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PETA

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March 28, 2003

Christine Todd Whitman, Administrator
U.S. Environmental Protection Agency
Ariel Rios Building (1101A)
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: HPV Test Plan for 2-cyclohexene-1-octanoic acid, 5 (or 6)- carboxy-4-hexyl (CAS no. 53980-88-4)

Dear Administrator Whitman:

The following comments on MeadWestvaco Corporation's HPV Challenge test plan for 2-cyclohexene-1-octanoic acid, 5 (or 6)- carboxy-4-hexyl (DIACID 1550) are submitted on behalf of People for the Ethical Treatment of Animals, The Physicians Committee for Responsible Medicine, The Humane Society of the United States, The Doris Day Animal League, and Earth Island Institute. These health, animal, and environmental protection organizations have a combined membership of more than ten million Americans.

Inveresk Research, on behalf of MeadWestvaco Corporation, submitted its test plan on November 18, 2002. DIACID 1550 is a branched, C-21 dicarboxylic acid composed of saturated alkyl chains and a cyclohexene branch. The substance is supplied commercially as Westvaco DIACID 1550 and is a mixture of about 60-70% of the C-21 diacid and 20-25% unreacted C-18 monoacid and 5-10% C-36 dimer acid. DIACID 1550 is manufactured by a patented process from tall oil fatty acids, which are obtained by the fractional distillation of crude oil, a by-product from pulping of pine trees. Tall oil fatty acids and some other similar substances have been sponsored under the HPV Chemical Challenge program by the Pine Chemicals Association (PCA) task force, of which MeadWestvaco Corporation is a member.

The test plan states that there are some similarities between DIACID 1550 and the chemicals sponsored by the PCA, but that there are also differences. Hence, they have elected not to use data on tall oils and other substances to "read across" to DIACID 1550, but rather to use these as supporting data to gain a broader view of the properties and to conduct new testing on DIACID 1550 itself. The proposed test is to address the SIDS requirement for subchronic, developmental and reproductive toxicity using OECD test guideline 422, which will kill 675 animals. We disagree with this approach and our rationale is presented below.

In its proposed test plan for 2-cyclohexene-1-octanoic acid, 5 (or 6)-carboxy-4-hexyl, MeadWestvaco Corporation fails to provide sufficient chemical information to allow a thorough outside independent evaluation of its proposed test plan. In previous test plans submitted by the PCA HPV Task Force, of which MeadWestvaco is a member, the chemical characterization was, in some cases, provided in more detail. For example, in the proposed test plans for "Tall Oil Fatty Acids and Related Substances," submitted June 14, 2001 and revised November 10, 2002, as well as in the plan for "Fatty Acid Dimers and Trimer," submitted April 4, 2002 and revised September 24, 2002, the PCA gives detailed structure and chemical composition information for

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the sponsored chemicals. This allows structure-activity relationships and similarities between groups of chemicals to be evaluated properly by all reviewers wishing to provide comments. Such information should also be provided in this proposed test plan, as we suspect that some reading of test data across groups may be possible, as was done for the previously mentioned plans.

MeadWestvaco states that they cannot read across categories because of a need for evidence of comparability. We hypothesize that comparability may be found quite easily if MeadWestvaco would carefully and thoughtfully search for the availability of such evidence before proposing new animal tests in this test plan as well as in any future test plans it may submit. Upon examining the comparability table found on page 8 of the plan (which is re-summarized below for purposes of clarity), we find that Monomer Acid, Dimer and Tall Oil Fatty Acids plans all have some tests proposed. If these proposed tests are going to be carried out as planned, despite our earlier comments on these plans, MeadWestvaco could at the very least delay the commencement of DIACID 1550 testing until those results are available. Forthcoming data may provide the comparability evidence MeadWestvaco seeks, when combined with chemical structure similarities and available physical/chemical and environmental fate data (see table below). This may allow reading across for this sponsored chemical, thus eliminating the need for DIACID 1550 tests using the OECD guideline 422. This course of action would eliminate the needless suffering and death of 675 animals.

Table of comparable parameters suggested.

ENDPOINT	RESULT		
	TOFA	FADT	DIACID 1550
Acute toxicity	negative	negative	negative
Aquatic toxicity	test proposed	test proposed	negative
Mutagenicity	negative	negative	negative
Melting point	N/A	N/A	N/A
Boiling point	N/A	N/A	N/A
Vapor pressure	N/A	N/A	N/A
Water solubility	test	test	test
Partition coefficient	test some	test	7.09
Biodegradation	test some	test	84% after 56 d
Hydrolysis	N/A	N/A	N/A
Photodegradation	N/A	N/A	N/A
Subchronic toxicity	low	low	test proposed
Reproductive toxicity	negative	negative	test proposed
Developmental toxicity	negative	test proposed	test proposed

TOFA: Tall Oil Fatty Acids
 FADT: Fatty Acid Dimers and Trimer

We commend MeadWestvaco for its efforts to reduce the use of animals by noting that acute oral toxicity, ecotoxicity and genotoxicity tests are not needed. It is therefore unfortunate that the company would propose conducting a test that kills so many animals without first making every effort to determine the comparability of DIACID1550 to other similar chemical mixtures. Several times in its proposed test plan, the company states similarities and makes comparisons between the categories, as well as stating that DIACID 1550 is unlikely to cause appreciable toxicities. Importantly, on page 13, the company states:

“This leads to the expectation that 2-cyclohexane-1-octanoic acid, 5 (or 6)-carboxy-4-hexyl also has a low subchronic toxicity and that further testing, which would require the use of vertebrate animals, *is not justified*. [our emphasis]. [However,] subchronic toxicity is a basic data requirement within the HPV Chemical Challenge Program, and the absence of data for this endpoint...suggests that testing of Westvaco DIACID□ 1550 using OECD method 408 is required.”

These comments point to an important and frequent problem in many proposed test plans and, in fact, in the HPV Challenge program itself: animals die so a company can “check the box.” According to the October 1999 agreement amongst the EPA, industry, and animal protection organizations, “participants shall conduct a thoughtful, qualitative analysis rather than use a rote checklist approach.” However, MeadWestvaco is clearly taking the rote checklist approach in this particular case and is thus violating the principles of the October 1999 agreement.

Another tenet of the October 1999 agreement is that participants should use all possible means to reduce the use of animals in experiments. As we have requested before, we ask again that if a developmental toxicity test is in fact deemed necessary after every effort has been made to use other available data, MeadWestvaco should consider the use of the rodent Embryonic Stem Cell Test (EST). The EST has been approved as scientifically reliable, reproducible and applicable for regulatory and screening purposes by the European Centre for the Validation of Alternative Methods (ECVAM) Scientific Advisory Committee (ESAC). Although the EPA has not included this *in vitro* test as part of the HPV Challenge Program, it was confirmed for use “within the context of OECD test guideline 414, for reducing and/or refining the use of animal procedures” (Genschow et al. 2002).

Finally, we ask that MeadWestvaco, in accordance with the October 1999 Agreement, make a sincere effort towards a thoughtful and careful analysis of its proposed test plan to determine if there are other sources of information that can be reviewed in order to eliminate the needless suffering of animals. Such information may include the amount of actual consumer contact with DIACID 1550 and the applicability of the proposed test results to realities of product use, to the availability of the product in the environment, and to a better characterization of the hazard potential posed to humans. These considerations would more properly reflect the spirit of thoughtful toxicology.

I look forward to a prompt and favorable response to our concerns. I may be reached at 757-622-7382, ext. 1304, or via email at JessicaS@PETA.org.

Sincerely,

Jessica Sandler
Federal Agency Liaison