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February 7, 2002

The Honorable Christine Todd Whitman
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
Room 3000, #1101-A
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Subject: Comments on Akzo Nobel's HPV Test Plan for Trixylenyl Phosphate

Dear Administrator Whitman:

The following comments on Akzo Nobel's test plan for the individual chemical trixylenyl phosphate are submitted on behalf of the Physicians Committee for Responsible Medicine, People for the Ethical Treatment of Animals, the Humane Society of the United States, the Doris Day Animal League, and Earth Island Institute. These health, animal protection, and environmental organizations have a combined membership of more than nine million Americans.

The test plan for trixylenyl phosphate submitted by Akzo Nobel chemicals is one of the most blatant applications of thoughtless, check-the-box toxicology our organizations have reviewed under the HPV program. Akzo Nobel is proposing a series of extensive and poorly planned animal tests that will provide little additional information and understanding to the toxicity of these compounds or related compounds. The test plan specifically violates the following terms of the October 1999 Agreement among the EPA, industry, animal protection organizations, and environmental groups, which delineated certain minimal animal protection measures to be taken in the HPV program:

1. In analyzing the adequacy of existing data, participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach.
2. Participants shall maximize the use of existing and scientifically adequate data to minimize further testing.
3. Participants shall maximize the use of scientifically appropriate categories of related chemicals and structure activity relationships.
5. Participants are encouraged to use *in vitro* genetic toxicity testing to generate any needed genetic toxicity screening data, unless known chemical properties preclude its use.

Based on the violations of the terms and spirit of the October 1999 Agreement, including the failure to even remotely approximate "thoughtful toxicology," the requirements of the original HPV framework, and minimal animal protection measures, the EPA must reject this plan in its entirety. Our primary concerns are discussed below.

Trixylenyl phosphate could easily be grouped into a larger category of phenyl-phosphate compounds. ATSDR¹ has already grouped many of these compounds together in a phosphate-based hydraulic fluid category in their review of the toxicity of hydraulic fluids. Furthermore, individual compounds in this group are commonly found in mixtures with other obvious chemicals of the hydraulic fluids category. A table of other phenyl phosphorus HPV compounds is presented in our comments on the Phosphite Producers HPV Consortium's test plan for tris(nonylphenyl)phosphite, which can be viewed at <http://www.epa.gov/chemrtk/phsphite/trispcrmct.pdf>. Analyzing the chemicals in the context of a broader category would provide greater insight into the potential hazards of this and related chemicals.

The plan calls for testing of all mammalian endpoints except acute toxicity, yet it fails to even outline the specific tests proposed, whether the repeat dose, reproductive, and developmental tests will be combined in the OECD TG 422 or conducted separately, or whether the tests will be conducted *in vitro* or *in vivo*. It also fails to describe the doses or administration methods.

Akzo Nobel's test plan does not provide any of the abundant available information on the relatively well-characterized toxicity of phenyl-phosphate chemicals. Instead, it simply presents a downloaded list of the studies available in the IUCLID format and does not discuss the overall context and behavior of this larger group of chemicals. Significant data exist on human exposure, toxicity, and epidemiology of phosphate-based hydraulic fluids, identifying them as potential neurotoxins.² In addition, these chemicals are suspected endocrine disrupting chemicals.¹ Concern about the adverse health effects associated with these chemicals has prompted ongoing research efforts into the behavior and metabolism of this group of compounds. Conducting screening-level tests on these well-studied chemicals is inappropriate.

We also note that this test plan is essentially identical to the test plans for isopropylated triphenyl phosphate and phosphoric acid tris(methylphenyl)ester (tricresyl phosphate), submitted by Great Lakes Chemical Corporation. We will soon be submitting a similar set of comments on those plans, and we ask again that the EPA take proactive measures to address the submission of such inadequate plans to the HPV program. All these phosphate compounds should be combined into a single category of triaryl phosphates.

The test plan submitted by Akzo Nobel is entirely inadequate from the perspectives of fundamental scientific documentation, toxicological rigor, and compliance with the most rudimentary guidance for the HPV program. EPA should reject this proposal and ask that Akzo Nobel must provide a more thoughtful analysis of this chemical and its fundamental uses and properties. Once again, we maintain that EPA must encourage the development of chemical categories as to maximize available information and avoid unnecessary, expensive, and poorly conceived testing, especially when so much animal suffering is at stake.

Thank you for the opportunity to comment. I can be reached at 202-686-2210, ext. 302, or via e-mail at ncardello@pcrm.org.

Sincerely,
Nicole Cardello, M.H.S.
Staff Scientist

References

1. ATSDR 1997 Toxicological Profile of Hydraulic Fluids. <http://www.atsdr.cdc.gov/toxprofiles/tp99-c3.pdf>
2. Inchem. 1990 International Programme On Chemical Safety. Environmental Health Criteria 110. Tricresyl Phosphate. <http://www.inchem.org/documents/ehc/ehc/ehc110.htm>.