

**Report to the Joint Standing Committee on
Agriculture, Conservation and Forestry**

**In Response to Resolve 2011 Chapter 59,
125th Maine State Legislature:**

**To Enhance the Use of Integrated Pest
Management on School Grounds**

1. Background
 - a. Why is IPM at schools important
 - b. History/content of Chapter 27
 - c. School IPM around the country
2. Resolve 2011, Chapter 59
 - a. What the bill originally proposed
 - b. Content of the Resolve as enacted
 - i. Assignments to BPC
3. Development of BMPs
 - a. Process used
 - b. Final product
4. Assessment of Compliance with Chapter 27
 - a. Report summarizing the 2010 and 2011 Inspection Data
 - b. What does that data tell us
 - c. Summary of the targeted survey's
 - d. What does the data tell us
 - e. Data call-in from contractors making pesticide applications on school grounds
 - f. What does it tell us
 - g. Assessment summary
5. Actions already taken
 - a. Kathy sent a letter through the DOE
 - b. The compliance staff has made revisions to their inspection process
 - c. Kathy has worked with DOE to annually obtain IPM Coordinators
6. Conclusions/Recommendations for minimizing use of pesticides at schools
 - a. Strengths & weaknesses of Chapter 27
 - b. Recommendations

Section 1: Background

In 2001, the BPC was petitioned by a public interest organization to initiate rule-making to adopt a regulation governing pesticide use in schools. BPC established a stakeholder group comprised of representatives ranging from school superintendents and maintenance directors to local pest control businesses and citizen interest groups. Following a consensus-based rule-making process, this group led the development of Chapter 27. The final rule was adopted in 2002 by BPC following public hearings and a public comment period. Chapter 27 became effective in 2003 and was revised slightly in 2005.

Section 2: Resolve 2011, Chapter 59.

In June of 2011, the Governor signed into law Resolve 2011, Chapter 59. The Resolve assigned three principle tasks to the Maine Board of Pesticides Control (BPC): (1) Assess compliance with board rule Chapter 27: Standards for Pesticide Applications and Public Notification in Schools; (2) Development of best management practices for school lawns, playgrounds and athletic fields; and (3) Make recommendation for minimizing the use of pesticides in schools and on school grounds. The BPC has been working on those assignments since the resolve was signed. The follow report details the BPC's efforts to address concerns raised in the resolve.

Section 3: Development of best management practices for school lawns, playgrounds and athletic fields

A diverse ad hoc committee (see Appendix) was established including school, pest management, public health, and environmental professionals. A set of Best Management Practices (BMP) were drafted by Department of Agriculture (DOA) staff after extensive review of existing school and turf BMPs developed elsewhere, primarily at school and turf IPM programs at universities. A sample turf maintenance schedule originally developed in Minnesota, which was adapted for schools in Iowa, was used as a basis for our Maine School Grounds BMPs. The ad hoc committee reviewed and revised this document. It was also shared with Maine Educational Plant Maintenance Association members (school IPM coordinators and facilities directors) but no comments were received from them.

Section 4: Assess compliance with board rule Chapter 27: Standards for Pesticide Applications and Public Notification in Schools.

It was determined that several steps would be undertaken to assess compliance with the existing rule. Since pesticide inspectors regularly visit schools and complete detailed inspection reports, the first step was to summarize those reports. Additionally, inspectors were interviewed for insights they might have that were not captured on the reports. Secondly, a plan was developed

for visiting and surveying a random selection of schools across the state. Thirdly, detailed information regarding pesticide applications at schools by grounds management professionals was requested of those companies by BPC.

a. Analysis of Routine IPM School Inspections

Since the passage of Chapter 27, Board inspectors have regularly visited schools to assess compliance. On average approximately 100 schools are visited each year. Inspectors report that much of this time is spent explaining the rule and its requirements to IPM coordinators. They explain that there is a lot of turnover in this position and often the coordinators are not aware of the school's policy and the beginning of school year notification, even if the school is complying with these requirements. Inspectors have found that in schools with untrained IPM coordinators, the first inspection is spent educating the coordinator about the rule. Upon returning, generally two years later, they find (if the coordinator is the same) that the coordinators are trying to do a good job and that compliance is pretty good. Inspectors feel that most schools are trying to do a good job of IPM. A summary report of findings is attached.

b. Some notable findings are:

- Inspections have tended to focus on indoor applications. This may be a result of:
 - The time of year that inspections are conducted;
 - IPM coordinators are often more familiar with indoor pest management;
 - Records are very poor for outdoor pest management.
- Inspectors find it challenging to contact the IPM coordinator.
 - School staff may not know the identity of the coordinator;
 - The coordinator may not be aware that this is one of his/her duties;
 - Often a result of staff turnover.
- Nearly all schools have an IPM Policy (statistically 100%)
- Available records indicate that schools are doing relatively few applications, however records are often incomplete, making verification difficult.
- Based on inspection records, 93% of schools had a pesticide application done within the last two years, 12% had an application done which required 5-day advance notification.
- Overall, record keeping is poor
 - For instance, of schools who reported having a commercial pesticide application within the past two years, only 48% had copies of records on site (indications are that this is for indoor applications and that the number for outdoor applications would be even lower)
- Most schools contract with one or more pest management professionals (indoor/outdoor) ranging from monthly monitoring to an on-call service.

c. Survey of randomly selected schools

Twenty school districts or private schools that have both a high school and a middle school were randomly selected from each of the four interscholastic division classes. Department of Agriculture staff collaborated with the Department of Education to send out a letter to all

superintendents in the state to enlist their support. Of these, eight public school districts and one private school serving grades pre-K-12, agreed to participate. These nine school systems, located in eight counties, ranged in size from three to 13 schools and have high school interscholastic division ranging in size from class A to class D.

A DOA staff member, with familiarity and knowledge about school IPM, visited the selected districts to meet with school representatives. Participating school personnel usually included the IPM Coordinator and/or other school staff responsible for making decisions about care of sports fields, playgrounds and lawns. At two visits, the superintendent or headmaster was also present. For all nine visits, DOA staff attempted to obtain or view a copy of the IPM Policy, IPM notices and records, and pesticide application notices and records. The site visits inspected both indoor and outdoor IPM, but focused on outdoor applications because that was the focus of the resolve. School gardens, greenhouses, nature trails were also reviewed where they existed. A summary report of findings is attached.

d. Some notable findings are:

- Most school districts rely heavily on management recommendations from contracted grounds management professionals.
- Cost is one of the primary considerations behind grounds management decisions.
- Aesthetics and playability of varsity sports fields is another major consideration in grounds management decisions:
 - Varsity athletics attract parents, fans and revenue
 - The frequency of use and type of play is hard on the turf, and requires more maintenance than other turf areas
- So far, we do not find schools routinely applying pesticides to lawns, practice fields or other school grounds areas with the exception of perimeter treatments for fence line weeds or ant management which may receive annual or biennial treatments. (more research is being done to determine the extent of pesticide usage on school grounds – see below)
- Schools generally have no records for outdoor pesticide applications and rely on grounds management professionals to keep records for them.
- Records and interviews indicate that schools often try to schedule pesticide applications during vacations when fewer students are present and 5-day advance notice is not required. This is done both to avoid the notice requirement and to reduce exposure.
- Confusion remains regarding notification exemptions. Some schools think it is okay to do applications over a weekend without doing the 5-day notice, while others deliberately schedule applications during summer vacations but fail to post the area two days before and after the application.
- Most schools are using good sanitation, maintenance and land-care practices consistent with IPM although they are not always recognizing these practices as components of IPM nor are they keeping records of them

- Maintaining an accurate, up-to-date list of IPM Coordinators to serve as information contact points is difficult because schools are not required to provide this information and there is a high turnover rate for this position.
 - Few records exist regarding disinfectants on artificial turf, and there may be some confusion around these applications. More research needs to be done around this topic.
- e. Data from companies providing outdoor pest management services to schools**
Companies providing pest management services to schools were identified by reviewing inspection reports and survey results. Each company will be requested to send data regarding the services they provided, and how pest management decisions were made, broken down by individual fields at each school in each school district. This information will also include advice given and services performed, including pesticides, dates and rates of applications. Summary report to be included.
- f. What does it tell us?**
- g. Assessment Summary**

Section 5: Actions taken in response to Resolve 2011, Chapter 59

Section 6: Conclusions/Recommendations

- a. Strengths and weaknesses of Chapter 27**
- b. Possible recommendations for minimizing the use of pesticides in schools and on school grounds.**
- The current 5-day notice requirement probably does more to minimize pesticide use at schools than any other component of Chapter 27. Schools don't want to disclose pesticide use for a variety of reasons. Consequently, maintaining some version of public disclosure will serve to minimize pesticide use.
 - Review the record keeping requirements to ensure that they only include useful information, are not overly burdensome, and are not redundant.
 - Schools should be keeping records of pest sightings, applications, IPM.
 - Pest management professionals should be providing a full service report to schools at the time of each service visit and should provide a notebook to schools to assist them in keeping the full set of IPM records up to date and accessible.
 - Require an additional certification or permit for applicators working at schools (not a new category, just an additional segment of training). This new certification/permit would cover important regulatory and policy information about schools and the need to minimize pesticide use and reduce exposure
 - Require the IPM coordinator or their designee to "sign-off" on every application. As part of this process, the licensed applicator could indicate what will be necessary for notification for each proposed application, and the IPM coordinator could assume

- responsibility for notification. This would be required to be part of the applicator's records and the school's records.
- Require licensed commercial applicators to submit a separate annual summary report of the pesticide applications applied at schools. Also, have commercial applicators post those summaries on a web site, by school name.
 - Require districts to notify BPC with name of IPM coordinator(s) at the beginning of each year, or whenever there is a change, so there can be communication with IPM specialist.
 - Strengthen the role of the IPM coordinator:
 - Require some type of training/certification for IPM Coordinators. On-line training and in-person training should both be offered.
 - Periodic recertification (every 5 years) of IPM Coordinators
 - Make this transferrable with employee from job to job.
 - This could be combined with the notification above by making IPM Coordinators take an online "test" to indicate they understand their responsibilities.
 - In lieu of financial penalties for non-compliance, require additional training for IPM coordinators (eg 2 hours for first instance, 4 hours for second)
 - Give the schools an option to identify two coordinators, one for indoor, one for outdoor.
 - Put names of non-compliant schools on website