*"The Pesticide Environmental Stewardship Program: considering an opportunity to demonstrate the AMCA's commitment to sound environmental management*¹*"*

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INTRODUCTION. There is no question of the great need for pesticides use in the U.S. In 1993, the U.S. Environmental Protection Agency (EPA) reports that U.S. use of pesticides totaled 1.1 billion pounds of active ingredients (=\$8.5 billion) - two-thirds of that for agricultural uses with the remaining one-third for other uses (*e.g.*, industrial, commercial, governmental & household uses), of which mosquito control is a part. Paying careful attention to the potential environmental impacts arising from the application of pesticides is a duty of any individual or organization involved in pest control (*i.e.*, any environmental steward). Mosquito control certainly is no exception. Collectively and individually, we must increasingly consider both the benefits and potential risks of pesticide use to public health and the environment.

In December 1994, the EPA in association with the U.S. Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA), initiated a program entitled the Pesticide Environmental Stewardship Program (PESP). This was initiated in recognition of the nationwide need for an approach to the application of pesticides that also considers and exercises environmental stewardship. The purpose of this article is to educate the AMCA membership about PESP and outline both the benefits to, and the requirements of the AMCA, should it choose to become a partner in this program.

¹Some of the information used in this article was derived from a brochure produced by the EPA concerning PESP.

THE GOALS AND PRINCIPLES OF THE PESTICIDE ENVIRONMENTAL

STEWARDSHIP PROGRAM. PESP is a broad effort aimed at reducing pesticide use and risk in both agricultural and nonagricultural environments through accomplishing two major goals:

- 1) Developing specific use/risk reduction strategies that include reliance on biological pesticides and other approaches to pest control that are considered to be safer than traditional chemical methodologies, and,
- 2) By the year 2000, having 75 percent of U.S. agricultural acreage adopt Integrated Pest Management programs.

A key component of the PESP program is the development of a public/private partnership. When PESP was first announced in December 1994, more than 20 private organizations signed on as charter members. Today there are 48 partners including the New England Vegetable and Berry Growers Association, the Golf Course Superintendents Association of America, the Professional Lawn Care Association of America and the American Corn Growers Association. Concerning PESP, Carol M. Browner, EPA Administrator has stated,

> "Voluntary pollution prevention has been a cornerstone of our efforts to protect human health and the environment, and this new pesticide partnership is an important step toward that goal...I congratulate the companies and grower groups that are joining us for their forward thinking approach to environmentally sound pesticide use practices and look forward to seeing others follow their lead."

All organizations with a commitment to the above-mentioned goals are eligible to join the program and the authors (along with the AMCA Environmental Protection Committee) believe it is time that the AMCA carefully considers becoming a member of this interagency, cooperative program. When joining PESP, each "partner" commits to stewardship as a key part of their pest management practices. Participation in the program requires that all partners must abide by the following principles:

- 1) Participation is completely voluntary and partners agree to develop environmental stewardship strategies and implement specific pest management practices designed for risk reduction when using pesticides,
- 2)The Federal government recognizes the need to protect public health and food in the U.S. with efficient, cost-effective pest control. Through research and education, the Federal government will seek to promote and fund the adoption of alternative techniques and practices that enhance pest management and reduce pesticide use and risks.

3) The Federal government will integrate the environmental stewardship strategies developed by participating members into its policies and programs for agriculture and the environment, and will lead by example with its own use practices.

BENEFITS OF PESP PARTICIPATION. The EPA states that joining the PESP partnership gives each participating organization the opportunity to demonstrate its commitment to environmental stewardship and take the necessary steps to put this commitment into practice. Membership can enhance public perception of the participating organization, can provide for support from constituents, and boost member morale. Membership also offers access to the following benefits:

- 1)Upon joining, the participating organization is assigned a liaison who serves as that group's official contact with the EPA. The liaison can be called upon to help obtain additional information about PESP or about other EPA programs, policies and procedures. The contact person can also help express the participating organizations concerns to EPA management and ensure that these views are considered as the Agency develops pesticide regulations and makes policy decisions.
- 2)As funding allows, EPA and the USDA provide participants with seed money to help support pest management practices that reduce pesticide use and risk. For 1996, \$250,000 is allocated for this program where types of projects considered for funding will include education, demonstration, outreach, technology transfer and applied research. Partners are asked to participate in the identification of needs for research on alternative systems for pest management.
- 3)PESP publicly recognizes partners that demonstrate their commitment to environmental stewardship and achieve progress in reducing pesticide use and risk while managing pests in a cost-effective manner.

RESPONSIBILITIES OF PESP PARTICIPATION. Any organization desiring to become a partner in PESP must develop and implement formal strategies to reduce the use and risk of pesticides. Partners must agree that their pesticide use will be tailored to specific sites, crops and regions of the country, as is appropriate for the participating organization. Partners must also commit themselves to define and implement their strategies in a timely fashion and to report regularly on progress. Associations of pesticide users (such as the AMCA) must agree that their participating members will use the safest, most effective pest management practices available.

POSSIBLE AMCA PARTICIPATION IN PESP. The possibility of the AMCA's participation as a partner in PESP was first brought to Douglas Wassmer's attention by the EPA's Dr. Robert Rose during the Summer of 1995. Since that time, the AMCA's Environmental Protection Committee has considered the merits of participating in this program.

At the AMCA's Interim Board Meeting in October 1995, the Environmental Protection Committee suggested to the Board that the AMCA strongly consider participating in the program. At that Interim Board meeting, Board action was tabled until more can be learned about the program and the general membership become better informed.

MOSQUITO CONTROL'S CURRENT COMMITMENT TO ENVIRONMENTAL

STEWARDSHIP. As a group, mosquito control nationwide has already demonstrated a commitment to sound environmental management techniques through its large-scale use of biopesticide larvicides (*i.e.*, the insect growth regulator (IGR) methoprene and *Bacillus thuringiensis israelensis (Bti)*) as part of an Integrated Pest Management (IPM) program. Where possible, mosquito control's use of IPM has included a dedicated effort to use source reduction when possible. Source reduction typically results in a reduction in the need for pesticide use. In many locations, in addition to mosquito control goals, these source reduction efforts have included the improved management of environmentally sensitive habitats. To the authors, it appears that overall, mosquito control in the U.S. is already adhering to some of the goals and principles of PESP. In order to become a member, the AMCA would first need to develop the strategy document which is required by PESP.

Coincidently, mosquito control in Florida, through the Fla. Coordinating Council on Mosquito Control (a legislatively established interagency committee formed to address issues affecting mosquito control and natural resource concerns), has been requested by the EPA to develop a "White Paper" on Florida mosquito control practices. As explained by the EPA, the goal of this request is to clearly explain past and present mosquito control practices in the State to identify ways in which pesticide use might be reduced in the future. The development of this "White Paper' is well under way with a scheduled completion in the Spring of 1996. With some modification to reflect mosquito control efforts nationwide, this document could possibly serve as the framework for the AMCA's PESP strategy document. If the AMCA decides to become a PESP partner, the Environmental Protection Committee has volunteered to the AMCA Board to develop the strategy document using Florida's "White Paper" as a model. The mechanism for providing input into and review of the strategy document as well as for documenting how the AMCA is meeting the strategy document goals in the future, have not yet been determined and is open for suggestions from the AMCA membership. Members' input into this process would be greatly appreciated.

EXPERIENCES OF PARTICIPATING "PARTNERS". In researching this article, we felt that it would be important to discuss PESP with representatives of organizations who have already become partners. This would allow us to learn their impressions as to how the program has helped them, what responsibilities (perhaps some unforseen) they have encountered in adhering to the program's requirements, and also to learn what mechanism they have put in place to document how they are accomplishing the goals of their strategy document.

Toward that informational need, detailed discussions (and some correspondence) were conducted with several PESP partners. Through contact with the Golf Course Superintendents

Association of America (contact person: Cynthia Kelly-Governmental Relations), the Professional Lawn Care Association of America (contact person: Tom Delaney-Government Affairs), the International Apple Institute (contact persons: James Cranney-Director of Industrial Services & Julie Daly-Director of Communications), and the National Peanut Council (contact person: Kimberly Cutchins-President), valuable information has been obtained.

While each of these organizations was strongly in support of their decision to participate in the PESP program, they recommend entering into it cautiously. They stress that before entering the partnership, your organization should clearly decide what it wants to gain by becoming a PESP partner - whether it be: 1) the benefits of having an identified liaison within the EPA who, their experience has shown, can be an effective conduit to make certain your organization's concerns are being heard within EPA, 2) the recognition that your organization can receive by being designated an "Environmental Steward" by the program, or 3) being eligible to apply for a grant to fund programs that will help achieve the goals of the strategy document.

In discussing the responsibilities of the program with the above-mentioned organizations' representatives, it was stressed that the PESP program is relatively young, now being only a few years old. Several of the partners had not had their strategy document approved. We were told that an initially informal PESP arrangement is becoming more formal, with more paperwork probably an inevitable outcome. Also, just because the participating organization (in our case that would be the AMCA) might receive partnership status, that does not yet automatically mean that sustaining AMCA members (*e.g.*, local mosquito control agencies), can make the claim that their individual organizations are PESP partners. They can do so only if they demonstrate that they are living up to the goals and objectives of the approved strategy document.

Concerning the strategy document itself, it was stressed that simply defining all the AMCA's inplace programs that are contributing to reducing pesticide risk, is not enough. An important, stated EPA goal is to reduce pesticide use/risk over time. However, the organizations interviewed emphasized that they are not willing to concede that pesticide use is inherently problematic. This too is certainly a position that the AMCA supports, that being that careful pesticide use is, and will continue to be, an essential tool in mosquito control's IPM programs. However, reducing pesticide "risk" is a goal shared by the organizations interviewed and one that perhaps the AMCA too can endorse. A dedication to reducing pesticide risk can be accomplished in a number of ways, one possibility being better education resulting in more prudent application of pesticides along with an increased commitment, where possible, to IPM programs.

We envision some difficulty in identifying or developing an internal mechanism to verify that the goals of the strategy document are being met. The International Apple Institute has established regional task forces to monitor members' compliance with a national task force to coordinate the regional groups findings. It is difficult to see how some similar arrangement might work in the AMCA but other options may be available. For instance, perhaps PESP grant money could be used to develop an effective means for the AMCA to internally administer the program.

SUMMARY. By the 1990's, environmental managers, of which mosquito control is one highly visible example, now realize that implementing sound environmental stewardship is important in sustaining or, where possible improving, the quality of life for ourselves and for subsequent generations. Over the past several years, the EPA reports that total U.S. use of pesticides has stabilized as application rates have reduced and as treatments have become more efficient and better targeted. While the use of pesticides undeniably can provide well-documented benefits, it can also include some environmental risks. PESP is a cooperative program designed to try and minimize the risks of pesticide use and at the same time provide benefits to participating organizations. Becoming a PESP partner could be a step in the right direction for the AMCA as it continues to attempt to demonstrate that it is an organization not only interested in vector control, but also in maintaining, and whenever possible enhancing, the environmentally sensitive habitats in which we work. However, beneficial programs also include responsibilities. The AMCA will have the opportunity to discuss the merits of becoming a PESP partner at the 1996 Annual AMCA meeting in Norfolk, Virginia. Individual members' input is strongly encouraged as we consider whether the AMCA should enter into this partnership.