BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

IN THE MATTER OF:	Docket No. TSCA-HQ-2004-0016 Docket No. RCRA-HQ-2004-0016 Docket No. TSCA-HQ-2005-5001
E. I. du Pont de Nemours and Company Wilmington, DE Respondent Washington Works Facility Route 892 South DuPont Road Washington, Wood County, WV	

JOINT MOTION TO AMEND THE SETTLEMENT
TO ALLOW A SECOND EXTENSION OF THE COMPLETION DATE
FOR RESPONDENT'S BIODEGRADATION
SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP)

The United States Environmental Protection Agency ("EPA" or "Complainant") and E.I du Pont de Nemours and Company ("DuPont" or "Respondent") (referred to jointly as "the Parties") file this Joint Motion to Amend the Settlement to Allow a Second Extension of the Completion Date for Respondent's Biodegradation Supplemental Environmental Project (SEP) pursuant to 40 C.F.R. §§ 22.4(a) and 22.16 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Rules of Practice). In this Motion, the Parties respectfully request to modify Appendix A (also referred to as the Biodegradation

SEP, SEP, or SEP A) of the Consent Agreement and Final Order (CAFO) signed by the Environmental Appeals Board on December 21, 2005, as amended on January 8, 2009, to extend the Completion Date by two (2) years and three (3) months, to March 27, 2014, and to incorporate several other changes to facilitate implementation of the SEP. The Parties have inserted deadlines for certain deliverables, added greater flexibility for the duration of future pilot testing, and inserted a requirement that assures that either the levels of residuals in the test substance measured by the contracted characterization laboratory and the contracted biodegradation laboratory are substantially equivalent or that additional activities are performed in lieu of further testing. The Parties believe good cause exists to grant the relief because DuPont has been working in good faith on this project, major milestone activities have been completed under the SEP so that much of the start-up work has been performed, and additional time would provide an opportunity for completion of independent review of methods developed, performance of characterization testing and performance of biodegradation testing. The Parties believe that the remaining DuPont obligation (as of November 30, 2011) of $2,265,237.00 (of the $5 million required under the CAFO) would be best used on completion of the SEP. A proposed revised SEP dated December 22, 2011 (Appendix A without Attachments) is attached as Exhibit 1.

Objectives of the Biodegradation SEP

The original CAFO required that DuPont "will use its best efforts to satisfactorily complete this Biodegradation SEP . . . no later than three (3) years from the date DuPont receives the signed Final Order of the Environmental Appeals Board ("SEP Completion Date")." (Section II.B. of SEP A of the CAFO.) The Parties stipulate that DuPont received the signed Final Order on December 27, 2005, and that the initial SEP Completion Date was December 27, 2008. On January 8, 2009, the Environmental

Appeals Board granted the Parties' Motion to extend the SEP for an additional three (3) years from December 27, 2008 to December 27, 2011. The Parties now seek to extend the SEP Completion Date to March 27, 2014.

Under Appendix A, as amended in 2008, Semicontinuous Activated Sludge ("SCAS") Testing is to be conducted in order to determine if certain fluorotelomer based polymer test substances can biodegrade to perfluorooctanoic acid ("PFOA") or precursors of PFOA. Full and detailed characterization of the fluorotelomer based polymer test substances is necessary in order to distinguish whether any PFOA found after SCAS testing is residual material that had been bound to the polymers prior to testing or if PFOA was formed as a result of biodegradation during SCAS testing. The methods development for this testing has been challenging. Substantial time and expense have been invested in refining and validating methods for extracting and identifying residuals and biodegradation products. Because these polymers were designed to repel other chemicals and not to react with them, they are generally more difficult to analyze than most chemicals.

Progress on the SEP

DuPont has performed many of the tasks required in the SEP since the prior extension of time was granted. DuPont purified nine (9) Fluorotelomer Products under a "Purification Procedure Agreement"[1] and shipped those Products to EPA by June 1, 2009 as required. DuPont sought requests for proposals to select laboratories to perform the characterization work and the biodegradation work. DuPont received the proposals, obtained EPA approval for the proposed work, selected the laboratories

[1] The Purified Fluorotelomer Products and the Purification Procedure Agreement are defined in SEP A and are not repeated herein.

and entered into contracts to perform specified work. The laboratories under contract with DuPont developed analytical methods and protocols. DuPont initiated the SCAS pilot test by January 30, 2010, as required. DuPont completed the pilot test in September, 2010. DuPont established an independent peer consultation group through a Panel Administrator who sought panel nominations and selected panel members. The panel members held conference calls, toured the facility where the SCAS pilot testing was conducted and held a meeting to review results of the biodegradation portion of the pilot study. Although analytical methods require additional optimization and validation, the work continues at an acceptable pace given the unexpected complications encountered as part of characterization. A detailed timeline of the activities performed since the first amendment to the SEP is attached as Exhibit 2.

Future SEP Activities

Proper characterization of the fluorotelomer based polymer test substances provides information about the residuals in the test substance prior to performing the biodegradation testing. Thus, only with a clear picture of the test substance at the start of the biodegradation testing can the change in the chemical due to biodegradation be interpreted. This characterization involves looking for eighteen (18) different analytes. When the DuPont contract laboratory started the characterization testing, a problem arose concerning the use of gas chromatography/mass spectrometry ("GC/MS") analysis. Similarly, GC/MS analysis at the contract laboratory for biodegradation testing became a problem. Both laboratories experienced signal enhancement of certain analytes on the instruments when performing GC/MS. This signal enhancement resulted in unreliable data through this GC/MS method and DuPont sought a modification to the method to correct for the problem. The inability to

characterize the test substance at the start of the SCAS pilot test also prevented the peer review panel from completing its report about the SCAS pilot test. DuPont consulted EPA on potential solutions to the dilemma and made multiple attempts to obtain reliable characterization data. These attempts have required much greater time and costs than was anticipated during the original settlement discussions. The Parties have decided to utilize liquid chromatography/mass spectrometry ("LC/MS") in lieu of the GC/MS method and are working through method validation for this work.

The Parties have established priorities for testing based on the cost information now available. The highest testing priorities are full characterization of at least one fluorotelomer based polymer test substance and completion of a definitive full scale SCAS test on the polymer test substance that has been fully characterized. Although the SEP funding may be exhausted in completing a definitive full scale SCAS test on one polymer test substance, it is also possible that funding could remain for additional testing. There are four families of polymers involved among the nine (9) SEP fluorotelomer based polymer test substances: urethane-based, acrylate-based, methacrylate-based, and phosphate salt-based. The Parties have agreed that if there are available SEP funds, one polymer test substance from each family should be tested. Of the four (4) variants of each fluorotelomer based polymer discussed in the SEP, the Purified Fluorotelomer Product variant and the Lab-scale Synthesized Fluorotelomer Product variant of each the four families will be given higher priority for testing. The prioritization takes into account the unexpected high start-up costs experienced in establishing validated test methods for these polymers. The priorities are adjusted as cost estimates become clearer and DuPont obtains better information about the testing.

The Parties believe that much of the preliminary work for performing biodegradation testing on the fluorotelomer based polymers has occurred. Although there have been numerous unexpected obstacles in the preliminary stages of this project, there has been significant effort devoted to overcoming those obstacles and setting the stage for important testing. If the Board grants this Joint Motion to Extend the SEP Completion Date, the Parties hope to be able to perform the tests that have been under development for several years.

Trial Run to Assess Fluorotelomer Based Polymer Residuals Baseline Agreement

Criteria have been added to the SEP that establishes that a minimum level of agreement must be met between the results of fluorotelomer based polymer test substance characterization by the characterization laboratory and the results from analysis of analytes in the polymer test substance as added to SCAS units in a trial run. This trial run is designed to obtain time zero samples ("trial run time zero samples") by the biodegradation testing laboratory before the full scale definitive SCAS test begins. The SEP now requires that DuPont demonstrate an understanding, via this trial run, of the residuals in the polymer test substance prior to the commencement of the full scale SCAS test. Identifying and quantifying the residuals in the trial run time zero samples is vital to obtaining accurate and reliable results concerning the extent of biodegradation, if any, at the conclusion of the SCAS test. The SEP also now requires that full scale SCAS testing should not be initiated if a comparison of (1) the sums of the molar concentrations of each analyte reported by the characterization laboratory for the polymer test sample to (2) the sums of the molar concentrations of each analyte reported by the biodegradation laboratory for the trial run time zero sample do not agree with a 95% molar equivalence, unless EPA determines upon review to accept a lesser level of agreement. This requirement is designed to help address a concern that the full scale SCAS testing could be run and the

data produced could be unreliable. If full scale SCAS testing does not commence due to the characterization results and the results from the trial run time zero samples not meeting the minimum data agreement of 95% molar equivalence, and if the EPA decides not to pursue full scale SCAS testing in light of that disagreement, and assuming SEP funding remains, then the revised SEP requires DuPont to perform certain additional activities to complete the SEP.

Additional Activities

The proposed SEP incorporates a new section (Section VI) that requires DuPont to purchase research equipment and chemicals for universities or state labs approved by the EPA if full scale SCAS testing does not commence as described above. The cost of these items will not exceed one million five hundred thousand dollars ($1,500,000). Any equipment purchase and donation will be made in accordance with the EPA's 1998 SEP Policy[2]. The items eligible for purchase are instruments or reference standards used in laboratories that relate to the PFOA substance at issue in the initial action. These items are restricted to research on the presence of PFOA in people or the environment and research on whether other chemicals degrade to form PFOA. These purchases may also occur if there is a full scale definitive SCAS study on a Purified Fluorotelomer Product and one of its Corresponding Polymers and the EPA determines that the remaining funds are not likely to be enough to complete a second full scale definitive SCAS test.

[2] The EPA 1998 SEP Policy and related guidance is found at http://cfpub.epa.gov/compliance/resources/policies/civil/seps/

Flexibility Sought For SCAS Pilot Testing

DuPont has performed an initial SCAS pilot test. The SCAS pilot test is a preliminary trial to make sure the instrumentation proposed in the validated method will work. The pilot test provides information primarily on the appropriateness of the hardware to be used in the full scale testing. Section II.J.3.a. of the Biodegradation SEP states, "The laboratory performing the biodegradation studies shall conduct one 14-day pilot test for SCAS on each of the Fluorotelomer Products that have been selected for pilot testing as identified in Attachment A, and shall conduct one 14-day pilot test for SCAS on each of the Corresponding Polymers that have been selected for pilot testing as identified in Attachment A, to develop test data that can inform protocol decisions . . . ." Because the polymer test substances being tested are all fluorotelomer products, they tend to share many of the same properties as the polymer test substance used in the initial 14-day pilot test. The initial 14-day pilot test has been performed and has informed the Parties about many of the protocol decisions. Because future test substances could be using test systems very similar to those used in the initial SCAS pilot test, the Parties believe that future pilot studies may only need to last a few days to inform the protocol decisions. The Parties have agreed that subsequent pilot tests shall be conducted for up to fourteen (14) days, with the exact number of days to be determined by EPA prior to the start of each pilot test. Such a change is expected to allow for more economical and time efficient pilot testing while also providing useful technical information.

Posting Reports on the Internet

The original SEP designated an Administrative Record (AR-226) for posting documents concerning this SEP. The public could obtain documents from AR-226 by requesting copies that would be provided in hard copy or on disk. The internet site Regulations.gov allows the public to search for documents at any time without the need for EPA to respond to a request. A docket file identified as EPA-HQ-OPPT-2011-0991 has been created in Regulations.gov for this SEP and the requirement for posting to AR-226 is changed to this new docket file on Regulations.gov. In addition, other documents submitted to EPA, such as monthly reports and quarterly reports, will now be posted to this new web site. Posting documents to this web site allows greater public access.

Conclusion

For the foregoing reasons, the parties request this Joint Motion to Amend the Settlement to Allow a Second Extension of the Completion Date for Respondent's Biodegradation Supplemental Environmental Project (SEP) be **GRANTED**.

Motion to Amend the Settlement to Allow a Second Extension of the Completion Date for Respondent's Biodegradation Supplemental Environmental Project (SEP)

Docket Nos. TSCA-HQ-2004-0016, RCRA-HQ-2004-0016, and TSCA-HQ-2005-5001

Respectfully submitted,

12/22/11

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CERTIFICATE OF SERVICE

I certify that the original of the above joint Motion to Amend the Settlement to Allow a Second Extension of the Completion Date for Respondent's Biodegradation Supplemental Environmental Project (SEP) Docket Nos. TSCA-HQ-2004-0016, RCRA-HQ-2004-0016, and TSCA-HQ-2005-5001 were filed with the Environmental Appeals Board Hearing Clerk and that copies were sent:

Hand carried to:

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