wheat made it from a private company's testing grounds to the Eastern Oregon commercial wheat field is a question investigators are trying to unravel in a mystery that could have global implications on the wheat trade in the U.S. and abroad.

Many countries around the world will not accept imports of genetically modified foods, and the United States exports about half of its wheat crop. Zemetra said the presence of the modified crop shows the need for testing.

"We'll need to develop or implement a method for testing some of the grain to see for the first year or two," Zemetra said.

An Oregon State wheat scientist and a graduate student did the first tests and discovered the likely presence of a gene that made the wheat resistant to herbicide.

The genetically-modified wheat grew on land that was supposed to be rotated, said Mark Flowers, Cereal Specialist at Oregon State University Extension. The field was in an off-year and in May 2013, it was supposed to be fallow and bare. Workers expected to kill off the few rogue plants that poked out of the ground.

But those plants resistant to the herbicide caught their attention.

"That's when this was noticed," Flowers said. "Some of the wheat did not die."

USDA officials declined to speculate whether the modified seeds blew into the field from a testing site or if they were somehow planted or taken there, and they would not identify the farmer or the farm's location.

The discovery also could have implications for organic companies, which by law cannot use genetically engineered ingredients in foods. Organic farmers have frequently expressed concern that genetically modified seed will blow into organic farms and contaminate their products.

U.S. consumers have shown increasing interest in avoiding genetically modified foods. There has been little evidence to show that modified foods are less safe than their conventional counterparts, but several state legislatures are considering bills that would require them to be labeled so consumers know what they are eating.

While most of the corn and soybeans grown in the United States are already modified, the country's wheat crop is not.

The tests confirmed that the plants were a strain developed by Monsanto to resist its Roundup Ready herbicides and were

tested between 1998 and 2005. At the time Monsanto had applied to USDA for permission to develop the engineered wheat, but the company later pulled its application.

The Agriculture Department said that during that seven-year period, it authorized more than 100 field tests with the same glyphosate-resistant wheat variety. Tests were conducted in in Arizona, California, Colorado, Florida, Hawaii, Idaho, Illinois, Kansas, Minnesota, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington and Wyoming.

During that testing and application process, the Food and Drug Administration reviewed the variety found in Oregon and said it was as safe as conventional varieties of wheat.

In a statement issued Wednesday, Monsanto noted that this is the first report since its program was discontinued.

"While USDA's results are unexpected, there is considerable reason to believe that the presence of the Roundup Ready trait in wheat, if determined to be valid, is very limited," the company said.

USDA officials confirmed they have received no other reports of discoveries of genetically modified wheat. Michael Firko of the Agriculture Department's Animal and Plant Health Inspection Service and Acting Deputy Secretary of Agriculture Michael T. Scuse said they have already been in touch with international trading partners to try and assuage any concerns.

"Hopefully our trading partners will be understanding that this is not a food or feed safety issue," Scuse said.

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Tim Fought in Portland, Ore., contributed to this report.

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## WRAPUP 1-US genetically modified wheat stokes fears, Japan cancels tender

Thu, May 30 2013

- \* Japan cancels tender to purchase U.S. wheat
- \* Asian consumers jittery about gene-altered food imports
- \* Importers to seek details from U.S. government (Recasts with details, quotes)

By Naveen Thukral and Risa Maeda

SINGAPORE/TOKYO, May 30 (Reuters) - A strain of genetically modified wheat found in the United States fuelled concerns over food supplies across Asia on Thursday, with major importer Japan cancelling a tender offer to buy U.S. grain.

Other top Asian wheat importers South Korea, China and the Philippines said they were closely monitoring the situation after the U.S. government found genetically engineered wheat sprouting on a farm in the state of Oregon.

The strain was never approved for sale or consumption.

Asian consumers are keenly sensitive to gene-altered food, with few countries allowing imports of such cereals for human consumption. However, most of the corn and soybean shipped from the U.S. and South America for animal feed is genetically modified.

"We will refrain from buying western white and feed wheat effective today," Toru Hisadome, a Japanese farm ministry official in charge of wheat trading, told Reuters.

The U.S. Department of Agriculture on Wednesday said the wheat variety was developed years ago by biotechnology giant Monsanto Co. It was never put into use because of worldwide opposition to genetically engineered wheat.

Wheat, long known as the staff of life, is the world's largest traded food commodity and it is used in making breads, pastries, cookies, breakfast cereal and noodles.

Asia imports more than 40 million tonnes of wheat annually, almost a third of the global trade of 140-150 million tonnes. The bulk of the region's supplies come from the United States, the world's biggest exporter, and Australia, the No. 2 supplier.

The USDA said there was no sign that genetically engineered wheat had entered the commercial market, but grain traders warned the discovery could hurt export prospects for U.S. wheat.

"Asian consumers are jittery about genetically modified food," said Abah Ofon, an analyst at Standard Chartered Bank in Singapore. "This is adding to concerns that already exist on quality and availability of food wheat globally."

In 2006, a large part of the U.S. long-grain rice crop was contaminated by an experimental strain from Bayer CropScience, prompting import bans in Europe and Japan and sharply lowering market prices. The company agreed in court in 2011 to pay \$750 million to growers as compensation.

### BUYERS CAUTIOUS, SEEK DETAILS

A major flour miller in China, which has been stocking U.S. wheat in recent months, said importers will tread carefully.

China has emerged as a key buyer of U.S. wheat this year, taking around 1.5 million tonnes in the past two months. Chinese purchases in the year to June 2014 are estimated to rise 21 percent to 3.5 million tonnes, according to the USDA, with most shipments coming from the United States, Australia and Canada.

Japan's Hisadome said the government has asked U.S. authorities to provide more details of their investigation and Japan will stop buying the wheat concerned, at least until a test kit is developed to identify genetically modified produce.

There is no U.S.-approved test kit to identify genetically engineered wheat. The USDA has said it is working on a "rapid test" kit.

The Philippines, which buys about 4 million tonnes of wheat a year and relies mainly on U.S. supplies, is waiting for more details from the USDA before acting, an industry official in Manila said.

An agriculture ministry source in South Korea said the government is reviewing the discovery, adding the country thoroughly inspects products from the United States as part of safety checks.

"I won't be surprised if other countries start cancelling or reducing their purchases of U.S. wheat, particularly Asian countries, putting pressure on wheat demand," said Joyce Liu, an investment analyst at Phillip Futures in Singapore.

The benchmark Chicago Board of Trade wheat futures eased half a percent on Thursday after rallying in the previous session.

Genetically modified crops cannot be grown legally in the United States unless the government approves them after a review to ensure they pose no threat to the environment or to people.

Monsanto entered four strains of glyphosate-resistant wheat for U.S. approval in the 1990s but there was no final decision by regulators because the company decided there was no market.

The St. Louis-based firm downplayed the incident in a statement posted on its website. "While USDA's results are unexpected, there is considerable reason to believe that the presence of the Roundup Ready trait in wheat, if determined to be valid, is very limited," it said.

Still, importers are not in a position to shun wheat from the United States, which accounts for about a fifth of the global supplies, analysts and industry officials said. (Additional reporting by Karl Plume in CHICAGO, Niu Shuping in Beijing, Erik dela Cruz in MANILA, Jane Chung in SEOUL and Yayat Supriatna in JAKARTA; Editing by Amran Abocar and Richard Pullin)

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## Fire officials: Bug bombs caused NY building blast

By COLLEEN LONG, Associated Press  
Updated 10:44 am, Friday, July 12, 2013

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NEW YORK (AP) — Two dozen bug bombs may have been set off at once inside a Chinatown beauty salon, leading to an explosion and fire that injured a dozen people, fire officials said Friday.

Three people remained hospitalized in serious condition Friday. Nine others suffered burns and smoke inhalation in the Thursday blaze, including four firefighters.

Fire investigators received reports that 24 pesticide cans, which release gas to kill bugs, were deployed at once in the first-floor beauty salon of the five-story brick building. The poisonous flammable fumes ignited, possibly from a pilot light or a spark from an electrical appliance. Fire officials were still investigating the blaze but believe it was accidental, spokesman James Long said.

Bug bombs, also known as foggers, are considered so poisonous and dangerous that New York City health officials have tried — so far unsuccessfully — to put restrictions in place so that only professional exterminators use the devices.

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The devices cause between four and eight explosions every year in New York City, and about 300 nationally, according to the California Department of Pesticide Regulation and a 2009 letter to the U.S. Environmental Protection Agency from the city's director of poison control urging tighter restrictions on the pesticides.

"Failure to read, understand or follow label instructions is widespread," according to the letter. "The use of foggers results in regular catastrophic events."

Last year, the EPA made changes to bug bomb labeling that included pictures showing that multiple canisters shouldn't be used in a room, that ignition sources should be unplugged or turned off and that no pilot lights should be on.

In the explosion at 17 Pike St., fire officials believe "improper use" of the cans caused the blast that blew out a wall and caused the building to partially collapse. The fire broke out about 12:45 p.m. Thursday, with the explosion shattering windows on the first three floors. Officials did not say who they believe may have set the canisters off.

Tszkan Cheung, who had been in his fourth-floor apartment above the salon eating lunch at the time, described what he heard as "boom, like a bombing, like an earthquake."

He made it out of the building on his own but saw firefighters carrying out a woman with a severely injured leg.

Jinjoo Yang, who lives next door, said, "I heard a big sound. It sounded like something big fell from the next floor. I felt the whole floor shaking."

The department of buildings issued a vacate order for the building in part because of the fire, but also because of illegal partitioning on some of the floors. It wasn't clear how many people were living there but is not uncommon in New York to partition walls to make extra rooms, though owners are required to get permits to do so. Buildings investigators also found illegal plumbing and electrical work, said spokeswoman Kelly Magee.

The building owner Mary Shiu was issued a violation. She did not answer a call to her New Jersey home Friday.

The owners were last cited in 2009 for working without permits and failure to maintain the building, according to department of buildings records.

Building inspectors evacuated the structure for two months starting in January that year after it was found to be unsafe. Also in 2009, floors were rotted and in danger of collapsing and there were no fire-stopping materials. They paid \$2,000 in fines and the complaints were resolved in March.

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**The New York Times**

May 28, 2013

# Wal-Mart Is Fined \$82 Million Over Mishandling of Hazardous Wastes

By **STEPHANIE CLIFFORD**

Wal-Mart Stores pleaded guilty Tuesday to improperly dumping hazardous waste in California and Missouri, agreeing to pay almost \$82 million in fines.

The retailer was charged with six counts of violating the Clean Water Act in California and one count of violating a federal law related to pesticide disposal in Missouri.

The guilty plea on all counts brings to an end years of investigations and legal wrangling that pitted the nation's largest retailer against government authorities over charges that employees were throwing hazardous products in the trash and into sewage systems.

While the legal issues have not made a significant dent in the retail giant's finances, they have prompted Wal-Mart to revamp its procedures. The company has added training on proper waste disposal for its store employees and created a compliance office consisting of former officials with the Environmental Protection Agency, among other people.

The problems stem from incidents beginning in 2003. At the time, Wal-Mart workers tossed products, like bleach and fertilizer, into the trash or the local sewer system, rather than dealing with them as hazardous waste, according to authorities.

"Retailers like Wal-Mart that generate hazardous waste have a duty to legally and safely dispose of that hazardous waste, and dumping it down the sink was neither legal nor safe," André Birotte Jr., the United States attorney for the Central District of California, said. In Missouri, the company was routing damaged items that its customers had returned, including pesticides, to a facility where the items were processed for resale without proper permits. "Regulated pesticides were mixed together and offered for sale to customers without the required registration, ingredients, or use information," the Justice Department said in a statement.

Wal-Mart "put the public and the environment at risk and gained an unfair economic advantage over other companies," Ignacia S. Moreno, assistant attorney general for the Justice Department's Environment and Natural Resources Division, said in a statement.

Wal-Mart noted in a statement that it had not been accused of any specific environmental damage as a result of the improper handling.

After the allegations of improper dumping came to light, the company in 2006 put into place a

program telling employees how to handle the waste and created a compliance office. For instance, an employee must now put returned or damaged items that are classified as hazardous into a special chemical bag.

The employee must then label the bag's contents, put the bag in a bucket liner, seal the liner, and place the liner into a color-coded bucket — red for nail polish, blue for aerosols. A hazardous-waste hauler takes the bucket from the store to a treatment center, along with documentation.

“Once we learned of these allegations, we looked into it, investigated it, and decided to put this program in place,” said Wal-Mart spokeswoman Brooke Buchanan, “so they know if something is determined as hazardous waste.”

The guilty plea comes after settlements that Wal-Mart reached with California and Missouri in 2010 and 2012 on the same charges. Tuesday's fines include \$60 million for violations of the Clean Water Act in California; \$14 million for a violation of the Federal Insecticide, Fungicide and Rodenticide Act in Missouri; and a \$7.6 million civil penalty to the E.P.A.

In total, Wal-Mart will have paid more than \$110 million to resolve all these related cases. Wal-Mart, which had \$128 billion in revenues last year, said the payments should not have a material effect on its business.

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## Guilty of Pesticide Crimes, Wal-Mart Fined \$81 Million

Posted by [News Editor](#) in [Biz/Sports](#), [Latest News](#), [RSS](#), [Toxics](#) on May 28, 2013 9:57 pm / [no comments](#)

An orange banner advertisement for Orangedrop. On the left, it says "Recycle your batteries" in large white text, followed by "Click here to find a drop-off location near you" in smaller white text. On the right, there is a white circular logo with a stylized orange drop and the word "ORANGEDROP" in white capital letters below it.

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**WASHINGTON, DC**, May 28, 2013 (ENS) – Retail giant Wal-Mart Stores today pleaded guilty to illegally handling and disposing of hazardous pesticides at its retail stores across the United States.

Hazardous wastes and pesticides returned to stores by customers were put into municipal trash bins or, if liquid, poured into local sewer systems, according to U.S. Justice Department and Environmental Protection Agency officials.

Wal-Mart transported tons of these hazardous materials without proper safety documentation to one of six product return centers located throughout the United States.



Wal-Mart store (Photo by [Grant Bierman](#))

Wal-Mart Stores Inc. pleaded guilty in cases filed by federal prosecutors in Los Angeles and San Francisco to six counts of violating the Clean Water Act by illegally handling and disposing of hazardous pesticides at its retail stores.

“Retailers like Wal-Mart that generate hazardous waste have a duty to legally and safely dispose of that hazardous waste, and dumping it down the sink was neither legal nor safe,” said André Birotte Jr., the U.S. attorney for the Central District of California.

As part of a plea agreement filed in California, Wal-Mart was sentenced to pay a \$40 million criminal fine. An additional \$20 million fine will fund community service projects, including a new \$6 million Retail Compliance Assistance Center that will help retail stores across the nation learn how to properly handle hazardous waste.

Wal-Mart also pleaded guilty in Kansas City, Missouri to failing to properly handle pesticides that had been returned by customers at its stores across the country, in violation of the Federal Insecticide, Fungicide and Rodenticide Act, FIFRA.

Starting in 2006, Wal-Mart began sending damaged household products, including regulated solid and liquid pesticides, from its six return centers to Greenleaf LLC, a recycling facility located in Neosho, Missouri, where the products were processed for reuse and resale.

Because Wal-Mart employees failed to provide adequate oversight of the pesticides sent to Greenleaf, regulated pesticides were mixed together and offered for sale to customers without the required registration, ingredients, or use information, in violation of FIFRA.

Between July 2006 and February 2008, Wal-Mart trucked more than two million pounds of regulated pesticides and other household products from its various return centers to Greenleaf. In November 2008, Greenleaf was convicted of a FIFRA violation and fined \$200,000.

As a result of the three criminal cases brought against Wal-Mart by the Justice Department, as well as a related civil case filed by the U.S. EPA, Wal-Mart will pay \$81.6 million in penalties.

Coupled with previous actions brought by the states of California and Missouri for the same conduct, Wal-Mart will pay a combined total of more than \$110 million to resolve cases alleging violations of federal and state environmental laws.

“Truckloads of hazardous products, including more than two million pounds of pesticides, were improperly handled under Wal-Mart’s contract,” said Tammy Dickinson, U.S. attorney for the Western District of Missouri.

“This tough financial penalty holds Wal-Mart accountable for its reckless and illegal business practices that threatened both the public and the environment,” she said. “Today’s criminal fine should send a message to companies of all sizes that they will be held accountable to follow federal environmental laws.”

Cynthia Giles, assistant administrator for EPA’s Office of Enforcement and Compliance Assurance, said, “Today Wal-Mart is taking responsibility for violating laws that protect people from hazardous wastes and chemicals. Walmart is committing to safe handling of hazardous wastes at all of its facilities nationwide, and action that will benefit communities across the country.”

Wal-Mart owns more than 4,000 stores nationwide that sell thousands of products which are flammable, corrosive, reactive, toxic or otherwise hazardous under federal law. The products containing hazardous materials include pesticides, solvents, detergents, paints, aerosols and cleaners. Once discarded, these products are considered hazardous waste under federal law.

In conjunction with today’s guilty pleas in the three criminal cases, Wal-Mart has agreed to pay a \$7.628 million civil penalty that will resolve civil violations of FIFRA and Resource Conservation and Recovery Act.

In addition to the civil penalties, Wal-Mart must implement a comprehensive, nationwide environmental compliance agreement to manage hazardous waste generated at its stores. The agreement requires personnel training at all levels of the company in identification and management of hazardous wastes and establishment of Environmental Management Systems at Wal-Mart stores and return centers. Compliance with this agreement is a condition of probation in the criminal cases.

These cases are the result of investigations conducted by the FBI and the EPA, with assistance from the California Department of Substance and Toxics Control and the Missouri Department of Natural Resources.

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