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Children's Health Protection  
Advisory Committee  
Cal/EPA, Office of Environmental  
Health Hazard Assessment  
1515 Clay Street, 16th Floor  
Oakland, CA 94612  

Dear Dr. Marty:

Thank you and the other members of the Children’s Health Protection Advisory Committee for your letter of April 7, 2003, regarding the Agency’s implementation of the Worker Protection Standard (WPS). We very much appreciate the Committee’s interest and recommendations for improvements to the WPS to ensure the protection of farmworkers and their families. We welcome input from all stakeholders on how to improve our programs, especially one as important as the implementation and enforcement of the WPS.

Your letter contains several recommendations for ways to strengthen the WPS program. I will respond to each of these recommendations below.

EPA should improve data collection and quality by creating a national pesticide incident reporting system accessible through a toll-free number staffed by English— and Spanish— speaking personnel and increase funding for effective surveillance.

As you noted, the General Accounting Office, in its 2000 report, recommended that EPA work with the National Institute for Occupational Safety and Health (NIOSH) to improve the quality of information on pesticide poisonings in the U.S. EPA is working with NIOSH, through an interagency agreement (extended in 2000 to 2005), to improve the reporting and collection of pesticide poisoning incidents.

EPA supports and funds programs such as the Sentinel Event Notification System for Occupational Risk (SENSOR) and the National Pesticide Information Center (NPIC). Currently, 11 states participate in the SENSOR project by providing surveillance data on pesticide intoxication cases: California, Florida, New York, Oregon, and Texas receive federal funding; and Arizona, Iowa, Louisiana, Michigan, New Mexico, and Washington also participate but without funding. Collectively, these states are very representative of agricultural activities in the US and include numerous farm workers.
An instructional manual has been drafted to assist states in implementing pesticide poisoning surveillance systems. This manual includes information on case definition, standardized variables, use of database software, reporting sources, follow-up capabilities, and sources of educational materials. Additionally, information from the SENSOR program was recently published in the American Journal of Public Health ("Acute Pesticide Related Illnesses in Working Youth 1988–1999", Calvert, et. al., April 2003) and another article regarding disinfectant pesticide poisoning in working youth is in preparation.

NPIC is a toll-free telephone service that provides information about pesticides to anyone in the contiguous U.S., Puerto Rico, and the Virgin Islands. NPIC is a cooperative effort between Oregon State University and EPA. The network provides science-based information on pesticides to the public as well as medical and veterinary professional communities on a variety of pesticide topics, including receiving and responding to pesticide incident calls. As an example, during 2001, of the 23,511 calls, 8.2% (1,916) involved pesticide incidents. NPIC staff record detailed information of reported incidents and, when appropriate, refer this information to the National Pesticide Medical Monitoring Program, EPA, state lead agencies, and other agencies. NPIC currently has a limited capacity to handle calls from Spanish speakers. Annually, of the 24,000 total calls the center receives about 100 calls from Spanish-speaking callers. Staff communicates with these callers with the help of a translator who serves as an intermediary between the caller and NPIC specialist.

You also encourage EPA to continue its support for training health care professionals in recognition and reporting of pesticide poisonings. In 1998, EPA, in collaboration with the U.S. Department of Health and Human Services (HHS), the U.S. Department of Agriculture (USDA), the U.S. Department of Labor (DOL), and the National Environmental Education and Training Foundation (NEETF), launched an initiative to provide health care professionals with education and training opportunities on health issues pertaining to pesticides. The overall goal of the initiative, Pesticides and National Strategies for Health Care Providers, is to improve the recognition, management, and prevention of pesticide-related health conditions.

As part of this effort, with support from EPA and hundreds of leading health and environmental experts nationwide, NEETF has released National Pesticide Competency and Practice Skills Guidelines for physicians and nurses. The guidelines address a gap in health professional training. Environmental health risks, including those posed by pesticide exposures, are a leading cause of illness yet most physicians today receive no training on environmental health risks. These guidelines will be a foundation from which front-line health care professionals can gain the core knowledge and skills they need to recognize and treat pesticide and other environmentally caused illness.

The guidelines will be a feature at our upcoming June 10 and 11 forum, "National Strategies for Health Care Providers: Pesticide Initiative," being held in partnership with HHS, USDA, and DOL. Funding is being provided by the EPA, the Centers for Disease Control and Prevention, and the National Institute of Environmental Health Sciences. The current list of co-
sponsoring organizations includes the American Association of Colleges of Nursing, the American Association of Occupational Health Nurses, the American Academy of Pediatrics (pending), the Association of Academic Health Centers, and the Migrant Clinicians Network. Supporting organizations include the American Association of Medical Colleges and the American Medical Association.

Through efforts such as the Pesticides and National Strategies for Health Care Providers and the new health care practice guidelines for pesticides, our ability to recognize, manage, and prevent pesticide-related health conditions will be strengthened. For your information, an associated set of pesticide related environmental health education guidelines are available at www.ncecf.org/health/index.shtm

EPA should improve risk assessments for children of farm workers, farmers and rural residents by considering the range of exposure to this population.

EPA considers a wide spectrum of exposures and potential risks in conducting all human health assessments: residential, occupational, and dietary risks. In its risk assessment process for each regulatory decision, EPA examines the special vulnerabilities of children.

The category of children below the age of 12 years is diverse in that it may include: children under the age of 12 who work illegally; those who accompany their parents to the fields for other reasons, such as lack of child care; dependents of farmers who are permanent residents; and, those children who live close to agricultural operations. EPA's strategy, including vigorous enforcement of the WPS, is intended to reduce exposures to each segment of this group. EPA is also supporting and/or participating in a number of important studies which will provide useful information about pesticide exposure issues and farm workers and their families. This information is expected to shape and refine EPA risk assessments of this group by helping recognize toxicological endpoints of special concern, such as birth defects and certain cancers, and the type and magnitude of pesticide exposures experienced. Some of these studies are discussed below.

**National Agricultural Workers Survey (NAWS):** EPA and NIOSH are currently providing funding for the NAWS, an ongoing effort by the Department of Labor. The NAWS is the only national information source on the working and living conditions of U.S. farmworkers and their families. EPA is working with DOL in analyzing more than 20,000 interviews since the survey's onset to look at farm worker experiences over time. The interviews include questions concerning the following: demographics, farmworkers' job mobility, day care arrangements, access to medical care, participation in pesticide training, exposures to pesticides, and reports of pesticide illness. Results from this survey, along with other studies, will assist EPA in addressing issues of pesticide exposures to farmworkers and their families. Additional information on the NAWS survey can be found at www.dol.gov/asp/program/agworker/naws.htm
Agricultural Health Study: The National Cancer Institute (NCI), EPA, NIOSH, and the National Institute of Environmental Health and Safety are conducting a long-term epidemiology study of 90,000 certified pesticide applicators and their families in North Carolina and Iowa. The study is looking at both cancer and non-cancer endpoints using periodic surveys of the population. Pesticide use practices and health outcomes are being examined in detail. The study has now been underway seven years and there have been 2,112 cancers reported in this cohort which includes 57,000 pesticide applicators and 32,000 spouses.

Additionally, scientists are conducting other studies on this cohort to learn further about exposures and potential effects and relationships, including birth defects, Parkinson's disease, asthma and other disease endpoints. As part of the Agricultural Health Study, field work in Iowa is being conducted, and over the next three years detailed exposure analyses on a sub-sample of families using various agricultural pesticides will be completed. Some initial results have already been published for high exposure events and effects to the eye. A detailed listing of these studies and a number of publications already reporting the results of the Agricultural Health Study can be found at the web site: http://www.aghealth.org

The Agency is also pursuing several other research efforts which may prove useful in enhancing risk assessments since they are providing additional information about pesticide exposure to farmworkers and their children. Below are highlights of some of these studies.

National Human Exposure Assessment Survey (NHEXAS): EPA developed this survey in the early 1990s to provide critical information about multi-pathway, multi-media population exposure distribution to chemicals. The data has been collected and the database is now being compiled. We expect to have the information accessible on the Internet later this year.

Children's Total Exposure to Persistent Pollutants: This study, conducted by EPA will add to our understanding of pesticide exposures to farmworker families. The data collection for this study, initiated this year, should be completed and available in 2004.

EPA is very interested in feedback from interested stakeholders on ways to improve our risk assessment process. Members of two of EPA's Federal advisory committees, the Pesticide Program Dialogue Committee and the Committee to Advise on Reassessment and Transition expressed interest in better understanding the Office of Pesticide Programs' (OPP) process for developing agricultural worker risk assessments. In response to this interest, EPA held a seminar last October to share with the regulated community, advocacy organizations, and the public detailed information on how EPA conducts worker exposure and risk assessments for pesticides. Also, OPP recently hosted the combined Agricultural Worker Protection Program National Assessment and Pesticide Worker Safety Workshop.

EPA should improve enforcement of the WPS.

EPA held four national workshops for assessing the Agency's WPS program. Participants
helped the Agency identify both Federal and state actions for enhancing the management, implementation, and enforcement of the WPS, including areas of training, notification, and early entry exceptions. We are currently evaluating the many comments and recommendations.

Participants in the national assessment gave significant attention to enforcement of the WPS. As a result, the Agency developed and implemented improved state guidance that better defines a complete worker protection standard inspection. The states, in turn, committed to conduct a specific number of inspections under those guidelines. The Agency’s Office of Enforcement and Compliance Assurance (OECA) collected the results from the first year of inspections conducted under the new guidelines. In our report to be issued this summer on the WPS assessment, we will discuss the results of the workshops, detail findings, actions taken, and actions planned. We will make sure that you receive a copy of this report.

Thank you for your recommendations. I look forward to continuing support and advice from the Children’s Health Protection Advisory Committee on how we can best protect the health and safety of our children.

Sincerely,

[Signature]

Stephen L. Johnson
Assistant Administrator