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December 5, 2008

Via Federal Express

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Room 6428
Attention: 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20004

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Dear 8(e) Coordinator:

8EHQ-06-16436 8EHQ-06-16478
Perfluorinated Aliphatic Carboxylic Acid, Ammonium Salt

This letter is to inform you of the results of a chronic *Daphnia magna* study with the R&D test substance referenced above.

The effect of the test substance (purity 84%) on the survival, growth, and reproduction of *Daphnia magna* was assessed in a chronic, unaerated 21-day static-renewal test in accordance with the test guidelines (U.S. EPA OPPTS 850.1300; OECD 211).

Nominal test substance concentrations selected for the study were 2.5, 5, 10, 20, or 40 mg/L. The corresponding mean, measured concentrations of the test substance were 2.13, 4.17, 8.13, 16.2, and 33.0 mg/L. A dilution water control was used in this study. The test substance was not detected in the dilution water control.

On day 21 at study termination there was at least 90% mobility in each test concentration group and the control. The EC₅₀ for adult survival was greater than >33.0 mg/L. The Fisher Exact test and the Cochran-Armitage trend test determined that the NOEC for survival of adult *Daphnia magna* on day 21 was >33.0 mg/L.

The NOEC for the number of live young per surviving female on day 21 was 4.17 mg/L using the Jonckheere-Terpstra test. The NOEC for the number of immobile young on day 21 was 8.13 mg/L while the NOEC for the first day of reproduction was >33.0 mg/L. The NOECs for the number of immobile young and first day of reproduction were determined using the Jonckheere-Terpstra test.

A standard one-way ANOVA was done on the data reporting the length of surviving adult *Daphnia magna*. The data were found to be normally distributed by the Shapiro-Wilk test. The Jonckheere-Terpstra test was used to determine that the NOEC for the length of surviving *Daphnia magna* at test end was >33.0 mg/L.

A standard one-way ANOVA was done on the data reporting the dry weight of surviving adult *Daphnia magna*. The data were found to be non-normally distributed by the Shapiro-Wilk test. The Jonckheere-Terpstra test was used to determine the NOEC for the dry weight of surviving *Daphnia magna* at test end was >33.0 mg/L.

The overall study NOEC (no-observed-effect concentration), LOEC (lowest-observed-effect concentration), and MATC (maximum-acceptable-toxicant concentration) for the test substance, based on mean, measured test concentrations and the total number of live young produced per surviving female, were 4.17 mg/L, 6.15 mg/L, and 8.13 mg/L for *Daphnia magna* exposed to the test substance for 21 days.

Sincere¹

Company Sanitized



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