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MEMORANDUM

DATE: January 2, 2007
TO: Joint Standing Committee on Agriculture, Conservation and Forestry
FROM: Maine Board of Pesticides Control
SUBJECT: Report on Findings and Recommendations Pursuant to PL 2006, Chapter 553

Executive Summary

Public Law 2006, Chapter 553 established temporary restrictions on the use of pesticides and required the Board of Pesticides Control (BPC) to perform the following tasks:

- Develop a plan and conduct spray monitoring on sites where the temporary restrictions were imposed, located between 50 and 250 feet from the mean high tide mark.
- Assess the risks and benefits relating to pesticide application near marine waters.
- Report its findings and recommendations to the Joint Standing Committee on Agriculture, Conservation and Forestry (ACF) by January 2, 2007.

The BPC has completed the monitoring and assessment work and offers the following findings and recommendations:

- The BPC finds that the overall risk to lobsters from browntail moth spraying is low, but safeguards are still warranted to reduce the risks to lobsters and to protect other marine invertebrates.
- The BPC recommends that the ACF report out emergency legislation to the First Regular Session of the 123rd Legislature to continue the statutory restrictions on browntail moth spraying for one more year (*with amendments summarized below*). The BPC will then initiate rulemaking to codify the restrictions beyond 2007. Placing the restrictions in rule provides further opportunity for public input and allows for ongoing modifications as new information arises.
- The BPC recommends the following amendments (*for specific language, see complete, model law attached*):
 - Air carrier (mist blower) application equipment would be allowed, in addition to hydraulic hand-held spray guns, where pesticide applications are allowed between 50 and 250 feet of the mean high water mark.
 - In addition to the prohibition of application when the wind is blowing toward marine waters, pesticide applications would be prohibited when the wind speed is less than 2 miles per hour.

- The section relating to notification and submission of records would be deleted; this provided information to assist with the monitoring study, which has now been completed.
- An exemption for licensed commercial applicators using non-powered (handpumped) equipment would be added to the exemptions for biological pesticides and the injection of pesticides into the soil or shade and ornamental trees.
- The repeal date of March 31, 2007, would be amended to March 31, 2008.
- The sections regarding the monitoring of spray applications and the authorization of legislation by the ACF would be deleted, as they are no longer necessary.

Background

In May of 2005, Representative Percy of Phippsburg and Senator Damon of Hancock sponsored LD 1657, "An Act to Minimize the Risk to Maine's Marine Waters and Organisms Posed by the Application of Pesticides." The bill was originally referred to the Committee on Marine Resources, but was subsequently transferred to the ACF.

A public hearing was held on the bill on May 18, 2005, where a number of people testified on both sides of the issue. The Committee recognized the issue was complex and that legislation could not be passed in time to affect the spraying that would occur in 2005. Consequently, the bill was carried over to the next session and the committee chairs wrote to the BPC Director, requesting that the BPC consult with the Maine Lobsterman's Association (MLA), the Lobster Conservancy and other affected state agencies to evaluate research and develop an approach that eliminates the likelihood that certain pesticides will end up in the ocean.

In response, the BPC convened its standing ERAC with ad hoc members from the Department of Marine Resources (DMR) and the university research community. Expertise on the natural history and control of the browntail moth came from the Maine Forest Service (MFS), members of which attended the meetings. The ERAC met five times and finalized a report to the BPC on January 24, 2006, that contained recommendations for revised restrictions on browntail moth spraying near marine waters. The BPC held a special meeting on January 27, where it accepted the ERAC's report. That report, together with a letter explaining the BPC's views, was transmitted to the ACF on February 9, 2006.

The ACF held three workshop sessions in February and March of 2006. At the conclusion of the third workshop, the committee asked their legal analyst to draft a bill limiting browntail moth treatments to the insecticide Dimilin near marine waters in York, Cumberland and Sagadahoc Counties. At a subsequent workshop on March 8, the committee heard testimony from prominent arborist companies indicating that Dimilin is not used by ground sprayers.

The committee then directed the BPC to host a meeting with representatives of the MLA and representative arborists to work out a compromise. That meeting was held on March 14, where an agreement that formed the framework for the final bill that became PL 2006, Chapter 553 was reached. It established the following one-year restrictions on pesticide applications for browntail moth control that were in effect during the 2006 spray season:

- Only biological pesticides or those injected directly into the soil or trees were allowed within 50 feet of the mean high water mark.
- In areas located between 50 and 250 feet from the mean high water mark:
 - only pesticides containing the four active ingredients recommended by the MFS and evaluated by the ERAC were allowed;
 - o only hand-held hydraulic sprayers were allowed;
 - o applications needed to be directed away from marine waters; and
 - applications could only be made when the wind was blowing away from marine waters.

2006 BPC Activities

The provisions of the PL 2006, Chapter 553 are set to expire on March 31, 2007. However, the law gave three assignments to the BPC for 2006. First, environmental monitoring of browntail moth spraying near marine waters was to be conducted. Second, in consultation with the ERAC, the MLA and the Lobster Conservancy, the risks and benefits relating to pesticide applications near marine waters were to be assessed. And third, the BPC was to report its findings and recommendations to the joint standing committee of the Legislature having jurisdiction over agriculture, conservation and forestry matters by January 2, 2007.

A summary of all the BPC activities related to browntail moth spraying is outlined below.

Publicity on the New Statute

Following passage of LD 1657 in April of 2006, the BPC issued a press release notifying the public of the new restrictions. All licensed applicators within the ornamental and aerial categories were also direct-mailed with the details of the new law.

Monitoring

The BPC staff met with representatives of the MLA, ERAC and the University of Maine Food Chemical Safety Laboratory on April 12, 2006, to discuss procedures for conducting monitoring of pesticide applications made under the temporary restrictions imposed for 2006. Spray monitoring was then conducted on four separate sites in late May of 2006.

Monitoring was done using drift cards set out prior to spraying at measured intervals in both the upwind and downwind directions. Cards were then packaged and sent to the Food Chemical Safety Laboratory at the University of Maine at Orono to be tested for levels of pesticide residue. A condensed version of the monitoring report is attached to this report.

Assessing Risks and Benefits

Much of the work of assessing the risks associated with pesticide applications for browntail moth control near marine waters was completed by the BPC ERAC during 2005. The group met five

times to review the insecticides most likely to be used for browntail moth control and assessed the potential magnitude of pesticide residues reaching the marine environment. The ERAC developed a fifty-page report that was delivered to the ACF on February 9, 2006. That report concluded that risks to lobsters from browntail moth spraying appeared low. Dimilin was recommended as the least risky insecticide due to its affinity for soil and the fact that lobsters aren't molting when product is applied.

During 2006, the BPC took additional steps to address specific concerns and continue the risk/benefit analysis. The BPC solicited public input at a formal Public Information Gathering Meeting held in Freeport on July 21, 2006. A written comment period was also publicized for those unable to attend the public meeting. The BPC reviewed all the public comments at its September 15, 2006, meeting. Benefits of spraying to control the browntail moth are primarily related to preventing dermatitis that results from exposure to the caterpillar hairs and reducing defoliation of oceanfront trees. These benefits are difficult to quantify, but were of less importance during 2006 when moth populations were unusually low.

On September 13, 2006, the ERAC held a follow-up meeting in which Dr. Diane Cowan of the Lobster Conservancy presented her research on lobster molting. The results of the spray monitoring were also reviewed and discussed. The ERAC subsequently reached consensus on a set of buffer zone recommendations that were presented to the BPC at their meeting on September 15, 2006. The BPC approved those recommendations and directed the staff to include them as the centerpiece of the written report to the ACF.

Findings and Recommendations

In conclusion to the assessment process, the BPC, in consultation with the ERAC and the Lobster Conservancy, finds that risks to lobsters from browntail moth spraying are low, but a lack of available exposure data warrants safeguards to reduce the risks to lobsters and to protect other marine invertebrates. The Board has concerns about aerial spraying of Dimilin under unfavorable conditions, especially at low tide. Accordingly, the ERAC supports continuation of the buffer zone scheme established in PL 2006, Chapter 553, which prohibits aerial spraying within 250 feet of the mean high water mark. The risks to other marine invertebrates in the intertidal zone were also a concern the ERAC considered in supporting continued safeguards, even though the committee felt populations would rebound quickly should any mortality occur. Based on these premises, the BPC recommends continuation of the restrictions established under PL 2006, Chapter 553, with the revisions outlined in the executive summary.

Finally, the BPC will continue to work collaboratively with the Departments of Marine Resources and Conservation to provide outreach to the public in affected areas on the pesticide use restrictions, proper pesticide use and browntail moth integrated pest management.

Attachments