

The Pesticide Stewardship Alliance's PESP Strategy

TPSA Organization Description and Strategic Approach

The Pesticide Stewardship Alliance (TPSA) promotes and supports pesticide stewardship in local, national and international arenas. Pesticide waste management and recycling programs were the initial foci of the organization, but TPSA now works to improve stewardship throughout the pesticide life-cycle—from product manufacture and formulation, through commerce, storage and application, and ultimately the final disposition of unwanted pesticides and properly rinsed containers.

TPSA fosters interaction and communication among pesticide stewardship professionals from diverse sectors and across the pesticide user community. TPSA members and past conference participants include professionals from the following areas:

1. United States Environmental Protection Agency, including the Offices of Pesticide Program, Solid Waste, Water and Air, and Regional Offices.
2. State regulatory agencies, county and city governments, federal agencies other than EPA like the Department of Transportation, and government associations such as the Association of American Pesticide Control Officials (AAPCO) and Association of Structural Pest Control Regulatory Officials (ASPCRO).
3. Pesticide industry—including companies that manufacture, formulate or distribute pesticides, pesticide containers, or other products/equipment utilized in any aspect of pesticide manufacture, packaging, transport, storage, and application and industry organizations representing such companies, like CropLife America, CropLife Canada and the Agricultural Retailers Association.
4. Waste management industry—including companies that identify, package, transport or dispose of waste pesticides. These companies often contract with state regulatory agencies to implement state pesticide disposal programs.
5. Pesticide container management and the recycling industry—including the Ag Container Recycling Council (ACRC) and companies that are involved in any aspect of pesticide container management, which include the ACRC contractors and other companies that recycle pesticide containers. This category of members and conference participants has expanded to include individuals and companies that recycle (or support the recycling of) plastic films, silage bags, nursery pots and other plastics used in agriculture and horticulture.
6. Academic institutions involved with research, teaching or extension in area(s) of pesticide stewardship, agricultural plastics management and related associations such as the American Association of Pesticide Safety Educators (AAPSE).
7. End users—including individuals or businesses that use or apply pesticides and trade associations or commodity groups that represent end-users or applicators.
8. Public or environmental health—including individuals and organizations involved with environmental and natural resource protection, recycling, pollution prevention or other conservation or ecological issues.

This membership diversity is integral to the mission of the organization, and is supported by the TPSA By-Laws, which stipulate that each of these areas should be represented on the Board of Directors. In addition, TPSA coordinates with other organizations with stewardship goals in areas other than pesticides, such as the North American Hazardous Materials Management Association (NAHMMA) and the Product Stewardship Institute.

Describe your Organization's Five-Year Goals Related to Pesticide Risk Reduction

As described above, TPSA is an organization which provides a forum for the broad spectrum of stakeholders who are involved in the manufacture, distribution, regulation, education, use and disposal of pesticide products. Pesticides are one of the most highly regulated classes of chemicals in the US because, if used improperly, they can adversely impact human health and the environment by creating unacceptable risk. The ability to use pesticides is based on the outcome of a risk vs. benefit analysis.

Good pesticide stewardship is recognized as a critically important issue by all members of TPSA as a means of risk reduction; however, for stewardship activities and goals to be sustainable and effective, they must consider the viewpoints of all the stakeholders who are involved in pesticide lifecycles. TPSA provides a forum for these stakeholders to meet and discuss stewardship issues in a civil, informative, and non-threatening manner in order to build better understanding of all aspects of pesticide stewardship issues.

Over the next five years, there are many stewardship issues which the pesticide regulators, industry, and educators will be engaged in such as:

- The need for pesticide container recycling rules,
- Implementation of the container and containment rules,
- Proposed revisions to applicator certification and the Worker Protection Standard regulations,
- Discussion of label language to address concerns over spray/volatility drift,
- Discussion of label language to address concerns over endangered species,
- Pesticide and pesticide container disposal options and methods.

TPSA's five-year goal is to foster and facilitate communication among pesticide stakeholders regarding these issues and other stewardship issues as they arise. The results of TPSA's efforts in this strategy should be evident in TPSA members and others exhibiting better manufacture, distribution, regulation, and management of pesticides; improved education; and reduced risks resulting from pesticide misuse and poor management practices.

What do you envision doing (broadly) to try to resolve your major issues?

TPSA will employ several methods of communication in order to foster "cross-pollination" of ideas and information. TPSA will host an annual conference where representatives of a broad spectrum of stakeholders with interests in different stages of the pesticide life cycle can discuss these issues, present their viewpoints and educate each other. TPSA maintains a website and has monthly conference calls where informal discussions can take place on a variety of stewardship issues. The most important benefit

leading to improved communication is the networking aspect of TPSA which facilitates interaction among stakeholders both within and outside of TPSA functions. This improved communication and networking will facilitate good pesticide practices, thus reducing risks from pesticides.

Goal 1 and Tactics

Information Exchange

Provide a forum for diverse groups of pesticide stewardship professionals to interact and communicate to improve pesticide stewardship and reduce risks from pesticides.

Tactics

Tactics for Goal 1 include the exchange of technical information, development of policy and strategies, and implementation of projects to improve pesticide stewardship by means of (i) an annual conference; (ii) organization website; (iii) electronic communication; (iv) substantive stewardship discussions during monthly meetings of the TPSA Board of Directors and annual meetings of the TPSA membership; and (v) participation on related external advisory groups, committees, etc.

The annual conferences, which began in 2000, move to different regions of the country each year and are generally held in February. The 8th annual TPSA Conference will be held in Asheville, North Carolina, February 24-27, 2008. The conference agendas include invited and submitted presentations, moderated panels, work sessions and roundtable discussions on a wide range of pesticide stewardship topics. The website includes presentations from past annual conferences, position papers, minutes from the Board of Directors meetings, news, links, other pesticide stewardship resources and a “members only” section. Monthly updates, including important stewardship news and the highlights from the Board of Directors meetings are sent to TPSA members. Other electronic announcements or information is sent as needed.

Measures

Surrogate measures will be used to assess risk reduction resulting from interaction, communication, and organization-building activities.

- Organization building will be assessed by attendance at the annual conference and by membership numbers and sectoral diversity;
- Conference evaluations will be used to identify effective formats and themes;
- Interest in specific conference presentations will be tracked both through conference evaluations and also by monitoring "hits" on the web-postings of conference proceedings;
- Use of the website as an organization-building activity will be assessed both in terms of the completion of additional web sections and functionalities as well as by monitoring usage of the website as an informational clearinghouse;

- TPSA's role as the premier pesticide stewardship organization will be assessed in part by monitoring TPSA's ranking on relevancy-based search engines. For example, in October 2007, using the search term "pesticide stewardship," the search engine Google returned the URL for TPSA as the first of 676,000 hits. The Yahoo search engine returned the TPSA URL as the 2nd of 784,000 hits (behind the PESP). In June 2005, the URL for TPSA was the first of 177,000 hits on Google and 4th of 126,000 hits on the Yahoo search engine; and
 - Electronic communication: It is a priority of TPSA to improve on-going communication with members, conference participants and other professionals to distribute pesticide stewardship news, engage the membership and other interested parties throughout the year, and ensure ongoing technical information transfer. Success will be measured by implementation of regular electronic communication and an increase in participation in TPSA activities (Board calls, conference planning and projects).
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Goal 2 and Tactics

International Pesticide Stewardship

Broaden the reach of stewardship activities and interactions thereby benefiting all by the sharing of experience and expertise.

Tactics

Encourage international pesticide stewardship and participation.

Measures

- Research and gather information on global stewardship efforts;
 - Inclusion of international pesticide stewardship issues and speakers into TPSA conference agendas;
 - Continued attendance of international collaborators at the TPSA conference;
 - Establishment of formal partnerships with international pesticide stewardship groups;
 - Implementation of joint programs and activities with international collaborators;
 - Establishing a network of international members with locations, contact information and expertise; and
 - Development of an international stewardship standard(s) that TPSA could promote, such as triple rinsing empty containers.
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Goal 3 and Tactics

End of Life Cycle Issues

Promote awareness and provide information regarding pesticide end of life cycle issues, such as pesticide disposal and plastic pesticide container recycling, and the related topic of agricultural plastic recycling.

Tactics

A key objective since TPSA's inception, end of life cycle issues will be addressed as follows:

1. Pesticide Disposal: Efforts to facilitate the collection and proper disposal of unwanted and obsolete pesticides, and clean-up pesticide storage sites will include:
 - a. developing a resource center/clearinghouse for pesticide disposal-related resources;
 - b. identifying and analyzing disposal related issues;
 - c. establishing a network of disposal program coordinators;
 - d. serving as a resource for individuals or organization implementing a pesticide disposal program;
 - e. developing audio-visual materials that promote pesticide disposal and present an argument for supporting disposal programs; and
 - f. recognizing both new and existing disposal programs.

As the storage of unwanted and obsolete pesticides and improper disposal of these pesticides presents a serious risk to human health and the environment, proper disposal will in turn result in risk reduction to the human health and the environment. As old pesticide containers degrade, and begin to leak, pesticides leach into soil and water, are windswept or volatilized into the air, and may be ingested by people and other non-target biota. Many of the older, obsolete pesticides persist for long periods and bio-accumulate. The collection and disposal of these hazardous chemicals by knowledgeable and properly equipped hazardous waste contractors is critical for risk reduction.

2. Container Recycling: Efforts to facilitate the recycling of pesticide containers include:
 - a. developing a resource center/clearinghouse for container recycling related resources;
 - b. promoting container recycling in organizational literature and events;
 - c. identifying and analyzing container recycling related issues;
 - d. establishing a network of recycling program coordinators;
 - e. serving as a resource for individuals or organizations implementing a container recycling program;
 - f. developing audio-visual(s) that promote container recycling and present an argument for supporting container recycling programs;

- g. advocating for recognized standards for recycling to ensure consistent and full implementation of container recycling programs; and
- h. recognizing both new and existing container recycling programs.

When not collected for recycling, plastic pesticide containers are often burned in open fires on-the-farm, exposing nearby residents, wildlife, and the food chain to toxic emissions from both the pesticide residues and from the burning plastic or they are disposed of in a sanitary landfill where they will remain. Promoting best management practices in handling of containers (such as triple- or jet rinsing pesticide containers and removal of non-recyclable components) and their removal from the waste stream reduces risks to human health and the environment.

- 3. Agricultural Plastic Recycling: Efforts to facilitate the recycling of agricultural plastics other than pesticide containers include:
 - a. developing a resource center/clearinghouse for agricultural plastics recycling-related resources;
 - b. promoting agricultural plastics recycling in organizational literature and events;
 - c. identifying and analyzing agricultural plastics recycling related issues;
 - d. establishing a network of agricultural plastics recycling program coordinators;
 - e. developing audio-visual materials that promote agricultural plastics recycling and present an argument for supporting such recycling programs; and
 - f. recognizing both new and existing agricultural plastics recycling programs.

When not collected for recycling, agricultural plastics are often burned in open fires on-the-farm, exposing nearby residents, wildlife, and the food chain to toxic emissions from the burning plastic. Promoting best management practices in handling agricultural plastics to optimize their potential recycling markets and their removal from the waste stream reduces risks to human health and the environment.

Measures

Direct measure of risk reduction can be made by compiling pounds of pesticides collected, quantity of containers collected for recycling and quantity of agricultural plastics collected for recycling. It should be noted that full credit for these collections does not rest with TPSA. Surrogate means of measuring TPSA impact on risk reduction through promotion of both pesticide disposal and container recycling include:

- 1. tracking the number of successful programs;
- 2. evaluating TPSA contact hours with program coordinators;
- 3. tracking new TPSA memberships of persons associated with disposal and recycling programs;
- 4. number of audio-visual materials requested by members and non-members; and

5. tracking the number, depth and success of sessions dedicated to this topic at TPSA conferences.
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Goal 4 and Tactics

Labeling as a Means of Pesticide Risk Reduction

Discuss and explore the issues surrounding the revision of pesticide label language to include improved stewardship information for all pesticide users. Examples include: clear instructions for pesticide product disposal and container management, spray drift reduction language, and endangered species protection language.

Tactics

Regulatory agencies and public health advocates often consider using label language to address a perceived risk to human health or the environment from pesticide use. Pesticide manufacturers, distributors, and end users are directly affected by revisions to label language because pesticide regulation follows the premise that the “label is the law”. It is important to direct the label language towards the intended risk reduction goals and not create unintended consequences which can divert the resources of pesticide manufacturers, distributors, and end users. The tactics for revising pesticide label language to include improved stewardship information for all pesticides users include having direct and open communication early in the process with all stakeholders to understand the perceived risk and the issues of each stakeholder group.

Measures

A direct measure will be the number of labels with improved stewardship labeling. In addition, effectiveness will be measured by the number of presentations at TPSA’s annual conference about improved pesticide label language and the number of participants in those presentations. Surrogate measures include:

- The number of established label-related workgroups or label-related projects in which TPSA is represented and is able to contribute ideas and information about pesticide stewardship; and
 - The number of improvements in stewardship information on pesticide labels that the organization has influenced.
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Goal 5 and Tactics

Pesticide Distribution Risk Reduction

Create an effective pesticide distribution system that minimizes improperly certified or incompetent applicators using pesticides.

Tactics

Proper pesticide use depends on pesticides being distributed to end-users who have the education and training to understand the potential hazards involved in pesticide use. Making sure that end-users have the necessary education and training to handle the pesticides they use involves a wide array of parties including the manufacturers and the EPA who determine the hazards associated with the pesticide, the state and federal regulators who determine the knowledge and if necessary, certification or licensure, required to use the pesticide, and, develop appropriate certification programs, pesticide educators who develop the training programs to minimize the knowledge gaps in applicators using pesticides, and distributors who verify that end-user customers have the appropriate levels of licensure and certification. There is significantly less risk when applicators are competent to use the pesticide. Because there are many stakeholders to this system, the primary tactic will be to promote and foster discussion regarding each step. Each stakeholder will be encouraged to describe their view point and the challenges they face towards meeting their individual goals. Opportunities for cooperation will be identified where stakeholders can take into account upstream and downstream viewpoints in order to create a more efficient system.

Measures

The effectiveness of these tactics will be measured by the number of presentations at TPSA's annual conference and the number of participants in those presentations.