ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OECA–2009–0986; FRL–9098–3]

Public Comment on Candidate National Enforcement and Compliance Assurance Priorities for Fiscal Years 2011–2013

http://www.regulations.gov, Docket ID No. EPA–HQ–OECA–2009–0986; FRL–9098–3.

(1) Environmental / human health impact;
(2) Significant noncompliance;
(3) Appropriate federal role.

Children's special vulnerability to pesticides includes both increased opportunity for exposure and increased susceptibility vs. adults (Goldman, 1995; National Academy of Sciences, 1993; US EPA, 2002; US GAO, 1999). Routes of exposure include hand-to-mouth, hand-to-ground and hand-to-floor behavior, and increased consumption of air, food and water. Hazardous pesticide uses persist in childcare facilities when effective, affordable and less hazardous options are available including design, construction and maintenance practices to exclude pests and reduce access to food and water.

A joint study between the U.S. Department of Housing and Urban Development, the U.S. Consumer Product Safety Commission and the U.S. Environmental Protection Agency (Tulve et al. 2006) characterized the environments of pre-school aged children (<6 years) by measuring lead, allergens, and pesticides in licensed institutional child care centers. Pesticide residue analysis was conducted on dust samples from surfaces. At least one pesticide was found in every facility tested. Pesticides were used up to 107 times annually in some locations. A large variety of pesticides were used, with centers employing up to 10 different kinds. The most commonly found pesticides were chlorpyrifos, diazinon, and permethrin. Chlorpyrifos and diazinon are organophosphates, which kill insects by disrupting their brains and nervous systems and can harm the brains and nervous systems of animals and humans. Permethrin attacks the nervous system and is possibly a carcinogen. Since the study was first conducted, chlorpyrifos and diazinon are no longer registered by the EPA for use in childcare facilities, homes and nearly all indoor locales.

In the summer of 2008, Toxic Free NC surveyed 89 child care providers from across the state about pest management practices in their facilities. The report was published by Strandberg et al. 2009. Three key findings emerged: 1) The majority of responding child care providers said broadcast pesticide application methods that carry a high risk for exposure to children and staff were regularly used at their facilities. Providers who employ professional pest control contractors, were more likely to report that high-risk methods are used than those who handled pest management in-house.

2) Around one quarter of responding child care providers were using Integrated Pest Management (IPM). Child care providers using IPM were less likely to have serious pest problems than those using conventional, high-risk practices.
3) Responding child care providers who use a professional service for pest management were less likely to be using IPM, than those who use in-house staff for pest control.

Additional survey findings confirm that many of the people employed and served by child care facilities are at elevated risk for health damage from pesticide exposure because of their age or health conditions, and also reveal some other serious pesticide exposure risks in their daily lives.

Municipalities often generate point source pollution and widespread contamination of surface waters due to urban pesticide use. Overuse and misuse of pesticides by municipal workers, professional pest managers, and residential populations lead to storm water runoff events resulting in contamination. Many urban areas draw their drinking water from surface sources, and concerns about the environmental fate and potential long-term health effects of pesticides have increasingly led city and government groups to adopt Integrated Pest Management (IPM) policies, e.g. the City of San Francisco. Community groups adopting IPM policies and procedures, in conjunction with targeted training programs for pest managers, have demonstrated more effective pest management, significant reduction in pesticide use, substitution of reduced-risk pesticides and/or formulations and significant risk-reduction (Gouge et al. 2006).

It is very appropriate for the EPA to focus resources on risk reduction practices that will benefit the most vulnerable members of society. Environmental stewardship in childcare environments is an appropriate priority for the agency. Every child has the right to reach their full potential.

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