September 7, 2005

Attn: Docket ID No. OPP-2004-0387
Public Information and Records Integrity Branch (PIRIB) (7502C)
Office of Pesticide Programs (OPP)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460–0001
Via Electronic Mail: *opp-docket@epa.gov*

Re: Docket No. OPP-2004-0387 Pesticides: Data Requirements for Conventional Chemicals

Dear Sir or Madame:

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to comment on the proposed changes to the data requirements for conventional chemicals (March 11, 2005; 70 *Fed. Reg.* 12276). Founded in 1970, NACWA represents the interests of nearly 300 of the nation's publicly owned wastewater treatment utilities. NACWA's members continue to face challenges as they strive to meet increasingly stringent effluent limitations while having little control over many of the sources of toxic pollutants and other substances in the wastewater they treat. Effective evaluation of products, such as pesticides, that may pose environmental and human health risks before they are approved for use will help the nation's wastewater treatment utilities protect water quality.

NACWA believes that the U.S. Environmental Protection Agency (EPA) should better integrate water quality protection into its pesticide review programs. EPA's Office of Pesticide Programs should fulfill its mandate under the Federal, Insecticide, Fungicide and Rodenticide Act (FIFRA) to ensure that pesticides will not cause unreasonable adverse effects to humans or the environment, by better coordinating with the Office of Water to assess data needs for the water quality-related portions of its registration and re-registration risk assessments, and to ensure these data needs are fulfilled by the requirements established under 40 CFR Part 158.

EPA's March 11, 2005, proposed changes to the data requirements for the registration and re-registration of conventional pesticides under FIFRA do not go far enough to ensure EPA has all the data it needs to evaluate whether pesticides are registered in a manner that is protective of water quality. Without a complete set of data relevant to potential water quality impacts, NACWA believes that EPA cannot

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fulfill its obligations under FIFRA. Properly implemented, U.S. EPA's pesticide registration process must ensure that water quality standards will ultimately be met and aquatic habitats are protected.

Pesticide Impacts on Wastewater Treatment Plants and Water Quality

Wastewater treatment plants are not designed to treat pesticides. However, pesticides may be discharged to treatment plants as a result of both indoor and outdoor pesticide applications. Pesticides can potentially interfere with treatment plant operation and the ability to recycle reclaimed water and biosolids, and affect compliance with National Pollutant Discharge Elimination System (NPDES) or Clean Water Act permit effluent limits. The potential for these impacts should be assessed in pesticide risk assessments.

Pesticides can enter sewer systems in many different ways. When a pesticide is used indoors, for example, it will often be discharged to a sewer, either because the use produces wastewater, or because an indirect pathway for sewer discharge exists (e.g., the treated surface is eventually cleaned with water). Since municipal wastewater treatment plants are not designed to treat or remove pesticides, they are likely to pass through the treatment process and enter the effluent or waste solids. Pesticides in treatment plant effluent have caused aquatic toxicity and exceedances of permit effluent limits for some treatment plants.

The proposed rule needs to recognize that pesticide uses can involve water quality risks and require that the data needed to assess those risks is provided to EPA. The data submitted should be sufficient to predict pesticide fate in wastewater treatment plants and to support an evaluation of how the pesticide may impact reclaimed water and biosolids reuse. NACWA suggests contacting the EPA Office of Water's Office of Wastewater Management for assistance in selecting data and methodology that should be required in the proposed rule to allow proper and complete assessment of the environmental and compliance risks associated with pesticide discharges into sewers.

NACWA encourages EPA to review the following information as it considers changes to its data requirements for pesticide registration and re-registration.

1. Aquatic Toxicity Testing

Aquatic toxicity test methods and the organisms selected for these test methods have changed significantly since EPA originally adopted Part 158. The Office of Pesticide Programs should take this opportunity to modernize its methods and to make its program consistent with Clean Water Act implementation by requiring the use of the same test species. For example, when Part 158 was first established, *Daphnia magna* was the preferred freshwater aquatic invertebrate test species. Since then, *Ceriodaphnia dubia* has become the preferred test species.

Current listings of EPA standard water quality test species and methods can be found in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 2002 (EPA 821-R-02-012), *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, 1995 (EPA/600/R-95/136), and *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 2002 (EPA-821-R-02-014). Pesticide registration and re-registration should require both acute and chronic toxicity test results for at least one invertebrate, vertebrate, and plant species utilizing the above-mentioned EPA standard water quality test species and procedures.

Toxicity test results for sub-lethal end points other than growth and reproduction are also necessary. For example, effects on behavior, swimming performance (which affects a fish's ability to maintain proper position

in the water column, avoid predators, and capture food), and reproduction can be critical to the survival of a species.

2. Urban Pesticide Modeling

During pesticide registration and re-registration, EPA should model urban runoff to estimate pesticide water concentrations resulting from urban pesticide use. The proposed rule should require the information necessary to support urban pesticide modeling. Pesticide "mobility" (washoff) from urban areas into surface waters can be substantially greater than washoff from agricultural fields because a greater fraction of an applied pesticide washes off impervious surfaces than soil.[1]

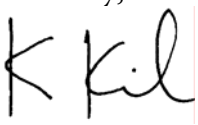
To support urban runoff modeling the proposed rule should require measurements of chemical properties related to surface water transport and pollutant-specific wash-off data for urban surfaces. EPA should require this data, particularly for impervious surfaces, in its data submittals for all pesticides registering or re-registering for application in outdoor urban areas. NACWA suggests contacting the EPA Office of Water, Office of Science and Technology (OST), and the EPA Office of Research & Development, Council for Regulatory Environmental Modeling, for assistance in developing the specific data requirements that should be included in the proposed rule to support urban runoff modeling.

3. Whole Sediment Toxicity Testing

NACWA supports the addition of whole sediment acute and chronic toxicity testing for freshwater and salt water invertebrates (Section 158.400) and environmental fate measurements for pesticides in anaerobic and aerobic aquatic sediment (Section 158.1100). This data is necessary to evaluate the water quality impacts of pesticides. EPA should recognize that *most* pesticides should be subject to this requirement. Pesticides that are not particularly soluble in water that have high octanol-water partition coefficients (e.g., the pyrethroids) can still move from outdoor surfaces into surface waters, where their presence in sediment may harm water quality.[2]

NACWA appreciates the opportunity to comment on the proposed rule. If you have any questions or require additional information, please contact NACWA's Director of Regulatory Affairs, Chris Hornback, at 202/833-9106.

Sincerely,



Ken Kirk
Executive Director

cc: Jim Hanlon, Office of Wastewater Management, Office of Water, U.S. EPA

[1] TDC Environmental (2003). *Insecticide Market Trends and Potential Water Quality Implications*, prepared for the San Francisco Estuary Project, April.
[2] Weston, D. P., J. You, and M. J. Lydy (2004). "Distribution and Toxicity of Sediment-Associated Pesticides in Agriculture-Dominated Water Bodies of California's Central Valley," *Environmental Science & Technology* **38**(10):2752-2759.