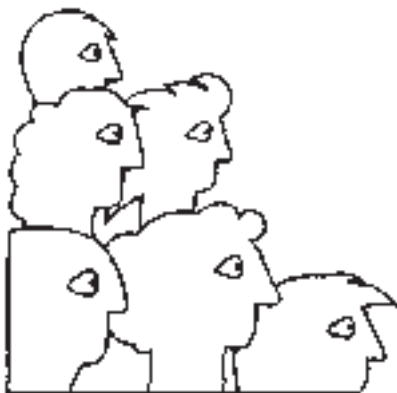

CHAPTER 13

Public Relations and Risk Communication for Aquatic Pest Managers

Aquatic pesticide applicators do their work in sensitive areas — sensitive to the environment and sensitive to public perception. The objective of their work is to change the environment. This may at first appear to be detrimental. However, aquatic plant management programs should be based on scientific research and years of experience, and they are designed to protect and improve the environment. If these programs are carried out correctly, the results are long-term benefits to water resources and their users. Misapplication or poor programs can result in fish kills or damage to nontarget plant communities or crops. The aquatic pesticide applicator must be aware of the potential impacts of misapplication and how to avoid them.



Often the general public does not fully understand the goals of aquatic pest management programs and their techniques. Because aquatic pesticides are placed directly in water where the public can come in contact with them through recreational activities and domestic water use, and because of the keen public interest in the environment, mistrust of aquatic pest management programs often develops. Therefore, aquatic pesticide applicators must be able to address environmental concerns while conducting their daily operations. Knowledgeable applicators are much appreciated by concerned individuals and also greatly benefit the entire aquatic plant manage-

ment profession. Review the information in the chapter on herbicide technology and environmental fate in this manual so you can communicate these principles effectively.

This chapter discusses some of the requirements that a chemical must satisfy before becoming a registered pesticide and ways to better understand and work more effectively with the public. Identifying your audience, being technically knowledgeable and practicing ways to share this information will improve your risk communication skills.

Data Requirements for Pesticide Registration

Because pest managers have direct contact with the public every day, they have an excellent opportunity to inform and educate people. When an applicator offers a homeowner literature about the techniques and pesticide products he/she uses and answers questions relating to these practices, their use is less likely to become a problem or an issue for the homeowner. Providing pesticide product information and discussing how these products become registered helps people understand the risks and benefits of pesticide use.

Before an aquatic pesticide is labeled by the EPA, research requiring approximately 10 years to complete must be conducted. Data required for pesticide registration include, but are not limited to, the following:

1. Potential residue in potable water, fish, shellfish and irrigated crops.
2. Environmental fate of the compound — where it goes after application and what happens to it when it gets there. (Review the chapter “Herbicide Technology and Application Considerations” in this manual.)
3. How the compound breaks down and what the breakdown products are.

4. Whether the compound is absorbed through the skin or other acute routes of entry by test animals.
5. Short-term or acute toxicity of the compound to test animals.
6. Whether the compound causes birth defects, tumors or other abnormalities after long-term exposure.
7. The toxicity of the compound to aquatic organisms such as waterfowl, fish and invertebrates.

These data are rigorously reviewed by the manufacturer, the EPA and the MDA before a product is labeled for use in Michigan. An aquatic pesticide is not labeled until it is determined that it will perform its intended function without unreasonable adverse effects on the environment.

Being able to successfully communicate this pesticide registration process and other information to the public may turn fear of pesticides into understanding and acceptance of their use.

Differences in Perception

Differences in perception between applicators and those alarmed about the pesticide applicators' work are likely. Aquatic applicators can take steps to avoid negative reactions. These will be discussed later. First, let's look at how a confrontation develops so we can learn how to turn it into an informative and beneficial conversation.

As a professional applicator, realize that you have considered your pest management practices, you understand the hazard associated with their use (for example, operating a harvester or using pesticides, which are hazardous substances) and you have voluntarily accepted the actual risk of using them — e.g., the chance of injury or damage from using a pesticide.

However, when members of the public experience a risk for the first time, an increased degree of risk or a new perception of risk e.g., exposure to pesticide in water, they respond with an emotional response evoked by everything about a pesticide except how likely it is to be harmful. An applicator needs to view public questioning as an opportunity to exchange information.

Risk communication is an interactive exchange of opinions and information. This exchange may be between individuals, the applicator and the client or the applicator and an outraged citizen, for example. Risk communication is necessary among groups, such as lake associations, institutions and/or agencies, including the Department of Natural Resources, the Michigan Department of Agriculture, the Environmental Protection Agency, universities and others.

How do people perceive risk? Any discussion about pesticides, their application, or pesticide residues has the potential to create serious concerns among consumers, possibly resulting in outrage. Looking at how people perceive risk helps to develop an understanding of why pesticides and their use produce such strong, potentially negative emotions.

Pesticides may be perceived as being risky because people feel they do not have control over their exposure to them, especially in an aquatic setting where chemicals can disperse over large areas, or possibly when the decision to apply a pesticide did not include their consent.



Outrage over pesticide use is heightened when people feel that someone else is benefitting while they, or the environment, are assuming the risk. Review Table 13-1 to see what qualities and perceptions cause something to appear more or less risky.

Table 13-1. Characteristics that contribute to perception of risk.

Less risky	More risky
Voluntary exposure	Involuntary exposure
Familiar	Unfamiliar
Controlled by self	Controlled by others
Fair	Unfair
Not fatal	Fatal
Natural	Artificial
Detectable	Undetectable
Old risk	New risk
Known to science	Unknown to science
Not in my backyard	In my backyard

To improve communication about benefits and risks:

Engage in early and sustained interaction with all stakeholders. Communicating with riparians

and other interested persons before, during and after a pest management treatment will help build trust. Interaction includes one-on-one discussions, attending lake association meetings, using newsletters, providing product literature, posting and making follow-up visits to treated sites.

Listen. Communication is a two-way activity. Let all parties with an interest be heard. If you do not listen to people, you can not expect them to listen to you.



Communicating is a two-way activity.

Accept emotions as legitimate. Acknowledge the feelings of people; put yourself in their place as well as you can. People are generally more concerned about trust, fairness and compassion than LD₅₀s or risk assessment.

Avoid finger pointing, such as: "Aquatic herbicides are needed because all the homes on this lake have septic fields that leach into the water." No one likes to have a finger pointed at him/her as the root of a complex problem, especially when he/she may have no control in the matter.

Be cautious of using comparisons of different risks. A voluntary activity such as water skiing does not cause the same level of concern as involuntary exposure to pesticides in a body of water where someone recreates. Comparisons are not a good way to justify risks.

Be honest and state your credentials and limitations. Do not ask or expect to be trusted. Disclose information as soon as possible, use credible sources, and use simple, nontechnical language. Acknowledge uncertainties and limits to scientific knowledge. If you do not know an answer, say so. Get back to people later with answers or direct them to a resource that can address their concerns.

Maintaining Public Confidence

Reduce pesticide use to the lowest level possible. Pesticide applicators must practice integrated

pest management to reduce the number of pesticide applications, maximize the effectiveness of each application and minimize pesticide impacts.

Seek to restore confidence in the ability of governmental agencies to protect the safety of commercial pesticide applications. Avoid publicly voicing any negative opinions about regulatory agencies. Instead, make positive suggestions about how regulatory agencies might improve.

Educate consumers about the steps taken to protect their safety. Notify waterfront residents before making applications and be sure all treated areas are visibly posted. Be sure all equipment is in proper working order and calibrated.



Listen to what the customer is asking and respond in a timely manner.

Communication is never a one-way process. It is essential to listen to what consumers are saying about changes they would like to have in the methods used to manage aquatic pests or in their willingness to accept a larger pest population.

Those who use aquatic pesticides must recognize that community members believe that their concerns about pesticides are legitimate. It is the public mindset that encourages community leaders and legislators to regulate commercial pesticide use. There will no doubt be increased regulations and restrictions imposed upon pesticide applicators. Applicators are expected to conduct themselves professionally and with safety consciousness.

Applicators can avoid potential criticisms by being considerate of public concerns, being knowledgeable and informative, and using common sense and extra care while handling and applying pesticides.

Professionalism

When you are in the aquatic pest management industry, you should:

- Remember that part of what you are selling is your reputation. Do not bid lower than you feel is truly

reasonable to do the job properly. Let someone else cut corners — there is no surer way to run into problems.

- *Choose your employees carefully and train them with equal care.* There is a direct correlation between lack of experience and training of the crew and the number of problems that can be expected on the job. Some of the problems associated with an inexperienced or poorly trained crew may simply cost you money; others may cost you an enforcement record.

- *Make sure you and your employees know who the client is and what that client expects.* It may appear that it will cost you less not to train crew members, but it will cost you more in the long run if you lose a business opportunity because you didn't meet the standards of the contracting agent.

If you have field staff members working on aquatic pest management programs, you should:

- *Train new employees how to use materials and equipment safely and accurately.* This training can be a refresher course for experienced employees. Teach your employees in the pest management program to be sensitive to the concerns of the public. If your work is in resort or outdoor recreation areas, keep in mind that the public will view any visible maintenance impacts and water use restrictions as interfering with their enjoyment of the outdoors. Make sure you and your applicators are aware of local concerns and are alert to any conflicts that may develop as a result.

- *Establish policies for your employees that outline exactly what you expect of them when they are at an application site.* Make sure that you enforce those policies and that you have a system for dealing with any employees who do not conform to those policies. Make sure employees use PPE and follow pesticide label directions.

- *Keep in touch with state regulatory agencies:* the Michigan Department of Agriculture and the Michigan Department of Natural Resources. Make sure that you know the latest requirements for conducting your business. Ignorance of the law is no defense. Some sources of information are:

- Labels and Material Safety Data Sheets (MSDS).
- Michigan State University Extension.
- Field demonstrations.
- Chemical company staff members.
- Industry publications.
- Applicator training seminars.

- *Let your regulatory agency know where and when you are working.* Much of this is accomplished through the permit process. This helps agency staff members respond to inquiries and gives them the opportunity to come out to the site and see what is going on. It lets them become familiar with your operations and you with theirs. You benefit because the agency can help identify potential problems before they become serious.

The basic rule for safe pesticide applications is: "Follow the label and use common sense." Common sense dictates that you remember that you or the people who work for you are using potentially dangerous chemicals. Your objective should be to make sure they are used properly and carefully. Don't be your own worst enemy by tolerating carelessness in your operations.

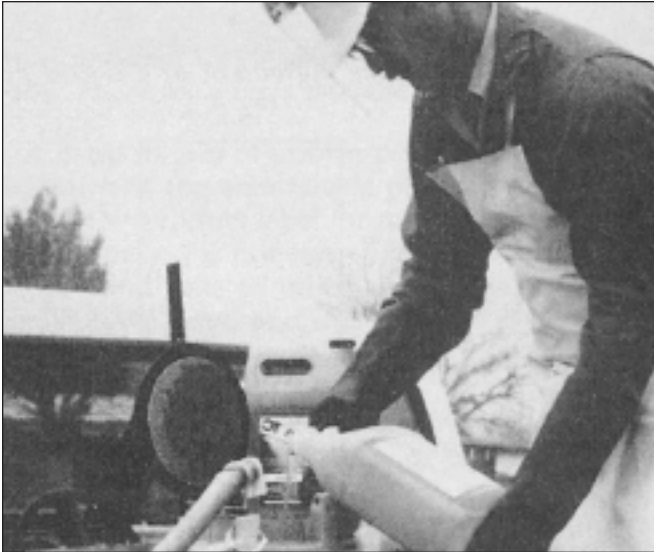
Safety Measures

Use of pesticides to control aquatic plants and other pests causes concern for many people. Typically, these concerns involve what products are being used and whether they are safe. Understand and be able to communicate the pesticide registration process, the pesticide's mode of action and the environmental fate of pesticides.

Most compounds do not make it through the registration screening process and are never marketed as pesticides. Those that do have undergone extensive review — a review that will continue throughout the product's life. Detailed Material Safety Data Sheets (MSDS) and concisely stated product labeling outline conditions of safe use established by extensive research and assist the applicator in performing operations safely.

Applicators on the job should:

- 1) Have available product information
 - Sample label.
 - MSDS.
 - Literature.
- 2) Respond to public inquiries:
 - Get name, address and phone number.
 - Do not spray without owner's permission and appropriate permits.
 - Distribute literature.
 - Resolve complaints in a timely manner.
- 3) Be professional
 - Maintain equipment.
 - Dress properly and appear neat.
 - Wear PPE when handling and applying pesticides.
 - Be polite.



Be professional and responsible: wear the appropriate safety equipment.

Often a waterfront property owner's questions about pesticide applications go unanswered or are not answered to his/her satisfaction. This generally results in a formal complaint and polarized viewpoints. Landowners feel the applicator is hiding something and the applicator may view

their questions as a nuisance. A simple solution to this problem is to know the answer to the landowners' questions before they are asked. A quick, direct response to the public's concerns facilitates better communications and a more enjoyable working environment. Be prepared to respond to such commonly asked questions as these:

- What are herbicides and why are they used?
- Do aquatic herbicides affect fish and reptiles?
- Can we use the water for irrigating after it's been treated?
- What should we do if our dog swims in or drinks the treated water?
- What kinds of precautions are taken to make sure that pesticides don't get into groundwater supplies?
- Do herbicides and other pesticides pose any risk to me and my family?
- What happens if herbicides move out of the treated area?
- If my cattle drink treated pond water, will they be harmed?

Chapter 13 – Public Relations and Risk Communications

Review Questions

Write the answers to the following questions, and then check your answers with those in the back of this manual.

- List four or more types of data and information required for a pesticide to become registered with the EPA.
- Who reviews the data collected for pesticide registration?
 - Manufacturers.
 - EPA.
 - State governments.
 - All of the above.
- What is risk communication?
- Why are pesticides perceived as risky, and how is that risk heightened?
 - Involuntary exposure.
 - Unfair.
 - Artificial.
 - Undetectable.
 - All of the above.
- How can a pesticide applicator improve communication?
- How can an applicator maintain public confidence?
 - Use IPM practices.
 - Educate consumers about steps taken to protect their safety.
 - Build confidence in governmental agencies.
 - All of the above.
- Why is it important to train employees carefully?
- Labels and Material Safety Data Sheets (MSDS), Michigan State University Extension, field demonstrations, chemical company staff members, industry publications and applicator training seminars are all sources of current pesticide safety information. True or False?
- What should applicators on the job be able to communicate about the pesticide they are using when dealing with the public?