



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

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

BOARD OF PESTICIDES CONTROL

February 28, 2020

Deering Building, 90 Blossom Lane, Room 101, Augusta, Maine

9:00 – 10:00 AM Board Meeting

10:00 - 11:30 AM Public Information Gathering Session On Notification

11:30 – 12:00 PM Board Meeting Continued

AGENDA

1. Introductions of Board and Staff

2. Minutes of the January 15, 2020 Board Meeting

Presentation By: Megan Patterson, Director

Action Needed: Amend and/or Approve

3. Report on 2019 Work Accomplished and Request for Funds for Mosquito Monitoring from Integrated Pest Management Program

The Integrated Pest Management Program is reporting work accomplished in 2019 and requesting funds to assist with on-going efforts for mosquito surveillance and identification, refinement of a GIS-based mosquito habitat mapping system, and continued outreach around vector-borne diseases.

Presentation By: Kathy Murray, DACF IPM Specialist

Action Needed: Discussion and Determination if the Board Wishes to Fund this Request

4. Request to Extend Special Local Need [24(c)] Registration for Asulox Herbicide (Company) for Bracken Fern in Wild Blueberries

MEGAN PATTERSON, DIRECTOR
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In 2010, the Board first approved a Section 24(c) registration for Asulox Herbicide (EPA Reg. No. 70506-139). The 24(c) was renewed in 2014, but the registration expired January 31, 2020. This University of Maine Cooperative Extension submitted this renewal request for a 24(c) registration. In the absence of other effective control measures for bracken fern, this product has proven to be effective, especially in newly cleared land and abandoned fields returned to production. The proposed SLN will expire December 31, 2024.

Presentation By: Mary Tomlinson, Pesticides Registrar and Water Quality Specialist

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

5. Board Review of Notification Requirements

At the January 2020 meeting of the Board, Representative Pluecker asked the Board to consider review and revision of existing notification requirements. The Board determined that it would be helpful to receive additional comment from the public and voted to host a public information gathering session at the February 28 meeting of the Board.

Presentation By: Megan Patterson, Director

Action Needed: Discussion and Determination of How the Board Wishes to Proceed

6. Other Items of Interest

a. LD 2069

b. LD 2070

c. LD 2082

d. LD 2083

e. Forestry Report and Public Law 2019 Chapter 84

f. Board of Pesticides Control 2019 Government Evaluation Act Report

g. Policy Describing the Environmental Risk Assessment Committee

h. Policy Describing the Medical Advisory Committee

i. Public Law 2020 Chapter 584 and Fiscal Note

j. Policy on Allowable Pesticides for Control of Browntail Moth Within 250 Feet of Marine Waters

k. Neonicotinoid Registration Reviews

1. Lorsban Manufacture

7. Schedule of Future Meetings

April 17, 2020; June 5, 2020; and July 24, 2020 are proposed meeting dates.

Adjustments and/or Additional Dates?

Possible Topics for the Board's 2020 Field Trip?

8. 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.
- 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 Board's office or pesticides@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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2

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BOARD OF PESTICIDES CONTROL

January 15, 2020

Augusta Civic Center, 76 Community Drive, Kennebec/Penobscot Room, Augusta, Maine

1:00 - 1:30 PM Board Meeting
1:30 - 2:00 PM Public Forum On Notification
2:00 – 4:00 PM Board Meeting Continued

MINUTES

Present: Adams, Bohlen, Jemison, Granger, Morrill, Waterman

1. Introductions of Board and Staff

- The Board, Assistant Attorney General Randlett, and Staff introduced themselves
- Staff Present: Bryer, Connors, Couture, Nelson, Patterson, Pietroski, Tomlinson, Saucier

2. Minutes of the November 8, 2019 Board Meeting

Presentation By: Megan Patterson, Director

Action Needed: Amend and/or Approve

- **Jemison/Granger: Moved and seconded to accept minutes**
- **In Favor: Unanimous**

3. Request for Financial Support from the Maine Mobile Health Program and the Eastern Maine Development Corporation

Since 1995 the Board has supported a Migrant and Seasonal Farmworker Safety Education program. The Maine Mobile Health Program (MMHP) and Eastern Maine Development Corporation (EMDC provided training to 315 migrant agricultural workers during the 2019 season). Funding to support this effort in 2020 is being requested in the amount of \$5,360, which is the same amount the Board provided in 2019. The funding has been accounted for in the Board's FY20 budget.

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Presentation By: Chris Huh, Program Manager, Farmworkers Jobs Program, Eastern Maine Development Corporation

Elizabeth Charles McGough, Director of Outreach, Maine Mobile Health Program

Action Needed: Discussion and Determination if the Board Wishes to Fund this Request

- Huh explained that he works for the Eastern Maine Development Corporation, which manages state-wide programs to provide support to those working in agriculture, as well as their family members. Huh also serves on the Board of the Association of Farmworker Opportunity Programs (AFOP), which receives its funding from EPA and OSHA to provide, among other services, Worker Protection Standard (WPS) training. The BPC matches funding received from AFOP so they can deploy this training in state.
- Charles-McGough stated that the MMHP hires a seasonal bilingual employee to provide WPS training to those throughout the state in English and Spanish. They also use interpretation services when necessary to provide training in additional languages.
- Charles-McGough explained that last year's trainer is now working full-time for the MMHP. She added that MMHP would additionally like to train a staff member they have who speaks English, Spanish, and Haitian creole.
- Huh thanked the Board for their past support.
- Jemison stated the he has been a big supporter of their program for many years.
 - **Jemison/Granger: Moved and seconded to fund request**
 - **In Favor: Unanimous**

4. Request for Financial Support from the Maine State Apiarist for CLEAR Training

Maine State Apiarist, Jennifer Lund, has requested funding to attend the National Certified Investigator & Inspector Basic Training held in Raleigh, North Carolina in March 2020. This course is designed to provide training in the basics of case development. Funding to support this effort in 2020 is being requested in the amount of \$2,000.

Presentation By: Jennifer Lund, State Apiarist

Action Needed: Discussion and Determination if the Board Wishes to Fund this Request

- Lund explained as the Maine State Apiarist she does all things bees, especially working with bee keepers on hive management issues, mandatory registration, and inspecting incoming agricultural hives to ensure no diseases are brought into the state that could affect resident bee populations.

- Patterson explained to the Board that this three-day course would help Lund investigate suspected pesticide related bee incidents and coordinate with BPC staff inspectors. The course covers interviewing, sample collection, report writing, and providing testimony.
 - **Jemison/Waterman: Moved and seconded to fund request**
 - **In Favor: Unanimous**

5. Request to Review Board Notification Requirements

For the November 2019 meeting of the Board, Representative Pluecker provided a letter asking the Board to convene a meeting of stakeholders to discuss strengths and potential weaknesses of the Board's current notification rules. Representative Pluecker was unable to attend the November meeting and the Board chose to table the discussion until the January 15, 2020 meeting. The Board will now continue the discussion.

Presentation By: Megan Patterson, Director

Action Needed: None, Informational Only

- Morrill thanked Representative Pluecker for coming and hoped the Board can answer some of his questions.
- Pluecker is the state representative covering Warren, Hope, Appleton, and part of Union. He has a small organic farm that has been in operation for 16 years.
- Pluecker told the Board that one of the sites he was leasing was next to a conventional blueberry operation and one day while he was working on the land, they were spraying malathion next door. Pluecker stated that they could smell the malathion strongly from where they were, so he called the BPC and MOFGA and left the fields.
- Patterson noted that this was investigated by BPC staff.
- Pluecker added that the owner of the field he was leasing attempted to talk to the sub-contractor making the application and was told to contact the sub-contractor's employer. The contractor finished the application. Pluecker stated that BPC staff tested for drift and found less than 1% residue. He added that there were bees on the property and there was a bee kill.
- Pluecker told the Board that MOFGA also collected samples and found no residue. If they had he would have lost organic certification for three years. He realized that reporting this had not helped him at all and that he was the one to face the repercussions. Pluecker asked if there was anything he could do to help the process. He stated that it was cumbersome to get on the notification registry because there is a deadline and a fee. Also, he added, the final notification needs to come from the landowner and sometimes the landowner is several layers removed from those doing the spraying.
- Pluecker told the Board that he understands this is a complicated issue and conventional farmers need some of these chemicals, but they also need to respect the needs of abutting landowners. If we handle this with legislation it becomes combative and there are a lot of fears.

- Morrill thanked Pluecker for taking the time to come to the Board meeting to discuss this issue.
- Detectable levels found on Pluecker's crop were less than one percent of the level detected on the target site and less than five percent of the EPA tolerance level for the sampled crops. USDA National Organic Program allows this produce to still be marketed as organic. If there had been residue on a crop that did not have tolerance, then it would have not been saleable.
- Pluecker stated that he had a variety of crops in the field.
- Morrill commented that he was learning much more about the leasing and sub-leasing of farm fields and that the owner is sometimes not even present. He asked how the application was made.
- Patterson replied that it was applied by air blast, and if they had asked for notification, it would have been the landowner or land manager who would be responsible for notifying the organic farm.
- Jemison asked Pluecker if he was on the notification registry at the time.
- Pluecker replied that he was not.
- Jemison asked if Pluecker had signed up since the incident occurred.
- Pluecker replied that he had not.
- Carey Nash stated that under the rules any abutter who wants notification contacts the person managing the land or the landowner if they do not know who is managing the land. The landowner then contacts the lessee and then they are responsible for notification. He added that in his case, as the lessee, he has the responsibility of notifying, answering any questions, and bringing a copy of the labels to the abutter.
- Patterson responded that Nash was correct.
- Pluecker told the Board that he made the request to get us all in a room together to discuss what is and is not working and make it work most smoothly and efficiently for everyone.
- Morrill asked Pluecker what his vision of this would look like.
- Pluecker responded that he would like to work with Patterson on it and have stakeholders from the large industry groups, including forestry and organic.
- Randlett commented that how rulemaking will be accomplished may come into play as will rules for public meetings. This work will have to allow any interested party to attend, and the Board must take comment from all parties. Randlett indicated that the rulemaking process is covered under the Maine Administrative Procedures Act. There are strict standards that must be upheld when stakeholders are engaged in consensus-based rulemaking.
- There was discussion about whether any changes made to the notification rules would be considered major substantive and would therefore involve the legislature.
- Randlett stated that he believed this would be major substantive.

- Pluecker asked the Board if they would want their hand in a consensus-based process or if they wanted them to start at the legislature.
 - **Morrill/Adams: Moved and seconded to suspend Board meeting at 1:30 PM and open public listening session**
 - **In Favor: Unanimous**

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- **Morrill/Waterman: Moved and seconded to adjourn public listening session at 2:00 PM and resume Board meeting session**
 - **In Favor: Unanimous**
- Morrill commented to Pluecker that notification is a tough topic and it appears the specific topic presented for consideration is agricultural notification. Morrill asked where the rest of the Board would wish to go. The Board could review the lessee/owner notification obligations.
 - Patterson asked the Board for clarification on how they would like to move forward—a stakeholder group, begin rulemaking, or begin with having discussion.
 - Bohlen stated that he was not sure the Board had enough conversation yet to identify the boundaries of what constitutes rulemaking. He noted that he was not comfortable stating what the scope is that he wants to discuss, and that the Board needs to have further conversation to decide whether to move forward with rulemaking or not. Bohlen commented that he did not even know which rule we are looking to change at this point.
 - Adams commented that what happened to Pluecker is unacceptable, but he did not understand how notification would have changed what happened. It's not going to stop what is already illegal. Notification would not have been relevant. He stated this issue requires further deliberation before conducting rulemaking.
 - Morrill stated that it seemed like the crux of the issue was drift. The drift rule is at 1% and when we wrote it that was because it was the number we could discern and make enforceable.
 - Bohlen commented that just because there was less than one percent does not mean it was allowed. It means the applicator had to show they had done their due diligence, had a drift plan.
 - Randlett stated that rule dictates that applicators must avoid off-target deposition to the maximum level practicable, so if off-target deposition exceeds 1% that is prima facie evidence that the drift rule has been broken.
 - Granger commented that there are no easy solutions to this issue. The Board has pretty good control over the licensed applicators, but the unlicensed applicators are something else. The Board also has no authority over local ordinances. It almost seems if the number of stakeholders is limited, there may be continued issues. Perhaps start with an open forum.
 - Randlett stated that whichever way the Board decides to proceed, it cannot hold a limited stakeholder meeting but must be open to anyone who wants to participate and provide feedback.

- Morrill asked who would facilitate the meeting.
- Randlett responded that the notice would be provided by the Board and the Chair would open the floor for discussion.
- Jemison commented that having been through this process once you'd think we would make gains, but we do not. He added that the one positive thing is that it has been eleven years and technology has improved. There may be a way we could do this much more efficiently that we did eleven years ago.
- Patricia Kontur, from the Wild Blueberry Commission, asked how many cases of drift violations occurred in the past year or two.
- Patterson responded that she could find the answer to that question and share it.
- Kontur commented on the outreach done by the BPC and Cooperative Extension to educate and direct agricultural producers to comply with rule. She added that she felt bad Pluecker had to deal with a violator but that this was not something which occurs consistently.
- Patterson stated that Pietroski is responsible for classes, which there are more of now than we have had in the past, and we do collaborate with Cooperative Extension.
- Pietroski stated that the BPC has done three annual updates during this Agricultural Trades Show and that drift control has been a part of each one.
- Kontur spoke about her involvement in revising the notification process ten years ago. She said that this one incident being discussed was a violation and she thought we would need to see more problems before entering into rulemaking. Kontur said they could be more aggressive in getting our notification out, but we also have been putting out brochures for the last ten years to assist our farmers in getting notification out to abutters, and development continues to increase in areas where wild blueberries are grown.
- Morrill stated that he was not quite sure which direction to go with this complex issue. He added that not only was drift of concern, but so was the reaction of the applicator when Pluecker came to him and he can understand Pluecker's desire to be notified of applications as well. Morrill added that the BPC does a good job of reaching applicators but a poor job of reaching the general public. General homeowners do not know who the BPC is, much less what notification requirements exist, and that speaks to the need for education.
- Jemison stated that he believed having an open session to see where people are might make sense.
- Waterman commented that technology has changed, and the public's psychology has also changed; there is a rising tide of curiosity about health risks. He stated that agricultural producers feel comfortable with what they are doing because they know the products and how to use them, but the public does not know that. Waterman said he agreed that the public does not know the BPC exists, and stated his support for a public meeting.
- Morrill asked the Board whether they would like to table this topic until next meeting and have time to think more about it or have an informational gathering session at next Board meeting.

- Granger stated that having a meeting might clarify how the Board would like to move forward.
- Bohlen commented that the Board had heard about online notification mechanisms such as Bee Watch and he would like to know what other technological options are out there. Bohlen stated he would like to have some information on this and what other states/groups have done.
- Patterson commented that the Drift Watch folks agreed to give a talk at our next meeting if the Board would like to hear from them. She added that she can also research what other states have done and get a quote from MEPERLS to see what it would take to build something into that system.
- Jemison said that would be great, and possibly Patterson could give the Board an update at the next Board meeting and give them some time to review it, unless we want to use that opportunity to tell everyone interested in the topic.
- Spaulding asked if the Board remembered the work Paul Schlein had done that was specifically designed to be a comprehensive system tied to maps and SDS sheets. She added that it seemed like a good thing then and that it should be considered.
- Jemison commented that possibly we could improve on that.
- Patterson responded that the system was never completed, or put into use, and is not usable at this point in time. She added that, depending on what documentation still exists, that information could possibly be used as a template.
- Bohlen stated that Representative Pluecker brought this to us and I know he has a schedule. He then asked Pluecker what the legislative timeline looked like.
- Pluecker stated this could not be completed before session ends and it would be laying the groundwork for future resolution.
 - **Morrill/Adams: Moved and seconded to include a public information gathering session at the next Board meeting**
 - **In Favor: Unanimous**

6. Discussion of Board Approved Products for Control of Browntail Moth within 250 feet of Marine Waters

On January 25, 2008, the Board adopted Section 5 of Chapter 29 which regulates the use of insecticides used to control browntail moth within 250 feet of marine waters. Section 5 limits insecticide active ingredients to those approved by the Board. At its April 19, 2019 meeting the Board received inquiries about active ingredients for removal from and addition to the list. Subsequently, the staff was directed to update the list of approved active ingredients for browntail moth control. The Board will now consider the list.

Presentation By: Pam Bryer, Pesticide Toxicologist

Action Needed: Amend or Approve the List of Products for Browntail Moth Control

- Bryer told the Board that looking through these labels there were differing scenarios, for example, some of the active ingredients only allow for one application per year. Explaining to the Board how to read the chart, Bryer stated that if they saw green in both boxes, acute and chronic, that means the risk was at an acceptable level.
- Bryer noted that tree injection does not need to be on that list because when run through risk assessment models this application method has very low levels of risk. She noted that imidacloprid had been removed from the list by the Maine Forest Service because it is not thought to be effective against browntail moth.
- Bryer stated she wanted to look at risks for applications done at maximum label rates. To do this she used agricultural drift software, which also allowed her to calculate concentration at the moment of application.
- Morrill thanked Bryer for doing this and stated it was a very clearly explained risk assessment that even lay people can understand.
- Bohlen stated that he was unfamiliar with all of these active ingredients and asked if there were differing modes of action and if the proposed list provided for long term management of resistance.
- Bryer stated that she did not spend much time on this, but there were multiple modes of action.
- Bohlen responded that it made him feel more confident that there were multiple modes of action on the list.
- Morrill asked if any applicators had reviewed the new list.
- Bryer stated that she was concerned about the big changes, but the list was informed by applicators who are actually making the treatments.
- Morrill commented that a couple of years ago the Maine Forest Service was doing testing on bark applications and it would be interesting to know if there is any efficacy data on this we could access.
- Bohlen commented that it would be helpful to know if these are active ingredients that applicators will be able to access and if this policy change would make browntail moth management difficult.
- Bryer stated she did not know about all of them but that acephate is currently being used by applicators.
- Morrill stated that it is mid-January and application season will start in three months. People are signing up now for browntail moth treatments and applicators need to be able to purchase product. He asked what the ability of staff was to educate applicators on this change.
- Patterson stated that staff will amend the policy document and bring it back to the Board. She told the Board that staff could notify applicators immediately of this policy change and also send out a press release through the department.
- Morrill stated that Bryer did not look at biologicals and asked if she planned to go back and look at these in the future.

- Bryer said yes, the biologicals were not comparable to the synthetic chemistries and there is not as much data on them. She added that she could have a study on biologicals completed by next year at this time.
 - **Jemison/Granger: Moved and seconded to authorize staff to amend the policy document with the list of active ingredients presented today**
 - **In Favor: Unanimous**

7. Request for Funding to Support an AmeriCorps Steward

Staff are requesting funding to support the employment of an AmeriCorps Steward. The individual in this position would help with editing pesticide applicator exam study manuals and philosophy into these important educational tools. The applicant may also help with the development of outreach materials that promote IPM and the proper and prudent use of pesticides. Funding to support this temporary position is being requested in the amount of \$11,000. The employment period for this position is April 20, 2020 to October 2, 2020.

Presentation By: John Pietroski, Manager of Pesticide Programs

Action Needed: Discussion and Determination if the Board Wishes to Fund this Request

- Pietroski told the Board that staff has well over 30 manuals to maintain and many of them need updating, especially after implementing EPA's new Certification and Training rules. He added that he and Couture recently attended a two-day training on composing exam questions and there is much work to be done updating our current exams.
- Pietroski stated that the AmeriCorps Steward would work with BPC staff for 900 hours from April to October. The role of the individual would be to help with manuals and exam questions, as well as increase outreach to the general public about the BPC.
- Morrill commented that the person's wage would be \$12.22 per hour and asked what Pietroski's goal was for the position. He added that it was his understanding that UMaine Cooperative Extension was responsible for writing the manuals and asked if we are duplicating work that should be done by Cooperative Extension.
- Pietroski replied that he had spoken to Bernard about this and she is doing a great job. He feels staff are not able to keep manuals sufficiently current. Pietroski added that it takes a long time to review these manuals and there are some that need considerable work.
- Jemison commented that it would be difficult to find a recently graduated college student who would have the knowledge base to do this kind of work.
- Pietroski responded that there is a lot of editing to do as well and he was not expecting someone to come in and understand that content.
- Adams commented that the fumigation manuals are so old and dated that they have nothing to do with what applicators are currently doing. He added that the forestry manuals and exam also need work because the manuals have so little to do with what applicators are doing today that the content is irrelevant.

- Pietroski stated that he was hoping to conduct more outreach to applicators to truly understand what work they are doing and what knowledge is essential to that work.
- Morrill commented that he was leery this person would not have enough knowledge and expertise to write a manual.
- Pietroski responded that he did not plan to ask them to write a manual, but rather help to gather information.
- Patterson stated that several manuals are a combination of fact sheets and sometimes a section of a manual that was pertinent to Maine. She stated that Chapter 31 gives us structure and guidelines on exactly what content is pertinent to each category. In some cases, the Board has developed agreements with other states to sell their manuals in Maine. Maine has used different approaches with different categories depending on the applications that fall within that category.
- Morrill stated that he wanted to make sure we get measurable results and asked if there was a list of what staff wanted to accomplish, such as exams and/or manuals that need to be tackled right out of the gate.
- Patterson responded that staff does keep a list of each manual/exam and the last time they have been revised.
- Jemison had to exit the Board meeting to give a previously scheduled presentation at the Agricultural Trades Show.
- Bohlen stated that he thought there was a risk considering the age and the knowledge and skill level of the potential employee.
- Morrill stated that at the conclusion of the season the Board would like a report on how this employee's time was used and if the educational level was there.
 - **Adams/Bohlen: Moved and seconded to accept request to fund request for employment of an AmeriCorps Steward**
 - **In Favor: Adams, Bohlen, Morrill, Waterman**
 - **Opposed: Granger**

8. Consideration of Consent Agreement with Triest Ag Group, Greenville, North Carolina

The Board's Enforcement Protocol authorizes staff to work with the Attorney General and negotiate consent agreements in advance on 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 to resolve the matter. This case involves licensing, storage, training, and applications.

Presentation By: Raymond Connors, Manager of Compliance

Action Needed: Approve/Disapprove the Consent Agreement Negotiated by Staff

- Connors stated that in 2015 there were two Triest Ag Group employees who were not certified and were conducting and supervising fumigation applications. There was also no master applicator with the company at the time. Fumigation applications were made in Presque Isle, Limestone, and Washburn.
- In 2017 there was an incident where an application was made to a potato field in Washburn and the material moved off site. The employees did not complete the EPA Soil Fumigation Training or field preparation as directed by the Strike 85CP Fumigant label. There were clumps of soil and residue from a previous crop present in the target site, allowing the product to escape and move approximately 400' off the property. Two individuals experienced symptoms related to picloram poisoning, including burning eyes and nausea.
- Connors told the Board that there was a separate incident where another state employee noticed there were also 18 picloram containers at that site, and 28 at two other sites, for a total of 46 containers.
- Morrill asked what the gallon capacity of the tanks was.
- Connors responded that it looks kind of like a larger propane tank on its side with a bonnet on it. Each label includes a storage component stipulating tanks be stored in dry, cool, well ventilated area under lock and key. Triest's containers were stored outside in the elements from September 2018 until June 2019. Connors added that they were originally intended for use in fall of 2018 but were not used due to inclement weather.
- Connors informed the Board that he sent a consent agreement to Triest Ag Group in early September. The company countered that the bonnet on the container was protective enough, but they ultimately signed the agreement and sent it back, but without a check. The consent agreement went back to them with some revisions and they did pay and said they would take steps to prevent this from occurring again.
- Morrill asked what steps the company planned to take.
- Connors responded that they have since licensed staff and taken the required online training.
- Morrill asked if Triest Ag Group was still operating in the State of Maine.
- Connors responded that the season is currently over, but it is likely they will operate here in the future, hopefully with much better practices.
- Morrill asked if there were plans to do some field inspections this spring and summer.
- Connors replied yes, and Inspector Keith Brown has inspected other companies conducting fumigation applications because it is new to the state and staff wants to ensure they are made in compliance.
 - **Waterman/Granger: Moved and seconded to approve the consent agreement**
 - **In Favor: Bohlen, Granger, Morrill, Waterman**
 - **Abstained: Adams**

9. Consideration of Consent Agreement with TruGreen Lawncare, Westbrook

The Board's Enforcement Protocol authorizes staff to work with the Attorney General and negotiate consent agreements in advance on 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 to resolve the matter. This case involves unauthorized applications, application in excessive winds, failure to post turf applications, no approved method for positive identification of the application site, failure to report applications to wrong properties, and failure to provide required notification to a registry member.

Presentation By: Raymond Connors, Manager of Compliance

Action Needed: Approve/Disapprove the Consent Agreement Negotiated by Staff

- Connors stated that TruGreen bought out Scott's, and the complaint concerned a customer who was not happy with their service and cancelled it. The complainant stated they told TruGreen on two occasions that they no longer wanted service, yet another unauthorized application was made.
- Connors stated that the company also made an application in Scarborough and there was a complaint that it was made in high winds. The application records reported very low wind speeds. The inspector checked the National Oceanic and Atmospheric Administration (NOAA), record for that time and it showed 20-21 miles per hour winds, with gusts of 30-31 miles per hour.
- Connors stated that in May of 2019 TruGreen was hired to spray a condo complex with multiple roads and cul-de-sacs. The applicator did not receive sufficient direction on where to spray, and he sprayed a different cul-de-sac. Many condos were sprayed in error. There were other single-family homes in the same area for which lawns were treated and the applications were not posted.
- In July 2019, in Cape Elizabeth, TruGreen failed to notify an individual on the notification registry. TruGreen stated that it was the new Hampshire office that had made that application.
- Connors concluded that all these violations were in a four-year cycle, making the company a repeat offender.
- Morrill commented that it seemed like a lot of work went into this case and he was impressed with staff and their diligence to uncover all these violations.
- Patterson commented that it was worth noting that these are very large fines.
- Morrill agreed that a \$21,000 fine was uncommonly large for the BPC and asked how the Board can be sure this company will not make these same violations again.
- Connors responded that \$5,000 of the consent agreement was suspended with the requirement that TruGreen train current and all new employees about these violations up until the 2020 season. They also sent in details of remedial steps they would take to prevent a recurrence of these violations. Connors stated that staff focused on how the

company was going to ensure they were treating the correct sites in the future, as well as informing those on the registry of impending applications.

- Morrill inquired about the company implementing a positive identification requirement.
- Patterson responded that TruGreen was going to use a GPS-based system and Geo code all addresses at time of sale. At a future date they will include photos of the property in account files.
- Connors stated that the company will not only download the most recent registry from the BPC website but has agreed to extend registry notifications beyond 250 yards.
- Connors stated they plan to use a system that would not allow the company to schedule a job and provide notification the same day
- Morrill suggested inspectors follow up to see how the new system is operating.
 - **Granger/Adams: Moved and seconded approve consent agreement**
 - **In Favor: Unanimous**

10. Correspondence

a. Emails and articles from Jody Spear

- Spear is asking the Board to begin a discussion of chlorothalonil.
- Morrill encouraged all Board members to read the articles submitted.
- Bohlen commented that this was a question that has come up repeatedly and he was uncertain about the statutory authority of the Board to review registered products.
- Morrill stated that the Board has done environmental risk assessments in the past and would have that avenue available, but he does not know enough about the topic yet to suggest one way or the other.

11. Other Items of Interest

a. LD 1888

- Morrill inquired about this bill being scheduled for public hearing.
- Patterson replied that the hearing would be sometime in February. She added that currently the wording is somewhat ambiguous as to the extent of the buildings and facilities covered by the proposed language. There is also the issue of how to manage enforcement and who the Board would take enforcement action against, as well as who is responsible for notification and what types of applications are included. Patterson stated that at this point, the way it is written, it would be very hard to enforce, and work needs to be done to provide clarification.
- Morrill stated that staff need to point out regulations the Board already has in place regarding applications on school grounds.

12. Schedule of Future Meetings

February 28, 2020; April 17, 2020; June 5, 2020; and July 24, 2020 are proposed meeting dates.

13. Adjourn

- **Bohlen/Granger: Moved and seconded to adjourn at 4:00 PM**
- **In Favor: Unanimous**

The Integrated Pest Management Program is requesting funds to assist with ongoing efforts for mosquito surveillance and identification, development of a GIS-based mosquito habitat mapping system, and continued outreach around vector-borne diseases. Request: \$6501.00

2020 Field Season

<i>10 sites</i>				
Item	rate	salary plus temp staffing fee	hours (20hrs/wk*15 wks, June 22-Sept 30, 2020)	total \$
summer field and lab assistant	\$14.00/hr	17.22	300	5166
mileage	100 miles/week *15 weeks @0.45/mi			675
supplies (co2)	\$55/week*12 weeks			660
total				6501



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

4

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

To: Board of Pesticides Control
From: Mary Tomlinson, Pesticides Registrar/Water Quality Specialist
Re: Request to extend ME-100003 EPA Special Local Need (FIFRA, Section 24(c)) registration for use of Asulox Herbicide (EPA Reg. No. 70506-139) to control bracken fern in wild blueberries
Date: February 19, 2020

The Special Local Need (SLN) registration for Asulox Herbicide (EPA Reg. No. 70506-139) was first approved in 2010 and the Board approved a five-year extension in 2014 which expired January 31, 2020. Dr. Lily Calderwood, blueberry specialist at the University of Maine Cooperative Extension requests renewal of this SLN. In the absence of other effective control measures for bracken fern, this product has proven to be effective, especially in newly cleared land and abandoned fields returned to production. The proposed SLN will expire December 31, 2024.

There are no changes to the SLN label and the application conditions, as listed below, remain the same.

- Application will be no more than once every other year.
- Application will be made during non-bearing years.
- Application will be via spot treatment.

Although the risk to surface and ground water may be reduced due to the application conditions listed above, water quality monitoring is recommended due to the potential for runoff and leaching. The presence of Asulam, the active ingredient, in groundwater has not been evaluated in Maine and would require a separate analysis from the Montana Universal method.

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

- Letter of request, Lily Calderwood, Ph.D., Wild Blueberry Specialist, Maine Cooperative Extension
- Board Memo regarding the risk assessment, Pam Bryer, Ph.D.
- Letter of Support, Rebecca Clemmer, UPL-Ltd. Inc.
- Asulox Herbicide proposed Maine SLN label
- Asulox Herbicide Section 3 label

MEGAN PATTERNSON, DIRECTOR
90 BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-2731
WWW.THINKFIRSTSPRAYLAST.ORG



February 12, 2020

Dear Mary Tomlinson,

On behalf of the University of Maine Cooperative Extension and lowbush (wild) blueberry producers in Maine, I request an extension of the 24C label for Asulox herbicide for use on bracken fern. Our current 24C label recently expired on January 31, 2020. There has been an Asulox 24C label approved for use on this crop since 2010.

Bracken fern, *Pteridium* species, are a serious weed in lowbush blueberry fields. The successional habitat in which lowbush blueberry is grown exhibit the same conditions that bracken fern lives. Through my Extension program, growers are encouraged to identify weeds in their fields and use cultural methods of weed management including sulfur application to bring the pH down and mechanical weed removal before using an herbicide method of control. Unfortunately, bracken fern grows well in the acidic soils, which must be maintained for grass weed suppression and wild blueberry growth.

There are 36,000 acres of commercial lowbush blueberry production in Maine. There are 485 total growers, 433 of which are conventional. In my recent weed survey, we found bracken fern to be one of the top two weeds that cover the most area in organic lowbush blueberry fields with very little bracken fern coverage in conventional fields. This is an indication that bracken fern is prevalent on farms that have not applied Asulox. This product is one of the only products available for conventional growers to use against bracken fern, which shades lowbush blueberry with its wide fronds.

Please support extending the Asulox 24C label for lowbush blueberry in Maine. I recently sent Arysa LifeScience North America LLC (Jody Hemphill) a request for this extension. Please let me know if the Board of Pesticide Control has any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Lily B. Calderwood'.

Dr. Lily Calderwood
University of Maine
Extension Wild Blueberry Specialist
5722 Grove Street Ext.
103 Deering Hall

Orono, ME 04469



UPL NA Inc.
630 Freedom Business Center,
Suite 402
King of Prussia, PA 19406

Rebecca A. Clemmer
Sr. Regional Regulatory Manager

Feb. 17, 2020

Mary E. Tomlinson
Pesticide Registrar/Water Quality Specialist
Maine Board of Pesticides Control
28 SHA
Augusta, ME 04333

Re: Renewal of Special Local Need label

Dear Ms. Tomlinson:

UPL NA Inc. supports the renew of the Special Local Need label ME-100003, for the use of Asulam (EPA Reg. No. 70506-139) for control of bracken fern in lowbush blueberries (non-bearing fields only).

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'R.A. Clemmer'.

Rebecca A. Clemmer
Sr. Regional Regulatory Manager
Rebecca.clemmer@upl-ltd.com
Tel: 610-491-2828



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

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

Memorandum

To: Board of Pesticides Control
From: Pam Bryer, Toxicologist
Subject: Asulox Special Local Need 2020 Review

February 19, 2020

Asulam has been used in Maine for several years under a Special Local Needs (SLN) registration for the control of bracken fern in lowbush blueberry fields. Previous reviews from the BPC toxicologist in 2010 and 2015 highlight the relatively low acute toxicity to many organisms, the short residence time in sunlit water and soil, and many pieces of missing data. In 2018, EPA issued a Proposed Interim Decision supported with several supporting documents and much of the data that was missing during the BPC's last SLN registration review is now available.

The primary concerns of this review focuses on: applicator safety, residues remaining on blueberries entering the marketplace, and ecological effects. This review is focused on the proposed use on lowbush blueberry in Maine. Spot use on blueberry fields during the non-bearing year is not consistent with how EPA modeled its potential effects during registration review. For example, the label allows asulam to be applied by aircraft over sugarcane twice a year (doubling the annual lbs/A over this proposed use). As a result, it is difficult to say how the effects demonstrated by EPA's predictive modeling compare to use in Maine. The modeling used throughout EPA's recent interim decision are at the very least conservative, however, they may be so conservative as to be unhelpfully vague for this specific use.

More data on the use patterns in Maine would help better understand how comparable Maine use patterns are to the patterns used by EPA in their interim decision modeling which were largely based on sugarcane. The label submitted with this SNL application allows for 3.34 lbs a.i./A as a spot treatment only once every other year. EPA reports that sugarcane growers used 270,000 lbs of asulam from 2011-2015. If we assume that 90% (10% are under organic production) of the 36,000 acres in Maine production use asulam consistent with the SLN label, Maine growers could use as much as 53,500 lbs each year (every-other-year application). EPA modeling uses the maximum allowable rate, however, their data show that sugarcane growers do not use the 3.6 lbs a.i./A rate two times a year as allowed. Typically, sugarcane growers use 1.5 to 2.5 lbs a.i./A

MEGAN PATTERNSON, DIRECTOR
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only once a year. Additional use data from Maine growers could help fully understand potential effects.

Applicator Safety Concerns:

The application scenario for Maine applicators, ground-level spot applying, is unlikely to pose undue risk to applicators when used as labeled. Asulam has low hazard to mammals and the exposure pathways do not favor uptake during application. Dermal exposures are not considered to be important in mammals based on animal testing. Mammals show high tolerance to asulam exposures, in many of the toxicity tests the maximum exposure dose was reached before any effects were found. There were no thyroid or developmental changes following long-term exposures in rats.

In contrast, based on tumors found in rat studies, EPA has classified asulam within the Group C, possible human carcinogen category. Asulam can produce eye and skin irritation. The harm from asulam is considered mitigated by following the label instruction for proper PPE and REI.

Tolerance Concerns:

There is no tolerance established for asulam on blueberry. There is a tolerance for sugarcane, molasses from sugarcane, and several livestock products (fat, milk, etc.) likely to be fed molasses. There are SLNs in other states for seed spinach and seed alfalfa growing. There are no other established asulam tolerances in the Codex Alimentarius or for other countries.

Data is lacking on the length of time asulam persists in soil. This lack of fate data is a gap identified in EPA's 2018 interim decision. How asulam behaves in various environmental media is unknown. The Asulox label reads that results will not be visible during the year of application, "Control will be observed the year following application of the Asulox." The mechanism of action is to interfere with growth so it is understandable that asulam would not produce a remarkable response following application. But, how is control in the harvest year accomplished? Bracken fern are perennial and can have robust rhizomes. Asulam has high leaching potential and therefore it is expected to also easily translocate evenly throughout the plant tissues. Just as there is asulam for weed control in the bearing year, it is possible that asulam may occur in the blueberry fruit due to stored asulam in the blueberry roots. I have not received data that speaks to the potential for this fate pathway in blueberries. We would expect large quantities asulam to affect the blueberry crop since it is an herbicide. This product is used on 30% of all US grown sugarcane without tolerance violations. Clearly, in sugarcane there is a mechanism for asulam degradation, perhaps this same process could also be at work for blueberries. Additional clarification around the issue of fate in the environment would help us better assess potential residue levels in blueberry.

Ecological Concerns:

Leaching

The main concern with asulam comes from its potential for easily leaching. In sunlight asulam is rapidly broken down. If the product moves into the ground before being photodegraded EPA considers it a risk to ground and surface water. Data reported by EPA, found 8 detections out of

the 11,269 database returns for asulam; 2 groundwater and 6 surface water. The groundwater values were 0.0047 ug/L and 0.0285 ug/L. The surface water values were 0.0495 ug/L to 0.669 ug/L. In 2002, Maine CDC established a water quality guideline of 35 ug/L for asulam.

Asulam is considered to be practically non-toxic to freshwater fish and invertebrates. There is no data on marine/estuarine organisms.

In sum, although asulam readily leaches, the short half-life and low toxicity profile prevent undue harm to freshwater aquatic organisms.

Birds & Mammals

Asulam has little acute toxicity to birds and mammals, however, it does affect reproduction in both birds and mammals as a result of chronic exposures. In multiple species of birds, asulam exposure produced eggshell thinning. In mammals, there was a reduction in the number of viable offspring. Based on the modeled exposure patterns (e.g. the sugarcane scenario) EPA predicts chronic effects to be seen in birds and mammals.

In order to mitigate the potential adverse effects on birds and mammals, EPA changed the label language to reduce drift. The changes introduced in 2018 were: ground applications must be made no more than 4 feet from the ground or canopy and the droplets must be in the medium-coarser ASABE Standard 572.1 size range. EPA considered those changes to be sufficient to allow continued use at the current application rate.

Bees

During acute exposures asulam is practically non-toxic to bees on contact, however, there is a large data gap in the honey bee data. There is only one test, the adult acute contact test, that has been performed. There is not enough data to fully determine effects on bees.

In sum, EPA indicates in their 2018 interim decision that between the label changes and the knowledge that few or no producers are likely to be using asulam at the maximum allowable rate there should be no undue harm to the environment.

SLN request summary

It seems impossible that growers in Maine would ever reach the predicted harm from the high exposures modelled under the sugarcane scenario (3.65 lbs/A twice a year by aircraft). Asulam has a consistently low toxicity profile especially when drift is managed. It has low acute toxicity to many taxa and the chronic exposure endpoints of concern should be mitigated by the current label.

The only uncertainty in this use surrounds tolerance violations because of the potential presence of asulam in blueberries at harvest.



FIFRA Section 24(c)
SPECIAL LOCAL NEED LABEL

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF MAINE

ASULOX® HERBICIDE

EPA Reg. No. 70506-139

EPA SLN No. ME-100003

**ASULOX FOR CONTROL OF BRACKEN FERN IN
LOWBUSH BLUEBERRIES
Non-bearing fields only**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This label and the federal label for this product must be in the possession of the user at the time of pesticide application.

Weed Species	Rate	Special Instructions
Bracken Fern (<i>Pteridium aquilinum</i>)	1 gal/acre	Bracken should be in full frond prior to application. Use Asulox only as a spot treatment. The use of a non ionic surfactant at 0.25% v/v may improve uptake of the Asulox. Treatment is limited to non bearing fields. Do not apply more than once <u>every other</u> year. Control will be observed the year following application of the Asulox. No visible control symptoms will be observed the year of application.

Rev. 2/17/2020
Expires Dec. 31, 2024



ASULOX[®]

HERBICIDE

**FOR AGRICULTURAL OR COMMERCIAL USE ONLY
NOT FOR USE BY HOMEOWNERS**

**For Postemergent Weed Control in Sugarcane, Turf, Ornamentals,
Christmas Tree Plantings and Non-Cropland**

ACTIVE INGREDIENT:

Sodium salt of asulam (methyl sulfanylcarbamate)* 36.2%

OTHER INGREDIENTS: 63.8%

TOTAL: 100.0%

*Equivalent to 33.1% asulam or not less than 3.34 lbs. per gallon.

EPA Reg. No. 70506-139

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

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 the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.



NET CONTENTS: _____ GALLONS



PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminated), and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

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.

User Safety Recommendations

Users should leave the treated area, remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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 chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Surface water contamination may occur in areas with poorly draining soils and little or no buffers or in areas where drainage systems flow directly to surface water.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwater in a manner that will contaminate resources. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

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 intervals. 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, chemical resistant gloves, and shoes plus socks.

GENERAL INSTRUCTIONS AND INFORMATION

APPLICATION INSTRUCTIONS

Do not apply ASULOX® Herbicide through any type of irrigation systems.

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 regulations.

SPRAY DRIFT

SENSITIVE AREAS: This herbicide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulation.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#).

INFORMATION ON DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below).

CONTROLLING DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH: (This section is advisory in nature and does not supersede the mandatory label requirements)

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT: (This section is advisory in nature and does not supersede the mandatory label requirements)

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: (This section is advisory in nature and does not supersede the mandatory label requirements)

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

WIND: (This section is advisory in nature and does not supersede the mandatory label requirements)

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: (This section is advisory in nature and does not supersede the mandatory label requirements)

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: (This section is advisory in nature and does not supersede the mandatory label requirements)

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict

vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SUGARCANE

ASULOX Herbicide can be applied to either plant cane or cane grown from stubble. Apply ASULOX as a water mix spray for ground applications. Use 15 to 100 gallons of water per acre, depending on local practice. For aerial application, ASULOX Herbicide should be mixed in 3 to 5 gallons of water per acre, except in Hawaii, where 5 to 10 gallons of water per acre should be used.

Addition of an adjuvant cleared for use on growing crops to the ASULOX Herbicide water mix spray will improve weed control when environmental conditions are not optimal. Use either a non-ionic surfactant containing a minimum of 80% active ingredient at the rate of 1 to 2 quarts per 100 gallons (0.25 to 0.5% V/V) of water mix spray or a crop oil concentrate containing 80 to 85% paraffin based petroleum oil and 15 to 20% non-ionic surfactant at the rate of 4 quarts per 100 gallons (1% V/V) of water mix spray.

The rates of ASULOX Herbicide given below are for broadcast applications. For banded application, reduce the rate proportionally to the width of the band according to the following formula:

$$\frac{\text{BAND WIDTH (inches)}}{\text{ROW WIDTH (inches)}} \times \frac{\text{Broadcast Rate}}{\text{Rate}} = \text{Band Rate/Acre}$$

For spot treatments, use a 5% v/v ASULOX spray (1 gallon per 20 gallons of water). Do not exceed 8 pints of ASULOX per acre per treatment.

Single Application Per Growing Season

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	Apply when the grass is 8 inches tall or less (addition of surfactant is necessary).	8 pints/acre
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is between 12 to 18 inches tall. Johnsongrass should be actively growing and the average air temperature should be at least 60°F or higher.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply when the grass is 6 to 8 inches tall or less.	
Crabgrass (<i>Digitaria</i> spp.)	If treatment is made before the grass reaches seed head formation then the lower rate should be used. If the grass is in early seed head formation then the higher rate should be used.	6 to 8 pints/acre
Alexandergrass (<i>Brachiaria plantaginea</i>)	If treatment is made when the grass is 6 to 8 inches tall or less, then the lower rate should be used. If the grass is greater than 8 inches tall, then the higher rate should be used.	
Foxtail (<i>Setaria</i> spp.)		
Goosegrass (<i>Eleusine indica</i>)		
Broadleaf Panicum (<i>Panicum adspersum</i>)		
Barnyardgrass (<i>Echinochloa crusgalli</i>)		

Two Applications Per Growing Season

This may be required when initial weed infestations are heavy and/or when rhizome Johnsongrass is present. Two applications may also be used when treating weed species which germinate at different times during one growing season.

WEED SPECIES	SPECIAL INSTRUCTIONS	1ST APPLICATION	2ND APPLICATION
Crabgrass (<i>Digitaria</i> spp.)	At each application the grass should be treated before seed head formation.	6 to 8 pints/acre	6 to 8 pints/acre
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	At each application the grass should be 8 inches tall or less (addition of surfactant is necessary).	8 pints/acre	8 pints/acre
Johnsongrass (<i>Sorghum halepense</i>)	At each application the grass should be between 12 and 18 inches tall.	8 pints/acre	8 pints/acre

RESTRICTIONS AND PRECAUTIONS: Sugarcane

- ASULOX Herbicide should be used when the weeds are actively growing.
- Cover crops may be planted if plowed under and not grazed.
- The following pre-harvest intervals for ASULOX Herbicide applications to sugarcane must be observed: 1) Mainland U.S.A. (except Louisiana) – 140 days; 2) Louisiana only – 100 days; 3) Hawaii – 400 days.
- Do not graze or feed sugarcane fodder and forage to livestock.
- Cultivation and/or fertilizer applications or any other cultural practice that disturbs the root system of targeted weed species may result in less than optimum control when applying ASULOX Herbicide. These practices are not recommended within 7 days prior to or within 7 days after applications of ASULOX Herbicide.
- Differences in crop tolerance to ASULOX among Sugarcane varieties has been reported in Louisiana. Contact your local County Agent or University Extension Specialist for further information.

NON-CROPLAND

ASULOX Herbicide may be used as a postemergent treatment to control weeds on non-cropland areas such as:

Boundary fences	Railroad rights-of-way and yards
Fence rows	Storage areas and industrial plant sites
Highway and roadside rights-of-way	Utility rights-of-way and yards
Lumberyards	Warehouse lots
Pipeline rights-of-way	

A surfactant may be added to the spray solution at 0.25% by volume. (Use an approved non-ionic surfactant.)

Apply ASULOX as a single water-mix spray for ground applications using 20 to 100 gallons of solution per acre, depending on local practice, to control the following weed species. Apply one application per season. Aerial application is prohibited.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Crabgrass (<i>Digitaria</i> spp.)	Apply before the grass reaches seed head formation.	1 gal/acre
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is 18 inches or taller. Use the higher rate in well established heavy infestations. For spot treatment in Hawaii, use the higher rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply before the grass reaches seed head formation. For spot treatment in Hawaii, use the same rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply when the fern is in full frond.	7 to 8 pints/acre

CHRISTMAS TREE PLANTINGS

ASULOX Herbicide may be used as a postemergent treatment in Christmas Tree Plantings where Douglas Fir, Grand Fir, Noble Fir or Scotch Pine are grown. Do not graze or feed foliage from treated areas to livestock.

ASULOX Herbicide should be applied as a water mix spray. For ground application, use a minimum of 20 gallons of solution per acre. Do not use a wetting agent with ASULOX Herbicide. Apply one application per season. Aerial application is prohibited.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply after bud break and hardening or firming of new tree growth. Bracken should be in full frond prior to treatment.	1 gal/acre

**TURF
(Sod Farms Only)**

ASULOX Herbicide can be applied on St. Augustinegrass and Tifway 419 Bermudagrass turf. Apply one application per season post-emergence to the weeds listed below. Use 20 to 50 gallons of water per acre in the spray solution.

TURF SPECIES	WEED SPECIES	RATE
St. Augustinegrass	Bullgrass (<i>Paspalum supinum</i>) Crabgrass (<i>Digitaria</i> sp.) Goosegrass (<i>Eleusine indica</i>)	5 pints/acre
Tifway 419 Bermudagrass	Sandbur (<i>Cenchrus</i> sp.)	

Do not use a surfactant. Do not apply to turf which is under stress or freshly mowed.

ORNAMENTALS

ASULOX Herbicide can be applied as a single, postemergent, broadcast application on the following ornamentals:

JUNIPERS		YEWS	
Juniperus andorra	Juniperus horizontalis	Taxus cuspidata	Podocarpus macrophyllus
Juniperus chinensis	Juniperus litoralis	Taxus media	
Juniperus conferta	Juniperus sabina		

Treatment should be made with a minimum of 20 gallons of water per acre. Do not use a surfactant.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Barnyardgrass (<i>Echinochloa crusgalli</i>) Crabgrass (<i>Digitaria</i> sp.) Fall Panicum (<i>Panicum dichotomiflorum</i>) Foxtails (<i>Setaria</i> sp.) Goosegrass (<i>Eleusine indica</i>) Horseweed (maretail) (<i>Coryza canadensis</i>)	Apply when the weeds are between the stages of early seedling and early seed head formation.	1 gal/acre

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialists for specific recommendations for local weed problems and for information on possible lower dosages.

STORAGE AND DISPOSAL

PESTICIDE STORAGE: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Store at temperatures above 20° F.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container.

[for containers less than 5 gallons] Triple rinse as follows: empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[for containers greater than 5 gallons] Triple rinse or pressure rinse as follows:

Triple rinse: empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Pressure rinse: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

CONTAINER DISPOSAL: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, United Phosphorus, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or United Phosphorus, Inc., and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, UNITED PHOSPHORUS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

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129th MAINE LEGISLATURE

SECOND REGULAR SESSION-2020

Legislative Document

No. 2069

H.P. 1470

House of Representatives, January 23, 2020

**Resolve, Regarding Legislative Review of Portions of Chapter 27:
Standards for Pesticide Applications and Public Notification in
Schools, a Major Substantive Rule of the Department of
Agriculture, Conservation and Forestry, Board of Pesticides Control**

(EMERGENCY)

Reported by Representative HICKMAN of Winthrop for the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control pursuant to the Maine Revised Statutes, Title 5, section 8072.

Reference to the Committee on Agriculture, Conservation and Forestry suggested and ordered printed pursuant to Joint Rule 218.

Handwritten signature of Robert B. Hunt in cursive.

ROBERT B. HUNT
Clerk



129th MAINE LEGISLATURE

SECOND REGULAR SESSION-2020

Legislative Document

No. 2070

H.P. 1471

House of Representatives, January 23, 2020

**Resolve, Regarding Legislative Review of Portions of Chapter 26:
Standards for Indoor Pesticide Applications and Notification for All
Occupied Buildings Except K-12 Schools, a Major Substantive Rule
of the Department of Agriculture, Conservation and Forestry,
Board of Pesticides Control**

(EMERGENCY)

Reported by Representative HICKMAN of Winthrop for the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control pursuant to the Maine Revised Statutes, Title 5, section 8072.

Reference to the Committee on Agriculture, Conservation and Forestry suggested and ordered printed pursuant to Joint Rule 218.

ROBERT B. HUNT
Clerk



129th MAINE LEGISLATURE

SECOND REGULAR SESSION-2020

Legislative Document

No. 2082

H.P. 1483

House of Representatives, January 28, 2020

**Resolve, Regarding Legislative Review of Portions of Chapter 28:
Notification Provisions for Outdoor Pesticide Applications, a Major
Substantive Rule of the Department of Agriculture, Conservation
and Forestry, Board of Pesticides Control**

(EMERGENCY)

Reported by Representative HICKMAN of Winthrop for the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control pursuant to the Maine Revised Statutes, Title 5, section 8072.

Reference to the Committee on Agriculture, Conservation and Forestry suggested and ordered printed pursuant to Joint Rule 218.

Handwritten signature of Robert B. Hunt in cursive.

ROBERT B. HUNT
Clerk



129th MAINE LEGISLATURE

SECOND REGULAR SESSION-2020

Legislative Document

No. 2083

H.P. 1484

House of Representatives, January 28, 2020

**An Act To Require the Board of Pesticides Control To Annually
Publish Certain Information Regarding Pesticides and To Prohibit
Certain Uses of Neonicotinoids**

Approved for introduction by a majority of the Legislative Council pursuant to Joint Rule 203.

Reference to the Committee on Agriculture, Conservation and Forestry suggested and ordered printed.

Handwritten signature of Robert B. Hunt in cursive.

ROBERT B. HUNT
Clerk

Presented by Representative GROHOSKI of Ellsworth.
Cosponsored by Senator MILLETT of Cumberland and
Representatives: DOUDERA of Camden, HICKMAN of Winthrop, HUBBELL of Bar Harbor,
MAXMIN of Nobleboro, McDONALD of Stonington, PEBWORTH of Blue Hill, ZEIGLER
of Montville, Senator: GRATWICK of Penobscot.

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

2 **Sec. 1. 7 MRSA §618**, as amended by PL 2005, c. 620, §18, is further amended to
3 read:

4 **§618. Publication of information**

5 The board may publish, at least annually and in such form as it determines proper,
6 results of analyses based on official samples as compared with the guaranteed analyses
7 and information concerning the distribution of pesticides. The board may not publish
8 individual distribution information, and that information is not a public record under Title
9 1, section 402.

10 By March 31st annually, the board shall publish a summary of the reports received
11 during the previous calendar year from commercial applicators pursuant to Title 22,
12 section 1471-G, subsection 2 and rules adopted by the board. For each pesticide reported
13 to the board pursuant to Title 22, section 1471-G, subsection 2, the board's annual
14 summary must include information on the total quantity of pesticide applied and the total
15 area treated in each county in the State.

16 **Sec. 2. Classification of neonicotinoids as limited use pesticide**

17 **1. Definitions.** As used in this section, unless the context otherwise indicates, the
18 following terms have the following meanings.

19 A. "Certified applicator" has the same meaning as in the Maine Revised Statutes,
20 Title 22, section 1471-C, subsection 4.

21 B. "Product containing neonicotinoids" means any product containing dinotefuran,
22 clothianidin, imidacloprid or thiamethoxam.

23 **2. Classification.** The Department of Agriculture, Conservation and Forestry, Board
24 of Pesticides Control, referred to in this section as "the board," shall classify any product
25 containing neonicotinoids as a pesticide whose use is prohibited or limited by the board in
26 accordance with subsection 3.

27 **3. Rulemaking.** Pursuant to the Maine Revised Statutes, Title 7, section 610, the
28 board shall adopt rules establishing restrictions for the use of a product containing
29 neonicotinoids. Rules adopted pursuant to this subsection must include:

30 A. A prohibition on use of a product containing neonicotinoids for landscape
31 gardening by certified applicators; and

32 B. Authorization for limited use of a product containing neonicotinoids for landscape
33 gardening by certified applicators if the board determines that limited use is
34 necessary, in accordance with Title 22, section 1471-A, to safeguard the public
35 health, safety and welfare of the State and protect the natural resources of the State.

36 At least annually, rules adopted pursuant to this subsection must be reviewed, and if
37 necessary revised, to specify with respect to allowable uses of products containing

1 neonicotinoids the timing, geographic locations, quantities, target plant and insect species
2 and methods of application.

3 **SUMMARY**

4 This bill requires:

5 1. The Department of Agriculture, Conservation and Forestry, Board of Pesticides
6 Control to annually publish a summary of the reports received during the previous
7 calendar year from commercial applicators of pesticides. For each pesticide reported to
8 the board, the board's annual summary must include information on the total quantity of
9 pesticide applied and the total area treated in each county in the State; and

10 2. The Board of Pesticides Control to prohibit the use of any product containing
11 neonicotinoids for landscape gardening by certified applicators or limit the use of any
12 product containing neonicotinoids if the board determines that use is necessary to protect
13 the State. The bill also requires the board to adopt rules establishing restrictions for the
14 use of products containing neonicotinoids.

Report to the Agriculture, Conservation and Forestry Committee on Findings Pursuant to PL 2019, Chapter 84

Report Prepared for: Maine Board of Pesticides Control

Client Contact:

Megan L. Patterson, Director

DATE OF FIELD ACTIVITIES
28 August – 9 September, 2019
DATE OF FINALIZED REPORT
22 January 2020 ¹

SCS Lead Auditor:

Dr. Robert J. Hrubes

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Registered Professional Forester

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¹ Review draft submitted to BPC on 19 December 2019.

Table of Contents

1. GENERAL INFORMATION	3
1.1 Name and Contact Information	3
1.2 Scope of Monitoring Activities.....	3
2. MONITORING DESIGN.....	4
2.1 Participating Forestland Owners and Service Providers.....	6
2.2 Participating Individuals.....	7
2.3 Field Observation Locations.....	8
3. MONITORING RESULTS	8
3.1 Additional Observations.....	9

1. General Information

SCS Global Services (formerly, Scientific Certification Systems) was contracted by the Maine Board of Pesticides Control (BPC) to undertake an independent assessment of conformance to State of Maine pesticide use regulations by industrial forest management companies engaged in aerial application of herbicides on forestlands under the jurisdiction of the Maine Board of Pesticides Control. The project results from a Resolve passed by the Maine State Legislature on 18 June 2019 (LD1691) directing the Board of Pesticides Control (BPC) to work with the Maine forest products industry to monitor aerial herbicide applications.

The objective of the contracted project was to gather information to enable the SCS project team to compile and convey observational data and conclusions as to the current practices of aerial pesticide (herbicide) applications in Maine, resulting in a monitoring report. The work was accomplished through personal interviews with forestry staff of Maine industrial forestland owners throughout the State, review of pertinent documents and, most importantly, sample-based field observations of organizations involved in aerial pesticide application (forestland owners, pesticide suppliers, aerial pesticide applicators).

The field work, comprised of monitoring inspections of aerial pesticide operations on three major industrial forestland ownerships², took place from August 26 to September 9, 2019. The SCS audit team was comprised of:

Robert J. Hrubes, Ph.D., Lead Auditor: Dr. Hrubes is a California Registered Professional Forester (#2228) with 40+ years of professional experience in both the public and private sectors. He is a founding member of the Forest Stewardship Council and the Forest Stewards Guild and he established and managed SCS' natural resources practice, beginning in the early 1990's until his semi-retirement in 2017. Hrubes holds degrees in forest management (BSF-Iowa State University), resource systems management (MS-University of Michigan), economics (MA-University of California at Berkeley) and wildland resource science (Ph.D.-University of California at Berkeley). Dr. Hrubes has led a large number of FSC forest management certification audits throughout North America as well as other regions ranging from Australia to Brazil to Sweden to Japan. Over the past 25 years, Hrubes has led numerous FSC forest management audits in Maine. Dr. Hrubes retired from his role as Executive Vice President of SCS Global Services in 2017 but remains active with the company on a part-time basis.

Mr. Gordon Moore, Audit Team Member: Gordon Moore is a Maine Professional Forester (#3207). He has worked in the timber industry in Maine for 40 years and, most recently, retired as a District Forester for the Maine Forest Service (MFS). During his time with the State of Maine he worked as the State Water Quality Forester and as a Timber Harvest Management specialist as well as co-author of the Performance Standards for Road Construction and Timber Harvesting on Wetlands Sites for the Land Use Planning Commission & MFS and co-authored along with the

² The pesticides applied on the three participating forestland properties were a mix of the same three commercially available herbicides: Rodeo (active ingredient: glyphosate), Arsenal (active ingredient: imazapyr) and Oust (active ingredient: sulfometuron methyl).

MFS and US Forest Service in developing Best Management Practices for Water Quality during Timber Harvesting. Gordon is a Maine licensed forester, receiving an AS in Forestry and BA's in Biology and Mathematics from the University of Maine at Fort Kent and completed work towards a MS at the University of Maine at Orono in wetland ecology. Gordon's professional work is conducted under the name: Maple View Forestry. His professional activities include having served on FSC forest management certification audit teams.

Both members of the SCS audit team underwent training and received pesticide handler certificates from BPC prior to commencement of the field auditing activities that are the subject of this report. However, at no time during the verification audit did the SCS auditors handle pesticides.

Any questions or comments regarding this report should be directed to:

Brendan Grady
Director, Forest Management Certification Services
SCS Global Services
Email: bgrady@scsglobalservices.com

Or:

Megan Patterson
Director, Maine Board of Pesticides Control
Email: Megan.L.Patterson@Maine.gov

2. Monitoring Design

The monitoring activities undertaken by the SCS team were focused on assessing conformance to three sets of "Verification Criteria" developed by Daniel J. Simonds³, principal consultant of MixedWood LLC, who was separately contracted by the Board of Pesticides Control for this purpose. The MixedWood-developed Verification Criteria⁴ (duly reviewed and approved by the BPC staff prior to use by SCS) were formatted around three "checklists:"

³ Daniel Simonds possesses a suite of experience & expertise — forestry, forestry auditing practices and procedures, and a working knowledge of Maine pesticide law—which made him uniquely qualified to develop the monitoring criteria for this project. Daniel is a Certified Forester, Licensed Maine Forester (ME883), and has 22 years of experience in industrial land management. Daniel is qualified as a Lead Auditor for third-party forest practice certification standards and is a noted expert in the protocols associated with FSC, SFI, and PEFC. Daniel also served 6 years as an appointed member of the Board of Pesticides Control. During his service, which including a year as Board chair, Daniel built expertise in the implementation and development of Maine pesticide regulations.

⁴ MixedWood scoped, designed, and vetted the monitoring criteria as well as the associated field verification checklists for use by SCS Global auditors. Initial considerations for criteria included simple adoption of FSC and/or SFI audit criteria. Ultimately, these were determined to be limited in scope and insufficiently Maine-specific for this project. Final criteria were designed using a complex aggregation of the numerous, existing and pertinent, state and federal regulations, as well as pesticide label language. During implementation and use of the monitoring criteria,

- **Document Review Checklist**—intended for office-based use by the audit team when interviewing personnel and reviewing documents generated by industrial forest management companies that agreed to participate in the investigation. The subject areas covered by the Document Review Checklist are:
 - Notifications
 - Licensing (e.g., of applicators)
 - Records (e.g., application projects, annual summary, incident reports, employee training)
 - Sensitive Area (SA) maps
 - Sensitive Area Likely to be Occupied (SALO) checklists
- **Operations Checklist**—intended for field use by the audit team when observing operations and interviewing involved personnel at the helicopter “landing zones” at which pesticides are mixed and loaded onto a helicopter for application on nearby project sites. The subject areas covered by the Operations Checklist are:
 - Mixing and Loading--Label
 - Mixing and Loading—Regulations
 - Herbicide Prescription Specification—By-Product & From Label
 - Application Equipment (Label)
 - Application Equipment (Regulations)
 - Worker Protection
- **Application Checklist**—intended for field use by the audit team when observing operations and interviewing personnel at the project sites (forest stands) where herbicides are aerially applied. The subject areas covered by the Application Checklist are:
 - Site Conditions
 - Early Entry to Site
 - Mixing & Loading
 - Sensitive Areas (SA)
 - Sensitive Areas Likely to be Occupied (SALO)

The auditing/monitoring approach employed by the Audit Team was to gather pertinent information and data, recorded on the appropriate checklist, regarding conformance to the Verification Criteria, through the following means:

- Interviews of personnel employed by participating industrial forestland owners, pesticide suppliers and pesticide applicators; interviews took place both in company offices and in the field
- Review of pertinent documents
- Direct field observations of aerial application sites, landing zones and water drafting sites
- All observational data was recorded on the appropriate Verification Criteria Checklists.

During the course of the monitoring project, a total of 20 Checklists were completed (filled out) by the SCS team: 3 Document Review Checklists, 9 Operations Checklists and 8 Application Checklists. Hard

MixedWood provided training, support, and oversight. This effort ensured effective, efficient and professional implementation of the monitoring project.

and electronic copies of the completed Checklists are maintained in the project file at the SCS Offices. Electronic copies of the completed checklists, along with this report, have been conveyed to BPC.

The findings presented in this Audit Report are based exclusively on the findings of the audit team, as recorded on the Checklists, augmented by notes of face-to-face interviews with participating individuals listed later in this report.

Participating Forestland Owners and Service Providers:

Three industrial forestland owners, each with substantial landholdings in Maine, agreed to participate in the verification audit⁵:

J.D. Irving (personnel based out of their Fort Kent office)
Seven Islands Land Company (personnel based out of their Ashland Office)
Weyerhaeuser (personnel based out of their Greenville and Bingham Offices)

All three forestland owners retain the services of the same pesticide supplier:

Nutrien Ag Solutions

Likewise, all three forestland owners retain the services of the same helicopter application company:

JBI Helicopter Services

Both Nutrien Ag Solutions and JBI Helicopter Services have an extensive and connected track record of work in Maine. It is the SCS audit team’s understanding that essentially all aerial application of herbicides in forestry operations in Maine, this year and in recent prior years, involves retaining the services of Nutrien Ag Solutions and JBI Helicopter Services. A clear benefit of this current situation is that there is a very high degree of consistency in aerial application procedures as the same supplier and applicator employees undertook all forestry aerial pesticide applications in Maine in 2019.

Forest landowner field staff play an integral role in the aerial pesticide projects, including:

- Determining which forest stands will be treated during the summer pesticide application “season” which, depending on weather patterns, can be a rather short window of time
- In coordination with other forestland owners requiring the services of Nutrien Ag Solutions and JBI Helicopter Services, and subject to exogenous factors associated with weather, establishing a planned schedule of pesticide treatments for each annual treatment “season”
- Delineating treatment areas as well as Sensitive Areas (SA) and Sensitive Areas Likely to be Occupied (SALO)
- Posting requisite signage and publishing requisite public notices
- “Blocking off” roadways through project sites during active aerial operations
- Undertaking any remedial work that may be required, following operations
- Submitting required documentation to BPC

⁵ SCS had no role in the selection of participating forestland owners, pesticide suppliers and aerial pesticide applicators.

Participating Individuals:

The following individuals participated (i.e., directly interacted with the SCS Audit Team in the field) in the verification audit:

Ron Lemin, Nutrien
 Rick Dionne, Nutrien
 Bruce Pelletier, Nutrien
 Ray Newcomb, JBI
 Chris Thresher, JBI
 Elvin Alvarez, JBI
 Sean Newcomb, JBI
 Alex Addren, JBI
 Ked Coffin, JDI
 Chris Huston, JDI
 Tim Cyr, JDI
 Nick Baser, 7 Isl.
 Zack Lowry, 7 Isl.
 Jason Desjardin, 7 Isl.
 John Ackley, WYCO
 Ben Dow, WYCO
 Devon Fogarty, WYCO
 Cullen Utermark, WYCO
 Megan Patterson, BPC
 Daniel Simonds, MixedWood LLC and Contractor to BPC

The field component of the verification audit commenced on August 26, 2019. Over the following 14 days, one or both of the SCS auditors engaged in field and office investigations on a total of 8 days. To the extent possible, field work was dependent on helicopter activity which, in turn, was dependent on favorable weather conditions. Weather conditions resulted in the SCS auditors observing active helicopter operations on a total of 5 days; active helicopter operations were observed on JD Irving and Weyerhaeuser forestland. No aerial applications took place on Seven Islands Land Company lands from the commencement date of the project through to the end of the 2019 aerial application “season.” During the 5 days of active helicopter operations, a total of approximately 40 “lifts”⁶ were observed. On other field days, when weather conditions grounded the helicopter, field work focused on inspection of sites that had received aerial herbicide application earlier in the season, prior to commencement of the verification audit.

Field Observation Locations:

Aug. 26 – Oxbow Road, JDI
 Aug. 27 – North Maine Woods, JDI

⁶ Helicopter leaving a landing zone with a full load herbicide mix, deploying the load on the target stand, and returning to the landing zone.

- Aug. 28 – T8R7 WELS, 7 Islands (3 sites)
- Aug. 29 – Sandwich Academy Grant, Greenville Unit, WYCO
- Sept. 1 -- Near Long Pond South of Greenville, Greenville Unit, WYCO
- Sept. 5 – Big W Township, Greenville Unit, WYCO
- Sept. 6 – Big W, West Middlesex, Brassua, Soldiertown Townships, Greenville Unit, WYCO
- Sept. 8 – Mayfield Township, Lexington Township, Bingham Unit, WYCO

3. Monitoring Results

Based upon the data collected and analyzed, interviews completed and field observations made, the SCS Audit Team concludes that:

- Overall, there is a consistently high level of compliance with applicable BPC regulatory requirements and pesticide label law.
- The participating industrial forestland companies and herbicide service providers (supplier and applicator) were consistently observed to be exercising a precautionary approach; e.g., substantial exceedance of the regulatory setbacks from special areas such as waterbodies and shutting down aerial operations when wind exceeds 10 miles per hour rather than the requisite 15 MPH.
- Personnel engaged in aerial herbicide application operations (landowner employees, pesticide supplier employees, aerial applicator employees) were consistently observed by the Audit Team to be acting with:
 - Professionalism
 - Competence
 - Consistent and robust understanding of and compliance with applicable regulations.
- In all field operations observed by the Audit Team, field personnel were found to:
 - Carefully prepare and accurately measure application volumes
 - Employ safe and precise application procedures.
- All equipment employed in aerial operations (transport, mixing, application) was observed to be well maintained and in good working order
- The application equipment and spray regulation systems employed by JBI are demonstrably effective at “getting the job done” with precision and minimum necessary deployment of chemicals. The nozzles employed are low pressure, narrow spectrum and designed specifically to minimize drift. The equipment incorporates an integrated flow regulation system that uses GPS inputs to regulate pressures and flow-rates in real time to match aircraft speed variations, resulting in ground-calibrated precision.

At bottom line, no evidence was gathered during the course of the verification audit to contradict the following overall conclusion:

The State of Maine regulatory framework, within which aerial application of herbicides in forest operations takes place, is functioning as designed.

Further: within the context of forest landowners’ silvicultural decisions and the decision to aerially apply herbicides to control (for a targeted period of time) but not eliminate vegetation that competes with forest stand establishment and early stand development, we observed a consistent and genuine effort

on the part of forest managers and pesticide applicators/suppliers to minimize reliance on and use of herbicides, principally through thorough planning and integrated pest management.

Additional Observations

Spray Height

Field observations by the Audit Team were that the helicopter's "spray height" (distance above the ground when herbicide is released from the spray boom) was consistently around 30 feet. As the pertinent verification criterion (taken from the regulations) is stated as: "Spray height < 10 ft. except higher for safety", the auditors regularly inquired of the helicopter pilot and ground crew as to the reason for consistently exceeding the 10-foot target. The answer was two-fold:

- Due to the fact that most treatment blocks are at least partially bordered by stands of trees of at least 30' height, it is a safety hazard to utilize a spray height of 10'
- Releasing herbicide at 10' would require the pilot to pull up rapidly at the end of the spray run to clear the adjacent tree line, resulting in an increased likelihood of the rotor wash of the banked helicopter pushing herbicide into the adjoining (non-targeted) trees.

That is, field personnel have judged that a 30' spray height is warranted for both safety and environmental considerations. Based upon our observations of the geometry of aerial release of herbicide at the periphery of the treatment block, we concur with the validity of that judgment. Accordingly, we conclude that the operations we observed were in compliance with "spray height < 10 ft. except higher for safety."

Wildlife Disturbance

As young stands of conifer trees can be attractive as a food source for ungulates such as moose and deer, it is not uncommon for moose, or other large mammals such as bear and deer to forage in stands that are scheduled for aerial application of herbicides. Dialogue with field personnel involved in aerial application projects, particularly the pilots, confirmed an awareness of the risk of wildlife "harassment" and that standardized measures are employed for avoiding harassment. Field personnel, employees of the forest landowner companies, regularly conduct "wobble walks" of a treatment area prior to operations for the purpose of identifying sensitive areas, which are most commonly water bodies. While not the principal purpose of "wobble walks", some field personnel interviewed during the audit mentioned that their focus also includes evidence of large mammal activity. If evidence of animal presence or activity is detected, the information is, as a matter of practice, conveyed to the helicopter crew. Additionally, the helicopter pilot "scouts" the spray block before treatment. These pass-overs enable the pilot to spot moose or bear and usually the noise of the helicopter results in the animal leaving the treatment block. The pilot can record the presence of large mammals during the scouting passes and can record their locations in the on-board GPS. The pilots informed the auditors that they, as a matter of practice, do not knowingly release herbicides onto large mammals. If necessary, the treatment will be delayed until large mammals vacate the treatment block.

While the audit team members are not qualified to definitively judge the effectiveness of these measures, nor did the audit protocol provide an opportunity to examine the topic in depth, it is our general sense that personnel involved in aerial pesticide application projects are genuinely committed to and effective at avoiding disturbance to wildlife that would qualify as harassment.

Maine Board of Pesticides Control
Forestry Aerial Herbicide Application Monitoring – 2019
3rd-Party Verification Criteria

DOCUMENT REVIEW CHECKLIST (Office)

Staff Interviews

Landowner		Name	Employer	role
Manager				
Applicator				
Acres				
# Sites				

NOTES:

NOTIFICATION (REGS)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
51	I	A/B	n/a	Newspaper Ads	Verify
51	IV	B	1		<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	I	C	n/a	Posters	Verify details
51	IV	C	1/2		<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	IV	B	2	Indiv. Notice	Verify notification w/in 500' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	IV	D	n/a	Program Notice	Verify BPC notification <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	IV	D	n/a	Program Notice	Verify Poison Control Center notification <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	VI	A	n/a	Program Notice	Verify notice 7-30 days prior <i>Interview, demonstration, documents, records, observations, comments</i>

					<input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	VI	B/C	n/a	Program Notice	Verify notification details (VI B1-2) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
28	1	A	n/a	Notif. Requests	Verify relevant notification requests <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
28	1	B	n/a	Notif. Procedure	Verify relevant notification responses <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
28	2	C	n/a	Registry Consultation	Verify appropriate consultation of Notification Registry <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
28	2	D	1/2	Registry Notification	Verify relevant notification responses - w/in 250' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
28	3	D	3/6/7	Registry Notification	Verify notification details <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

28	4	D	4	Registry Notification	<p>Verify add'l information - if requested</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	4	C	I - III	Off-target Application	<p>Consent recorded for off-target discharge or drift</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	5	A/B	n/a	Variances	<p>Verify application, receipt , & record</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	6	A/B	n/a	Emergencies	<p>Verify declaration</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

LICENSING (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
31	n/a	n/a	n/a	Licensing	Verify licensed applicators - appropriate categories <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
31	n/a	n/a	n/a	Licensing	Verify firm licenses - Nutrien, JBI, others (?) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

RECORDS (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
50	1	A	I	Applic. Records	Verify required records - 2 year retention <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
50	1	A	II	Applic. Records	Verify record details (see IIa - d) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
50	2	A	n/a	Annual Summary	Verify 2018 report <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
50	2	C	n/a	Incident Reports	Verify if relevant <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
20	5	A	n/a	Employees	Appropriate training <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

SA MAPS (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
22	2	C	I	SA Identification	Site maps retained 2 years <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	III	Site Plan	Verify record details (see IIa - d) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	Drawn to scale <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	Target area boundaries <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	Property lines <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	Significant landmarks & flight hazards <i>Interview, demonstration, documents, records, observations, comments</i>

					<input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	SALO w/in 1000' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	I	Site Plan Map	SA w/in 500' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	B	II	Site Plan Map	School bus schedule <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

SALO CHECKLISTS (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
22	3	C	I	SALO Checklist	Date, time, target descrip., applic. ID <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	Confirmation of notifications (Ch28 & 51) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	Confirmation of site ID (3A) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	Weather monitoring location <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	Weather monitoring equipment <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

22	3	C	I	SALO Checklist	<p>Confirmation of acceptable weather conditions</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	<p>Current weather observations (wind speed & direction)</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	<p>SA protection measures</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I	SALO Checklist	<p>Confirmation of no humans visible</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

Maine Board of Pesticides Control
 Forestry Aerial Herbicide Application Monitoring – 2019
 3rd-Party Verification Criteria

OPERATIONS CHECKLIST (Landing Zone (LZ))

APPLICATION SITES

Landowner		Site ID	Rx	Acres
Applicator				
LZ Location				
Assessor				

Staff on Site

Name	Employer	role

WEATHER

time	observation

MIXING & LOADING

Batch ID	time	Volume	Rx	Sites	Observed?
					y/n

APPLICATIONS

Site ID	time	Volume	Rx	Acres	Observed?
					y/n

MIX & LOAD (LABEL)

HERBICIDE LABEL	LABEL PAGE NO.	CATEGORY	SUB-CATEGORY	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
ACCORD XRT II	1	Haz. to Humans, etc.	n/a	PPE	Long-sleeved shirt & pants - chem. resistant gloves - shoes/socks
Rodeo	1	Haz. to Humans, etc.	PPE	PPE	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	2	Haz. to Humans, etc.	Precautionary Statements	PPE	
Arsenal	2	Haz. to Humans, etc.	PPE	PPE	
Accord XRT II	1	Phys. & Chem. Haz.	n/a	n/a	
Rodeo	1	Phys. & Chem. Haz.	n/a	n/a	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	2	Phys. & Chem. Haz.	n/a	n/a	
Accord XRT II	3	Mixing Directions	n/a	n/a	
Rodeo	3	Mixing Directions	n/a	n/a	Eliminate risk of siphoning <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Accord XRT II	3	Mixing Directions	n/a	n/a	
Rodeo	4	Mixing Directions	n/a	n/a	Avoid water containing soil <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Accord XRT II	4	Tank Mixing	n/a	n/a	
Rodeo	4	Tank Mixing	n/a	n/a	Maintain agitation at all times <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Accord XRT II	4	Tank Mixing	n/a	n/a	
Rodeo	1	Directions for Use	n/a	n/a	Do not apply in a way that will contact persons <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

MIX & LOAD (REGS)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
20	3	A	n/a	Storage	<p>Secure enclosure - prevent unauthorized use, mishandling, etc.</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
20	5	A	n/a	Employees	<p>Appropriate training</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
20	5	B	n/a	Employees	<p>Appropriate PPE</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>

HERBICIDE PRESCRIPTION SPECIFICATION – BY PRODUCT & FROM LABEL

HERBICIDE	LABEL PAGE NO.	CATEGORY	SUB-CAT.	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
Accord XRT II	4	Aerial Application	n/a	n/a	Application rate = 3-25 gpa <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	6	Forestry Management	n/a	n/a	Application rate = 4-8 qts/acre <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Rodeo	4	Aerial Application	n/a	n/a	Application rate = 3-25 gpa <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	7	Forestry Site Prep	n/a	n/a	Application rate = 1.5 - 7.5 qt/acre <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	8	Forestry Site Prep	Tank Mixing	n/a	Arsenal App. Conc. = 2-16 oz/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	8	Forestry Site Prep	Tank Mixing	n/a	Oust XP = 1-4 oz/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	8	Forestry Conifer & HW Release	Broadcast Applic.	ME & NH	Use up to 2.25 qt/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

	8	Forestry Conifer & HW Release	Broadcast Applic.	ME & NH	May be tank mixed 1-2.5 oz Arsenal App Conc <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	9	Forestry Conifer & HW Release	Broadcast Applic.	ME & NH	May be tank mixed 1-3 oz Oust XP <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	13	Agric. Use Requirements	Conifers Site Prep	NE & Lake States	Application = 2-4 oz/ac - black spruce <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	14	Agric. Use Requirements	Conifer Release	NE & Lake States	Application = 1.5-3 oz/acre white spruce <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	17	Agric. Use Requirements	Use Restrict. Forestry	n/a	Apply < 8 oz/acre/year <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	17	Agric. Use Requirements	Use Restrict. Forestry	n/a	Do not apply more than 2 applications/year <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	22	Non-Agric. Uses	Tank Mix Combos	n/a	Add 2-6 oz/ac to Glyphosate <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	26	Additional Instructions	n/a	n/a	Apply < 4.25 oz/ac/single application <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

Arsenal	5	Site Specific Restrictions	Nonagr. Land/Forest	n/a	Do not apply more than 48 fl.oz/year <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	7	Application Methods	Aerial Application	n/a	Application rate = 2-30 gal/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	9	Forestry Use	Site Prep Treatment	n/a	Application rate = 5-30 gal/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	9	Forestry Use	Site Prep Treatment	Broadcast Applic.	Application rate = 12-16 oz/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
	10	Forestry Use	Conifer Release	Broadcast Applic.	Application rate = 6-12 oz/ac <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

APPLICATION EQUIPMENT (LABEL)

HERBICIDE	LABEL PAGE NO.	CATEGORY	SUB-CATEGORY	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
Oust	4	Mandatory Spray Drift Req.	Aerial Application	n/a	Use extremely coarse or coarser droplet size (ASABE S572.1) <i>Interview, demonstration, documents, records, observations, comments</i>
Arsenal	6	Aerial Application	n/a	n/a	<input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	4	Mandatory Spray Drift Requirements	Aerial Application	n/a	Boom length < 75% of rotor diameter (Oust) Boom length < 90% of rotor diameter (Arsenal)
Arsenal	6	Aerial Application	n/a	n/a	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	4	Mandatory Spray Drift Requirements	Aerial Application	n/a	Nozzles oriented toward back of aircraft <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	2	Engineering Controls	n/a	n/a	Pilots must use enclosed cockpit <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	7	Application Methods	Aerial Application	n/a	Spray equipment calibrated <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

APPLICATION EQUIPMENT (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
22	2	A	I	Spray Equipment	Used in accordance with mfg. recommendations & instructions <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	A	I	Spray Equipment	Sound mechanical condition <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	A	I	Spray Equipment	free of leaks, defects, malfunctions - which may cause off-target <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	A	II	Spray Equipment	Calibrated according to relevant guidance <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	A	II	Spray Equipment	Calibration records sufficient <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	A	III	Spray Equipment	Functioning shut-off valves <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

22	2	A	III	Spray Equipment	Anti-siphoning device <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	B	I	Weather	Does not favor drift onto SA <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	B	I	Weather	Does not prevent proper target deposition <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	B	II	Weather	Application ceased when off-site deposition observed <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	B	III	Weather	Wind speed does not exceed 15 mph <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

WATER QUALITY PROTECTION (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
29	1	A	n/a	Mix/Load	Mixing & Loading >50' from water body <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
29	1	B	n/a	Pumps	Water pumping equipment clean of pesticides <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
29	1	C	n/a	Anti-syphon	Verify anti-syphon for water pumping equipment <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
29	2	n/a	n/a	Tanks & Containers	Verify secure transport <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
29	3	n/a	n/a	Spill Cleanup	Verify spills w/in 50' of water cleaned promptly <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
29	6	A	n/a	Water Buffer	Verify minimum 25' buffer on water bodies <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

WORKER PROTECTION STANDARD (WPS) - (BPS Inspection Forms)

FORM	TOPIC	Verification Criteria
		<i>Details & conclusion</i>
General	Posted Information	<p>Visible, central location</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
General	Posted Information	<p>SDS - all products</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
General	Posted Information	<p>Names of pesticides in use</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
General	Posted Information	<p>REI's and expiration</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
General	Posted Information	<p>Time/date of application</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
General	Posted Information	<p>Pesticide safety information</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>

General	Posted Information	Medical facility information <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
General	Posted Information	Label information (EPA reg., Active ingredients) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
General	Training	Verify training for interviewed staff <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Workers	Site Entry	Verify no entry prior to REI expiration <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Handlers	PPE	Appropriate PPE <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Handlers	Equipment Operation	Verify training for all equipment <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

EARLY ENTRY TO SITE (LABEL)

HERBICIDE	LABEL PAGE NO.	CATEGORY	SUB-CATEGORY	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
Arsenal	3	Agric. Use Requirements	n/a	n/a	PPE required for early entry to treated areas (coveralls, shoes + socks, gloves, eyewear)
Oust	12	Agric. Use Requirements	n/a	PPE	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Rodeo	1	Directions for Use	n/a	n/a	do not apply in a way that will contact persons <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Accord XRT II	1	Agric. Use Requirements	n/a	n/a	REI = 4 hours (Accord, Rodeo, Oust) REI = 48 hours (Arsenal)
Rodeo	1	Agric. Use Requirements	n/a	n/a	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	12	Agric. Use Requirements	n/a	n/a	
Arsenal	3	Agric. Use Requirements	n/a	n/a	

SITE CONDITIONS (LABEL)

HERBICIDE	LABEL PAGE NO.	CATEGORY	SUB-CATEGORY	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
Oust	3	Environmental Hazards	n/a	n/a	<p>Do not apply directly to surface of water</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
Oust	8	Product Information	n/a	n/a	<p>Do not apply to bodies of water</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
Oust	27	Additional Instructions	n/a	n/a	<p>Do not treat frozen or snow covered soil</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
Arsenal	2	Environmental Hazards	n/a	n/a	<p>Do not apply to water except as specified in label</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>
Arsenal	5	Site Specific Restrictions	Potable Water Intakes	n/a	<p>Do not apply 1/2 mile upstream of active potable water intake</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <p><input type="checkbox"/> verified <input type="checkbox"/> not reviewed</p>

Arsenal	9	Forestry Use	Site Prep & Conifer Release	n/a	<p>Do not apply when conifers under stress</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	10	Forestry Use	Conifer Release	n/a	<p>Apply before end of 2nd growing season (crop trees)</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	12	Agric. Use Requirements	Forestry	Application timing	<p>Apply before herabceous weeds emerge or shortly thereafter</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	14	Agric. Use Requirements	Conifer Release	NE & Lake States	<p>Apply when trees are dormant</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	18	Agric. Use Requirements	Use Restrictions Forestry	n/a	<p>Leave treated soil undisturbed</p> <p><i>Interview, demonstration, documents, records, observations, comments</i></p> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

EARLY ENTRY TO SITE (LABEL)

HERBICIDE	LABEL PAGE NO.	CATEGORY	SUB-CATEGORY	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
Oust	3	Agric. Use Requirements	n/a	n/a	Use ½ upwind swath displacement
Oust	12	Agric. Use Requirements	n/a	PPE	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	28	Additional Precautions	Application	n/a	Vol. & delivery for uniform pattern, minimize drift
Arsenal	7	Application Methods	Aerial Application	n/a	<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	6	Aerial Application	n/a	n/a	Wind speeds 3-10 mph <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	6	Aerial Application	n/a	n/a	Required to use upwind swath displacement <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	4	Mandatory Spray Drift Requirements	Aerial Application	n/a	Spray height < 10 ft. except higher for safety <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

Oust	3	Environmental Hazards	n/a	n/a	Surface water buffer strip is applied <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	7	Application Methods	Aerial Application	n/a	Appropriate buffers except on open tracts of land <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	4	Mandatory Spray Drift Requirements	Aerial Application	n/a	Do not apply during temperature inversions <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Oust	11	Site Specific Considerations	n/a	n/a	Careful evaluation prior to use <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
Arsenal	6	Aerial Application	n/a	n/a	Required to use upwind swath displacement <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

MIX & LOAD (REGS)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
51	I	C	n/a	Posters	Verify details
51	IV	C	1/2		<i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
51	IV	B	2	Indiv. Notice	Verify notification w/in 500' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	D	n/a	Humans & Animals	Application minimizes exposure to humans, animals, livestock <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	E	n/a	Other Factors	Special precautions to avoid adverse impacts <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	A	n/a	Positive ID	Geo-referenced, electronic mapping (e.g. GPS) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	A	n/a	Positive ID	Effective, visible site marking <i>Interview, demonstration, documents, records, observations, comments</i>

					<input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	A	n/a	Postive ID	Other approved method <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	4	A/B	n/a	Off-target Application	Evidence of Off-Target Direct Discharge of Pesticides <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	4	C	I - III	Off-target Application	Consent recorded for off-target discharge or drift <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	5	A/B	n/a	Variances	Verify application, receipt , & record <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	6	A/B	n/a	Emergencies	Verify declaration <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

SENSITIVE AREAS (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
22	2	C	I	SA Identification	Applicator familiar with spray area <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	C	I	SA Identification	ID & record, type & location of SA w/in 500' <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	2	C	I	SA Identification	Site map with target area & adjacent SA (updated manually) <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

SALOS (REG)

CHAPTER	SECTION	CLAUSE	SUB-CLAUSE	TOPIC	Verification Criteria
					<i>Details & conclusion</i>
22	3	B	I	Site Plan Map	Confirmation re: record review <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	C	I-VIII	SALO Checklist	Confirm checklist use on-site <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	D	n/a	SALO Buffers	Confirm on-site <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed
22	3	E	n/a	SALO Wind	Verify wind speed 2-10 mph <i>Interview, demonstration, documents, records, observations, comments</i> <input type="checkbox"/> verified <input type="checkbox"/> not reviewed

STATE OF MAINE

IN THE YEAR OF OUR LORD

TWO THOUSAND NINETEEN

S.P. 556 - L.D. 1691

6e

Resolve, Directing the Board of Pesticides Control To Work with the Forest Products Industry To Monitor Aerial Herbicide Applications

Sec. 1. Monitoring of aerial herbicide applications. Resolved: That the Board of Pesticides Control, established in the Maine Revised Statutes, Title 22, section 1471-B, shall work with representatives of the forest products industry who conduct aerial application of herbicides for the purpose of silviculture, including reforestation, regeneration or vegetation control, to monitor aerial applications of herbicides through a neutral 3rd-party entity determined by the board. The one-time monitoring of aerial applications required under this section is contingent upon the receipt of outside funds for this purpose. The board shall report to the Joint Standing Committee on Agriculture, Conservation and Forestry with findings and recommendations related to the monitoring of aerial herbicide application no later than February 1, 2020. The monitoring of aerial applications of herbicides must conclude upon submission of the report to the joint standing committee. The joint standing committee may submit a bill relating to the subject matter of the report to the Second Regular Session of the 129th Legislature.

PROGRAM EVALUATION REPORT

**BOARD OF PESTICIDES CONTROL
MAINE DEPARTMENT OF AGRICULTURE,
CONSERVATION, AND FORESTRY**

**Submitted in fulfillment of the requirements of
Title 3, Chapter 35**

November 1, 2019

TABLE OF CONTENTS

SECTION I:

A. EXECUTIVE SUMMARY	1-2
B. HISTORY OF THE MAINE BOARD OF PESTICIDES CONTROL	2-5

SECTION II:

A. ENABLING AND AUTHORIZING LAWS	5
B. DESCRIPTION OF PROGRAMS	5-15
C. ORGANIZATIONAL STRUCTURE	15-17
D. COMPLIANCE WITH FEDERAL AND STATE HEALTH AND SAFETY LAWS.....	18
E. FINANCIAL SUMMARY	18-20
F. RULES AND REGULATIONS	20-33
G. COORDINATION WITH OTHER AGENCIES	33-37
H. IDENTIFICATION OF CONSTITUENCIES SERVED.....	37
I. USE OF ALTERNATIVE DELIVERY SYSTEMS.....	38
J. EMERGING ISSUES	38-42
K. ANY OTHER INFORMATION SPECIFICALLY REQUESTED BY THE COMMITTEE	42
L. COMPARISON OF FEDERAL LAWS AND REGULATIONS	43
M. POLICY ON MANAGING PERSONAL INFORMATION	43
N. REQUIRED REPORTS AND APPLICATIONS	43-44

APPENDIX:

ADDITIONAL DATA	45-58
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SECTION I

A. EXECUTIVE SUMMARY

It is the charge of the Maine Board of Pesticides Control to ensure public access to the benefits of pesticide use while protecting public and environmental health. The Board is further charged with finding ways to minimize reliance on pesticides through promotion of Integrated Pest Management (IPM) and other science-based strategies for controlling pests. The current public Board is comprised of seven public members appointed by the Governor to serve four-year terms. Day-to-day activities are carried out by a staff of eleven full-time, and four seasonal employees who are housed in the Bureau of Agriculture, Food and Rural Resources, Division of Animal and Plant Health.

The Board's area of oversight and stewardship—pesticide distribution and use—has remained the same since the Board was established, however the scope of responsibilities continues to steadily increase. This trend has been characterized by an increase in:

- Pesticide products registered for sale in Maine
- Pests of economic or public health significance, notably browntail moth
- Complaints to the Board's office
- The number of licensed commercial pesticide applicators and general-use pesticide dealers in Maine
- The number of private applicators of general use pesticides, particularly organic farmers and producers of medical and adult use cannabis as well as hemp
- The number of licensees thus impacting the number of exams offered, demand for recertification hours, as well as inspections
- Requests for information and assistance about pesticide use, safety and regulations from Maine citizens
- Responsibilities assigned to the Board by the Maine Legislature and the U.S. Environmental Protection Agency (EPA)
- The number of towns adopting or considering pesticide policies or ordinances
- News coverage and increased public awareness, specifically related to glyphosate, dicamba, neonicotinoids, pollinators, chlorpyrifos
- Pesticide-related bills introduced into the Maine Legislature in recent years
- Revisions to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
- Topic-specific training and certifications as required by the EPA, such as, soil fumigation, structural fumigation, aerial application, chlorpyrifos use, respirator use, changes to FIFRA certification requirements and worker protection standard requirements

(See Appendix, page 48, for details on the above list.)

For nearly thirty years, the Board has operated entirely on dedicated and federal revenues. The Board's dedicated account has been relatively stable since implementation of a fee increase in 2007. Recent increases in personnel costs and the added costs of hosting and support fees for a business-wide software solution have narrowed the gap between revenue and expenditures. The Board's dedicated account remains important to the Department, as it funds five other professional positions in the Division of Animal and Plant Health.

The Board's federal grant, in contrast, has been flat or gradually declining since new responsibilities were added in 1988. A disproportionate number of the Board's staff (four positions or 52% of the FTEs) are currently assigned to the federal grant relative to the percent of revenue coming into the account (18% of the total revenue). The outlook for federal funds in the near term indicates additional reductions continue to be likely. This could lead to cancellation of the water quality monitoring program, retained vacancies or the need to allocate alternate funds.

B. HISTORY OF THE MAINE BOARD OF PESTICIDES CONTROL

The Board was initially established in 1965 but was not funded until 1969. The original Board was comprised of the heads of eight state agencies involved with or concerned about pesticide use: the Commissioners of Agriculture, Forestry, Health and Welfare, Inland Fisheries and Game, and Sea and Shore Fisheries; plus the Chairman of the Highway Commission, the Public Utilities Commission and the Water Improvement Commission. Employees of these departments shared the workload until a supervisor and secretary were hired in 1970. At that time, their primary function was the licensing of custom applicators—those persons who applied pesticides for hire.

In 1973, a governmental reorganization resulted in the Board being placed in the Department of Agriculture. Staffing remained constant until 1976, when an additional person was hired under an EPA grant to develop and implement a new licensing system to comply with federal pesticide law. Starting in 1977, the Board began licensing private applicators (farmers, Christmas tree growers, greenhouse and nursery operators, etc.), commercial applicators and dealers selling restricted-use pesticides.

Increasing public concern in the late 1970s about pesticide use led to the restructuring of the Board by the Maine Legislature in 1980 to its current composition of seven public members appointed by the Governor. That same year, the Board entered into a cooperative enforcement agreement with the EPA and hired two inspectors to monitor pesticide applications and respond to citizen complaints.

In 1981, the Maine Legislature, determining that the Board should be responsible for all aspects of pesticide regulation, transferred the authority for registering pesticide products from the Commissioner of Agriculture to the Board. At the same time, they transferred two positions, a pesticides registrar and a secretary, to handle this workload.

During the mid-1980s, the Board's statutes and regulations were amended several times, as both the Maine Legislature and the new Board expressed considerable interest in mitigating negative impacts from pesticides. The discovery of more than 100 open pesticide container dumps on farms resulted in 1983 legislation that made Maine the first, and still only, state to administer a mandatory deposit and return program for restricted-use pesticide containers. That same year, the Board was directed to develop regulations on pesticide drift, and to conduct both health and environmental risk assessments of all pesticides used in the state. Another change required applicators using pesticides in places open to the public to become licensed as commercial applicators. In addition, the Legislature agreed with the Board in 1987 that education was key to ensuring proper pesticide usage and created a certification and licensing specialist position to work toward improving the manuals, exams and continuing education programs for applicators.

As a result of controversy over a 1987 bill which would have preempted municipalities from adopting local pesticide ordinances, the Maine Legislature established a study committee to review the uniformity of pesticide laws. This effort turned into a comprehensive review of the Board and led to the eventual

conclusion that increasing the Board's capabilities would decrease the need for municipal ordinances. Accordingly, legislation was passed in 1988 that created the positions of toxicologist and public information officer so the Board could better respond to public concerns. This act also required general-use pesticide dealers to become licensed so there would be a mechanism to require annual sales reports. The revenue from their license fees was designated for a grant to support a position at the University of Maine to develop better quality training manuals.

In 1990, the Board underwent Sunset Review resulting in only two minor changes being adopted by the Maine Legislature in 1991. The first specified that the two "public members" of the Board must have a demonstrated interest in environmental protection, while the second change designated the Board as the lead state agency in developing a groundwater management plan for pesticides in order to meet federal requirements and provide necessary coordination. At this time, the Board received additional EPA grant moneys to create a Planning and Research Associate I position to address new federal issues on groundwater and worker protection.

The early 1990s were relatively quiet in terms of legislative activity. During this time, the Board instituted annual planning sessions to identify and deal with several new issues, including the Productivity Realization Task Force that resulted in the loss of one clerical position. The Board received two citizen petitions for rulemaking in 1994 and 1995. The first requested a ban on the use of the herbicide hexazinone in blueberry production. The Board rejected the request, but instead created an advisory committee that resulted in the development of a Hexazinone State Management Plan for the Protection of Ground Water. The second petition requested a ban on aerial pesticide applications, but the Board did not find sufficient evidence to support eliminating aerial application and the associated benefits (e.g., reduction in applicator exposure) of this application method.

In 1997, the Maine Legislature enacted a new policy directing state agencies to find ways to minimize reliance on pesticides by promoting the implementation of IPM and other science-based technology. The legislation recognized that outbreaks of disease, insects and other pests would necessitate fluctuation in pesticide use but directed the Board to educate both pesticide users and the general public in the proper use of pesticides. A separate provision of this legislation directed the Board to publish an annual report on pesticide sales and use data so there could be some determination if the new policy was resulting in decreased pesticide use. No funds or positions were provided to produce these reports.

In 2000, the Board underwent its first program evaluation review where the ACF determined that the agency was operating within its statutory authority. The Committee's discussion during this review focused on the difficulty in obtaining useful, reliable information on pesticide use in the state. After studying the issue, the Board reported back to the Committee in 2002 and presented several recommendations for change. These included requiring all in-state dealers to report their pesticide sales and all commercial agricultural producers to report their pesticide use on an annual basis. The Committee agreed the current reports were of little value but did not take any action to require additional groups to report or to extend the requirement for annual reports of incomplete data.

In 2005, the Board received its second petition since 1995 to ban aerial spraying. The petition coincided with a series of other public efforts intended to restrict or ban aerial pesticide spraying in the state. These efforts included bills in the Maine Legislature, legal challenges and municipal ordinances, which convinced the Board that public concern over aerial spraying had reached a tipping point that required Board intervention. Consequently, the Board embarked on a comprehensive and systematic review of

the laws affecting aerial spraying in the state. An overhaul of the Board's spray drift rule was completed in 2008 and approved by the Maine Legislature in early 2009. However, attempts to update the Board rule covering pesticide notification were never finalized. Instead, the Maine Legislature enacted a law establishing a pesticide notification registry in 2009, but that law was subsequently repealed in 2011, over objections from the regulated community.

The period of 2005 through 2011 was marked by an unusual number of pesticide bills before the Maine Legislature, signaling the public's heightened concern about pesticides in the environment. Municipal ordinances and policies covering pesticide use in Maine also flourished during this period, further bolstering the premise that public concern over pesticides is on the rise.

In 2012, statewide regulatory reforms resulted in the repeal of CMR 01-026 Chapter 21, Pesticide Container Disposal and Storage. This rule detailed the restricted use pesticide container deposit program.

In January of 2014, bills were introduced to the Maine Legislature to ban the use of two insecticides used for mosquito control in other states. Due to the lack of sufficient scientific evidence to support a ban, the ACF issued a resolve to approve the Board's formation of the Environmental Risk Advisory Committee (ERAC) to evaluate the potential impact of pesticide use on Maine's lobster fishery and require progress reports in January of 2015 and 2017. Sediment was collected from the edge of the intertidal zone along the Maine coast in 2014 and 2015 and stormwater in 2015. Use patterns were researched and a literature review of pesticide active ingredients used in Maine was conducted in an attempt to prioritize those pesticides found in sediments with the greatest potential to impact lobsters. Although, the two mosquito control pesticides originally targeted in the bill were not detected, bifenthrin was detected in nearly all the sediments associated with urban areas. The monitoring results did not indicate a likely appreciable impact of pesticides on the lobster industry.

The Maine legislature approved use of medical marijuana in 2014 following the approval of two people's referendums in 1999 and 2009. The first law permitted only the use of pesticides exempt from federal registration but was soon revised to permit EPA registered pesticides as long as the use was not in violation of the label. The BPC staff and DACF IPM coordinator worked closely with the Department of Health and Human Services and representatives from the medical marijuana industry during the writing of the bills to provide information about Maine and federal laws governing pesticide use and IPM. The BPC provided, and continues to provide, certification and licensing training to medical marijuana growers. Staff also developed guidance for selecting pesticides. More recently, the BPC expanded outreach to hemp growers.

In the period between 2014 and 2019 numerous pesticide bills were introduced but few were enacted. The proposed legislation focused on several topics, but primarily addressed pesticide use on school grounds, pollinator protection and municipal regulation of pesticide use.

During this same time the Board increased pollinator protection education and outreach to pesticide applicators and wrote the Maine Pollinator Protection Plan—best management practices for pollinator protection written for pesticide applicators, beekeepers and the general public. The DACF IPM Specialist and Board staff continued education for school IPM coordinators and implemented administrative responses to bring schools into compliance with school IPM rules. Multiple municipalities enacted pesticide ordinances many of which were focused on restricting the use of pesticides on urban, suburban and residential landscapes. Additionally, significant changes in federal

pesticide laws on pesticide applicator certification and the agricultural Worker Protection Standard required Board staff to conduct outreach, undergo rulemaking, revise inspection procedures, and submit a new state plan to the EPA.

In 2019, the Maine Legislature introduced several bills that revisited issues previously raised. Topics addressed included pesticide applications on school grounds, notification related to aerial and air assisted pesticide applications, and a ban on aerial application of herbicides for forestry operations. These bills highlight the public’s continued interest in these topics.

SECTION II

A. ENABLING AND AUTHORIZING LAWS

1. Maine Board of Pesticides Control Statute 22 M.R.S.A. § 1471 A-X

This statute creates the Board of Pesticides Control, defines its purpose and policy, requires licensing of applicators and dealers and establishes the powers of the Board to promulgate rules regulating pesticide sales and use. It also contains a 1997 amendment creating a new state policy to minimize reliance on pesticides.

2. Maine Pesticide Control Act 7 M.R.S.A. § 601-625

This statute requires the registration of all pesticides to be sold or used in the state. It also contains provisions that govern the sale and use of these products, establishes penalties for violations of Maine pesticide laws and regulations and requires public utilities and the Maine Department of Transportation to offer no-spray agreements to municipalities.

3. Federal Insecticide, Fungicide and Rodenticide Act 7 U.S.C. 136 *et seq*

The Board has a cooperative agreement with the EPA and has been granted enforcement primacy covering this federal statute that governs the manufacture, sale and use of pesticides. In addition, the Board operates under an EPA-approved plan for certifying pesticide applicators. As a result of these two “delegated” authorities, Maine—like nearly every other state—administers all pesticide laws and pesticide public policy within the state.

B. DESCRIPTION OF PROGRAMS

The Board operates a variety of programs, all of which promote proper stewardship of pesticides and/or assist citizens of the state with the most effective strategies for managing pests. A description of the Board’s programs follows, together with an assessment of the effectiveness of each.

1. Registration

Statutory Basis

7 M.R.S.A § 607 & 607-A: Requires any pesticide which is distributed in the state to first be registered by the Board. Also sets forth guidelines for the review of pesticides used in the state and for water residue testing.

Objectives

- Maintain a central listing of pesticides that are registered in the state for reference and compliance purposes.
- Maintain a reference library of the pesticide product labels and Safety Data Sheets to assist the staff and pesticide applicators when questions arise about the legality and/or propriety of a particular use pattern, and to assist the public with questions about potential adverse effects.
- Respond to unique pest problems in Maine by working with user groups and the state universities to submit requests to the EPA for special product registrations (special local needs labels, emergency and/or crisis exemptions and experimental use permits).
- Review the risks and benefits of active ingredients that may present concerns unique to Maine.
- Provide funding to support the stewardship activities of the Board.
- Conduct groundwater, surface water and sediment residue monitoring to provide representative data about pesticide impacts on the water resource.

Outcomes

- Inspections of Maine distributors and pesticide applicators show overall compliance with the pesticide product registration requirement is high. However, in recent years, there has been a noted increase in the number of unregistered minimum risk pesticide products in the marketplace. When unregistered products are detected, steps are taken immediately to rectify the situation.
- The Board's registrar has modernized the state's product registration process, converted it to an electronic document management system, and all product registrations are now submitted, paid for, reviewed and maintained within the Maine Pesticide Enforcement, Registration and Licensing System (MEPERLS). This requires less file space, has reduced the use of paper and has facilitated sharing of data.
- During 2018, the Board registered 12,493 pesticide products, and in 2019 submitted five special local needs label requests to EPA to address constituent requests.
- The Board's toxicologist continues to review the risks and benefits of active ingredients present in Maine. Note: this position was vacant from June 2016 to January 2018 following retirement of the previous toxicologist. In 2018, the toxicologist worked with DHHS to convey the need to prohibit pesticides from being used on cannabis crops until appropriate health effects have been studied. The toxicologist provides on-going risk benefit analyses to individuals throughout the state who aim to reduce their impacts to human health and the environment; these calls typically involve concerns about outdoor pesticide use for the management of mosquitoes, ticks, grubs, or trees infested with browntail moth. Likewise, the toxicologist advises BPC staff during review of variance requests.
- Pesticide product registrations account for approximately 83% of the Board's total annual revenue.

Future Goals

- Develop labeling policy for FIFRA Section 25b exempt products that incorporates the AAPCO 25(b) Working Group labeling guidelines

- Update pesticide registration policies
- Adopt policy requiring efficacy data for FIFRA Section 25b exempt products
- Conduct call-in for efficacy data and labeling for all currently registered FIFRA Section 25b exempt products to assess compliance for subsequent renewal
- Establish routine document comparison with EPA master label for new and revised distributor pesticide labels
- Develop reference list of pesticide products for use on cannabis
- Incorporate request for active ingredient conversion data in registration submission process. This will assist with the electronic submission of required commercial applicator pesticide use reports.
- Hire additional Environmental Specialist III to restore two FTEs—one for water quality and one for registration. This will support an expanded water quality program and increased registration requests.

2. Certification and Licensing

Statutory Basis

22 M.R.S.A § 1471-D and § 1471-M: Requires prior certification and/or licensing for certain pesticide distributors and applicators and sets forth competency standards for certification and licensing.

Objectives

- Ensure that those using, supervising the use of, and distributing pesticides, are competent, properly trained and up-to-date on the latest pest management research by administering a certification and licensing program which includes providing training materials and information, administering tests and providing continuing education.
- Maintain contact information to facilitate dissemination of the latest news and research about pesticides and/or pest management.
- Provide licensee information to citizens that are looking for pest management services.

Outcomes

- Number of Licensees in the year 2018:
 - Private Pesticide Applicator— 1,072
 - Agricultural Basic Pesticide Applicator— 543 (New license effective as of 12/26/2011)
 - Commercial Pesticide Applicator—1623
 - Spray Contracting Firms—254
 - Restricted Use Pesticide Dealers—60
 - General Use Pesticide Dealers—1,012 (Approximately 887 licenses in 2010)
 - *Bt* Corn Training Certificates—109
- 22 category manuals and tests currently available and updated on a regular basis (Three new private supplemental categories go into effect 1/1/2020)

- Training seminars provided in 2019 as of 10/30/2019:
 - Conducted by staff—31
 - Monitored—115
 - Total seminars awarded credits—375 (155 provided in 2010)
 - Total education credits approved—851
 - Total credits awarded to applicators—3,355
- Tests administered in 2018: 1,924 (1,443 administered in 2010)
- In 2015 a licensing requirement for all farmers growing plants for direct human consumption went into effect. Prior to 2015, only those agricultural producers using restricted use pesticide were required to maintain a pesticide applicator license. The realized increase in licenses was 500 to 600 new licensees.
- Courses approved for credit are posted to the BPC website by a staff managed automated webservice. This service ensures applicators are efficiently informed of the courses offering essential continuing education opportunities and the credits necessary to maintain certification.
- Support a number of professions that require their workers to be certified or licensed, even though they are not required to be licensed by statute or regulation
- Online license renewals
- Online license and certification status review for licensees
- Online ability to update contact information
- Online access for the public to generic information on actively licensed companies and applicators by category—this aids the public in finding licensed pest management services
- Improved communication with licensees through use of GovDelivery and automated emails

Future Goals

- Development of Master Applicator manual
- Develop exams and manuals for supplemental private applicator certification in soil fumigation, non-soil fumigation and aerial application
- Improve outreach to restaurants, fuel delivery companies, apartment building owners, and other businesses regarding unlawful unlicensed applications
- Applicator upload of re-certification credit information
- Online submission of requests for recertification course approval
- Revision of commercial and private certification exams according to best practices for exam development
- Streamline manual adoption and review process
- Offer annual spring and fall IPM focused recertification programs for pesticide applicators

- Develop paper and digital content on the proper use of pesticides for distribution to the public and applicators
- Maintain consistent, timely communication with all applicators on topics including emerging pesticide science, policy, and issues

3. Compliance

Statutory Basis

7 M.R.S.A § 611, 22 M.R.S.A § 1471-H: Authorizes the Board and its employees to conduct inspections and enforce its statutes and the rules promulgated thereunder.

7 U.S.C. § 136u (a)(1): Authorizes EPA to delegate enforcement of federal pesticide law to the states.

Objectives

- Establish and maintain a credible enforcement presence to deter willful disregard for state and federal pesticide laws.
- Provide compliance assistance to the regulated community.
- Protect the public health and safety and the public interest in the soils, water, forests, wildlife, agricultural and other resources of the state by ensuring that all state and federal pesticide laws are consistently applied.
- Promptly and effectively respond to citizen concerns so that Maine citizens feel confident that the pesticide oversight program is protecting their interests.
- Track trends in complaints and violations so the Board can identify areas of weakness that might be addressed through tailored education or policy changes.

Outcomes

- The Board's one year-round and four seasonal inspectors conduct both routine and for cause inspections to check registration status of pesticide products and make sure applicators, manufacturers and dealers are aware of and complying with all state and federal regulations and pesticide label instructions.
- When inspections uncover violations, inspectors and staff work with individuals and companies to improve business practices and compliance.
- Inspectors respond to citizen complaints. When a citizen complaint is received, inspectors conduct a full priority investigation of the application and any resulting adverse effects. In 2018, 71 complaints were investigated.
- When violations are detected, the staff works closely with an Assistant Attorney General in following the Board's Enforcement Protocol to determine whether an enforcement response is warranted. In those situations where a monetary penalty is deemed appropriate, the compliance staff attempts to negotiate a consent agreement with the violator. When that approach is unsuccessful, the staff prepares a case summary so the Board may decide on appropriate enforcement action. In 2018, there were 10 consent agreements negotiated.

- The Manager of Compliance annually compiles a summary of complaints for the Board’s review and the summary is posted on the Board’s website for public viewing.
- When violations are identified during general use pesticide dealer and school IPM inspections, inspectors issue an administrative summary of violations to the business or school. This timely feedback is intended to assist the business or school in rectifying the identified deficiencies.
- Inspections are now conducted electronically using tablets with, where cellular service is available, connectivity to the MEPERLS software solution.

Future Goals

- Improve monitoring for unregistered products and unlicensed applicators
- Conduct outreach, compliance assistance, and monitoring for compliance with federal fumigation standards—specifically fumigation applications by private applicators
- Continue development of a state pesticide inspector’s manual
- Improve initial training for new hires
- Improve peer to peer training for inspectors
- Improve the process for reviewing inspections
- Improve the process for notifying those out of compliance with the Federal Worker Protection Standard
- Continue to improve database for compliance-related records
- Improve laboratory analytical capacity
- Utilize new and existing technology to effectively present enforcement case findings to the Board and assist in deliberations

4. Public and Environmental Health

Statutory Basis

22 M.R.S.A. § 1471-A, 22 M.R.S.A. § 1471-X

Objectives

- To protect the health and safety of pesticide workers and handlers
- To protect the health and safety of the citizens of Maine by ensuring that pesticides are used and disposed of properly
- To protect the soils, water, forests, wildlife, agricultural and other resources of the state by ensuring that pesticide applicators are informed about and trained to address potential environmental impacts
- To facilitate communication between pesticide applicators and their neighbors in order to minimize the potential for conflict and unconsenting exposure.

Outcomes

- *Worker Protection Standard:* This program resulted from a 1992 (revised in 2015) EPA initiative to protect farm workers from occupational exposure to pesticides. The Board assists farmers, foresters, nursery, and greenhouse operators in complying with this

federal standard by providing training to both agricultural workers and pesticide handlers. The efforts are accomplished through cooperation with and a funding grant provided to the Maine Mobile Health program and Eastern Maine Development Corporation. New training and respirator requirements implemented in 2015 have required ongoing applicator compliance assistance—primarily in the form of respirator fit testing.

- *Water Quality:* Activity for this program relates to the Board’s designation as lead agency for pesticide residues in groundwater. Based on statutory requirements and depending on funding resources the Board’s registrar/water quality specialist works with the Board inspectors to sample residential wells in areas of pesticide use to determine if any residues are occurring in groundwater. Results are incorporated into reports, shared with interested parties and posted on the Board’s public website. In addition, the Board conducts small surface water and sediment sampling projects in an effort to augment national studies and gauge their relevance to Maine conditions. The results of these collective efforts—together with suggested Best Management Practices (BMPs)—are incorporated into training programs for pesticide applicators to aid informed decision-making.

Groundwater monitoring surveys are conducted every five to seven years. In 2014 and 2015 groundwater monitoring surveys were conducted. The 2014 study assessed statewide agricultural production while the 2015 study focused on lowbush blueberry growing areas.

Surface water quality studies were conducted in 2014, 2015, 2018, and 2019.

- The 2014 Gulf of Maine Study sampled sediment at twenty sites along the Maine coast for pesticides of potential risk to marine invertebrates.
 - The 2015 Gulf of Maine Study sampled sediment at fourteen sites in Casco Bay and stormwater at twenty sites along the Maine coast, again looking for pesticides of potential risk to marine invertebrates.
 - The 2018 Penobscot Bay Study shifted focus to the Penobscot Bay area where surface water and sediment were sampled at eight sites—primarily for residential use pesticides, including glyphosate. In an effort to expand residue detection potential and investigate new sampling techniques, staff deployed a single passive sampling unit.
 - The 2019 Ten Cities Study sampled water and sediment of urban waters along a population gradient of the ten largest Maine cities. Samples will be assessed for residential use pesticides and glyphosate. Passive sampling units were deployed at each site.
- *Obsolete Pesticide Collection:* This special program has been a joint effort with the DEP to provide an affordable and environmentally responsible way for farmers and homeowners to dispose of obsolete pesticides. Through the inspection process, the Board compiles a list of persons who are holding pesticides that have either been banned or deteriorated to the point they are no longer usable. Each fall, a hazardous waste contractor is hired and those individuals on the list and all other Maine residents are invited to bring their products in on a designated date to one of four DEP regional offices. In 2019, the Board changed its four collection sites to include Jonesboro. Should this site be determined a successful addition, collection at this location will be repeated in 2021. The contractor then packages the material and transports them to an out-of-state, licensed

disposal facility. Since 1982, the Board has funded 25 collection programs. Over 109 tons of outdated pesticides have been safely disposed of through the program.

- *Pesticide Container Recycling:* A program to manage the proper disposal of pesticide containers was instituted in Maine in 1983, when a deposit law was enacted for restricted-use pesticide containers. In 2012, the regulation defining this program was repealed. Over the years, Board inspectors ensured that the most hazardous pesticide containers were returned, thoroughly cleaned and properly disposed of in a licensed solid waste facility. Following the repeal of CMR 01-026 Chapter 21, inspectors have continued to work with applicators to provide compliance assistance on proper disposal. However, with the repeal of Chapter 21 both restricted-use and general-use pesticide containers without any controls, may end up burned on-site, or in public landfills and incinerators
 - In 1991, to keep plastic pesticide containers completely out of the waste stream, the Board began working with pesticide dealers, the non-profit Ag Container Recycling Council (ACRC) and local municipalities, to develop a program where, on a strictly volunteer basis, both restricted- and general-use plastic pesticide containers could be recycled. With oversight and coordination from the Board, plastic containers, collected throughout the growing season, are taken to a transfer station, baled and then sold and recycled to create new non-consumer products, where chemical purity is not a priority, such as drainage tiles, railroad ties, pallets, fence posts and speed bumps.
 - At present, there are recycling facilities in Dexter, in central Maine, and in Frenchville, in northern Maine, and the Board continues to work with ACRC and the Maine Resource Recovery Association to develop infrastructure to provide container recycling in the eastern and southern regions of the state.
 - Through this program, Maine has recycled an average of 152,000 pounds of #2 plastic annually since 2011 and 678,000 pounds since 1992. Nationally, since the program started in 1992, approximately 190 million pounds have been recycled.
- *Pesticide Notification:* Dating back to 1987, the Board recognized that sharing pesticide application information with neighbors was a low-cost and effective means of reducing pesticide-related conflicts. Consequently, the Board included the so-called “by request” notification provision in its original drift rule. The “by-request” provision, generally well accepted by pesticide applicators, proved to be reasonably effective, especially in rural settings, although the lack of public awareness about the rule was often cited as a shortcoming.
 - During the 1990s, the Board sponsored a subcommittee which examined the effectiveness of its notification provisions. The committee recommended development of a “notification registry” to augment the “by request” provision, because commercial spraying of residential properties posed different challenges for people interested in advance notification of spraying. Consequently, the Board promulgated Chapter 28 in 1998, which included the new “urban” registry and consolidated other notice-related requirements into one chapter. The urban registry has worked relatively well over the succeeding years but has always had

low participation (generally just over 20 people). It has also required significant staff resources to administer.

- The Board’s staff has worked to facilitate notification under both systems over the years, reasoning that improved communication can only benefit both parties. The staff explains the notification options and sometimes helps neighbors identify the person who is making pesticide applications on an adjoining property. The staff also helps mitigate when either party does not agree what type of notice should be given or on the substance of that notice.
- In the coming year, the Board, in response to recent legislative activity and numerous public inquiries, will likely dedicate resources to the continued discussion of existing notification requirements and possible improvements.
- Endangered Species: The EPA is obligated to ensure that endangered species are not adversely affected by pesticide use. Consequently, the EPA has developed a system of “County Bulletins” that advise pesticide applicators—by county—if they need to take special precautions. To date, the only endangered species in Maine that might be affected by pesticides is the Atlantic salmon. So far, no specific pesticide uses have been identified by the EPA as likely to impact the survival of salmon. The staff has participated in the salmon restoration plan, conducted pesticide monitoring on salmon rivers and provided technical support on pesticide issues.

Future Goals

- Improve monitoring of pesticide-related illnesses as tracked by the Maine Center for Disease Control and Prevention (CDC) occupational incident tracking database and pesticide-related exposures through Northern New England Poison Center data
- Continue to seek funding to conduct the water monitoring program and work with stakeholders to update the priorities and approach
- Continue to investigate expanding the obsolete pesticide collection for better geographical coverage and potential inclusion of commercial applicators
- Continue to investigate expanding the pesticide container recycling program to include non-agricultural containers
- Work with all stakeholders to identify alternative notification systems that are acceptable to everyone
- Update and expand water quality database to facilitate incorporation of new data fields and automate repetitive data entry
- Conduct groundwater monitoring with increased frequency, alternating monitoring for blueberry pesticides and the statewide monitoring, to assess trends in detections
- Expand surface water and sediment studies to include agricultural sites
- Conduct surface water study to assess the occurrence of antifouling paint residues at marinas

5. Outreach and Education

Statutory Basis

22 M.R.S.A § 1471-B, 22 M.R.S.A. § 1471-X

Objectives

- Promote the principles and implementation of IPM and other science-based technology to effectively control pests while minimizing reliance on pesticides.
- Provide easy-to-use resources so the public can quickly obtain pest management fact sheets and the latest research on integrated control strategies.
- Promote in-state resources—such as the Maine Forest Service (MFS) and University of Maine Cooperative Extension—for identifying pests and obtaining expert advice.
- Educate the general public and health care professionals on the risks inherent in pesticide use.
- Educate the general public on the reasons for pesticide use in agriculture, forestry and other industrial applications.
- Work with applicators and dealers to ensure they are following all rules and regulations and operating in the safest way possible.
- Fund and work closely with the Department IPM specialist and the University of Maine to assist growers, schools and homeowners with their pest management challenges.

Outcomes

- Information is available and regularly updated on the Board's website. www.thinkfirstspraylast.org and distributed through electronic notification, social media, newsletters, and press releases.
- Staff works one-on-one with applicators and dealers providing assistance in understanding and complying with rules and regulations.
- Staff does presentations at public meetings and presents booths at trade shows.
- www.gotpests.org: The Board continues to manage, with input from other agencies and the Cooperative Extension, the *Got Pests?* website. The website serves as a clearinghouse for pest management advice and fact sheets targeted to homeowners dealing with pest problems. The *Got Pests?* website receives approximately 10,000 hits annually.
- YardScaping: This public/private partnership of government agencies, non-profits, nurseries and landscape service providers promotes sustainable landscaping practices designed to minimize reliance on pesticides and fertilizers and to reduce runoff of landscaping chemicals.
- Master Gardeners: Staff assists in training master gardeners across the state by providing education about proper pesticide use and effective pest management strategies.
- School IPM: Staff works with the Department's IPM specialist to provide resource documents, outreach and technical assistance to schools about the use of IPM. In 2013, the Board implemented amendments to CMR 01-026 Chapter 27 requiring initial, comprehensive and annual recertification training for School IPM Coordinators. There is general recognition that children are more susceptible to adverse effects arising from chemical exposure, so minimizing the potential for pesticide exposure is especially important in the school setting.
- Interagency Support: Staff provides technical support to other state, local and federal agencies about pesticides and their effects on humans and the environment. Examples of

agencies that benefit from the Board’s technical support include the DACF, DEP, Maine Center for Disease Control and Prevention, MFS, Department of Transportation, and the Northern New England Poison Center.

- In 2019, staff applied for and received a Margaret Chase Smith Governor’s Internship slot for the summer. The summer intern created a series of outreach documents (on horticultural vinegar, rodenticides, browntail moths, and homemade pesticides) for incorporation into the Board’s webpage and social media outlets.

Future Goals

- Continue/expand collaboration with the University of Maine on homeowner IPM outreach projects.
- Track and disseminate the latest research on the lowest risk pest management strategies—possibly through the *Got Pests?* website. Continue research and education on sustainable landscaping practices.
- Investigate development of a pesticide safety outreach program for the general public.
- Provide the public with additional resources to make informed decisions by increasing the topical content on the BPC webpages and social media outlets.
- Support the public’s dialogue in understanding the delicate risks/benefits balance of pesticide use. This deeper understanding relies on, in part, a basic science literacy of the chemistry in our lives; this literacy can be increased by participating in science and chemistry themed K-12 educational events.

C. ORGANIZATIONAL STRUCTURE

The staff of the Board is housed in the Department of Agriculture’s Division of Animal and Plant Health. There are eleven full-time employees who work year-round and are based in Augusta on the AMHI campus in the Deering Building. The Board also employs four seasonal pesticide inspectors who work full-time for 40 weeks each year. They are also available in intermittent capacity during the off-season when they might be called out to attend a training, investigate a complaint, present information at a Board meeting, or monitor attendance at applicator recertification meetings.

The Board’s compliance staff is located throughout the state in a manner that reflects both the level of pesticide use and travel distance. There is one full-time, year-round inspector based in Augusta who covers the central coastal and interior portions of the state. The four seasonal inspectors operate from their homes in Washburn (Aroostook County), Exeter (Penobscot County), Machias (Washington County) and Kennebunk (York County).

An organizational flowchart (see *Figure 1 below*) with the position count and job classification for the Board appears on the following page. As indicated below, five other positions within the Department are funded by the Board.

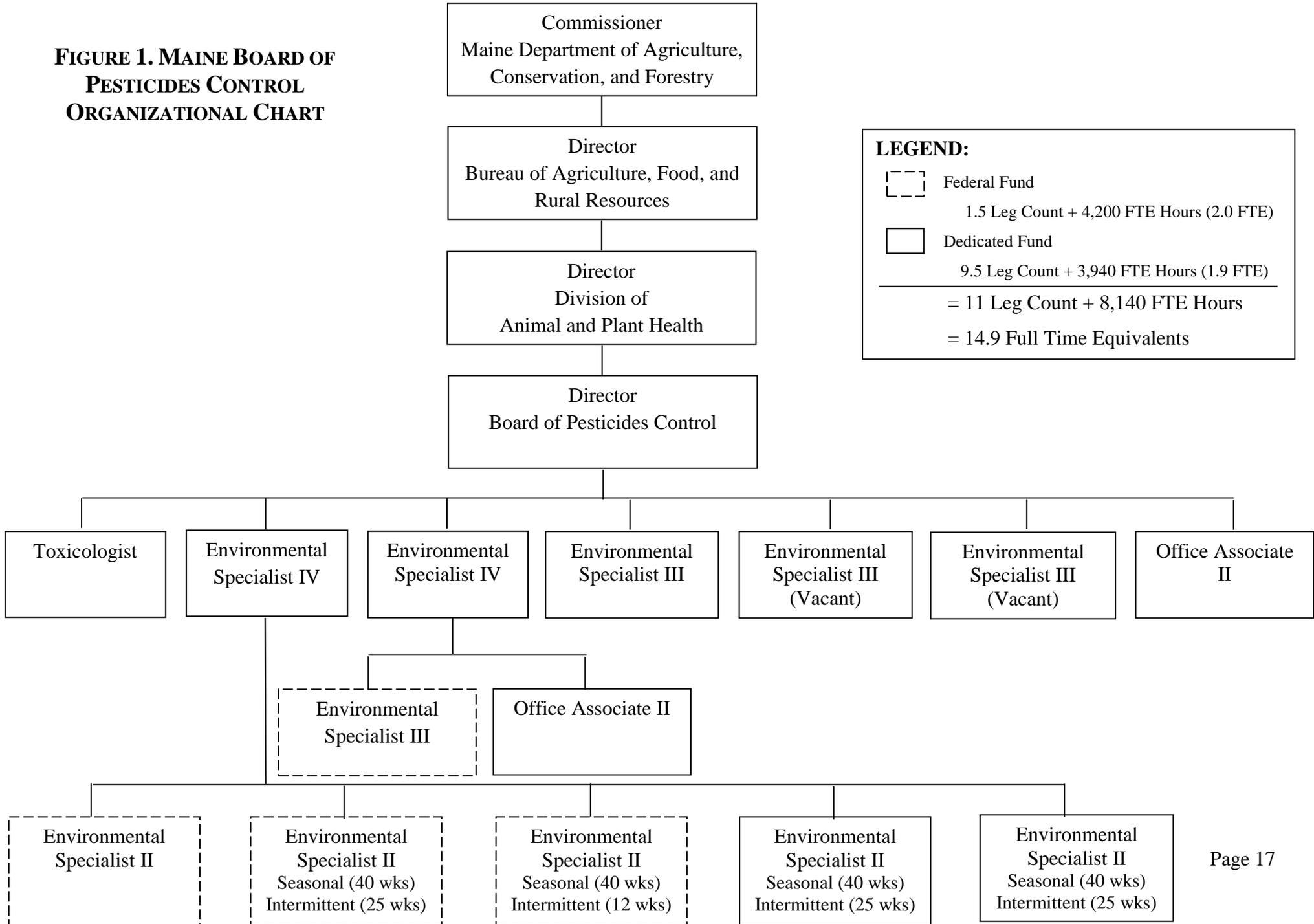
Other Departmental Positions Funded by the Pesticide Control Fund

<u>Position</u>	<u>Division</u>	<u>Full Time Equivalent</u>
Entomologist III	Animal and Plant Health	1
Entomologist III	Animal and Plant Health	1

Assistant Horticulturist	Animal and Plant Health	1
Assistant Horticulturist	Animal and Plant Health	1
State Horticulturist	Animal and Plant Health	1
Total Full Time Equivalents:		5

FIGURE 1. MAINE BOARD OF PESTICIDES CONTROL ORGANIZATIONAL CHART

FIGURE 1. MAINE BOARD OF PESTICIDES CONTROL ORGANIZATIONAL CHART



D. COMPLIANCE WITH FEDERAL AND STATE HEALTH AND SAFETY LAWS

The Board takes proactive measures to ensure compliance with all federal and state health and safety laws. As part of accepting grants from the U. S. Department of Agriculture and the EPA, the Board certifies that it will comply with all federal standards relating to nondiscrimination which include, but are not limited to, (a) Title VI of the Civil Rights Act—prohibits discrimination on the basis of race, color or national origin, (b) Title XI of the Education Amendments of 1972—prohibits discrimination on the basis of sex, (c) Section 504 of the Rehabilitation Act of 1973—prohibits discrimination on the basis of handicaps and (d) The Age Discrimination Act of 1975—prohibits discrimination on the basis of age.

The Board, as a unit of the Bureau of Agriculture, participates in safety compliance inspections conducted by the Maine Bureau of Labor Standards. Work site evaluations have been performed for all employees using video display terminals in order to provide specific recommendations to enhance employee safety, comfort and efficiency. Ergonomic workstations have been obtained, when necessary, for all employees to implement the recommendations contained in the work site evaluations.

The Board is especially concerned about its field personnel who are sometimes on site at the time of pesticide applications or must visit an application site soon afterwards to investigate a complaint. Staff are provided with the necessary selection of personal protective equipment likely to appear on pesticide labels. Over the last nine years, inspectors have been discouraged from engaging in activities that require the use of respirators. However, staff are currently investigating implementation of an OSHA compliant respirator program for the 2020 inspection season. In addition, monthly inspector training sessions are held where frequent topics include pesticide safety. Whenever an opportunity arises, the inspectors also participate in both regional and national training sessions.

E. FINANCIAL SUMMARY

Since 1991, all of the Board's expenses have been covered by the dedicated Pesticide Control Fund (PCF) and, to a lesser extent, through an ongoing federal grant. Revenue for the PCF comes from pesticide product registration fees (95%) and exam and license fees (5%). During 2019, pesticide product registration fees provided 83% of the Board's total revenue.

Following a 2006 product registration increase of \$25, the Board experienced a series of staff vacancies and staffing transitions that continued through the present day. During the same period, personnel costs, while increasing annually, were less overall due to the employ of new staff. These two factors combined to create a significant cash balance during the period between 2011 and 2015. In 2016 and 2017, development of the MEPERLS decreased this cash balance. However, continued vacancies, retirements and new hires resulted in the, once again significant cash balance. In the short term, revenues in the PCF continue to exceed expenditures. However, as personnel costs rise and with the restoration of the water quality FTE the surplus will likely be eroded within a few years.

As a result of Public Law 2013, Chapter 290, the pesticide registration fee was increased by \$10 to provide a \$135,000 annual grant to the University of Maine Cooperative Extension and to fund mosquito monitoring programs or other pesticide stewardship and IPM programs as monies allowed.

The PCF supports the operation of the public Board and the salaries and expenses of eleven Board employees. It also funds five other positions in the Department: an Entomologist who is an IPM Specialist, an Entomologist who is the State Apiarist, the State Horticulturalist, and two Assistant

Horticulturalists. Additionally, the fund provides at least three grants annually, one to Cooperative Extension for development of pesticide applicator training materials, a second to Cooperative Extension for IPM education, and a third grant for training of agricultural workers. For several years, the fund has also provided grants to the Maine Center for Disease Control for mosquito monitoring. In addition, the account funds an annual obsolete pesticide collection. A chart displaying the last 10 years of revenues and expenditures for the PCF is presented in Figure 2 (*below*).

As a result of Public Law 2019, Chapter 243, the \$65,000 formerly provided by the Board to the University of Maine Cooperative Extension Pest Management Lab in the form of a grant to fund the position responsible for the development of pesticide applicator training manuals, was incorporated into statute.

The Board’s ongoing federal grant—which has supported core Board functions since 1980— has been flat or declining since new responsibilities were added in 1988. For federal Fiscal Year 2019, the Board requested \$313,000 in grant funds. There are indications that additional reductions to the federal grant are likely in the future, due to reductions in federal spending. A disproportionate number of the Board’s staff (four positions or 29% of the FTEs) is currently assigned to the federal grant relative to the percent of revenue (17% of the total revenue). As predicted in the 2011 GEA the federal funding used to support the Board’s water quality monitoring program ceased altogether but not until 2020. The potential for staff layoffs or retained vacancies continues to loom as a possibility. Figure 3 (*below*) provides an historical summary of expenditures broken down by account.

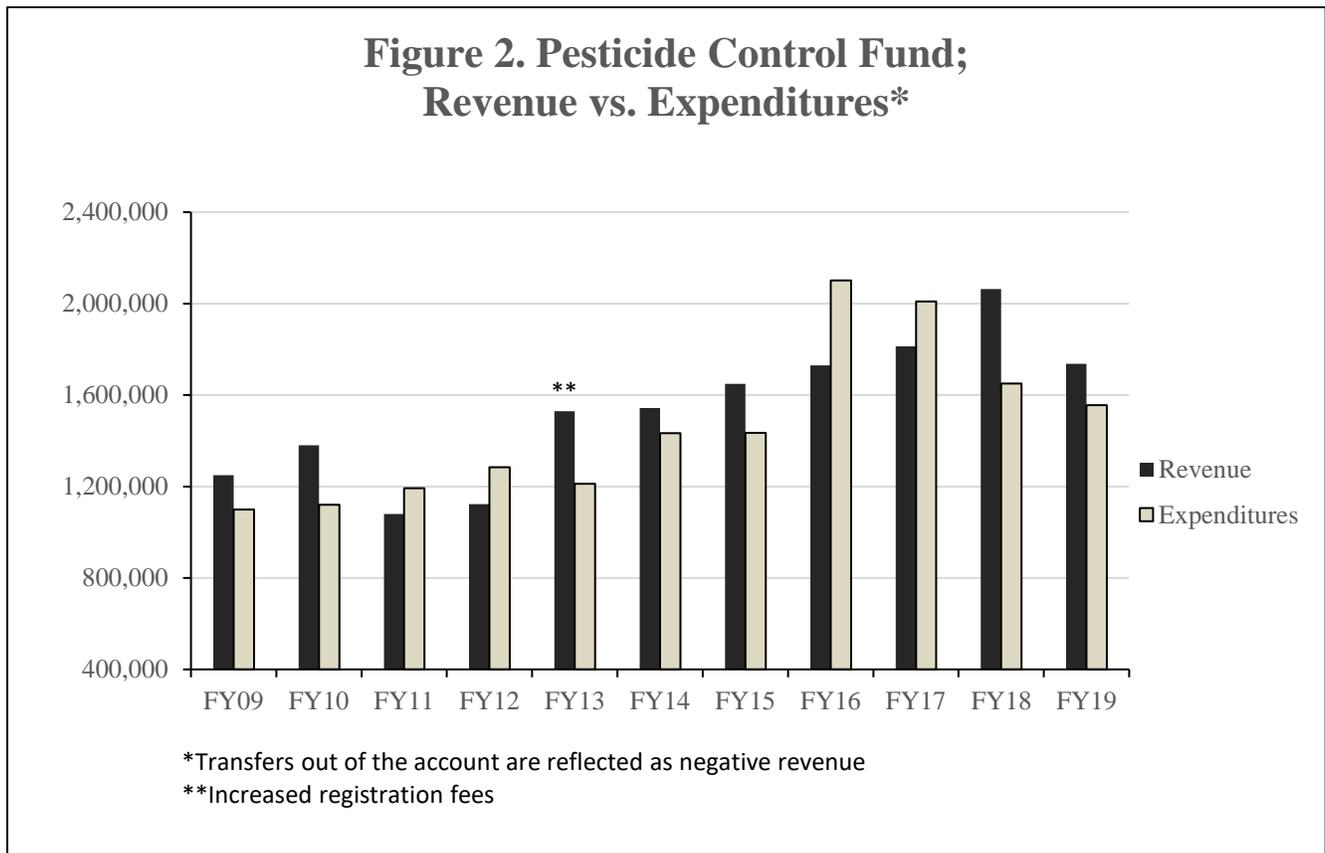
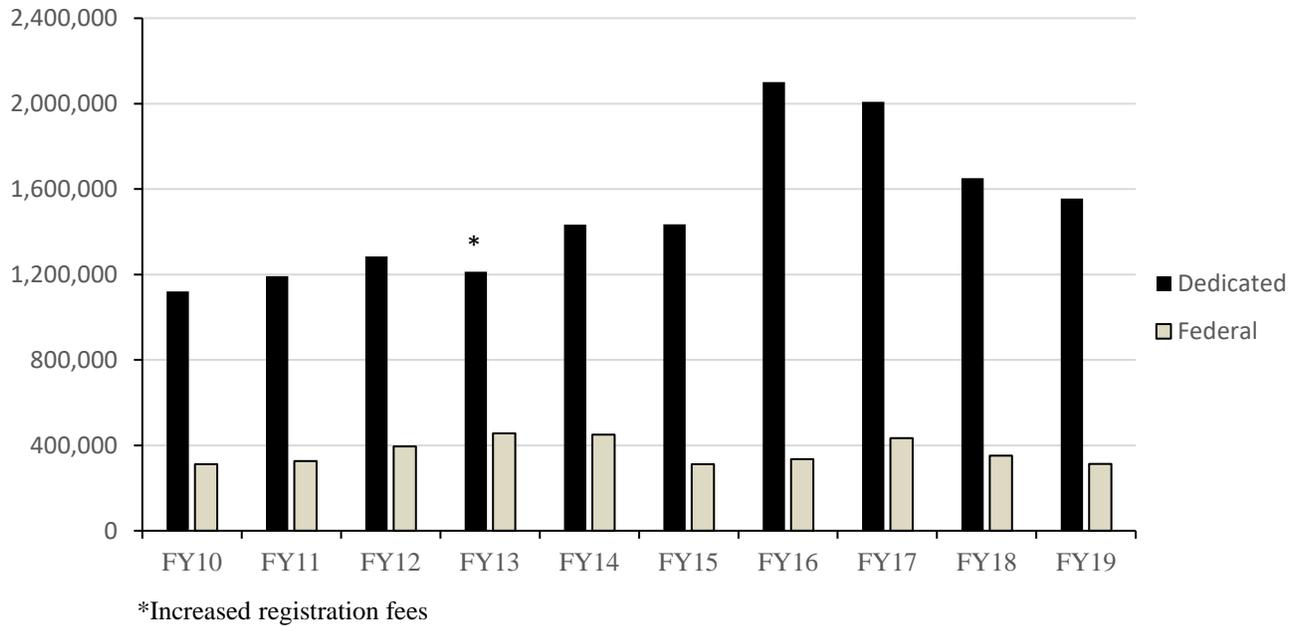


FIGURE 3. BOARD OF PESTICIDES CONTROL EXPENDITURES 10-YEAR HISTORY



F. RULES AND REGULATIONS

The Board has developed regulations over the years in response to legislative mandates or to address specific issues and concerns identified by the Board or its constituents. A summary of rulemaking covering the last eight years is included below, followed by an overview of all 21 rule chapters. Finally, a copy of the most recent regulatory agenda is included. The complete text of the Board’s rules may be viewed online by accessing the Board’s home page at www.thinkfirstspraylast.org .

Recent Rulemaking Summary

During the past eight years, the Board adopted only one new regulation. Chapter 33 Certification & Licensing Provisions/Private Applicators of General Use Pesticides became effective as of December 26, 2011. This rule requires the certification and licensing of private applicators using general-use pesticides to produce plants or plant products intended for human consumption as food, where the person applying the pesticides or the employer of the person applying the pesticides derives \$1,000 or more in annual gross income from the sale of those commodities. The rule was subsequently amended in December 9, 2014 to shorten the time period between failing and retaking a certification exam to six days.

Since the 2011 GEA report, the Board repealed two regulations, Chapters 21 and 36. The repeal of Chapter 21 Pesticide Container Disposal and Storage became effective date as of December 23, 2012. This rule set forth the regulations for the management of emptied pesticide containers for limited and

restricted use pesticides. It established deposit amounts, sticker requirements, triple rinse or equivalent procedures, and refund places and procedures. The repeal Chapter 36 Certification and Licensing Provisions/Monitors and Spotters for Forest Insect Aerial Spray Program became effective as of July 23, 2019. This rule described the requirements for certification and licensing of monitors and spotters for major forest insect aerial spray programs.

Other rule amendments completed since the 2011 GEA report submission are as follows:

- October 2014—Amendment to Chapter 20 (requirement to positively identify residential sites when making commercial outdoor applications), Chapter 31 (exempt consented applications of repellents to children and installation of antimicrobial hardware from commercial licensing requirements; when staff determine an urgent pest issue exists, allows staff to offer verbal review of regulations and reciprocal licensing to replace written regulation examination), Chapters 31, 32 and 33 (shorten to six days the wait period between failing and retaking an exam), Chapter 41 (eliminate the restrictions on hexazinone relative to pesticide distributors and air-assisted application equipment)
- August 2015—Amendment to Chapter 31 (align licensing and certification periods at three years; clarify which applications are included in category 6B; change the requirement for passing both the core and category within one year to within five years; clarify that licensing exemptions for certified wastewater and drinking water operators only pertain while applying pesticides to the wastewater or drinking water and not while performing other duties such as weed management), Chapter 34 (shorten to six days the wait period between failing and retaking an exam; align licensing and certification period at three years), Chapter 35 (remove the requirements for spotters and monitors for forest insect aerial spray programs; change the license period to three years), Chapter 22 (eliminate the requirement of identifying sensitive areas for commercial applications conducted under categories 6A, 6B and 7E), Chapter 28 (add to the list of categories that require posting 6B except when making applications to sidewalks and trails, power substations, and railroad sidings and 7E; requires notice per Board policy for applications to sidewalks and trails under 6B)
- July 2019—Amendment to Chapter 10 (amend the definition of aerial applicator to allow certification as a private applicator; amend the definition of property deemed not open to use by the public), Chapter 31 (add government-issued photo id for examination; establish annual training requirement for noncertified applicators; establish a minimum age for certified applicators; describe applicator credentials; remove the licensing exemption for the post-harvest treatment category; remove the fee for the replacement or upgrade of licenses), Chapter 32 (amend competency certification standards; remove non-reader examination option; add supplemental private categories in soil, non-soil, and aerial application; establish minimum age for certified applicators; add government issued id requirement for exams), Chapter 50 (add requirements to dealer restricted use pesticide sales records)
- July 2019—Provisional Adoption of Major Substantive Amendments to Chapter 26 (amend the definition of occupied buildings), Chapter 27 (clarify language related to school grounds; add personal insect repellent to the list of products that do not require licensure), Chapter 28 (telephone number listed on posting signs must be a working number)

Summary of Regulations

Chapter 10 Definitions and Terms

Statutory Authority 22 M.R.S.A., Chapter 258-A

Effective Date July 6, 1979

Last Amended July 23, 2019

These definitions and terms are defined as they specifically relate to the use of pesticides, the certification and licensing of pesticide applicators and dealers and other areas as regulated by the Board in succeeding chapters.

Chapter 20 Special Provisions

Statutory Authority 22 M.R.S.A., Chapter 258-A

Effective Date July 6, 1979

Last Amended December 9, 2014

Regulates the use, storage and disposal of pesticides with specific emphasis on registered pesticides, right-of-way and aquatic applications and employer/employee requirements.

Chapter 21 Pesticide Container Disposal and Storage

Statutory Authority 22 M.R.S.A. §1471-Q

Effective Date April 1, 1985

Repealed December 23, 2012

These rules set forth the regulations for the management of emptied pesticide containers for limited- and restricted-use pesticides. They establish deposit amounts, sticker requirements, triple rinse or equivalent procedures, and refund places and procedures. The rules are organized according to classification of the pesticide as to whether it was purchased in state or out of state.

Chapter 22 Standards for Outdoor Application of Pesticides by Powered Equipment in Order to Minimize Off-Target Deposition

Statutory Authority 7 M.R.S.A. §606(2)(G): 22 M.R.S.A. §1471-M(2)(D)

Effective Date January 1, 1988

Last Amended May 24, 2015

Establishes procedures and standards for the outdoor application of pesticides by powered equipment in order to minimize spray drift and other unconsented exposure to pesticides. The primary purpose of these regulations is to implement the legislative mandate of the Board, as expressed by 7 M.R.S.A. § 606(2)(G), to design rules which “minimize pesticide drift to the maximum extent practicable under currently available technology.”

Chapter 24 Pesticide Storage Facility Standards/Pesticide Distributors

Statutory Authority 22 M.R.S.A. §1471-O and 7 M.R.S.A. §610(2)(B)

Effective Date May 12, 1992

Last Amended April 12, 2009

Provides minimum criteria for the siting, construction and operation of facilities and businesses which store pesticides for wholesale or retail purposes. They are intended to protect the public health of employees and persons who live near these facilities and to minimize adverse environmental impacts that might result from emergencies caused by fires or spills. This chapter divides storage facilities into three groups and imposes requirements commensurate with their potential threat to public health and the

environment. These regulations also describe display requirements for retail businesses which offer pesticides for sale in self-service areas.

Chapter 26 Standards for Indoor Pesticide Applications and Notification for All Occupied Buildings Except K–12 Schools

Statutory Authority 7 M.R.S.A. §§ 601-625 and 22 M.R.S.A. §§ 1471-A-X

Effective Date January 1, 2007

Last Amended May 1, 2008

Establishes procedures and standards for applicators applying pesticides inside occupied private and public buildings other than K–12 schools that are covered by Chapter 27. This chapter also sets forth the requirements for notification about pending pesticide applications to residents of rented space, employees of agencies, businesses and institutions, and parents or guardians of children in licensed child care facilities and nursery schools.

Chapter 27 Standards for Pesticide Application and Public Notification in Schools

Statutory Authority 7 M.R.S.A. §§ 601-625 and 22 M.R.S.A. §§ 1471-A-X

Effective Date August 30, 2003

Last Amended August 29, 2013

Establishes procedures and standards for applying pesticides in school buildings and on school grounds. This chapter also sets forth the requirements for notifying school staff, students, visitors and parents about pending pesticide applications.

Chapter 28 Notification Provisions for Outdoor Pesticide Applications

Statutory Authority 22 MRSA §1471-M(2)D

Effective Date September 22, 1998

Last Amended May 24, 2015

Establishes procedures and standards for informing interested members of the public about outdoor pesticide applications in their vicinity. This chapter sets forth the requirements for requesting notification about pesticide applications, for posting property on which certain commercial pesticide applications have occurred and also establishes the Maine Pesticide Notification Registry structure and fees.

Chapter 29 Standards for Water Quality Protection

Statutory Authority 7 M.R.S.A. §§ 601-625 and 22 M.R.S.A. §§ 1471-A-X

Effective Date April 14, 1999

Last Amended May 1, 2008

Establishes standards for protecting surface water. This chapter establishes a 50-foot setback from surface water for mixing and loading of pesticides, sets forth requirements for securing containers on sprayers and cleaning up spills occurring within the setback zone, establishes restrictions on pesticide applications to control browntail moths near marine waters and requires an untreated 25-foot buffer zone for outdoor terrestrial broadcast pesticide applications near waters of the State.

Chapter 31 Certification and Licensing Provisions/Commercial Applicators

Statutory Authority 22 M.R.S.A., Section 1471-D
Effective Date January 1, 1983
Last Amended July 23, 2019

Describes the requirements for certification and licensing of commercial applicators.

Chapter 32 Certification and Licensing Provisions/Private Applicator

Statutory Authority 22 M.R.S.A. § 1471-D
Effective Date January 1, 1983
Last Amended July 23, 2019

Describes the requirements for certification and licensing of private applicators.

Chapter 33 Certification & Licensing Provisions/Private Applicators of General Use Pesticides (Agricultural Basic License)

Statutory Authority 22 M.R.S. §1471-D(2-D), 22 M.R.S. §1471-M(1)(C-1)
Effective Date December 26, 2011
Last Amended December 9, 2014

Describes the requirements for certification and licensing of private applicators using general-use pesticides to produce plants or plant products intended for human consumption as food, where the person applying the pesticides or the employer of the person applying the pesticides derives \$1,000 or more in annual gross income from the sale of those commodities.

Chapter 34 Certification and Licensing Provisions/Dealers

Statutory Authority 22 M.R.S.A. § 1471-D
Effective Date January 1, 1983
Last Amended September 23, 2015

Describes the requirements for certification and licensing of pesticide dealers.

Chapter 35 Certification and Licensing Provisions/Spray Contracting Firms

Statutory Authority 22 M.R.S.A. § 1471-D
Effective Date February 6, 1985
Last Amended September 23, 2015

Describes the requirements for certification and licensing of spray contracting firms.

Chapter 36 Certification and Licensing Provisions/Monitors and Spotters for Forest Insect Aerial Spray Program

Statutory Authority 22 M.R.S.A. § 1471-D
Effective Date February 6, 1985
Repealed July 23, 2019

Describes the requirements for certification and licensing of monitors and spotters for major forest insect aerial spray programs.

Chapter 40 Restricted and Limited-Use Pesticides

Statutory Authority 22 M.R.S.A., Chapter 258-A and 7 M.R.S.A., Chapter 103

Effective Date July 6, 1979
Last Amended April 30, 2007

Lists the pesticides classified by the Board as restricted or limited use and describes procedures governing their sale and use.

- Chapter 41 Special Restrictions on Pesticide Use
Statutory Authority 5 M.R.S.A. §§ 8051 et seq. 7 M.R.S.A. §§ 601-610; 22 M.R.S.A. §§ 1471-A, 1471-B, 1471-C, 1471-D, 1471-M
Effective Date March 8, 1981
Last Amended December 9, 2014
Describes special limitations placed upon the use of (1) aldicarb (Temik 15G) in proximity to potable water bodies; (2) trichlorfon (Dylox, Proxol); (3) hexazinone (Velpar, Pronone), (4) aquatic herbicides in the State of Maine and (5) plant-incorporated protectants.
- Chapter 50 Record Keeping and Reporting Requirements
Statutory Authority 22 M.R.S.A., Chapter 258-A §1471-G, M and R
Effective Date July 6, 1979
Last Amended July 23, 2019
Describes the types of records and reports which commercial applicators, commercial agricultural producers, limited- and restricted-use pesticide dealers, spray contracting firms and monitors must maintain and submit to the Board.
- Chapter 51 Notice of Aerial Pesticide Applications
Statutory Authority 22 M.R.S.A. §1471-G, M, R and T
Effective Date August 12, 1985
Last Amended September 11, 2014
Describes the notification requirements for persons contracting aerial pesticide applications to control forest, ornamental plant, right-of-way, biting fly and public health pests.
- Chapter 60 Designation of Critical Pesticide Control Areas
Statutory Authority 5 M.R.S.A., § 8051 et seq. and 22 M.R.S.A., §§ 1471-F and M
Effective Date July 6, 1979
Last Amended December 26, 2011
Establishes criteria which the Board will use in deciding if an area should be designated as a critical pesticide control area. In addition, these regulations specify the procedures parties must follow in requesting such a designation. These regulations also define the locations that have been designated as critical areas by the Board.
- Chapter 70 Adjudicatory Proceedings
Statutory Authority 22 M.R.S.A., Chapter 258-A
Effective Date July 6, 1979

Describes procedures the Board must follow in conducting hearings concerned with pesticide certification, licenses and permits.

Chapter 80 Advisory Rulings
Statutory Authority 22 M.R.S.A., Chapter 258-A
Effective Date July 6, 1979

Describes the procedures any interested person must follow in requesting an advisory ruling to determine if the Board's Statute and rules apply to his situation.

Chapter 90 Complaints
Statutory Authority 22 M.R.S.A., Chapter 258-A
Effective Date July 6, 1979
Last Amended October 2, 1996

Describes the procedure a person must follow in bringing a complaint to the Board and outlines the steps the Board may take in response.

Regulatory Agenda

AGENCY UMBRELLA-UNIT: **01-026**

AGENCY NAME: **Maine Department of Agriculture, Conservation and Forestry, Board of Pesticides Control**

AGENCY CONTACT PERSON: Emily Horton, 22 SHS, Augusta, Maine 04333, (207) 287-4909, emily.k.horton@maine.gov

RULES ADOPTED SINCE THE LAST REGULATORY AGENDA:

FINALLY ADOPTED

Chapter 10 Definitions and Terms

1. Amended the definition of “Aerial Applicator” to allow certification as a private applicator.
2. Amended the definition of property not deemed to be open to use by the public to include where the public has not been permitted on the treated portion of privately held recreational land within seven days of a pesticide application for vegetation management.

Chapter 31 Certification and Licensing Provisions / Commercial Applicators

1. Added requirement for a government-issued photo id for all exams.
2. Established annual training requirements for noncertified applicators of restricted use pesticides.
3. Established minimum age for individuals certified as commercial applicators.
4. Described the credentials which will be issued to each applicator verifying certification.
5. Removed section on transitioning to revised licensing and certification requirements since the time frame has passed.
6. Updated the names of certain categories to align with current exams.
7. Removed requirement to collect social security number.

8. Changed cost of master exams from \$50 for both to \$10 for Master Regulations exam and \$40 for Master Oral exam.
9. Removed exemption for those certifying in the Post-Harvest Treatment category from having to take the master exams.
10. Removed requirements for applicators to receive continuing education credits in specific categories as the Board doesn't categorize courses this way.
11. Removed fee for replacement and upgraded licenses as the Board no longer charges for these due to improved software.

Chapter 32 Certification and Licensing Provisions for Private Applicators

1. Amended competency standards to include those required by the EPA Revised Certification Standards: label comprehension; responsibilities for supervisors of noncertified applicators; stewardship; ability to read and understand pesticide labeling.
2. Removed option to provide oral exam.
3. Added supplemental private categories which can be obtained in addition to certification for private licensure: aerial application; soil fumigation; non-soil fumigation.
4. Established minimum age for individuals certified as private applicators.
5. Described the credentials which will be issued to each applicator verifying certification.
6. Added requirement for a government-issued photo id for all exams.

Chapter 50 Reporting Requirements for Applicators and Dealers

1. Added requirements to dealer records of sales (required by the EPA Revised Certification Standards):
 - o customer address
 - o issuing authority, certification expiration date, and categories of certification in addition to the applicator's certification number

Repeal of Chapter 36 Certification and Licensing Provisions for Monitors and Spotters for Forest Insect Aerial Spray Program

PROVISIONALLY ADOPTED

Chapter 26 Standards for Indoor Application of Pesticides

1. Amended the definition of "occupied buildings" to mean fully enclosed indoor spaces inside buildings and that roofed structures which are otherwise not enclosed are not buildings for the purpose of the rule.

Chapter 27 Standards for Pesticide Applications and Public Notification in Schools

1. Changed wording to clarify that all pesticide applications, inside and outside, must be included in the pest management activity log.
2. Changed wording to clarify that applications made to the exterior of buildings are included in the rule.

3. Added personal insect repellents to the list of products which do not require licensure.

Chapter 28 Notification Provisions for Outdoor Pesticide Applications

1. Stated that the telephone number required on signs must be a working number.

EXPECTED 2019 RULE-MAKING ACTIVITY:

CHAPTER 10: Definitions and Terms

STATUTORY AUTHORITY: 22 MRSA §§1471A-X

PURPOSE: In 1996, the Board consolidated all rule definitions in this Chapter. This chapter must be updated each time a new definition is added or amended. It received a series of housekeeping amendments in January 2005 and in 2012. The rule was amended in 2019 to change the definition of aerial applicator to allow for the use of UAS by those with agricultural pesticide applicator licenses. Issues may arise necessitating further amendment.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All individuals and businesses affected by the Board's rules.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 20: Special Provisions

STATUTORY AUTHORITY: 22 MRSA §§1471A-X

PURPOSE: In 2007, the Board amended Chapter 20 to clarify that authorization from the property owner is required prior to applying a pesticide. The Board passed an amendment in 2013 to eliminate the need for individual homeowner permission in the event of a public health threat. In 2014, a requirement was added for applicators making outdoor treatments to residential properties to implement a system to positively identify application sites in a manner approved by the Board. The Board may develop specific duties that an employer must perform to protect their employees from occupational exposure to pesticides. These amendments may be modeled on the 2015 Federal Worker Protection Standard and the 2017 Federal Pesticide Applicator Certification Standard. In addition, Chapter 20 is a key chapter for the Board when it determines that additional regulation is in the public interest, so other amendments are also possible.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Applicators making outdoor treatments to residential properties; since this is already required by policy, there will be no real affect.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 22: Standards for Outdoor Application of Pesticides by Powered Equipment in Order to Minimize Off-Target Deposition

STATUTORY AUTHORITY: 7 MRSA §§ 601-625 and 22 MRSA §§1471A-X

PURPOSE: Aerial spraying is a very controversial issue and the Board completed a major overhaul of this chapter in 2009 to provide greater protection for area residents. In 2013 the Board passed amendments to exempt the sections concerning Identifying and Recording Sensitive Areas, Presence of Humans and Animals, and certain specifics of Site Plans in the event of a public health threat. In 2014, the requirement of identifying sensitive areas was eliminated for commercial applications conducted under categories 6A (rights-of-way vegetation management), 6B (general vegetation management) and

7E (biting fly & other arthropod vectors [ticks]). Further experience with the revised rule may reveal the need to make additional modifications.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All applicators making outdoor applications with powered application equipment.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 24: Pesticide Storage Facility Standards/Pesticide Distributors

STATUTORY AUTHORITY: 22 MRSA § 1471-O and 7 MRSA § 610(2)(B)

PURPOSE: The Board has received letters expressing concern that odors and spilled chemicals may represent a health risk for both employees and customers who enter the self-service display areas of general-use pesticide distributors. In addition, inequities have been noted between the requirements for agricultural distributors versus the requirements for warehouse-style retailers. Finally, a few provisions are somewhat vague and would benefit from additional clarity. Consequently, the Board may adjust these standards to address concerns.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Pesticide retailers.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 26: Standards for Indoor Application of Pesticides

STATUTORY AUTHORITY: 22 MRSA §§1471A-X and 7 MRSA §§ 601-625

PURPOSE: The Board adopted this chapter during 2006 and it became effective in January of 2007. An amendment was made during 2007 to address concerns raised by structural applicators. Concerns have arisen about the higher risk of indoor applications versus outdoor applications. Further refining may be necessary for this rule.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All structural pest control applicators, owners or managers of businesses, institutions and apartment houses, as well as interested members of the general public.

CONSENSUS-BASED RULE DEVELOPMENT: Not Contemplated

CHAPTER 27: Standards for Pesticide Applications and Public Notification in Schools

STATUTORY AUTHORITY: 22 MRSA §§1471A-X and 7 MRSA §§ 601-625

PURPOSE: The Board adopted this rule in 2003 and made some housekeeping amendments to it during 2005, 2007 and 2012. Several minor clarifications have been identified which should be addressed. Since use of pesticides on school grounds continues to garner legislative and public attention, further amendments may be necessary in the future.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All public and private school systems as well as commercial applicators and all persons using school buildings and grounds.

CONSENSUS-BASED RULE DEVELOPMENT: Not Contemplated

CHAPTER 28: Notification Provisions for Outdoor Pesticide Applications

STATUTORY AUTHORITY: 22 MRSA § 1471-M (2)(D)

PURPOSE: This rule was adopted in 1998 and slightly amended in 2000, 2007, 2011 and 2014. It contains all of the Board outdoor notification requirements. In 2014, it was amended to require posting for applications under categories 6B (general vegetation management) except when making applications

to sidewalks and trails, power substations, and railroad sidings; and 7E (biting fly & other arthropod vectors [ticks]) and to require notice per Board policy for applications to sidewalks and trails under 6B (general vegetation management). The Maine Legislature recently enacted and subsequently repealed a pesticide notification registry. There is some sentiment indicating that additional legislative initiatives may be forthcoming on this subject, which would likely necessitate rulemaking. This chapter also needs some updating to reflect the evolution of its usage.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Pesticide applicators and persons who live near sprayed sites. Persons who believe they are sensitive to pesticides. Regulated parties include all commercial pesticide applicators, the landowners who hire them and anyone who applies pesticides outdoors in the vicinity of persons on the registry.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 29. Standards for Water Quality Protection

STATUTORY AUTHORITY: 22 MRSA § 1471-M(2)(D)

PURPOSE: A recent federal court decision now requires applicators to work under a Maine Pollution Discharge Elimination System permit for certain outdoor pesticide applications that have the potential for a portion of the spray to deposit in surface water, so Chapter 29 may need to be amended to address this change. In addition, the Board may look to exempt certain urgent applications from the 25-foot buffer requirement. Recently, concerns have arisen relative to pesticides and the marine environment. A current outbreak of browntail moth may necessitate amendments to this rule around products approved for use for control. Finally, water quality has emerged as one of the more significant environmental fate concerns with pesticides. All of these issues suggest a possible need to amend this chapter.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Pesticide manufacturers, outdoor applicators, persons owning land next to surface water bodies and environmental groups.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 31: Certification and Licensing Provisions for Commercial Applicators

STATUTORY AUTHORITY: 2 MRSA §§ 1471-D and S

PURPOSE: The Board amended this chapter during 2007 and 2014, but may find it necessary to revise this regulation again to accommodate new licensing software, streamline processes or deregulate certain types of pesticide applications. Several amendments were adopted in 2015. Changes to the federal certification and training requirements necessitated amendments, which were adopted in 2019.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All persons licensed by the Board.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 32: Certification and Licensing Provisions for Private Applicators

STATUTORY AUTHORITY: 2 MRSA §§ 1471-D and S

PURPOSE: The Board may amend any of its current regulations dealing with the examination, certification, licensing and relicensing of private applicators to accommodate new licensing software, streamline procedures and/or adjust the fees. An amendment to reduce the waiting time for re-taking a failed exam was passed in 2014. Changes to the federal certification and training requirements necessitated amendments, which were adopted in 2019.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All persons licensed by the Board.
CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 33: Certification Provisions/Private Applicators of General Use Pesticides

STATUTORY AUTHORITY: 2 MRSA §§ 1471-D (2-D), 22 MRSA 1471-M (1) (C-1)

PURPOSE: This new rule was recently adopted to fulfill the requirements of Public Law 2011, Chapter 169 which requires pesticide applicator licensing for certain farmers who apply only general use pesticides. Since it is a newly adopted rule, experience may reveal some desirable upgrades. In addition, the potential for new licensing software may also necessitate changes. An amendment to reduce the waiting time for re-taking a failed exam was passed in 2014. Changes to the federal certification and training requirements will necessitate amendments to this rule.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All persons licensed by the Board.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 34: Certification and Licensing Provisions for Pesticide Dealers

STATUTORY AUTHORITY: 2 MRSA §§ 1471-D and S

PURPOSE: Amendments adopted in 2015 included shortening the wait time to re-take an exam after failing and changing both the license and certification periods to three years. Going forward, the Board may amend its current regulation to require pesticide dealers to have a company license in addition to having their employees licensed. Also, the license fee is outdated. Other changes may be necessary as the Board reviews all the licensing chapters with a view toward streamlining and simplifying procedures.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Pesticide distributors.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 35: Certification and Licensing Provisions for Spray Contracting Firms

STATUTORY AUTHORITY: 22 MRSA §§ 1471-D and S

PURPOSE: In 2015 this chapter was amended to remove the requirements for spotters/monitors for forest insect aerial spray program. The license period was also changed in 2015 from two years to three. The Board may amend this chapter dealing with licensing and relicensing of firms to accommodate new licensing software, continue to streamline procedures and/or adjust fees.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All persons licensed by the Board.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 40: State Restricted Pesticide List

STATUTORY AUTHORITY: 7 MRSA §§ 601-625 and 22 MRSA §§ 1471A-X

PURPOSE: The Board amended this chapter in 2007 and may update its Restricted Use List by deleting products that are no longer registered. Also, it may be necessary to modify the list as a result of the Board's registration review process which may necessitate adding any products which present a unique threat to Maine's public health or the environment.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Pesticide manufacturers, pesticide applicators and environmental groups interested in pesticide issues.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 41: Special Restrictions

STATUTORY AUTHORITY: 7 MRSA §§ 601-625 and 22 MRSA §§ 1471A-X

PURPOSE: The Board amended this chapter in 2011 to relax some administrative burdens for the use of *Bt* corn seed, and in 2014 to reduce the restrictions on the use of hexazinone. This is a key chapter for the Board to implement appropriate restrictions associated with certain pesticides or classes of pesticides that pose unique risks to Maine. There have been significant changes to this chapter in the last ten years, and additional amendments are likely in the future.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All applicators and environmental groups.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 50: Reporting Requirements for Applicators and Dealers

STATUTORY AUTHORITY: 22 MRSA §§ 1471-G and M

PURPOSE: The Board adopted several housekeeping amendments to this chapter in January 2005 and 2019. Changes to Chapters 22, 27 and 41 have created additional record keeping requirements that might be more appropriately incorporated in Chapter 50. Current rulemaking around the licensing chapters may also necessitate changes to record keeping requirements.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All private and commercial applicators, dealers and consumer or environmental groups.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 51: Notice of Aerial Pesticide Applications

STATUTORY AUTHORITY: 22 MRSA § 1471-R

PURPOSE: Legislative activity around pesticide notification may necessitate amendments to this chapter. The Board has expressed an interest in regulating unmanned aircraft systems, which may require amendments to this chapter.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Aerial applicators, paper companies, utility officials, and environmental groups.

CONSENSUS-BASED RULE DEVELOPMENT: Not contemplated

CHAPTER 60. Designation of Critical Pesticide Control Area

STATUTORY AUTHORITY: 22 MRSA § 1471 - M (4)

PURPOSE: Upon receipt of a petition, the Board would be required to consider rulemaking to restrict pesticide usage within a designated area to protect public health, threatened or endangered species or their habitat, surface or ground water, or other environmental resources. During 2011, the Board repealed one of the two designated critical control areas since the subject of protected area no longer existed.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: Persons living within the requested area and all applicators wishing to do business within the designated zone.

CONSENSUS-BASED RULE DEVELOPMENT: The Board engaged in consensus-based rule development the last time a request was received and would likely try it again.

NEW RULE CHAPTER (# to be assigned): Unmanned Aircraft Systems, Unmanned Ground Systems

STATUTORY AUTHORITY: 22 MRSA §§1471A-X and 7 MRSA §§ 601-625

PURPOSE: The Board is considering implementing rules around both unmanned aircraft systems (UAS) and unmanned ground systems (UGS) for use in pesticide applications.

SCHEDULE FOR ADOPTION: Prior to September 30, 2020

AFFECTED PARTIES: All pesticide applicators and dealers, as well as interested members of the general public.

CONSENSUS-BASED RULE DEVELOPMENT: Contemplated

CONTACT PERSON: Megan Patterson, 28 SHS, Augusta, Maine 04333 (207) 287-2731

Megan.L.Patterson@maine.gov

G. COORDINATION WITH OTHER AGENCIES

The Board's staff has frequent contact with employees in other agencies to discuss items of mutual interest or shared responsibility. Some of the best examples are detailed in the following paragraphs.

- *Cooperative Extension:* The Board's staff works very closely with the Cooperative Extension's Pest Management Office at the University of Maine on pesticide applicator training activities. This relationship has been ongoing since 1976 when training programs were initially offered to assist agricultural growers in qualifying for their first private applicator licenses to purchase and apply restricted-use pesticides. In recent years, the Board's Manager of Pesticide Programs and the staff in the Pest Management Office have provided a wide variety of recertification training programs to keep licensees updated. In order to continue offering the most relevant training, the two agencies recruit national experts to present the latest information on such topics as pest biology, application technology, integrated pest management techniques and public risk communications.
- *EPA:* In addition to the many contacts with EPA Region 1 staff regarding management of the federal grants, the Board's staff have also collaborated to offer training programs especially on IPM in schools. They are actively engaged in pesticide issues at the national level through membership in the Association of American Pesticide Control Officials (AAPCO), American Association of Pesticide Safety Educators (AAPSE) and the State FIFRA Interagency Research Evaluation Group (SFIREG). The Board's Director is currently serving on the Board of Directors for AAPCO. In addition, there are two working committees that meet twice a year with EPA Headquarters officials to discuss potential new federal initiatives and prepare issue papers for consideration by the full SFIREG. The Board's previous Pesticides Toxicologist and the Board's Director has served one term on the Pesticide Operations and Management Working Committee that primarily addresses registration, certification, and enforcement related pesticide issues of national or regional importance. The Board's water quality specialist has served one term on the Environmental Quality Issues that primarily addresses issues related to water quality, threatened and endangered species, human health and the environment, and risk assessments. Certification and Training Assessment Group (CTAG) is in the process of being reformed and will work on ways to continuously improve the pesticide certification and licensing and safety education programs. When it is reformed, Board staff intend to participate in CTAG activities. The Board's Water Quality Specialist and Toxicologist participate in two EPA Region 1

Roundtable meetings per year to share water quality information. Board staff frequently present at and serve on planning groups for EPA sponsored “PREP” meetings. Pesticide Regulatory Education Program (PREP) meetings bring together state lead agency and Regional EPA staff for week-long trainings.

- *DEP*: Since 1996, the Board’s staff has worked jointly with staff in DEP’s Bureau of Remediation and Waste Management to conduct annual collections of obsolete pesticides. The Board maintains a list of growers and homeowners with banned or otherwise unusable products on their property. Annually, bids are sought from licensed hazardous waste contractors to properly package and transport the inventory of chemicals to a licensed out of state disposal facility. The DEP staff assists the Board in the evaluation of bids and supervises the collections at their four regional offices in Presque Isle, Bangor, Augusta and Portland. In response to ongoing requests to better serve eastern Maine, the 2019 collection sites included Jonesboro. If utilized, collection at this site will be repeated in 2021. Additionally, DEP staff are often called upon to address pesticide caches deemed too dangerous for transportation by homeowners. In those situations, DEP will travel to the site in question, over-pack the pesticides, and safely transport them to their temporary storage facilities for inclusion in the collection program.

The Board’s Toxicologist actively assisted DEP with their general permit for allowing herbicides to be used to control invasive plant species in lakes and ponds. Board and DEP staff have also discussed such issues as aquatic pesticide application permits and potential for nonpoint source pollution of both groundwater and surface water.

The Board continues to work closely with DEP staff on regulating the use of aquatic herbicides in public lakes and ponds. Pesticides with an aquatic herbicide use remain state restricted pesticides and a current list of these pesticides is maintained on the BPC website.

- *Multi-Agency Projects*:
 - The Board’s staff has been involved with DEP, the Department of Inland Fisheries and Wildlife (IF&W) and the Atlantic Salmon Authority regarding potential impacts of pesticides on Atlantic salmon.
 - BPC staff work with the MFS and Maine CDC regarding the control of browntail moth in urban areas. With the involvement of Maine Cooperative Pest Management Office, BPC and MFS conduct trainings for pesticide applicators who intend to conduct browntail moth management work.
 - BPC and MFS have recently re-evaluated the BPC policy that prescribes which pesticides may be used within 250 feet of the marine zone for browntail moth. This collaboration included reviewing best management practices for browntail moth control and organizing a public roundtable / listening session. Risk assessments based on this new information are currently on-going and expected to be complete in winter 2019-2020.
 - Recent water quality research has been conducted in cooperation with DEP; City of Ellsworth harbormaster; the Maine Warden Service (IF&W); Maine Maritime Academy; wastewater treatment facilities in Farmington, Augusta, and Sanford; Casco Bay Estuary; South Portland Stormwater Program Coordinator; the U.S. Coast Guard; Essex Hydro; and a citizen volunteer.
 - Board staff works closely with the DEP, Maine Department of Health and Human Services (DHHS), Maine Geological Survey, Maine’s Soil and Water Conservation

Districts and regional planning councils to maintain the Board's Generic Plan for Pesticides and Groundwater.

- Employees from these agencies as well as those of other private and governmental entities have been enlisted as volunteers to serve on the Board's Medical Advisory and Environmental Risk Advisory Committees. These groups focus on specific issues by reviewing scientific literature, analyzing available monitoring data and making recommendations to the Board on additional steps that might be taken to minimize risks from pesticides.
 - Board staff are participating in an effort organized by the Department of Labor to encourage the use of lower risk chemicals in the workplace, as dictated by PL 47. This resolve directs the DOL to develop and implement a "framework that encourages employers to identify safer alternatives to hazardous chemicals".
 - The Board enlisted the aid of 30 partners to form the Maine YardScaping Partnership and develop a sustainable landscaping initiative with the goal of inspiring Maine people to create and maintain healthy landscapes through ecologically based practices that minimize reliance on water, fertilizer and pesticides. The partners include the University of Maine Cooperative Extension, DEP LakeSmart, Friends of Casco Bay, Soil and Water Conservation Districts, Congress of Lake Associations, Maine Organic Farmers and Gardeners Association, Southern Maine Community College, City of Portland, City of Brunswick, Carroll Associates and LNC Landscape Architecture, (the complete list of partners can be found at <http://www.yardscaping.org/about.htm>). Board staff have a continued interest in the concepts at the foundation of the YardScaping program. Over the next few years, staff intend to begin the much need process of updating these materials and the associated YardScaping website. For more information, go to the YardScaping website at <http://www.yardscaping.org>.
 - The Board funds a training grant administered jointly by the Maine Mobile Health Program (formerly Maine Migrant Health) and Eastern Maine Development Corporation, which assists farmers, foresters, nursery and greenhouse operators to comply with the federal Worker Protection Standard by providing training to both agricultural workers and pesticide handlers.
 - The Board staff participate in the Maine Emergency Management Agency's training events as representatives of the Bureau of Agriculture.
- *Maine CDC:*
 - Previously, the Board's Toxicologist worked with CDC Toxicologists to set Maine Exposure Guidelines (MEGs) for pesticides in drinking water. In 2019, CDC abandoned the creation and updating of MEGs.
 - The Board's Toxicologist, the Manager of Pesticide Programs, and the Board's Director have been part of the CDC's Vector-borne Disease Working Group since its creation in 1999. This group was originally called the West Nile Virus Task Force, but was renamed in 2005 to recognize the need to address other mosquito-borne diseases such as Eastern Equine Encephalitis and tick-borne Lyme disease.
 - Board staff have worked with ME CDC in preparation to complete a Mosquito Arboviral Surveillance and Response Plan which would plan out the state's response should a public health emergency be declared in response to the threat of mosquito borne disease.

This plan involves coordinating the responses between the ME CDC and the DACF should wide-area mosquito treatments be needed.

- The Board funds CDC's vector monitoring program.
 - Board staff regularly participate in public education events arranged by CDC staff on tick vectored disease.
 - The Board's Director, Manager of Pesticide Programs, and Manager of Compliance works regularly with the CDC Sanitarians to discuss the use of pesticides in the areas they inspect, including food handling establishments and swimming pools/spas. In addition, the Board's Toxicologist and Water Quality Specialist have worked with other Health Engineering staff regarding drinking water contaminants.
- *Bureau of General Services*: Historically, the Board's Toxicologist and the Manager of Pesticide Programs have worked with a variety of state agencies to help identify the lowest risk chemicals for use in cleaning and maintenance of state facilities. Cooperating agencies have included the Bureau of General Services, Division of Purchases, CDC, DEP and Bureau of Labor Standards. The Board expects that similar efforts will be needed in the future, as the lists are refined and newer choices are added.
 - *Department of Education*: The Board's staff works closely with staff in the Department of Education to coordinate training programs on school IPM for school officials and to develop BMPs for school grounds, athletic fields and playgrounds. Staff has created technical factsheets for educators on the use of disinfectants and the use of insect repellents.
 - *Maine Poison Center*: The Board's Toxicologist serves as a technical consultant to the Northern New England Poison Center (NNEPC), located at Maine Medical Center in Portland. The value of this relationship is demonstrated when technical information regarding pesticide exposures is urgently needed when there are major pesticide spills, such as helicopter crashes or pesticide fires at storage locations. The Toxicologist has participated in NNEPC's recent tabletop exercises. The Board's Toxicologist also participates in ongoing training of Poison Center staff on pesticide issues.
 - One ongoing project is the tracking of pesticide exposures in Maine in an effort to target educational programs. Efforts have included contacting local and national poison control centers, national animal poison control centers, Department of Labor to acquire workers compensation claim data, review of EPA's 6(a)(2) incident reports, and National Pesticide Information Center to gather data.
 - *Maine Indoor Air Quality Council (MIAQC)*: The MIAQC was established in March 1998 as a 501(c)(3) state nonprofit corporation to promote better quality of life and increased productivity through improved indoor air quality environments. The stakeholders for this group include health professionals, engineers, architects, managers of facilities and others. Historically, the Board's Manager of Pesticide Programs has been involved with many of their training programs regarding the use of disinfectants and mold remediation. The current Manager of Pesticide Programs continues to review and approve MIAQC trainings for the purpose of pesticide application continuing education.
 - *Maine Rural Water Association (MRWA)*: MRWA is the lead support organization for public water suppliers to maintain compliance and licensure. The Board's Toxicologist will participate in upcoming events training public water suppliers about current-use pesticides.

- *Other:* The Board's Toxicologist has worked on the University of Southern Maine Institutional Biosafety Committee and is on the Board of Directors for the North Atlantic Chapter of the Society of Environmental Toxicology and Chemistry.
- *Department of Agriculture, Conservation and Forestry:* The Board's staff is housed in the Department and works most closely with the Department's IPM Entomologist in promoting IPM in schools and coordinating training sessions and workshops on this subject. The staff also assists the Department in dealing with food safety issues, investigating agricultural complaints that may include pesticide use, and developing BMPs to help prevent future complaints.

H. IDENTIFICATION OF CONSTITUENCIES SERVED

The entire population of Maine is the Board's most important constituency. Most of the state's population will occasionally use pesticides—whether they realize it or not—since pesticides are very broadly defined and include common disinfectants, personal insect repellents, organic and natural products, plant rooting hormones, and some paints and stains.

Citizens sometimes complain that they have been adversely impacted by a pesticide application, and these complaints are treated by the staff as the highest priority. An inspector is generally able to visit the site the same or the next day to collect appropriate samples and pertinent information from both the complainant and applicator while events are fresh in their minds. Inspectors also engage outside agencies and departmental expertise where specialized knowledge is required.

The staff routinely answers questions from persons seeking information about why pesticides are used and what risks are posed by their use. Any medical emergencies are referred to the Northern New England Poison Control Center.

Questions are often received about how to control specific pest problems. These individuals are regularly referred to either the Pest Management Office in Orono, the MFS Entomology Laboratory or a state-sponsored pest management website such as the ones jointly sponsored by the Board and Cooperative Extension Pest Management Office.

In recent years, the Board has identified the at-home pesticide applicator as the user group with the greatest need to minimize reliance on pesticides. As a result, the Board has worked with Cooperative Extension, DEP and other natural resource organizations to promote sustainable, science-based strategies for managing pests.

The most readily identifiable constituency of the Board is its licensed community of over 4,500 individuals and firms that are licensed to sell or apply pesticides. The Board is committed to providing them with information so they may obtain appropriate licenses in a prompt and efficient manner. As previously indicated, the Board also expends considerable efforts to ensure they receive the latest changes in pesticide information so they may handle products safely and in full compliance with all federal and state laws and regulations. As a result of Public Law 2011, Chapter 169, in 2015 all farmers growing more than \$1,000 of plants for direct human consumption must be licensed (previously only those using restricted-use pesticides needed a license), which increased the number of private applicators. A Department of Health and Human Services statute requiring growers of medical marijuana to obtain a license also caused an increase. Ongoing changes to laws around adult use cannabis and hemp will likely add new constituents.

I. USE OF ALTERNATIVE DELIVERY SYSTEMS

Pesticides and their regulation tend to be complex and, by their very nature, controversial. Consequently, the credibility of the regulatory agency is paramount to its effectiveness. For this reason, the Board believes most aspects of pesticide regulation are best left to governmental entities which have no vested interest in the public policies or enforcement outcomes. Therefore, there are only limited opportunities for privatization of the regulatory program, as described in the following:

- Due to the lack of a Maine laboratory that can analyze monitoring and enforcement samples for current use pesticide residues, the BPC contracts with state, university, and private laboratories in other states that have EPA approved Quality Assurance Project Plans.
- The Board has committed significant financial and staff resources to working with the private contractor, PEGA Systems, in the construction of the cloud-based software solution known as the Maine Pesticide Enforcement, Registration and Licensing System (MEPERLS). MEPERLS allows the Board to interface with constituents through an electronic portal for exam enrollment, license renewal, product registration, report submission, electronic payment, and continuing education tracking. This system not only reduces paperwork, but also allows constituents to conduct business with the Board regardless of the time of day or day of the week. The staff continues to find ways to further utilize this system to streamline and expand services.
- The Board and DHHS agreed to allow swimming pool and spa operators to be certified to apply disinfecting chemicals by one of four private, non-profit foundations or institutes that provide specific training on these chemicals and their appropriate application methods rather than by the state.
- The Board accepts on-line pesticide applicator training programs for recertification credit. In addition, it has occasionally utilized the Department of Education's Asynchronous Transfer Mode equipment to transmit video, audio and computer data over the same network so presentations by recognized pest control experts may be transmitted to groups of applicators gathered at several remote sites around the state. This reduces the cost of having the speakers in travel status for several days and also reduces the distance applicators must travel to obtain their recertification credits.
- The Board has invested heavily in a major Internet presence, reasoning that it is the least expensive and most effective means of disseminating information to its constituency. Information about exams, state and federal laws, training opportunities, pesticide labels and SDSs, and a multitude of links to pest management resources can all be found through Board-sponsored websites.
- The Board also utilizes its many partnerships with state agencies and with a great variety of non-profit groups and organizations to get information to the public, and to applicators and dealers, including a variety of opportunities for continuing education credits (*see Section G. Coordination with other Agencies*).

J. EMERGING ISSUES

- *Pesticide Notification:* As part of an effort to reduce conflicts over aerial spraying, the Board has been involved in discussions about updating the pesticide notification provisions (CMR 01-026, Chapter 28) dating back to 2006. In 2009, the Maine Legislature intervened by enacting PL 2009, Chapter 378, An Act to Require Citizen Notification of Pesticide Applications Using

Aerial Spray or Air-carrier Application Equipment. That law was subsequently amended in the spring of 2010 (PL 2009, Chapter 584), and then repealed in the spring of 2011 (PL 2011, Chapter 332). Brought before the 129th Legislature, LD 101 was introduced and withdrawn, but proposed the adoption of the same language associated with PL 2009, Chapter 584. Following public request, the Board is now engaged in public discussions of existing notification requirements.

- *National Pesticide Topics:* Recent national headlines have covered dicamba, glyphosate, neonicotinoids, and chlorpyrifos. The Board invests significant staff time to respond to enquiries from the public on these topics. Staff supplies environmental organizations, individuals from the public, legislators, pest professionals, and pesticide educators with detailed information on these current topics. Staff also attend national meetings with other state lead agencies and EPA to learn how to best manage all pesticides, not just the topical ones, to reduce undo harm from their use. Ultimately, this leads to continuous training for pesticide applicators and communicating with the public the basic principles of risk-benefit assessment and the current regulatory framework in place to protect them.
- *Licensing of Commercial Farmers Using Only General Use Pesticides:* In 1999, the Board raised the issue of whether commercial farmers who do not apply restricted-use pesticides would benefit from some level of training about pesticide use. It reasoned that restricted-use pesticides were being phased out, while overall pesticide use was increasing. Moreover, a broad range of potential concerns about improper pesticide use had been identified during the 1980s and 1990s, including food safety, contamination of groundwater and surface water, applicator and farmer worker safety, chronic health concerns, bee mortality, and pesticide drift and volatility. The Board concluded it was not its place to recommend an expanded licensing or training requirement, and set the issue aside. The issue resurfaced during the Board's 2010 planning session, when it was raised by the Board member with agricultural expertise. Again, the Board refrained from further pursuing the issue. However, the issue was brought before the 125th Legislature in the form of LD 975, which was enacted by PL 2011, Chapter 169. The Board then implemented the requirements which included promulgating a new rule and then training and testing an additional 500 to 600 commercial farmers. Approximately half of these licenses are held by producers of cannabis crops and with the legalization of adult use cannabis, staff anticipate further demand for certification and licensure.
- *Pesticide Use on Cannabis:* Growers of cannabis are extremely motivated to ensure the success of their highly valued crop which leads, too frequently, to inappropriate pesticide use. Each state that allows some form of legal cannabis has encountered problems with pesticide enforcement. The problem is two-fold: 1) there is currently not enough health information for state agencies to determine what constitutes acceptable pesticide usage, and 2) because cannabis is not federally legal, state entities face challenges to their delegated enforcement authority. Maine is further challenged by the lack of an accredited in-state lab capable of analyzing for pesticide residues.
- *School IPM:* The Board promulgated a rule (CMR 01-026, Chapter 27) requiring the use of IPM in K through 12 schools in 1993. However, public concerns about children's exposure to pesticides persist, which was illustrated by the introduction of LD 837 before the 125th Legislature. The Maine Legislature amended LD 837 when it enacted Resolve 2011, Chapter 59, which directs the Board to develop BMPs for the use of pesticides on school grounds and to assess compliance with its current School IPM rule. The public remained concerned about the transparency of pesticide use in schools and notification of indoor and outdoor applications. The

Maine Legislature addressed these concerns in PL 2013, Chapter 63. Additionally, five unsuccessful bills addressing pesticide use on school grounds have been introduced since the 2011 GEA report.

- *Increase in Municipal Pesticide Policies and Ordinances:* The Board's staff also notes an increase in the number of municipal pesticide ordinances and policies that have been enacted in recent years. The general thrust of the movement focuses primarily on pesticide use on town or private residential/retail property and most of them favor either the use of BMPs or organic landscaping practices. All of the recent policies and ordinances have been enacted by coastal communities. This trend may be driven in part by a number of factors including concerns about the effects of pesticide runoff on marine organisms, increased urban and suburban density, increased invasive species management, and increased demand for disease vectoring arthropod management.
- *Vector-borne Diseases:* Human diseases transmitted by arthropod vectors—primarily mosquitoes and ticks—have been a growing concern in recent years as pests and diseases native to warmer climates continue to creep northward. In 2019, New England experienced an outbreak of Eastern Equine Encephalitis (EEE) and in Maine this resulted in the death of one horse. The northeast region responded with a heightened concern by government officials for the potential for human cases. In addition, the incidences of Lyme disease, Ehrlichiosis, Babesiosis, Anaplasmosis, and *Borrelia miyamotoi* in Maine have been steadily increasing, along with tick populations. Incidents of Powassan virus remain low, but present. Maine has not yet identified a human case of West Nile Virus (WNV), but the virus has been detected in mosquitoes. In 2019, WNV was detected in either humans or animals in all states within the continental United States except Maine. Wide-area mosquito-control projects are common in Massachusetts, New Hampshire, Connecticut and Rhode Island, including some aerial spray programs.

The Board has observed a substantial increase in the number of individuals sitting for the biting fly (ticks and mosquitoes) pesticide applicator certification exam. This is likely in response to growing public concern about tick and mosquito vectored diseases.

- *Water Quality Issues:* Concerns about pesticide contamination of groundwater and surface water began surfacing in the early 1980s when the granular insecticide Temik[®] was discovered in wells from potato growing regions of the country. Initially, EPA focused its assessment programs on the nation's groundwater, and states were enlisted to help with the assessment through their cooperative grants. The Board has conducted a variety of groundwater assessments and, overall, the results demonstrate the resource is in relatively good condition. Over the last two decades, state and federal regulators have shifted their attention to surface waters. A recent series of regional studies across the US conducted by USGS revealed notable statistics about the presence of pesticides in surface waters. The Board has conducted small-scale, surface-water- and sediment-monitoring studies to gauge the applicability of national data. Board studies have traditionally been funded through the cooperative federal grant, but in 2019 no funds were available in the federal grant for water quality monitoring. This is likely the first of many years in which the Board will need to choose to fund water quality monitoring with available dedicated funds or not conduct the work.
- *Minimum Risk Pesticides (25b Products):* In 1996 the EPA issued a Final Rule in the Federal Register exempting certain minimum risk pesticides from regulation in response to the public demand for more natural and less risky pesticides and to reduce the regulatory burden and costs on producers. The argument was that these chemicals that have long been in trade, often as food,

didn't need the same safety testing as conventional pesticides. To qualify as minimum risk and exempt from federal regulation, all ingredients in the formulation must appear on the EPA lists of accepted active and inert ingredients and labeling must meet a certain basic standard. This rule created a significant regulatory burden for states because the number of products claiming to be minimum risk continues to increase and the majority do not comply with established regulations. The pesticides registrar continually finds unacceptable labels with false and misleading claims and ingredients not allowed in minimum risk pesticides. Some minimum risk pesticides may also contain ingredients that producers claim are natural, but are actually quite potent and must be registered with EPA for proper safety testing; e.g., a locally produced repellent contained a large list of essential oils including eucalyptus oil which would require the product be EPA registered. An additional concern is the confusion minimum risk classification of pesticides creates around product safety, many of the minimum risk pesticides have acute toxicity and can cause eye and skin problems including blindness.

- *Residential Use of Pesticides:* Pesticides are often equated with agriculture; however, research has demonstrated that residential areas also contribute to environmental residues from pesticide use. Training, testing, and the components of licensure provide the pesticide applicator community with a greater knowledge of pesticide safety basics than is present in the general public. For example, when speaking with the general public staff frequently encounter a general lack of understanding that the pesticide label is a legal document whose directions must be followed. Label directions dictate important precautions to follow to reduce pesticide movement to off-target locations. Set-backs, soil type restrictions, weather, dosage rates, application equipment, and appropriate listed use. This language is placed on the label at the request of EPA as part of the registration process and represents how EPA regulates use in a way that ensures no undue harm. Unfortunately, the general public can have a cavalier attitude about pesticide application that disregards this essential language. Due to concerns over residential contributions to surface water quality, BPC initiated a small surface water monitoring project that evaluated pesticide levels across a spectrum of differently sized cities in Maine. The samples from that study will be analyzed in fall/winter of 2019, and a report is expected in 2020.
- *Invasive Pests:* New pest species are constantly arriving in Maine with varying levels of impacts on the state's natural resources. Invasive aquatic weeds are an example of pest species with the potential to have significant aesthetic and economic impacts. New forest or agricultural pests also have the potential for significant economic impacts. Invasive terrestrial plants are receiving increased attention for their impacts on ecology and aesthetics. The Asian longhorned beetle, emerald ash borer, browntail moth, winter moth, spotted wing drosophila, spotted lanternfly, Swede midge, leek moth, hemlock woolly adelgid, and the brown marmorated stink bug are examples of invasive insects that resource managers are extremely concerned about. When invasive pests arrive in Maine, pesticides are invariably one of the management options. Additional pesticide uses generally raise concerns about the potential for additional risks to humans or the environment, which means the Board will usually be involved in assessing the risks and recommending the lowest risk approach. In the case of browntail moth, the Board staff have dedicated significant resources to address numerous public inquiries about relative toxicity of pesticides, label interpretation, and alternative approaches for management.
- *Increased Use of Fumigants:* The Board has become aware of changing practices in the potato growing regions of Maine. Potato producers are beginning to adopt soil fumigation technology. Regional Cooperative Extension specialists suggest this technology is already utilized in other potato producing parts of the country and that Maine is one of the last to adopt this technology.

Increased demand for a higher quality potato and for increased yields is the motivation for this change. There is a recognized need for increased training and awareness of proper product stewardship of these fumigants. Additional concerns stem from the method of delivery- pressurized gas cylinders- the safe handling of which represents a new skill set for some applicators. These changes coincide with new federal requirements for states to adopt supplemental soil fumigation certification for private applicators. Maine will be implementing this new requirement in 2020.

- *Plant back Restrictions:* Nationally, growers have faced difficulty with plant back restrictions and cover crops. From season to season farmers rotate crops and insert cover crops. Frequently cover crops are terminated with herbicides prior to planting. There is a lack of consistency in guidance for the interval between the termination of one crop and the next use of the cropping site. Growers have faced crop injury in subsequent plantings due to the termination timing. Additional concerns have been raised about whether cover crops should enter the commodity stream or be classified as non-food. Classification as non-food would eliminate improper herbicide transfer into food or feed pathways.
- *Unmanned Aerial Vehicles (UAVs), or drones:* Advances in on-farm use of UAV technology have increased dramatically. UAVs are currently used to apply pesticides in other countries. In conjunction with GIS and sensitive photography pesticides can now be selectively applied to only those areas experiencing pest pressure. In the United States, the Federal Aviation Administration has been slow to permit UAVs for pesticide application. The potential for targeted application and reduction in total pesticide usage is promising. However, UAVs represent uncharted territory for regulators in the US who continue to seek additional data to better understand how to best manage this technology. Currently, in Maine, UAV applications would be permitted so long as all proper certifications and licenses are held.
- *Genetically Modified Crops:* In 2007, Maine became the last state to approve corn seed genetically modified to produce toxins to combat insect pests. Since then, a total of 17 *Bt*-corn products have been registered for use by Maine corn growers. Corn seed genetically modified to resist herbicides such as glyphosate (commonly known as Roundup[®]) does not fall under the Board's purview, since it does not produce a pesticide, and has been used in the state for many years. In 2017, EPA registered the first Ribonucleic acid interference (RNAi) based plant incorporated protectants. This new approach and other genetically modified organisms continue to generate press and controversy around the globe. The Board anticipates additional product registration requests will be forthcoming and that concerned citizens will continue to make their opinions known.
- *Pollinator Populations:* Domesticated bees are critical pollinators for a variety of agricultural crops and significant bee losses could eventually result in agricultural losses as well. Researchers have identified numerous factors likely to effect pollinator populations and in Maine there are strong associations with managed pollinator health and a suite of factors including mites, bee diseases, hive management, and weather. However, an association with pesticide use has not been ruled out and may be one of the contributing factors.

K. ANY OTHER INFORMATION SPECIFICALLY REQUESTED BY THE COMMITTEE

L. COMPARISON OF FEDERAL LAWS AND REGULATIONS

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) 7 U.S.C. 136 *et seq* is much more extensive than the Board's two statutes because it specifies in great detail the information that a manufacturer must provide in order to get a new active ingredient registered. It also includes requirements for the manufacturer to become a pesticide producer establishment and the procedures they must follow during production and the filing of reports on amounts of chemicals produced. In addition, FIFRA details the information EPA must receive in approving experimental-use permits and state requests for special local needs registrations. FIFRA allows a state to be more restrictive than the federal law but not less restrictive in the manner it regulates pesticide sales and use.

As previously mentioned, the Board has a cooperative agreement with the EPA and has been granted enforcement primacy for enforcing this federal statute that governs the manufacture, sale and use of pesticides. Generally, the Board only uses this authority when EPA requests it inspect a pesticide producing establishment that they regulate.

M. POLICY ON MANAGING PERSONAL INFORMATION

The Board is extremely careful to protect the private personal information of its licensees by adhering to Maine's Freedom of Access Law (1M.R.S.A. § 401 *et seq*) and the state's web-based privacy policy described at <http://www.maine.gov/portal/privacy.html>. As of the development and adoption of a cloud-based certification and licensing software solution, the Board no longer requires Social security numbers on license applications. Paper applications are still accepted and these, along with all other paper-based applicator information, are kept in locked files. Once the applications are no longer needed by Board staff, they are destroyed by shredding them in the Board's office.

Private information is not available on the internet and is only provided to two other agencies as mandated by law. Licensing information is provided to the State Tax Assessor pursuant to 36 M.R.S.A. § 175 for tax purposes and to the Department of Health and Human Services pursuant to 19 M.R.S.A. § 2201 to check for deadbeat dads.

Following numerous public requests, the Board staff now maintains, on its website, two lists—one of licensed commercial applicators and one of licensed pesticide application companies. The applicator list includes the applicator's name, license type, certification categories, license expiration, and company of employ. The company list includes contact information, the company website, certification categories, and county location.

N. REQUIRED REPORTS AND APPLICATIONS

The Board's statutes include the following requirements for submission of applications and reports:

- 7 M.R.S.A. § 607 for applications to register pesticide products on an annual basis (adopted 1975).
- 22 M.R.S.A. § 1471-D for applications to license commercial applicators, spray contracting firms, private applicators, government pesticide supervisors, spotters, monitors and limited and restricted use pesticide dealers on a schedule prescribed by Board rule (amended 1985).
- 22 M.R.S.A. § 1471-G for reports of pesticides sold by limited- and restricted-use dealers on a schedule prescribed by Board rule (adopted 1975).

- 22 M.R.S.A. §1471-G for reports of pesticides applied by commercial applicators and spray contracting firms on a schedule prescribed by Board rule (amended 1983).
- 22 M.R.S.A. §1471-W for applications to license general use pesticide dealers for a one to three-year period (adopted 1989).
- 22 M.R.S.A. §1471-W for reports of pesticides sold by general use dealers on an annual basis (amended 1997).

Dealer licenses have always been issued on an annual basis and private applicator licenses have always been issued for a three-year period. In 2015, restricted use pesticide dealer licenses were converted to three-year licenses while general use pesticide dealer licenses remained one-year licenses. Commercial applicator and spray contracting firm licenses were originally renewed on an annual basis but were converted to two-year licenses in 1999 to reduce applicator paperwork and even out the staff workload. In 2015, they were again converted, but to three-year licenses to align with certification periods, provide consistency across all license types, to again reduce applicator paperwork, and even out the staff workload. All reports that are required to be submitted are required on an annual basis.

The number of applications and reports filed over the last two years and projected for the coming two years are as follows:

Type	2017	2018	2019*	2020*
Registration Applications	3,167**	3,056	3,200	3,300
Commercial License Exam Applications	1,503***	1,673	1,800	1,900
License Applications	2,417	2,471	3,000	3,100
Applicator & Dealer Reports	577	658	700	800

**Estimated*

***In 2010, staff processed a total of 1,562 pesticide product registration applications.*

****In 2010, staff processed a total of 760 commercial license exam applications.*

APPENDIX: ADDITIONAL DATA

A. Number of Pesticide Products Registered for Sale in Maine by Year

2018	12,493
2017	12,238
2016	12,186
2015	11,850
2014	11,416
2013	11,239
2012	11,240
2011	10,829
2010	10,597
2009	9,987*
2008	8,563
2007	8,412
2006	8,175
2005	7,900
2004	7,672

**Fee structure changed. Beginning in 2009 fee charged per brand name.*

B. Complaints Received by the Board of Pesticides Control

Category	2010	2017	2018	2019
ROW	8	9	7	7
Landlord/Tenant	2		1	
Structural Pests	10	26	24	7
Outdoor Ornamental	3	31	29	45
Lawn/Turf	28			
Agricultural	30	23	18	13
Water	8	4	3	5
License/Certification	9	5	2	
Sale Distribution	2	2	3	2
Disposal/Storage	2	3	1	1
Miscellaneous	3	14	12	11
Indoor Ornamental				
Government Related				
Forestry	1		1	4
Mosquito/Tick	2	15	16	10
Greenhouse/Nursery	3	1	2	
Neighbor non-ag	5	2	1	
General Vegetation Mgmt*		3	11	9
Cannabis*		1	1	
Bees*			1	
Total	116	139	133	114**

*Reporting category added in 2016/2017

**Through October 30, 2019

C. Number of Maine Licensed Pesticide Applicators and Dealers

Year	Licensed Applicators			Licensed Dealers		
	Private	Commercial	Total	General Use	Restricted Use	Total
2000	1604	1387	2991	743	66	809
2005	1489	1472	2961	723	58	781
2011	1140	1600	2740	877	59	936
2018	1633	1623	3256	1012	60	1072

D. Town Ordinances and Policies

Proposed or Adopted Town Ordinances Regarding Pesticides within the Last 8 Years

- 2018—Portland—Curtails the use of pesticides for turf, landscape and outdoor pest management
- 2018—Harpwell—Originally adopted in 2004—2018 amendment restricts the use of neonicotinoid insecticides
- 2017—Manchester—Curtails the outdoor use of pesticides on town owned lands
- 2016—South Portland-- Curtails the use of pesticides for turf, landscape and outdoor pest management
- 2015—Ogunquit—Originally adopted in 2011—Restricts the outdoor application of pesticides on public and private land. Pesticides used must be approved for organic use or exempt from Federal EPA registration.
- 2014—Rockland— Restricts the outdoor application of pesticides on town (owned, leased or managed) land. Pesticides used must be approved for organic use or exempt from Federal EPA registration.

E. Pesticide Related Bills Submitted by Legislature

LD #	Title	Final Disposition
129th Legislature First Regular Session		
36	An Act To Change the Composition of the Board of Pesticides Control	Enacted June 5, 2019 Signed by Governor Public Law Chapter 192
101	An Act To Reestablish the Pesticide Notification Registry	Withdrawn March 12, 2019
643	An Act To Provide Funding to Municipalities Severely Affected by Pest Infestations	Dead 5/28/19
785	Resolve, Directing the Board of Pesticides Control To Educate the Public on the Proper Use of Pesticides and To Promote Integrated Pest Management	Indefinitely Postponed February 28, 2019--Dead
889	An Act To Require the Labeling of Foods Made with Nanotechnology	ONTP March 28, 2019--Dead
908	An Act To Require Schools To Submit Pest Management Activity Logs and Inspection Results to the Board of Pesticides Control for the Purpose of Providing Information to the Public	Carried over 6/20/19
1518	An Act To Establish a Fund for Portions of the Operations and Outreach Activities of the University of Maine Cooperative Extension Diagnostic and Research Laboratory	Last House Action 6/13/2019 - PASSED TO BE ENACTED. Sent for concurrence. ORDERED SENT FORTHWITH. Last Senate Action 6/14/2019 - PASSED TO BE ENACTED, in concurrence. Last Engrossed by House on 6/12/2019 Last Engrossed by Senate on 6/12/2019
1775	An Act To Protect Sustenance Fishing	Enacted June 21, 2019 Signed by Governor Public Law Chapter 463
1273	An Act To Ensure Funding for Certain Essential Functions of the University of Maine Cooperative Extension Pesticide Safety Education Program	Enacted June 7, 2019 Signed by Governor Public Law Chapter 243
1691	Resolve, Directing the Board of Pesticides Control To Work with the Forest Products Industry To Monitor Aerial Herbicide Applications	Enacted June 19, 2019 Signed by Governor Chapter 84 Resolves
128th Legislature Second Regular Session		
1853	An Act To Ensure the Safe and Consistent Regulation of Pesticides throughout the State by Providing Exemptions to Municipal Ordinances That Regulate Pesticides	ONTP April 4, 2018

1298	An Act To Update Maine's Water Quality Standards	Enacted February 16, 2018 Signed by Governor Public Law Chapter 319
128th Legislature First Regular Session		
993	An Act To Protect Pollinators from Neonicotinoid Pesticides	ONTP May 2, 2017
594	An Act To Modify the Definition of "General Use Pesticide"	Enacted May 11, 2017 Signed by Governor Public Law Chapter 59
1505	An Act To Create Consistency in the Regulation of Pesticides	ONTP June 1, 2017
418	An Act To Educate the Public on the Proper Use of Pesticides and To Promote Integrated Pest Management Using Existing Resources	Withdrawn April 13, 2017
174	An Act To Limit the Use of Pesticides on School Grounds/ An Act To Require Schools To Submit Pest Management Activity Logs and Inspection Results to the Board of Pesticides Control for the Purposes of Providing Information to the Public	Died on Adjournment September 13, 2018
699	An Act To Enact the Toxic Chemicals in the Workplace Act	Died Between Houses May 23, 2017
127th Legislature Second Regular Session		
1099	An Act To Establish a Fund for the Operations and Outreach Activities of the University of Maine Cooperative Extension Animal and Plant Disease and Insect Control Laboratory	ONTP April 14, 2016
1543	An Act To Create Stability in the Control of Pesticides	Died On Adjournment, April 29, 2016
127th Legislature First Regular Session		
203	Resolve, Regarding Legislative Review of Portions of Chapter 28: Notification Provisions for Outdoor Pesticide Applications, a Major Substantive Rule of the Department of Agriculture, Conservation and Forestry, Board of Pesticides Control	Enacted March 29, 2015 Without Governor's Signature Resolve Chapter 6
708	An Act To Limit the Use of Pesticides on School Grounds	ONTP April 16, 2015
884	An Act To Amend Laws Concerning Water Quality Standards	ONTP April 7, 2015
1105	An Act To Protect Populations of Bees and Other Pollinators	ONTP May 5, 2015
1106	An Act To Compensate Beekeepers for Hive Losses	ONTP May 5, 2015

817	An Act Regarding Aerial Pesticide Spray Projects	Enacted May 8, 2015 Signed by Governor Public Law 58
1098	An Act To Protect Children from Exposure to Pesticides	ONTP May 5, 2015
1099	An Act To Establish a Fund for the Operations and Outreach Activities of the University of Maine Cooperative Extension Animal and Plant Disease and Insect Control Laboratory	Carried over to second session
126th Legislature Second Regular Session		
1567	Resolve, Regarding Legislative Review of Portions of Chapter 22: Standards for Outdoor Application of Pesticides by Powered Equipment in Order To Minimize Off-Target Deposition, a Late-filed major Substantive Rule of the Department of Agriculture, Conservation and Forestry	Law Without Governor's Signature, February 26, 2014, Resolve Chapter 88
1568	Resolve, Regarding Legislative Review of Portions of Chapter 20: Special Provisions, a Late-filed Major Substantive Rule of the Department of Agriculture, Conservation and Forestry	Law Without Governor's Signature, February 26, 2014, Resolve Chapter 87
1569	Resolve, Regarding Legislative Review of Portions of Chapter 51: Notice of Aerial Pesticide Application, a Late-filed Major Substantive Rule of the Department of Agriculture, Conservation and Forestry	Law Without Governor's Signature, February 26, 2014, Resolve Chapter 86
1587	An Act To Temporarily Ban the Use of Neonicotinoid Pesticides	Report out ONTP February 7, 2014
1674	An Act To Further Ensure the Provision of Safe Medical Marijuana to Maine Patients	Majority OTP as amended March 6, 2014
1678	An Act To Protect Maine's Lobster Fishery	Reported out ONTP February 21, 2014
1744	An Act To Protect Maine Lakes	Committee on Environment and Natural Resources.
1808	An Act To Protect the Public from Mosquito-borne Diseases	Enacted April 16, 2014 Unsigned by Governor Public Law 548
126th Legislature First Regular Session		
33	Resolve, Regarding Pesticide Applications and Public Notification in Schools	Emergency Finally Passed June 22, 2013 Emergency Unsigned June 22, 2013 Resolve Chapter 63

292	An Act To Protect the Public Health from Mosquito-borne Diseases	Became 2013 Chapter 13 Resolve, Directing the Department of Agriculture, Conservation and Forestry To Develop a Plan for the Protection of the Public Health from Mosquito-borne Diseases Finally Passed, May 8, 2013 Signed by Governor on May 8, 2013
475	An Act To Increase Food Sovereignty in Local Communities	Accepted Majority ONTP Report, May 22, 2013
718	An Act To Protect Maine Food Consumers' Right To Know about Genetically Engineered Food	Enacted, January 12, 2014 Unsigned by Governor Public Law 436
903	An Act To Enhance the Development and Implementation of Integrated Pest Management Programs	Amended by Committee Enacted June 18, 2013; signed by Governor June 18, 2013 Public Law Chapter 290
920	An Act To Prohibit Herbicide Spraying on Abandoned Rail Lines	Accepted ONTP Report, May 8, 2013
	An Act To Eliminate the Use of Chemical Fertilizers, Pesticides and Herbicides on All State-funded Property	LR 889 withdrawn
961	An Act to Ensure Safe School Grounds	Died between houses June 11, 2013
	An Act To Extend the Restricted Use Pesticide Dealers License to 6 Years	LR 1149 withdrawn
	An Act To Allow an Exam for a Commercial Applicator of Pesticides To Be Given Orally	LR 1150 withdrawn
1391	An Act To Provide a Pesticide Spraying Notification Process	Accepted Majority (ONTP) Report, May 30, 2013
1430	An Act To Clarify the General Use Permit for Aquatic Pesticides	Enacted June 4, 2013 Signed by Governor, June 4, 2013 Public Law 193
1531	An Act To Maintain Access to Safe Medical Marijuana	Emergency Enacted June 28, 2013 Emergency Unsigned, June 27, 2013 Public Law Chapter 371
125th Legislature First Regular Session		
16	An Act to Revise Notification Requirements for Pesticides Applications Using Aircraft or Air-carrier Equipment	Unanimous Ought-Not-to-Pass by Committee May 10, 2011
228	An Act to Revise Notification Requirements for Pesticide Application	Enacted, June 2, 2011 Public Law, Chapter 332
321	An Act To Change the Qualifications of Certain Members of the Board of Pesticides Control	Enacted, May 16, 2011 Public Law, Chapter 119
591	An Act To Prohibit the Use of Pesticides in Certain Circumstances	Leave to Withdraw March 1, 2011

837	An Act To protect Children’s Health and Promote Safe Schools and Child Care Centers by Limiting the Use of Pesticides Changed to Resolve, To Enhance the Use of Integrated Pest Management on School Grounds	Finally Passed, May 23, 2011 Resolve, Chapter 59
975	An Act To Require Certification of Private Applicators of General Use Pesticides	Enacted, May 16, 2011 Public Law, Chapter 169
1041	An Act To Simplify and Enhance Pest Control Notification	Unanimous Ought-Not-To-Pass by Committee May 11, 2011
1198	An Act To Reduce Regulations for Residential Rental Property Owners	Enacted, June 14, 2011 Public Law, Chapter 405
2545	An Act Regarding the Treatment of Bedbug Infestations in Rental Property	
124th Legislature		
68	An Act Regarding the Composition of the Board of Pesticides Control	Unanimous ONTP by Committee, Mar 26, 2009
182	An Act To Prohibit Aerial Spraying of Pesticides near Buildings, Roads and Bodies of Water	Unanimous ONTP by Committee, May 7, 2009
494	Resolve, Regarding Legislative Review of Portions of Chapter 22: Standards for Outdoor Application of Pesticides by Powered Equipment in Order To Minimize Off-target Deposition, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, Jun 5, 2009 Resolve, Chapter 114
495	Resolve, Regarding legislative Review of Portions of Chapter 10: Definitions and Terms, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, May 12, 2009 Resolve, Chapter 41
557	Resolve, Directing the Study of a Potato Variety Demonstrating Resistance to the Colorado Potato Beetle	Finally Passed, May 27, 2009 Resolve, Chapter 80
559	An Act to Update the Board of Pesticides Control	Unanimous ONTP by Committee, Apr 2, 2009
972	Resolve, Regarding legislative Review of Portions of Chapter 28: Notification Provisions for Outdoor Pesticide Applications, a Major Substantive Rule of the Board of Pesticides Control	Emergency Finally Passed, Jun 2, 2009 Resolve, Chapter 115
1239	An Act To Provide Funding to Educate Homeowners in Integrated Pest Management	Enacted, Mar 2, 2010 P&S Law, Chapter 31
1293	An Act To Require Citizen Notification of Pesticide Applications Using Aerial Spray or Air-carrier Application Equipment	Enacted, Jun 9, 2009 Public Law, Chapter 378

1294	An Act To Amend the Laws Governing the Public Hearing Process for the Board of Pesticides Control	Unanimous ONTP by Committee, May 29, 2009
1460	Resolve, Regarding Legislative Review of Portions of Chapter 41: Special Restrictions on Pesticide Use, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, Jun 2, 2009 Resolve, Chapter 118
1547	An Act To Revise Notification Requirements for Pesticides Applications Using Aircraft or Air-carrier Equipment	Emergency Enacted, Mar 31, 2010 Public Law, Chapter 584
1726	Resolve, Regarding Legislative Review of Portions of Chapter 28: Notification Provisions for Outdoor Pesticide Applications, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, Mar 22, 2010 Resolve, Chapter 173
1790	An Act To Implement the Recommendations of the Working Group to Study Landlord and Tenant Issues	Enacted, Mar 26, 2010 Public Law, Chapter 566
123rd Legislature		
406	An Act To Prohibit Aerial Spraying of Pesticides near Buildings, Roads and Bodies of Water	Unanimous ONTP by Committee, Mar 21, 2007
861	An Act To Require a Commercial Applicator's License To Use Pesticides in Licensed Food and Eating Establishments	Enacted, Jun 5, 2007 Public Law, Chapter 245
875	An Act To Continue the Protection of Marine Waters and Organisms from the Risks Posed by the Applications of Pesticides	Emergency Enacted, Apr 11, 2007\ Public Law, Chapter 50
1274	An Act To Allow the Discharge of Aquatic Pesticides Approved by the Department of Environmental Protection for the Control of Mosquito-borne Diseases in the Interest of Public Health and Safety	Enacted, June 5, 2007 Public Law, Chapter 291
1698	An Act To Provide for Public Notification of Indoor Pesticide Applications	Unanimous ONTP by Committee, May 23, 2007
1700	Resolve, Regarding Legislative Review of Portions of Chapter 103: Board of Pesticides Control Regulatory Agenda, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources	Unanimous ONTP by Committee, Apr 5, 2007
1798	An Act To Fund Pesticide Education in the State	Enacted, June 12, 2007 Public Law, Chapter 302
1891	An Act To Designate Certain Rules of the Board of Pesticides Control as Major Substantive Rules	Emergency Enacted, May 16, 2007 Public Law, Chapter 145

2190	An Act To Designate Certain Rules Proposed by the Board of Pesticides Control as Major Substantive Rules	Emergency Enacted, Feb 26, 2008 Public Law, Chapter 484
2194	Resolve, Regarding Legislative Review of Portions of Chapter 26: Standards for Indoor Pesticide Applications and Notification for All Occupied Buildings Except K-12 Schools, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, Mar 14, 2008 Resolve, Chapter 153
2195	Resolve, Regarding Legislative Review of Portions of Chapter 29: Standards for Water Quality Protection, Section 5, Restriction on Pesticide Application To Control Browntail Moths near Marine Waters, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Unanimous ONTP by Committee, Feb 28, 2008
2211	Resolve, Regarding Legislative Review of Portions of Chapter 29: Standards for Water Quality Protection, Section 6, Buffer Requirement, a Major Substantive Rule of the Department of Agriculture, Food and Rural Resources, Board of Pesticides Control	Emergency Finally Passed, Mar 14, 2008 Resolve, Chapter 154
122rd Legislature		
643	An Act To Authorize the Department of Environmental protection To Issue Emergency Permits for the Application of Herbicides and Pesticides	Unanimous ONTP by Committee, Apr 26, 2005
1227	An Act To Fund Pesticide Education in the State	Unanimous ONTP by Committee, May 11, 2005
1256	An Act To Ensure Public Awareness of Pesticide Applications	Unanimous ONTP by Committee, May 18, 2005
1304	An Act Concerning Invasive Species and Water Quality Standards	Enacted, May 17, 2005 Public Law, Chapter 182
1560	An Act To Transfer the Pest Control Compact from the Department of Conservation to the Department of Agriculture, Food and Rural Resources	Enacted, May 18, 2005 Public Law, Chapter 147
1657	An Act To Minimize the Risk to Maine's Marine Waters and Organisms Posed by the Application of Pesticides	Emergency Enacted, Apr 5, 2006 Public Law, Chapter 553

1791	An Act To Increase the Number of Members on the Board of Pesticides Control	Unanimous ONTP by Committee, Apr 5, 2006
1890	An Act To Make Revisions to the Laws Governing Pesticide Control	Enacted, Apr 28, 2006 Public Law, Chapter 620
2035	An Act Regarding Storm Water Program Administration	Enacted, Apr 26, 2006 Public Law, Chapter 602
2065	An Act To Implement Recommendations of the Joint Standing Committee on Agriculture, Conservation and Forestry Regarding Pesticide Registration	Enacted, Apr 10, 2006 Public Law, Chapter 585
121st Legislature		
199	Resolve, Directing the Department of Agriculture, Food and Rural Resources, the Department of Education, the Department of Human Services and the Department of Labor To Review the 2002 United States Environmental Protection Agency List of Pesticides Registered and Classified as Known, Likely or Probably Human Carcinogens	Emergency Finally Passed, May 16, 2003 Resolve, Chapter 48
759	An Act Concerning Public Members of the Board of Pesticides Control	Unanimous ONTP by Committee, Apr 1, 2003
1400	An Act To Amend the Maine Pesticide Control Act of 1975 To Increase the Pesticide Product Registration Fee	Enacted, May 19, 2003 Public Law, Chapter 282
120th Legislature		
1540	An Act To Ensure that the State Board of Pesticides Control has Sufficient Resources to Provide Accurate Information About the Use of Pesticides in the State	Enacted, May 24, 2001 Public Law, Chapter 355
1918	An Act to Amend the Integrated Pest Management Laws	Enacted, Feb 26, 2002 Public Law, Chapter 497
1953	An Act to Amend the Laws Governing Pesticide Control to Increase the Pesticide Product Registration Fee	Enacted, Feb 26, 2002 Public Law, Chapter 498
119th Legislature		
1535	An Act to Require Notice to Abutters Prior to commercial Applications of Pesticides	Unanimous ONTP by Committee, May 5, 1999
2435	An Act to Implement the State Policy to Minimize Reliance on Pesticides	Unanimous ONTP by Committee, Feb 15, 2000
2634	An Act to Implement the Recommendations of the Joint Standing Committee on Agriculture, Conservation and Forestry Relating to Review of	Enacted, Apr 3, 2000 Public Law, Chapter 724

	the State Board of Pesticides Control Under the State Government Evaluation Act	
118th Legislature		
420	An Act to Improve the Reporting of General Use Pesticide Sales	Enacted, Apr 28, 1997 Public Law, Chapter 139
447	An Act Regarding Disclosure of Pesticide Use to a Buyer of Blueberry Land BY REQUEST	Unanimous ONTP by Committee, Mar 11, 1997
1078	An Act to Require Labeling on Genetically Engineered Food	Indefinitely Postponed, May 15, 1997
1726	An Act to Minimize Reliance on Pesticides	Enacted, May 23, 1997 Public Law, Chapter 389
117th Legislature		
940	An Act to Clarify the Board of Pesticides Control Authority Regarding Restricted Use Pesticides and Groundwater Contamination	Majority (ONTP) Report, May 23, 1995
116th Legislature		
1085	An Act Repealing Advisory Boards on Agriculture Matters	Enacted, May 25, 1993 Public Law, Chapter 251
115th Legislature		
72	An Act Regarding the Forestry, Natural Habitat, Water Quality and Environmental Impacts of Pesticide Use (Reported by the Commission to Study the Use of Herbicides Pursuant to Resolve 1989, chapter 98—Majority Report)	Accepted ONTP Report, Mar 25, 1991
111	An Act to Facilitate the Reimbursement of Deposits on pesticide Containers	Leave to Withdraw, Feb 14, 1991
577	An Act Regarding the Use of Pesticides and Placing the Board of Pesticides Control under the authority of the Department of Environmental Protection (Reported by the Commission to Study the Use of Herbicides, Pursuant to Resolves 1989, chapter 98)	Accepted ONTP Report, Mar 25, 1991
2397	An Act to Repeal the Sunset on Penalties for Violations of Pesticide Laws	Emergency Enacted, Mar 26, 1992 Public Law, Chapter 829
1261	An Act to Enhance the Integrated Pest Management Capabilities of Agriculture in the State	Enacted, July 17, 1991 Public Law, Chapter 609
114th Legislature		

179	An Act Concerning the Regulation of General Use Pesticides	Emergency Enacted, May 1, 1989 Public Law, Chapter 93
466	An Act to Study the Use of Pesticides in the State's Forests	Accepted ONTP Report, Mar 30, 1989
811	An Act To Simplify Pesticide Inventory Requirements	Leave to Withdraw, Apr 24, 1989
958	An Act to Enhance the Integrated Pest Management Capabilities of Agriculture in Maine	Indefinitely Postponed, Jul 1, 1989
1916	An Act to Increase Penalties for violation of the Pesticide Laws	Enacted, Apr 5, 1990 Public Law, Chapter 841
113th Legislature		
102	An Act to Ensure Uniformity in Pesticide Regulation	Replaced by LD 1833, Jun 12, 1987
1449	An Act to Establish an Exemption from the Waste Water Discharge Licensing Requirement for Certain Holders of Aquatic Pesticide Permits	Emergency Enacted, May 27, 1987 Public Law, Chapter 235
1469	An Act to Clarify Licensing Definitions under the Laws Related to the Board of Pesticides Control	Enacted, May 28, 1987 Public Law, Chapter 243
1588	An Act to Continue on an Annual Basis the Registration Fee Charged to Pesticide Manufacturers and Other Registrants in 1987	Enacted, Jun 4, 1987 Public Law, Chapter 310
1833	RESOLVE, to Study the Need for Uniformity in Pesticide Regulation	Emergency Finally Passed, Jun 18, 1987 Resolve, Chapter 50
2063	An Act to Establish Appropriate and Effective Penalty Levels for Violation of the Pesticide Control Laws	Leave to Withdraw, Feb 8, 1988
2067	An Act to Provide Additional Resources to the Board of Pesticides Control (Reported Pursuant to Resolves of 1987, Chapter 50)	Enacted, Apr 12, 1988 Public Law, Chapter 723
2121	An Act to Improve the Regulation of Pesticides (Report Pursuant to Resolves of 1987, chapter 50)	Enacted, Apr 5, 1988 Public Law, Chapter 702
2441	An Act to Require Farms to Post Notice of Pesticides Used	Majority (ONTP) Report, Apr 7, 1988
2663	An Act to Provide Funds for Safe Collection and Disposition of Obsolete Pesticides	
112th Legislature		
372	An Act to Provide for Licensing of Companies who Apply Pesticides as Custom or Commercial Applicators	Enacted Public Law, Chapter 122
1014	An Act to Implement Procedures for Insuring the Safe Return and Proper Disposal of Restricted Pesticide Containers	

1563	An Act to Allow the Use of Botanical Pesticides in the Production of Foods Labeled or Advertised as Organic	
1699	An Act to Coordinate Board of Pesticides Control Registration	
1715	An Act to Increase the Registration Fee Charged to Pesticide Manufacturers and Other Registrants	
1754	An Act to Increase the Penalty for Violation of the Provisions of the Pesticide Control Laws	
2091	An Act to Coordinate Board of Pesticides Control Registration	
2208	An Act to Increase the Registration Fee Charged to Pesticide Manufacturers and Other Registrants	



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

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WALTER E. WHITCOMB
COMMISSIONER
HENRY S. JENNINGS
DIRECTOR

MAINE BOARD OF PESTICIDES CONTROL POLICY RELATING TO THE ENVIRONMENTAL RISK ADVISORY COMMITTEE (ERAC)

Adopted June 25, 1999
Amended September 29, 2000
Amended March 28, 2014

Background

The Maine BPC recognizes the potential impact of some pesticides on the environment from their federally approved label uses. Evaluation of risks specific to Maine situations and conditions is critical to reducing potential adverse effects on the environment. The Board needs impartial scientists, knowledgeable in the fields of biology, environmental toxicology, environmental chemistry, and ecology, who can provide expert assessments of environmental risks and provide guidance and recommendations to the Board.

Establishing an Environmental Risk Advisory Committee

The Board will select scientists with the appropriate expertise to serve voluntarily on the Board's Environmental Risk Advisory Committee (ERAC) on an ad hoc basis when the Board deems it is necessary to seek outside scientific expertise. The Board will provide a clear charge to the ERAC regarding the purpose and scope of the committee's work.

Membership

The ERAC will be chaired by a Board member. Additional committee members will be determined by the Board based on the current issue. The Board should appoint persons whose disciplines in aggregate are suitable for evaluating potential adverse environmental effects, and, where appropriate, for recommending courses of action to mitigate potential adverse effects.

Term

The committee will serve until it has issued a final report to the Board.

Meetings

The Committee will meet on an as needed basis at the invitation of the ERAC chair.

Compensation

The ERAC is voluntary and no compensation for services is available. However, all reasonable travel expenses will be reimbursed, subject to the approval of the staff director, in a manner consistent with State Travel Policy.



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, FOOD AND RURAL RESOURCES
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
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SETH H. BRADSTREET III
COMMISSIONER
HENRY JENNINGS
DIRECTOR

MAINE BOARD OF PESTICIDES CONTROL POLICY RELATING TO THE MEDICAL ADVISORY COMMITTEE

Adopted August 1, 2008

Background

The Maine Board of Pesticides Control recognizes the potential impact of some pesticides on human health, as well as the importance of protecting the beneficial uses of most pesticides when used carefully by responsible applicators. In order to separate potentially harmful chemicals from the essentially safe ones, the Board needs expert advisors, knowledgeable in the field of human health research or clinical practice, who can add their assessments to the economic and benefit recommendations of others prior to the Board initiating and ruling on pesticide restrictions.

These persons will be established as a volunteer Medical Advisory Committee to the Board of Pesticides Control.

Membership

The MAC will be composed of three standing members and *ad hoc* members. One standing member will be the Board member appointed with medical expertise. This member will also chair the committee. The other two standing members will be the State Toxicologist or their designee, from the Environmental Toxicology Program at the Maine Centers for Disease Control and the Medical Director of the Northern New England Poison Center or their designee. In addition, up to six members may be chosen *ad hoc* with expertise specific to the issue at hand. The Board will solicit and review resumes for positions on the MAC.

The Board should appoint as members persons whose disciplines in aggregate are suitable for identifying and evaluating health hazards or risks. Members are not required to be physicians, but should be qualified professionals in a related health care or medical research discipline.

Term

Ad hoc MAC members will be appointed by the Board for the duration of specific reviews.

Meetings

The Committee will meet on an as needed basis at the invitation of the MAC chairman.

Compensation

The MAC is voluntary and no compensation for services is available. However, all reasonable travel expenses will be reimbursed, subject the approval of the staff director, in a manner consistent with State Travel Policy.

STATE OF MAINE

6i

IN THE YEAR OF OUR LORD

TWO THOUSAND NINETEEN

H.P. 1111 - L.D. 1518

**An Act To Establish a Fund for Portions of the Operations and Outreach
Activities of the University of Maine Cooperative Extension Diagnostic and
Research Laboratory**

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

Sec. 1. 7 MRSA c. 419 is enacted to read:

CHAPTER 419

TICK LABORATORY AND PEST MANAGEMENT FUND

§2471. Tick Laboratory and Pest Management Fund

The Tick Laboratory and Pest Management Fund, referred to in this chapter as "the fund," is established. The fund is nonlapsing, is administered by the University of Maine at Orono and consists of funds derived from the pesticide container fee under Title 36, section 4911, appropriations and allocations to the fund and funds from other public and private sources. The fund, to be accounted within the University of Maine at Orono, must be held separate and apart from all other money, funds and accounts. Eligible investment earnings credited to the assets of the fund become part of the assets of the fund. Any balance remaining in the fund must be disbursed on a quarterly basis to the University of Maine at Orono.

§2472. Expenditures from the fund

Funds in the fund must be distributed by the University of Maine at Orono as provided in this section.

1. Pesticide container fee reimbursement. Funds must be provided for ongoing reimbursement to the State Tax Assessor on a monthly basis by the 15th of the month following collection, to pay for administrative costs not to exceed \$40,000 annually from collection of the pesticide container fee imposed under Title 36, section 4911.

2. Registered pesticides. Funds must be provided for ongoing reimbursement, not to exceed \$60,000 annually, to the Board of Pesticides Control, established in Title 5, section 12004-D, subsection 3 and referred to in this chapter as "the board," to generate and maintain a list of pesticides registered with the board pursuant to section 607 and answer inquiries relating to the list. The board shall post on its publicly accessible website, a list of currently registered pesticide products.

3. Administrative costs. Funds must be provided for ongoing reimbursement to the University of Maine at Orono for administrative costs not to exceed 10% of the balance remaining in the fund after the amounts under subsections 1 and 2 are subtracted.

4. Pest management education. Twenty-five percent of the balance remaining in the fund after the amounts under subsections 1, 2 and 3 are subtracted must be provided to the University of Maine Cooperative Extension pest management unit for outreach and education initiatives on pest management and pesticide safety and pesticide application and use, particularly for homeowners and other individuals using pesticides.

5. Tick laboratory costs. Fifty percent of the balance remaining in the fund after the amounts under subsections 1, 2 and 3 are subtracted must be provided to the University of Maine Cooperative Extension pest management unit for nonadministrative costs related to a tick laboratory, including, but not limited to:

- A. Testing ticks provided by residents of the State for pathogenic organisms;
- B. General tick laboratory operations;
- C. Salaries;
- D. Tick management research, demonstrations and educational outreach, including community integrated pest management and developing educational materials;
- E. Equipment, materials and supplies;
- F. Facility expansion; and
- G. Medical and veterinary pest management focusing on health-related issues caused by ticks and other arthropods as needed.

6. Pest research. Twenty-five percent of the balance remaining in the fund after the amounts under subsections 1, 2 and 3 are subtracted must be provided to the University of Maine at Orono or to an entity in collaboration with the University of Maine at Orono for a pest research project to be identified every 3 years by a pest research committee designated by the University of Maine at Orono, the University of Maine System and the department in the 2nd year of the project. The pest research committee under this subsection consists of 7 members, including:

- A. One member who is an extension specialist with pest management expertise, appointed by the dean of the University of Maine Cooperative Extension;
- B. Two members who are faculty of the University of Maine at Orono, College of Natural Sciences, Forestry, and Agriculture with pest management expertise, appointed by the dean of the University of Maine at Orono, College of Natural

Sciences, Forestry, and Agriculture, Maine Agricultural and Forest Experiment Station;

C. Two members, one representing the agricultural sector and one who is a commercial pesticide applicator, appointed jointly by the dean of the University of Maine Cooperative Extension and the dean of the University of Maine at Orono, College of Natural Sciences, Forestry, and Agriculture, Maine Agricultural and Forest Experiment Station;

D. One member representing a campus of the University of Maine System other than the University of Maine campus in Orono and having pest management expertise, appointed by the Chancellor of the University of Maine System; and

E. One member from the department with pest management expertise, appointed by the commissioner.

Members serve one-year terms and may be reappointed to successive terms.

7. Report. No later than January 15th of each year, the University of Maine at Orono shall submit a report to the board and the joint standing committee of the Legislature having jurisdiction over agriculture matters on use of the funds under this chapter.

8. Rules. The board may adopt rules to carry out the provisions of this chapter. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 2. 36 MRSA c. 723 is enacted to read:

CHAPTER 723

PESTICIDE CONTAINER FEE

§4911. Fee imposed

1. Imposition. A fee is imposed on the retail sale in the State of containers of pesticide products registered with the Board of Pesticides Control, established in Title 5, section 12004-D, subsection 3 and referred to in this chapter as "the board," in the amount of 15¢ per container. Three cents of the container fee imposed under this subsection may be retained by the retailer to defray the costs associated with collecting the fee.

2. Exemptions. The following products are exempt from the fee under subsection 1:

A. A container of pesticides sold by a manufacturer or manufacturer's representative directly to a pesticide applicator licensed under Title 22, section 1471-D;

B. A container of pesticides sold to a pesticide applicator licensed under Title 22, section 1471-D that is exempt from sales tax pursuant to section 1760, subsection 7-B or 7-C; and

C. A container of paint, stain, wood preservative or sealant registered as a pesticide with the board.

3. Administration of fee. The fee imposed by this chapter is administered as provided in chapter 7 and Part 3, with the fee imposed pursuant to this chapter to be considered as imposed under Part 3. The revenue collected during the preceding month pursuant to this subsection must be transferred to the Treasurer of State on a monthly basis on or before the last day of the month. The Treasurer of State shall credit all revenue derived from the fee imposed by this chapter to the Tick Laboratory and Pest Management Fund established under Title 7, chapter 419.

Sec. 3. University of Maine at Orono to conduct study on browntail moths. Upon the effective date of this Act, the University of Maine at Orono shall commence a study of browntail moths as the first research project to be conducted under the Maine Revised Statutes, Title 7, section 2472, subsection 6.

Sec. 4. Appropriations and allocations. The following appropriations and allocations are made.

ADMINISTRATIVE AND FINANCIAL SERVICES, DEPARTMENT OF

Revenue Services, Bureau of 0002

Initiative: Provides a one-time allocation for administrative costs associated with revision of the sales tax return to accommodate the pesticide container fee.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
All Other	\$16,000	\$0
OTHER SPECIAL REVENUE FUNDS TOTAL	\$16,000	\$0

ADMINISTRATIVE AND FINANCIAL SERVICES, DEPARTMENT OF DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$16,000	\$0
DEPARTMENT TOTAL - ALL FUNDS	\$16,000	\$0

AGRICULTURE, CONSERVATION AND FORESTRY, DEPARTMENT OF

Pesticides Control - Board of 0287

Initiative: Provides allocations for one half-time Office Associate II position to generate and maintain a list of registered pesticides.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
POSITIONS - LEGISLATIVE COUNT	0.500	0.500
Personal Services	\$24,213	\$33,890

All Other	\$2,625	\$2,625
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$26,838</u>	<u>\$36,515</u>

AGRICULTURE, CONSERVATION AND FORESTRY, DEPARTMENT OF DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$26,838	\$36,515
DEPARTMENT TOTAL - ALL FUNDS	<u>\$26,838</u>	<u>\$36,515</u>

UNIVERSITY OF MAINE SYSTEM, BOARD OF TRUSTEES OF THE

Tick Laboratory and Pest Management Fund N330

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
All Other	\$26,662	\$102,485
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$26,662</u>	<u>\$102,485</u>

UM Cooperative Extension - Pesticide Education Z059

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee to be used for tick laboratory costs.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
All Other	\$27,000	\$54,000
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$27,000</u>	<u>\$54,000</u>

UM Cooperative Extension - Pesticide Education Z059

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee to be used for pest management education.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
All Other	\$13,500	\$27,000
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$13,500</u>	<u>\$27,000</u>

UNIVERSITY OF MAINE SYSTEM, BOARD OF TRUSTEES OF THE DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$67,162	\$183,485
DEPARTMENT TOTAL - ALL FUNDS	\$67,162	\$183,485

SECTION TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$110,000	\$220,000
SECTION TOTAL - ALL FUNDS	\$110,000	\$220,000

Sec. 5. Effective date. This Act takes effect January 1, 2020.

STATE OF MAINE

6i

IN THE YEAR OF OUR LORD

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§2472. Expenditures from the fund

Funds in the fund must be distributed by the University of Maine at Orono as provided in this section.

1. Pesticide container fee reimbursement. Funds must be provided for ongoing reimbursement to the State Tax Assessor on a monthly basis by the 15th of the month following collection, to pay for administrative costs not to exceed \$40,000 annually from collection of the pesticide container fee imposed under Title 36, section 4911.

2. Registered pesticides. Funds must be provided for ongoing reimbursement, not to exceed \$60,000 annually, to the Board of Pesticides Control, established in Title 5, section 12004-D, subsection 3 and referred to in this chapter as "the board," to generate and maintain a list of pesticides registered with the board pursuant to section 607 and answer inquiries relating to the list. The board shall post on its publicly accessible website, a list of currently registered pesticide products.

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- A. Testing ticks provided by residents of the State for pathogenic organisms;
- B. General tick laboratory operations;
- C. Salaries;
- D. Tick management research, demonstrations and educational outreach, including community integrated pest management and developing educational materials;
- E. Equipment, materials and supplies;
- F. Facility expansion; and
- G. Medical and veterinary pest management focusing on health-related issues caused by ticks and other arthropods as needed.

6. Pest research. Twenty-five percent of the balance remaining in the fund after the amounts under subsections 1, 2 and 3 are subtracted must be provided to the University of Maine at Orono or to an entity in collaboration with the University of Maine at Orono for a pest research project to be identified every 3 years by a pest research committee designated by the University of Maine at Orono, the University of Maine System and the department in the 2nd year of the project. The pest research committee under this subsection consists of 7 members, including:

- A. One member who is an extension specialist with pest management expertise, appointed by the dean of the University of Maine Cooperative Extension;
- B. Two members who are faculty of the University of Maine at Orono, College of Natural Sciences, Forestry, and Agriculture with pest management expertise, appointed by the dean of the University of Maine at Orono, College of Natural

Sciences, Forestry, and Agriculture, Maine Agricultural and Forest Experiment Station;

C. Two members, one representing the agricultural sector and one who is a commercial pesticide applicator, appointed jointly by the dean of the University of Maine Cooperative Extension and the dean of the University of Maine at Orono, College of Natural Sciences, Forestry, and Agriculture, Maine Agricultural and Forest Experiment Station;

D. One member representing a campus of the University of Maine System other than the University of Maine campus in Orono and having pest management expertise, appointed by the Chancellor of the University of Maine System; and

E. One member from the department with pest management expertise, appointed by the commissioner.

Members serve one-year terms and may be reappointed to successive terms.

7. Report. No later than January 15th of each year, the University of Maine at Orono shall submit a report to the board and the joint standing committee of the Legislature having jurisdiction over agriculture matters on use of the funds under this chapter.

8. Rules. The board may adopt rules to carry out the provisions of this chapter. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 2. 36 MRSA c. 723 is enacted to read:

CHAPTER 723

PESTICIDE CONTAINER FEE

§4911. Fee imposed

1. Imposition. A fee is imposed on the retail sale in the State of containers of pesticide products registered with the Board of Pesticides Control, established in Title 5, section 12004-D, subsection 3 and referred to in this chapter as "the board," in the amount of 15¢ per container. Three cents of the container fee imposed under this subsection may be retained by the retailer to defray the costs associated with collecting the fee.

2. Exemptions. The following products are exempt from the fee under subsection 1:

A. A container of pesticides sold by a manufacturer or manufacturer's representative directly to a pesticide applicator licensed under Title 22, section 1471-D;

B. A container of pesticides sold to a pesticide applicator licensed under Title 22, section 1471-D that is exempt from sales tax pursuant to section 1760, subsection 7-B or 7-C; and

C. A container of paint, stain, wood preservative or sealant registered as a pesticide with the board.

3. Administration of fee. The fee imposed by this chapter is administered as provided in chapter 7 and Part 3, with the fee imposed pursuant to this chapter to be considered as imposed under Part 3. The revenue collected during the preceding month pursuant to this subsection must be transferred to the Treasurer of State on a monthly basis on or before the last day of the month. The Treasurer of State shall credit all revenue derived from the fee imposed by this chapter to the Tick Laboratory and Pest Management Fund established under Title 7, chapter 419.

Sec. 3. University of Maine at Orono to conduct study on browntail moths. Upon the effective date of this Act, the University of Maine at Orono shall commence a study of browntail moths as the first research project to be conducted under the Maine Revised Statutes, Title 7, section 2472, subsection 6.

Sec. 4. Appropriations and allocations. The following appropriations and allocations are made.

ADMINISTRATIVE AND FINANCIAL SERVICES, DEPARTMENT OF

Revenue Services, Bureau of 0002

Initiative: Provides a one-time allocation for administrative costs associated with revision of the sales tax return to accommodate the pesticide container fee.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
All Other	\$16,000	\$0
OTHER SPECIAL REVENUE FUNDS TOTAL	\$16,000	\$0

ADMINISTRATIVE AND FINANCIAL SERVICES, DEPARTMENT OF DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$16,000	\$0
DEPARTMENT TOTAL - ALL FUNDS	\$16,000	\$0

AGRICULTURE, CONSERVATION AND FORESTRY, DEPARTMENT OF

Pesticides Control - Board of 0287

Initiative: Provides allocations for one half-time Office Associate II position to generate and maintain a list of registered pesticides.

OTHER SPECIAL REVENUE FUNDS	2019-20	2020-21
POSITIONS - LEGISLATIVE COUNT	0.500	0.500
Personal Services	\$24,213	\$33,890

All Other	\$2,625	\$2,625
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$26,838</u>	<u>\$36,515</u>

AGRICULTURE, CONSERVATION AND FORESTRY, DEPARTMENT OF DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$26,838	\$36,515
DEPARTMENT TOTAL - ALL FUNDS	<u>\$26,838</u>	<u>\$36,515</u>

UNIVERSITY OF MAINE SYSTEM, BOARD OF TRUSTEES OF THE

Tick Laboratory and Pest Management Fund N330

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee.

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS		
All Other	\$26,662	\$102,485
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$26,662</u>	<u>\$102,485</u>

UM Cooperative Extension - Pesticide Education Z059

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee to be used for tick laboratory costs.

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS		
All Other	\$27,000	\$54,000
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$27,000</u>	<u>\$54,000</u>

UM Cooperative Extension - Pesticide Education Z059

Initiative: Allocates funds to allow expenditures from revenue received from the pesticide container fee to be used for pest management education.

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS		
All Other	\$13,500	\$27,000
OTHER SPECIAL REVENUE FUNDS TOTAL	<u>\$13,500</u>	<u>\$27,000</u>

UNIVERSITY OF MAINE SYSTEM, BOARD OF TRUSTEES OF THE DEPARTMENT TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$67,162	\$183,485
DEPARTMENT TOTAL - ALL FUNDS	\$67,162	\$183,485

SECTION TOTALS

	2019-20	2020-21
OTHER SPECIAL REVENUE FUNDS	\$110,000	\$220,000
SECTION TOTAL - ALL FUNDS	\$110,000	\$220,000

Sec. 5. Effective date. This Act takes effect January 1, 2020.



PAUL R. LEPAGE
GOVERNOR

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

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WALTER E. WHITCOMB
COMMISSIONER

**MAINE BOARD OF PESTICIDES CONTROL POLICY ON ALLOWABLE
PESTICIDES FOR THE CONTROL OF BROWNTAIL MOTH WITHIN 250
FEET OF MARINE WATERS**

Adopted January 15, 2020

BACKGROUND

On January 25, 2008, the Board adopted Section 5 of Chapter 29 which regulates the use of insecticides used to control browntail moth within 250 feet of marine waters. Section 5 limits insecticide active ingredients to those approved by the Board. Since that time, a number of newer chemistries have been registered for use and far more data is available on the efficacy of many products. On April 19, 2019, the board recommended the existing risk assessment to be updated by the board toxicologist. This update started with input from the Maine Forest Service on efficacy and included use of newer predictive models and modified the exposure scenario. On January 15, 2020, the Board approved the following active ingredients for control of browntail moth in coastal areas located between 50 and 250 feet from the mean high water mark in accordance with CMR 01-026 Chapter 29: Standards for Water Quality Protection.

Acephate
Chlorantraniliprole
Cyantraniliprole
Indoxacarb
Piperonyl Butoxide
Tebufenozide
Spinosad

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ALLOWABLE APPLICATIONS FOR CONTROL OF BROWNTAIL MOTH NEAR MARINE WATERS (2020)

0 to 25 feet

25 to 50 feet

50 to 250 feet

Over 250 feet

Soil and tree injections of any appropriate pesticide following BPC regulations and label.

Non-broadcast applications using non-powered equipment and

- approved biological pesticides; or
- appropriate products by a licensed commercial applicator.

Non-broadcast applications are:

- less than 100 contiguous sq ft; and
- less than 20% of area within the 25 foot zone per year; and
- application directed away from water; and
- application minimizes drift to non-target species and areas.

With a variance from BPC, broadcast applications using non-powered equipment

Approved biological pesticides:

- *Spinosad*
- *BtK*
- *Azadirachtin*

Applications of any appropriate pesticide by a licensed commercial applicator (with category 3A) using non-powered equipment.

Applications of approved biological pesticides with powered equipment (potentially including aerial and UAV applications)

Applications of products approved for use within 50-250 feet of marine waters using hydraulic handheld and air-assisted equipment:

- spray is directed away from water, and
- wind speed is greater than 2mph and blowing inland

2020
Approved products:

- *Acephate*
- *Chlorantraniliprole*
- *Cyantraniliprole*
- *Indoxacarb*
- *Piperonyl Butoxide*
- *Tebufozide*
- *Spinosad*

Applications of any appropriate pesticide following BPC regulations and label

- must list proper site e.g., ornamental trees
- label does not have to list pest

This graphic summarizes Maine Board of Pesticides Control (BPC) rules and policies specific to control of browntail moth. All BPC rules, as well as product labels, must always be followed. BPC rules can be found at thinkfirstspraylast.org.

BPC recommends hiring a licensed commercial applicator. Potential serious environmental consequences and legal penalties may result from the incorrect application of pesticides.



ocean

mean high water