



John Elias Baldacci
GOVERNOR

STATE OF MAINE
MAINE DEPARTMENT OF AGRICULTURE, FOOD & RURAL RESOURCES
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

SETH H. BRADSTREET, III
COMMISSIONER
HENRY JENNINGS
ACTING DIRECTOR

MEMORANDUM

DATE: January 2011
TO: Joint Standing Committee on Agriculture, Conservation and Forestry
FROM: Maine Board of Pesticides Control
SUBJECT: Report on Findings and Recommendations Pursuant to PL 2009,
Chapter 584

Executive Summary

Public Law 2009, Chapter 584 (hereinafter referred to as Chapter 584), was signed into law by Governor Baldacci on April 1, 2010. Chapter 584 enacted changes to the pesticide notification registry established the prior year by the Maine Legislature (PL 2009, Chapter 378), and charged the Maine Board of Pesticides Control (BPC) with a number of tasks including:

- Implement the revised registry with a second sign-up period for 2010
- Publicize the new registry with an initial focus on areas of the state where applications using aircraft or air-carrier equipment occur
- Work to develop a comprehensive notification registry that covers additional types of applications, incorporates the existing non-agricultural registry and consolidates notification provisions into a single chapter
- Submit a report to the Joint Standing Committee on Agriculture, Conservation and Forestry (ACF) no later than February 1, 2011, on:
 - Progress on development of the comprehensive registry
 - Recommendations regarding appropriate notification distances
 - The effectiveness of the public awareness campaign required by the statute
 - The feasibility and advisability of requiring posting of signs
 - The feasibility of a state-supported Internet-based system designed to assist applicators with the notification process

The BPC began work on implementing the new registry shortly after the original statute (PL 2009, Chapter 378) was signed by the Governor on June 12, 2009. The staff launched a public awareness campaign and worked with state information technology personnel to set up an online sign-up form. At the same time, the Board began reviewing Chapter 378 to develop an implementation strategy. Ultimately, the Board identified some unforeseen consequences arising from Chapter 378 that it conveyed to the ACF in an August 2009 letter. The ACF addressed a number of concerns in the 2010 amendments contained in Chapter 584.

[It makes more sense to finish the executive summary once the rest of the report is finalized.]

Report to the Legislature

Progress in the Development of a Comprehensive Notification Registry

During 2010, development and implementation of the notification registry dominated the Board's meeting agendas and was the top priority for the Board's staff. In an effort for the Board to get as much input as possible from stakeholders and the public, five Public Information Gathering Meetings were held across the state (*see table below*), and the registry was the primary topic discussed at all eight monthly Board meetings following enactment of Chapter 584 on April 1, 2010. In addition, the Board organized an *ad hoc* committee of public health officials which met on July 30, 2010.

PUBLIC INFORMATION GATHERING MEETINGS ON A COMPREHENSIVE PESTICIDE NOTIFICATION REGISTRY		
Location	Date	Number of Speakers
Fairfield	April 16	12
Bangor	May 14	10
Machias	June 24–25	17
Presque Isle	July 8	7
Portland	July 23	21

Over the course of the development process, the Board vetted and reviewed an array of concepts relating to the scope and operation of the registry. In addition, the Board reviewed its existing notification requirements with an eye toward standardizing and incorporating those requirements with the comprehensive registry. In general, the Board tried to align operational details with those that were set forth in Chapter 584. The Board plans to initiate formal rulemaking on the comprehensive registry after reviewing its ideas with the ACF in January of 2011. Currently, the Board offers the following recommendations:

- Sign-up and distribution of the registry should be primarily electronic in order to keep administration manageable.
- In an expanded registry, the current annual March 15 deadline for signing up should be moved back so the BPC staff can distribute the registry earlier. The reason for this is that commercial pesticide applications may begin as early as April 1, and commercial pesticide application companies often apply pesticides to a far larger number of properties, necessitating greater time to compare the registry to their customer list and implement the requirements.
- The scope of the registry should cover the regulated community that the Board primarily deals with: commercial agricultural producers and commercial applications. It is this group of applicators that does the type of spraying that may be of concern to area residents.

-
-
- Homeowners should not be required to consult and comply with the notification requirements of the registry. Instead, anyone who wants to be notified about pesticide applications made by homeowners can send their neighbor a Board-approved letter detailing their desire to be notified and the state law requiring such notice.
 - The historical “by request” option for notification should be retained because:
 - It would allow people who feel they need notice beyond 250 feet an option
 - Some people don’t want their personal contact information on a publicly available list, or they prefer to talk directly with their neighbors
 - Some people will miss annual sign up deadline
 - We use it in another rule
 - Some pesticide applicators support and prefer the by request approach
 - The older “non-agricultural” registry should be merged into and aligned with the comprehensive registry
 - The notification time frames need to be aligned
 - The notification methods need to be aligned
 - The aerial notification requirements contained in Chapter 51 of the Board’s rules should be consolidated into and aligned with Chapter 28 of the Board’s rules.
 - Chapter 51 is tailored more to address “wide-area” spray programs, many of which occur in the sparsely populated areas of the state that are managed for forest products. Consequently, the provisions in Chapter 51 are designed primarily around a public notification system rather than notification of individuals. Much of the logic behind the Chapter 51 provisions is still valid, so the Board supports retaining some of the major provisions including:
 - Advance notice of aerial spraying to the BPC—although there is general agreement that the notice to the Northern New England Poison Center may be discontinued. There is some support for making the notice to the BPC for aerial spraying universal, instead of exempting agriculture as the current rules do.
 - Newspaper notices for programs in unpopulated areas
 - Use of signs at major points of ingress and egress
 - The Board supports discontinuing the requirement that land managers notify abutting landowners about aerial spraying in areas where newspaper coverage is questionable. The comprehensive registry would substitute for that requirement.
 - The BPC should take affirmative steps to ensure that a comprehensive registry is kept current. Chapter 584 specifies that participants shall remain on the registry until they notify the BPC they want to be removed or until the Board staff determines the contact information is no longer valid. Stakeholders generally agree that steps must be taken to ensure the list does not contain a significant number of invalid entries.
 - The Board has not yet resolved—and is seeking the Legislature’s input on—the question of who should have the burden of identifying properties that, when treated, create a duty for the land manager to notify a registry participant(s). Stakeholders disagree about who should bear the burden. The Legislature, in Chapter 584, placed the burden on the land
-
-

manager. However, the Board's non-agricultural registry places the burden on the registry participant. In an expanded, comprehensive registry, identifying properties would be more challenging for large commercial application companies that sometimes spray thousands of properties over the course of a year. The Board believes that identifying properties that create a notification duty will create a burden primarily in the first year of implementation, and it will decrease in succeeding years, until it becomes relatively manageable.

Recommendations Regarding Changes to the Distances and Types of Applications Requiring Notification

The Board spent considerable time and effort grappling with the question of what are appropriate distances from a pesticide application site for which registry participants should be entitled to notification. Some pesticide applicators favored relying on spray droplet movement studies as a basis for setting distances. The Board decided against relying on this type of research because it recognized droplet studies are not suitable for evaluating inhalation exposure which is one of the principle reasons neighbors express concern about nearby spraying.

Underlying the question of notification distances is the question of what is the purpose of notification about pesticide spraying. The Board has taken the position that notification addresses a fundamental right-to-know about the use of chemicals adjacent to occupied areas. It does not believe there needs to be clear and irrefutable evidence that pesticide drift will result in demonstrable health effects to neighboring residents before notification should become a right. On this basis, any reasonable likelihood that neighbors may be exposed to even low levels—beyond background—of pesticides is sufficient justification to honor a notification request. This logic, coupled with input from public health officials suggesting a health risk assessment approach to establishing appropriate notification distances is not feasible, led the Board to look for other information to guide the assessment.

As a result, the Board looked at historical precedents, notification requirements in other states and its own records relating to complaints and inquiries about pesticide applications taking place in the vicinity. Ultimately the Board was not able to identify compelling information that clearly pointed to specific distances. At the same time, the Board reasoned that distances existing in current Maine pesticide law have worked fairly well, and that there was no clear evidence suggesting they were either too large or too small. In addition, the Board recognized that simplicity would be important for all stakeholders, and that distances based on the type of equipment was the most logical approach. Consequently, the Board recommends the following set of notification distances:

RECOMMENDED DISTANCES FOR A COMPREHENSIVE NOTIFICATION REGISTRY	
Notification Distance (Application Site To Registry Participant's Property)	Types of Pesticide Applications Covered
≤ 250 feet	<ul style="list-style-type: none"> • Non-powered commercial applications • Granular/pelletized applications (including aerial) • In furrow and band applications • Powered backpacks • Low-pressure hydraulic applications (< 60 psi)
≤ 500 feet	<ul style="list-style-type: none"> • Boom sprayers • Chemigation • Fumigation • Air-carrier equipment • High-pressure hydraulic applications (> 60 psi) • Other powered equipment
≤ 1,320 feet	<ul style="list-style-type: none"> • All aerial spraying

The Effectiveness of the BPC Public Awareness Activities

BPC staff researched the options for publicizing the notification registry to raise public awareness. With the \$25,000 budget and June 15 deadline for the close of the 2010 registry in mind, it became clear that the available resources were not sufficient enough to produce an ad, nor buy enough airtime to achieve the desired goal. On that basis, it was determined that newspaper advertising would be the most effective means of communication. With help from one of the major newspapers, an ad was designed and formatted, and an intensive newspaper advertising campaign was developed to run in print and online media over a two-week period preceding the June 15 deadline.

A press release was also sent to all statewide news media, all municipalities, community television stations, the Maine Center for Disease Control, and major environmental organizations. With the exception of the news media, an informational poster about the registry was included with the press release.

A chronology of the advertising campaign follows:

- May 23–June 6: During this period, a ¼- or ½-page display ad (*see attached*) ran five times in the weekday and weekend editions of five major daily newspapers and two times

in twenty weekly newspapers (*see list attached*); total circulation coverage: 439,500; total cost: \$26,788; while the daily papers broadly covered all regions of the state, weeklies were chosen to supplement coverage in areas where aerial and air-carrier spraying are employed.

- May 30–June 15: A banner ad (*see attached*) ran on the websites of the five daily newspapers; total cost \$1,308 (*included in the total above*).
- May 27, 2010: A press release (*attached*) was sent to 175 Maine media outlets, including newspapers, television, radio, and wire services; the release was also posted on the State homepage and Board of Pesticides website.
- May 27, 2010: A press release and an informational poster, formatted for television (*attached*), were sent to 93 Maine public access community television stations for use on the air.
- June 1, 2010: A press release was sent to the Maine CDC state epidemiologist, Dr. Stephen Sears, who then forwarded it to district health liaisons for local distribution and posting in medical offices, health clinics, etc.
- June 1, 2010: A press release and an informational poster (*see attached*) were sent to 85 contacts at approximately 30 Maine environmental organizations.
- June 2, 2010: A press release and a copy of the newspaper ad, for use as a poster, were sent to approximately 4,000 municipal e-mail addresses.

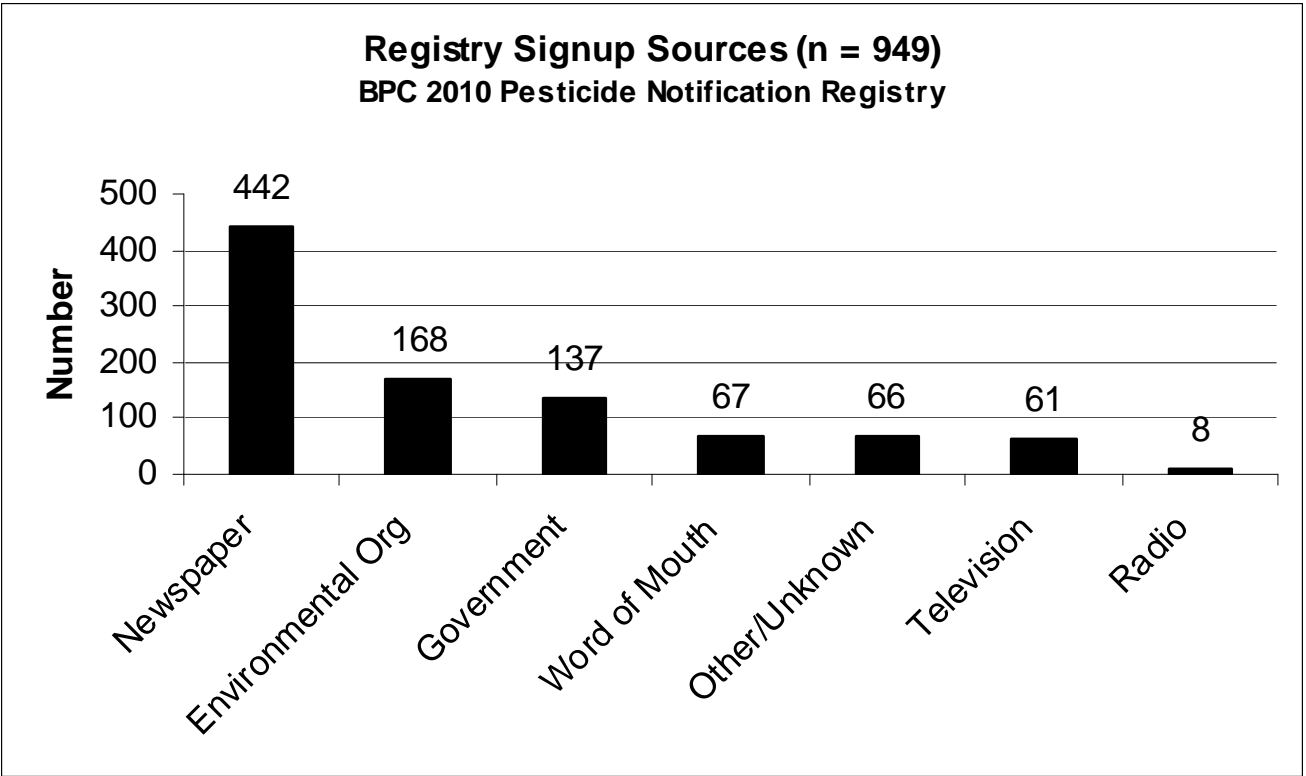
Before the campaign began, there were 525 names on the registry. By June 15, the list had increased to a total of 1606 participants.

Following the advertising campaign, and the closing of the 2010 notification registry on June 15, the BPC contracted with the Portland research and marketing firm, Market Decisions, to survey Maine citizens and determine if they had heard about the registry. A random sampling of 401 people was interviewed by telephone between July 14 and August 3. Survey participants were asked the following question:

Have you heard about the new Maine Pesticides Notification Registry which requires farm managers to inform registry participants about nearby pesticide applications?

The key finding of the survey was that 18%, or nearly 1 in 5 Maine citizens, had heard about the new registry. Other findings included that men, college graduates, and residents of northern Maine were more likely to have heard about the registry (see complete report attached).

The BPC added a field to the online signup form for the registry which required participants to indicate how they heard about the registry. The table below shows the results of this query.



The Feasibility and Advisability of Requiring Land Managers to Post Signs

The Board sought input and discussed the appropriateness of a sign posting requirement during several of its meetings. With the exception of forest managers, the applicator community was opposed to any new sign requirement. Few other stakeholders voiced strong support for a sign requirement either. The following points summarize Board consensus relating to new posting requirement for pesticide applications:

- The Board recommends that the current aerial posting requirements contained in Chapter 51 be retained since it focuses on “wide area” spray programs that often cover remote, unpopulated areas where recreationalists predominate.
- The Board believes that the purpose of any new posting should be clear and defensible. Board members determined that any posting requirements should be intended to help alert area residents that spraying may occur and to provide a contact for obtaining additional information.
- The Board foresees a significant burden associated with any new posting requirement.
- The Board does not support a requirement for posting the perimeter pesticide application sites because many application sites are in remote locations that are surrounded by woods or agricultural lands—if not entirely, at least in part—so that the vast majority of signs would not be visible to the public.

-
- The idea of requiring a single sign for aerial spraying adjacent to residential areas or state-maintained roads was discussed by the Board and had the support of a minority of Board members.

The Feasibility of Establishing and Maintaining an Internet-based System to Allow Land Managers to Electronically Provide Notification

In researching the possibility of an Internet-based notification system, the Board considered numerous entities, both public and private, with both mapping and database expertise. It was quickly realized that the Maine Office of Geographic Information Systems (MEGIS) could provide the services needed.

Board staff have been meeting with MEGIS to discuss how to create an Internet-based mapping/notification system that will incorporate the notification registry, display property boundaries of registry participants, where available, and map address points if not, and allow pesticide applicators to access this data, draw a boundary around the application area, search and identify all properties within a specified distance from where the application is being made, and contact, through various means, the property owners, to notify them of the pending application.

During the course of two meetings with MEGIS, on June 18 and August 26, it was determined that a mapping application has already been developed for the Maine Geological Survey that performs many of the desired functions. For an estimated additional cost of \$5,000, MEGIS could customize this application to meet our needs.

However, where the law bases the notification distance on the property boundaries of the registry participants, the accuracy of this mapping system depends on the availability of digital parcel data (property boundaries) for all Maine towns. At present, while data exists for all the unorganized territories, only about 135 of the nearly 500 municipalities in the state have this information. For the 2010 registry, approximately 100 of the 382 towns currently on the registry have parcel information.

Where no parcel data exists, only a point will appear on the map, based on the 911 address system. This point would identify only a single point along the property boundary, and would not allow for accurate measurement from a pesticide application site to the registry participant's property. This would give applicators some idea of who has to be notified, but they would still have to seek out boundary information from other sources, such tax maps from the local town office.

There is also a known error factor of about 100 feet over $\frac{1}{4}$ mile for digital maps. This error would be automatically factored into all distance measurements. However, in all cases, whether parcel data is available or not, applicators would be encouraged to err on the side of including more registry names, to be sure no one is left out due to either lack of data or the inherent inaccuracy of the distance measurement.

Key Policy Decisions for the Maine Legislature

During the course of its deliberations on the development of a comprehensive notification registry, the Board identified a handful of key policy questions that it believes are fundamental in nature and of sufficient importance, such that they are more appropriately decided by the Legislature. Consequently, the Board prefers that the ACF provide guidance on these topics prior to moving forward with a formal rulemaking process.

- The Board acknowledges that Maine pesticide law already contains two models for identifying properties that—when treated—create a duty to notify registry participants. The Maine Legislature placed this burden on the land manager in Public Law 2009, Chapter 584, while the non-agricultural registry contained in Chapter 28 of the Board’s places the burden on the registry participants. The stakeholder community is polarized and divided on this issue and the Board sees logic to both sides of the argument.
- The Board received considerable input suggesting that homeowners and other applicators who are not part of the Board’s normal regulated community should be required to review and comply with the comprehensive registry. While the Board agrees that homeowners are more prone to misuse of pesticides, they also recognized homeowners rarely use equipment capable of dispensing large volumes of pesticides, nor do they apply pesticides on a large scale. For these reasons, the Board believes that homeowners are far less likely to apply pesticides in a manner in which their neighbors may be exposed. Moreover, the Board recognized that requiring the entire state population to comply with a new regulation is far beyond the capability of the Board’s staff. In addition, the Board believes there is a more practical approach for people to be informed about homeowner use of pesticides. Consequently, the Board does not recommend requiring homeowners to comply with the notification requirements in a comprehensive registry, but it believes the Legislature needs to be aware of the issue because of the wide variety of stakeholders who advocated for it.
- 22 M.R.S.A. § 1471-R specifies a number of notification requirements relating to aerial forest insect spray programs. Since the Legislature has directed the Board to consolidate its notification requirements into a single chapter with a comprehensive registry as the centerpiece, it may be prudent to repeal this section of statute in order to avoid conflicts and redundancy.

Next Steps for the BPC in Development of a Comprehensive Pesticide Notification Registry

After receiving policy guidance from the ACF Committee, the BPC will initiate a formal rulemaking process based on the concepts articulated in this report, and feedback from the Maine Legislature.

Attachments