CLERK'S OFFICE U.S. DIST. COURT AT CHARLOTTESVILLE, VA

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA HARRISONBURG DIVISION

NATURAL RESOURCES DEFENSE COUNCIL, INC.))
and SIERRA CLUB,) CIVIL ACTION NO.5:05CV30013
Plaintiffs,)
v.)) <u>ORDER</u>)
E.I. du PONT de NEMOURS AND COMPANY,	
Defendant.) JUDGE JAMES H. MICHAEL, JR.

Upon the June 29, 2005 Joint Motion to Enter Consent Decree, it is this day ADJUDGED, ORDERED, and DECREED

that the motion shall be, and it hereby is, GRANTED. The court shall, and hereby does, approve and adopt the terms of the settlement set forth in the parties' Consent Decree, lodged with this court on June 29, 2005 and appropriately endorsed by counsel for all parties. The court shall, and hereby does, retain jurisdiction over this action only for the purpose of interpreting and enforcing the terms of the Consent Decree.

This case shall be, and it hereby is, DISMISSED with prejudice and stricken from the docket of the court.

The Clerk of the Court hereby is directed to send a certified copy of this Order to all

counsel of record.

ENTERED: Semor United States District Judge

July 1, 2005
Date

UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF VIRGINIA HARRISONBURG DIVISION

NATURAL RESOURCES DEFENSE)	
COUNCIL, INC. and SIERRA CLUB,)	
Plaintiffs,)))	
v.)	
)	Civ. Action No.
E.I. du PONT de NEMOURS AND COMPANY,)))	5:05-cv-30013
Defendant,)	

CONSENT DECREE

PARTIES

- 1. The Parties to this Consent Decree are Plaintiffs Sierra Club (Sierra Club"), The Virginia Chapter of the Sierra Club ("Sierra Club"), the Natural Resources Defense Council, Inc. ("NRDC") and Defendant E.I. du Pont de Nemours and Company ("DuPont").
- 2. The Sierra Club is a non-profit, member-supported, public interest organization, with its principal office located at 85 Second St., 2nd Floor, San Francisco, CA 94105-3441. The Virginia Chapter of the Sierra Club is a non-profit, member-supported, public interest organization, with its principal office located at 6 N. 6th Street,

- #102, Richmond, VA 23219. In this Decree Sierra Club and the Virginia Chapter of the Sierra Club shall be referred to collectively as "Sierra Club".
- 3. The Natural Resources Defense Council, Inc. ("NRDC") is a non-profit New York corporation with its principal office located at 40 W. 20th St., New York, NY 10011.
- 4. E. I. du Pont de Nemours and Company ("DuPont") is a Delaware corporation with its principal office located at 1007 Market St., Wilmington, DE 19898.

BACKGROUND

- 5. The purpose of this Consent Decree is to approve the settlement terms described in this Decree and provide for enforcement of those terms. This is a private party settlement, not a settlement with the United States of America or the Commonwealth of Virginia or their respective agencies. The terms of this Consent Decree are not binding on the United States of America or the Commonwealth of Virginia or their respective agencies. Neither the United States nor the Commonwealth of Virginia participated in the negotiations pertaining to this settlement.
- 6. This matter arises as a result of mercury discharges to the South River in Virginia between the years 1929 and 1950 when DuPont operated an acetate fiber manufacturing facility in Waynesboro, Virginia (the "Waynesboro Facility"). The acetate manufacturing operations were discontinued in 1950. On April 30, 2004, DuPont sold the Waynesboro Facility to another firm.
- 7. In the 1970s DuPont and other entities studied mercury releases to the South River. In 1977 the Virginia Department of Health issued a "fish consumption ban" covering portions of the South River and the South Fork of the Shenandoah River. In

1979 the ban was replaced with a "fish consumption advisory." A "fish consumption advisory" due to mercury is presently in effect for the South River and the South Fork of the Shenandoah River.

- 8. In 1984 the Commonwealth of Virginia entered into a settlement with DuPont regarding mercury in the South River and South Fork of the Shenandoah River.

 The Release from that settlement is attached as Exhibit A.
- 9. The Commonwealth released DuPont from various liabilities. DuPont paid a sum to the Commonwealth and created a trust to be managed by the Treasurer of the Commonwealth to be used to monitor the South River and the South Fork of the Shenandoah River. Since that time the rivers and fish in the rivers have been monitored for mercury. Studies have revealed that in some fish and in some parts of the South River and the South Fork of the Shenandoah River mercury levels in fish are not declining as expected.
- 10. In 2000 the South River Science Team was established to determine why the levels of mercury in some fish in the South River and South Fork of the Shenandoah River were not declining as expected and what could be done to improve the situation. The South River Science Team is an ongoing collaborative effort by DuPont, the US Environmental Protection Agency, the VA Department of Environmental Quality, the VA Department of Health, the VA Department of Game & Inland Fisheries, various universities, local citizens groups, a panel of mercury science experts and other entities.
- 11. The South River Science Team meets regularly under the guidance of the VA Department of Environmental Quality. Among other activities, the South River Science Team studies fish tissue, the water column, sediment and floodplains, conducts

bioavailability studies, develops conceptual models of soil and water, conducts crop studies and statistical analyses. The South River Science Team communicates with the public through its citizen group membership, a newsletter and the news media.

- On October 20, 2003, Sierra Club and NRDC (Natural Resources Defense Council, Inc.) delivered to E.I. du Pont de Nemours and Company a Notice of Intent to Sue Under Section 7002(a)(1)(B) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6972(a)(1)(B). The Notice of Intent is attached as Exhibit B. The Notice alleged that mercury levels in fish were too high and that mercury presents an imminent and substantial endangerment to health and the environment along the South River and the South Fork of the Shenandoah River.
- 13. The Notice indicated, among other things, that Sierra Club and NRDC would file suit and ask this Court to order DuPont to fund (1) scientific studies of the endangerment and how to eliminate it and (2) fund abatement measures based on the studies. The Parties engaged in settlement discussions subject to Federal Rule of Evidence 408 and have reached a settlement in accord with the terms of this Decree.
- 14. Pursuant to the settlement Plaintiffs have filed a Complaint with this Court asserting claims that are the same as, or elaboration of, the claims contained in the Notice of Intent to Sue letter of October 20, 2003, from NRDC and Sierra Club to DuPont. The Complaint is attached as Exhibit C. The Parties have filed a joint Motion for entry of this Consent Decree approving the settlement described in this Decree. DuPont need not file an Answer, Motion or other pleading to the Complaint unless or until 20 days after the date the Court expressly declines to enter this Consent Decree. DuPont preserves its right, if necessary, to contest all factual allegations and legal contentions.

- 15. Notice of this Complaint, the Motion and Consent Decree have been given to the US Dept. of Justice, US Environmental Protection Agency, US Fish & Wildlife Service, VA Office of Attorney General, VA Dept. of Environmental Quality and the South River Science Team.
- 16. The Parties recognize, and the Court finds, that this Consent Decree has been negotiated in good faith, that implementation of this Consent Decree will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable and in the public interest.

NOW THEREFORE, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

JURISDICTION AND VENUE

- 17. This Court has jurisdiction over the subject matter of this action, and over the Parties hereto, pursuant to Section 7002(a)(1)(b) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6972(a)(1)(B). Venue is proper in this District pursuant to Section 7002(a)(1)(B) of RCRA, 42 U.S.C. § 6972(a)(1)(B), and 28 U.S.C. §§ 1391 and 1395(a).
- 18. The Court retains jurisdiction to enforce the terms of this Consent Decree.

 Any action arising out of these matters will be filed and prosecuted exclusively in the

 U.S. District Court for the Western District of Virginia for purposes of enforcing the

 terms of this Consent Decree and all matters incidental.

NO ADMISSION OF LIABILITY

- 19. By entering into this settlement and Consent Decree and by taking any action under this settlement and Consent Decree DuPont does not admit or concede in this matter (or in any other matter, location or circumstance) liability, damages, endangerment or harm to human health and the environment. DuPont preserves its right to contest all factual allegations and legal contentions.
- 20. Neither the execution of this Consent Decree nor any action taken hereunder is an admission by DuPont of any fact, liability or wrongdoing of any kind regarding any of the matters alleged in the Complaint or addressed in this Consent Decree. Entry of this Consent Decree does not constitute an admission, or determination, that the presence of mercury contamination in or near the South River and the South Fork of the Shenandoah River constitutes an imminent or substantial endangerment to health or the environment.

NOTICE AND COMMENT

21. This Consent Decree has been lodged with the Court and simultaneously provided (along with the Complaint) by certified mail return receipt requested to the US Dept. of Justice, US Environmental Protection Agency, US Fish & Wildlife Service, VA Office of Attorney General, VA Dept. of Environmental Quality and the South River Science Team for their review and comment for a period of up to 45 days after lodging. Service upon the South River Science Team is sufficiently accomplished by serving Don Kain, Water Monitoring and Compliance Manager, DEQ Valley Regional Office, P.O. Box 3000, Harrisonburg, VA 22801.

22. The approval and entry of this Consent Decree takes into consideration timely comments, if any, received from the US Dept. of Justice, US Environmental Protection Agency, US Fish & Wildlife Service, VA Office of Attorney General, VA Dept. of Environmental Quality and the South River Science Team. The Parties may withdraw or withhold their consent on the basis of comments or demands, if any, submitted to the Court.

THE SETTLEMENT TERMS

- 23. The Parties have entered into a settlement. The terms of the settlement are described in this Decree.
- 24. The settlement and Consent Decree require DuPont to perform an Ecological Study. The requirements of the Ecological Study are described in a document titled "Description of Ecological Study" attached as Exhibit D.
- 25. The settlement and Consent Decree also require DuPont to perform a Fish Consumption Survey and Health Advisories. The requirements of the Fish Consumption Survey and Health Advisories are described in a document titled "Description of Fish Consumption Survey and Health Advisories" attached as Exhibit E.
- 26. The texts of Exhibit D and Exhibit E are incorporated and merged into this Decree and describe the requirements of the Ecological Study, the Fish Consumption Survey and the Health Advisories under this settlement. Exhibit D and Exhibit E constitute the entire agreement of the Parties with respect to the subject matter thereof and supersede all prior writings or oral statements between them related thereto.
- 27. This Consent Decree shall not impair the ability of the US EPA, the VA DEQ, South River Science Team or its members to perform their work or take any action

they believe to be necessary regarding mercury or any other pollutant, contaminant, hazardous waste, hazardous substance and/or solid waste in the South River and the South Fork of the Shenandoah River. DuPont will confer with the South River Science Team, the US EPA, the VA DEQ and the US Fish & Wildlife Service about the Ecological Study (including the written program management plan). NRDC and Sierra Club may participate in these conferences if they wish. The participation by the US EPA, the VA DEQ and the US Fish & Wildlife Service in any such conference shall not be considered as a waiver or release of any claims the United States, the Commonwealth of Virginia, or their respective agencies may have regarding DuPont's Waynesboro Facility.

THE ECOLOGICAL STUDY

28. The Ecological Study will commence 30 days after approval and entry of this Consent Decree. The Ecological Study will be conducted in two phases. DuPont shall complete the Ecological Study in six years. The six-year period may be adjusted by consent of the Parties in the event of additional work negotiated with NRDC and Sierra Club or force majeure events such as major drought, flood, extensive refusal to issue necessary permits by government agencies or extensive refusal to permit necessary entry by private landowners. The Party requesting a time adjustment due to force majeure events shall have the burden of proving that any delay in performing the Ecological Study, Fish Consumption Survey or Health Advisories was caused by circumstances beyond its control that could not have been overcome by reasonable diligence. The Ecological Study will be considered complete when DuPont delivers the final report of the Ecological Study to NRDC.

THE FISH CONSUMPTION SURVEY

29. DuPont shall complete the Fish Consumption Survey within one year after completion of the next regularly scheduled fish tissue sampling by the Commonwealth of Virginia. The Fish Consumption Survey will be considered complete when DuPont delivers the report of the Fish Consumption Survey to NRDC.

THE HEALTH ADVISORIES

30. DuPont shall complete the actions required of it with respect to the Health Advisories (public service message on Spanish language radio; Spanish language information sheet; enhanced fish advisory signs in Study area) by December 31, 2005. The Health Advisories will be considered complete when (a) the Spanish language information sheet concerning local fish advisories has been developed and provided free of cost to physicians in the local area who serve the Spanish speaking community and (b) DuPont has submitted proposals to the VA Dept. of Health and the VA Dept. of Game & Inland Fisheries in order to cause those agencies to provide signs that are more available, more frequent, translated into Spanish, and that face the River.

CONSULTATION

31. The Parties' experts will privately meet and consult during the Ecological Study. There will be an initial meeting before commencement of the Ecological Study. A written program management plan will be developed describing how the studies will be conducted, scheduled, and integrated to answer the research questions. There will be subsequent meetings at critical points of scientific decision, including one meeting every six months, unless the Parties agree it is not necessary.

- 32. The purpose of the consultations is to help complete the Ecological Study and the Fish Survey in a manner that is consistent with the Ecological Study Plan and the Fish Consumption Survey Plan. The experts shall agree upon the details and manner in which each consultation will be conducted (date, time, place, facility, meeting services, etc.).
- 33. It is anticipated that Party consultations will be conducted between (a) DuPont, (b) the outside Study Project Manager (referred to in Exhibit D) and (c) the expert representative for NRDC and Sierra Club. DuPont shall have the right to invite a representative of the South River Science Team to participate in the consultations. Legal representatives of the Parties are not required to participate in the consultations, but they may attend if they desire.
- 34. If NRDC and Sierra Club believe that a material aspect of the Ecological Study or the Fish Consumption Survey is being performed, or omitted, in a manner that is not consistent with the agreed upon Ecological Study Plan or the Fish Consumption Survey Plan, then NRDC and Sierra Club shall express that opinion to DuPont and make reasonable efforts to discuss, negotiate and resolve the difference with DuPont.
- 35. Requests, if any, under the force majeure provision of paragraph 28 to adjust the time for completing the Ecological Study, Fish Survey or Health Advisories shall be subject to the consultation process. If a Party believes a time adjustment is necessary due to a force majeure event, then that Party shall give the other Parties written notice of the request within 90 (ninety) days after the requesting Party learns of a delay or anticipated delay. The requesting Party shall provide notice to the other Parties of the cause and anticipated length of the delay, the steps taken to prevent or minimize the

delay, a proposed timetable for remedying the delay, and why the requesting Party believes the delay was due to a force majeure event.

36. If the dispute is not resolved to the satisfaction of a Party, then that Party may file a motion with the Court to resolve the dispute. Before filing a motion with the Court the complaining Party shall give the non-complaining Party 15 days (not including Saturdays, Sundays, and dates this Court is closed) written notice and a complete description of the nature of the complaint and the action sought.

FEES AND COSTS

- 37. DuPont will pay \$110,000.00 (one hundred and ten thousand dollars) to NRDC and Sierra Club for past and current legal and expert fees and costs in this matter. The check shall be payable to NRDC and delivered to NRDC when 30 days has passed after the Court enters this Consent Decree. This sum shall be the sole and exclusive payment by DuPont of all fees and costs incurred up to the date of this settlement.
- 38. Within 30 days after entry of this Consent Decree DuPont will make a \$40,000.00 (forty thousand dollar) advance cost payment to NRDC and Sierra Club for the first year of future legal and expert fees and costs in this matter. DuPont will make similar annual advance cost payments for future legal and expert fees and costs in this matter in the same amount and in the same manner during the years of the Ecological Study, and a similar advance payment for each additional year negotiated or ordered for the Ecological Study. These annual advance cost payments shall be DuPont's exclusive liability for legal and expert fees and costs incurred by NRDC and Sierra Club, or their representatives, in connection with consultation, negotiation and administration of the

Ecological Study, the Fish Consumption Survey and the Health Advisories during the particular year covered by the advance cost payment.

- 39. The Court shall not order DuPont to pay any additional sums for legal and expert fees and costs predating this settlement or in connection with consultation, negotiation and administration of the Ecological Study, the Fish Consumption Survey and the Health Advisories. NRDC shall be responsible for the distribution of fees and costs as between NRDC and Sierra Club.
- 40. After entry of this Consent Decree if the Parties engage in motion practice or trial before the Court with respect to enforcement of this Consent Decree or if a remediation action is filed under paragraphs 51-54, then the Court shall follow applicable statutes and court rules regarding an award, if any, of fees and costs. The Court (consistent with paragraph 40 above) shall not order DuPont to pay any additional sums for legal and expert fees and costs predating this settlement or in connection with consultation, negotiation and administration of the Ecological Study, the Fish Consumption Survey and the Health Advisories.

EFFECT OF SETTLEMENT AND RELEASE OF CLAIMS

41. It is Decreed that DuPont is released by the Parties for past, present and future legal claims: (a) that were asserted in the October 20, 2003, letter of Nancy S. Marks of NRDC to Charles Holliday, Jr. of DuPont (Exhibit B) and (b) that are raised or could have been raised in the Complaint (Exhibit C), related to performance of studies of mercury, metals, pesticides and PAH's in the ecosystem of the South River and South Fork of the Shenandoah River. These are the "Released Claims." The Parties do not release DuPont for remediation of the ecosystem of the South River and South Fork of

the Shenandoah River. It is Decreed that this is a full and final settlement of all "Released Claims."

42. The Release is given by Plaintiffs, their directors, officers, shareholders, parent corporations, subsidiaries, predecessors, successors, assigns, chapters, employees and agents to Defendant, its parent corporations, subsidiaries, predecessors, or successors and their respective agents, directors, officers, shareholders and employees. The "Released Claims" includes any and all claims, causes of action, suits or demands past, present or future, known or unknown regarding the "Released Claims."

REMEDIATION NEGOTIATION

- 43. If DuPont believes that no remediation is necessary after completion of the Ecological Study, then DuPont will notify NRDC in writing of that fact within 30 days of the completion of the Ecological Study.
- 44. If DuPont believes that remediation is necessary after completion of the Ecological Study, then within one year after completion of the Ecological Study DuPont will present NRDC with its proposal for a voluntary program of remediation that is safe, effective and reasonably necessary to address ecological impacts, human health impacts or the alleged imminent and substantial endangerment to human health or the environment caused by mercury contamination in the Ecological Study area.
- 45. NRDC and Sierra Club will consider the DuPont proposal and notify DuPont whether the proposal is acceptable. If NRDC and Sierra Club give notice to DuPont that the proposal is not acceptable in whole or part, then the Parties shall immediately begin negotiating what remedial action different from DuPont's plan, if any, is necessary based upon available evidence, including the completed Ecological Study.

- 46. The Parties shall seek to resolve their differences through negotiation on remediation, just as they have done on the Study and Survey. The negotiations will be subject to an Agreement to Negotiate in Confidence and Federal Rule of Evidence 408.
- A7. DuPont will provide copies of the notices under paragraphs 43-45 to the South River Science Team, the US EPA, the VA DEQ and the US Fish & Wildlife Service. DuPont will confer about the remediation alternatives with the South River Science Team, the US EPA, the VA DEQ and the US Fish & Wildlife Service. NRDC and Sierra Club may participate in these conferences if they wish. The Parties shall have the right to invite the US Dept. of Justice, the US Environmental Protection Agency, the US Fish & Wildlife Service, the VA Office of Attorney General, the VA Dept. of Environmental Quality and the South River Science Team to participate in the negotiations regarding remediation. The participation by the US EPA, the VA DEQ and the US Fish & Wildlife Service in any such conference shall not be considered as a waiver or release of any claims the United States, the Commonwealth of Virginia, or their respective agencies may have regarding DuPont's Waynesboro Facility.

AGREEMENT ON REMEDIATION

48. If the Parties reach an agreement on remediation, then the Parties shall prepare an additional settlement and Consent Decree that defines the terms of the settlement, release and Decree on remediation. The Parties will provide 45 days' notice of such a proposed Consent Decree to the US Dept. of Justice, the US Environmental Protection Agency, the US Fish & Wildlife Service, the VA Office of Attorney General, the VA Dept. of Environmental Quality and the South River Science Team.

- 49. The Parties will file a joint Motion to modify the original Consent Decree to incorporate the terms of the remediation settlement and Consent Decree. The US Dept. of Justice, the US Environmental Protection Agency, the US Fish & Wildlife Service, the VA Office of Attorney General, the VA Dept. of Environmental Quality and the South River Science Team shall be given 45 days' notice and opportunity to be heard and assent, or object, in any Court proceedings regarding approval of the proposed additional settlement on remediation.
- 50. The Court will retain jurisdiction to enforce the remediation settlement and Consent Decree until completion and termination as defined under the remediation settlement and Consent Decree.

ACTION FOR REMEDIATION UNDER SECTION 7002 (a)(1)(B) OF RCRA

- 51. If the Parties do not reach an agreement on remediation, then the Parties shall file a joint Motion for termination of this Consent Decree and to mark this case dismissed, preserving the right of NRDC and Sierra Club to proceed with a new action as described below under section 7002 (a)(1)(B) of the Resource Conservation and Recovery Act ("RCRA").
- 52. Upon dismissal of the prior action NRDC and Sierra Club shall give 90 days' notice to DuPont of Intent to Sue Under Section 7002 (a)(1)(B) of the Resource Conservation and Recovery Act ("RCRA"), 42 USC 6972 (a)(1)(B). The 90 days' notice of Intent to Sue shall be deemed to be a new notice of Intent to Sue Under Section 7002 (a)(1)(B) of the Resource Conservation and Recovery Act ("RCRA"), 42 USC 6972 (a)(1)(B). During the 90-day notice period, state and federal governmental entities, such as the US Dept. of Justice, the US Environmental Protection Agency, the VA Office of

Attorney General or the VA Dept. of Environmental Quality, may assert their jurisdiction over the matter as if it were an original Notice of Intent to Sue by NRDC and Sierra Club to DuPont. All defenses shall be preserved to DuPont, including without limitation, the diligent prosecution defense and the primary jurisdiction defense.

- 53. Thereafter, NRDC and Sierra Club may file their Complaint, which shall be a new Complaint commencing a new action. DuPont shall file pleadings and motions in response.
- 54. The Parties agree and stipulate that the statute of limitations applicable to such a new Complaint and action filed under the provisions of this settlement and Consent Decree shall be tolled as of October 20, 2003, only for legal and factual claims for remediation enumerated in the October 20, 2003, letter of Nancy S. Marks of NRDC to Charles Holliday, Jr. of DuPont (Exhibit B) and the tolling shall last until six months following termination of this Consent Decree.

BINDING EFFECT

55. The provisions of this Consent Decree shall apply to, and be binding upon the Parties and their officers, directors, employees, agents, servants, successors, predecessors, parents, subsidiaries, chapters and assigns. No person or entity other than the Parties shall have authority to enforce the terms of this Consent Decree.

SERVICE OF NOTICES

56. Notices with respect to matters relating to or arising under this Consent Decree shall be delivered in writing to Nancy S. Marks, Esq. for NRDC/Sierra Club, Ross F. Schmucki, Corporate Counsel, for DuPont and Eugene E. Mathews III, Esq. for

DuPont (or their respective designated successors). Service of notices of intent to sue, motions, legal process, pleadings and all notices under paragraphs 14, 15, 18, 21-30, 34-40, 43-54, and 60-62 shall be in writing and served in accord with the Rules of this Court.

- 57. With respect to consultation described in paragraphs 31-33 of this Decree (in addition to Nancy S. Marks, Ross F. Schmucki and Eugene E. Matthews, III, or their designated successors) notices shall be delivered to Robert Livingston for NRDC/Sierra Club, Mike Liberati for DuPont, Ralph Stahl for DuPont, and Ralph Turner as the Study Manager (or their respective designated successors). For such consultation notices Robert Livingston, Mike Liberati, Ralph Stahl and Ralph Turner (and their designated successors) may direct that they receive written notices by paper mail, by fax, by email or any combination. In the absence of a clear directive, traditional paper mail shall be the default method.
- 58. It is recommended that a simultaneous courtesy phone message be left for the fax or e-mail recipient advising of the delivery in case the recipient is on vacation or not accessing fax or e-mail. A fax or e-mail notice shall be deemed delivered on the date and time indicated in the header of the recipient's fax or e-mail. If a fax or e-mail notice is received (1) after 5pm or before 9am, or (2) on a Saturday or Sunday, or (3) on a date this Court is closed, then the notice shall be deemed delivered at 9am on the next weekday this Court is open for business.
- 59. In the event of a change of designation of the person (or address) for receipt of notices, the Party making the change shall give timely written notice of that change.

CURRENT ADDRESSES

Nancy S. Marks, Esq.
Natural Resources Defense Council, Inc.
(NRDC)
40 West 20th St.
New York, NY 10011
212-727-4414 phone
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Ross F. Schmucki, Corporate Counsel DuPont Legal, Rm. D-4044-1 1007 Market St. Wilmington, DE 19898 302-774-5330 phone 302-773-5952 fax ross.f.schmucki@usa.dupont.com

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Wilmington, DE 19805
302-892-1369
302-892-7641 fax
ralph.g.stahl@usa.dupont.com

MODIFICATION

60. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation or understanding.

Prior drafts of the Consent Decree shall not be used in any action involving the interpretation or enforcement of this Consent Decree.

61. If all the Parties agree to modification of this Consent Decree in writing, they may apply to the Court for approval thereof. If the Parties do not reach agreement on the modification, a Party may seek modification of this Consent Decree under Rule 60(b) of the Federal Rules of Civil Procedure.

TERMINATION

62. DuPont may, with notice to Plaintiffs pursuant to the Federal Rules of Civil Procedure and the Local Civil Rules for the Western District of Virginia, move to terminate this Consent Decree. The Motion for Termination must contain a certification that the Ecological Study, the Fish Consumption Survey and the Health Advisories are complete, there are no disputed payment claims hereunder and Plaintiffs have not proceeded with the action for remediation as described in paragraphs 51-54 above. In the event of Termination of this Decree the provisions regarding Release shall survive.

JOINT AUTHORSHIP

63. In the event of a dispute under this Settlement or the Consent Decree the Parties shall be considered joint authors of the Settlement and Consent Decree and no provision shall be interpreted against any Party because of authorship.

SIGNATORIES

64. The undersigned representatives of the Plaintiffs and DuPont each certifies that he or she is authorized to enter into the terms and conditions of this Consent Decree and to execute and bind legally such Party to this document.

THE UNDERSIGNED Parties hereby consent to the entry of this Consent Decree:

Natural Resources Defense Council, Inc.
By: Nancy SManks
By: Namey SManks Title & Date: Senior Attorney June 21, 2005
Sierra Club (and Virginia Chapter)
By: Delle Journ Title & Date: Director, Virginia Chapter June 20, 2005
Title & Date: Director, Virginia Chapter June 20, 2005
E.I. du Pont de Nemours and Company
By: (I. W. Bedsel
By: (1. W. Bedsel. Title & Date: Wericles v Corporate Remediation June 27, 2005
APPROVED AND ENTERED this day of, 2005.
United States District Judge

Description of Ecological Study

- 1. The Study will be conducted in two phases. Six (6) years will be required for the design, implementation and completion of the Study (both phases). DuPont is committed to completing the Study in (6) years. The six-year period may require adjustment by consent of the Parties in the event of additional work negotiated with NRDC and Sierra Club or force majeure events such as major drought, flood, extensive refusal to issue necessary permits by government agencies or extensive refusal to permit necessary entry by private landowners. The Study period will commence 30 days after approval and entry of the Consent Decree. The Study will address these basic questions:
 - (a) Why has mercury remained higher than previously predicted in fish tissue in certain areas?
 - (b) How is bioavailable mercury getting to the river ecosystem in the Study area?
 - (c) How is mercury getting into tissue of fish and aquatic animals in the Study area?
 - (d) Are there specific mercury pathways that significantly contribute to mercury levels in fish tissue in the Study area?
- 2. The Study will focus on the origin, fate and effects of mercury in the Study area. The Study will coordinate mercury loading analyses with experimental work on methylation and bioavailability of mercury to evaluate how mercury is concentrating in organisms. The field data and the experimental results as they apply to the questions of this Study will be the primary focus of the final analysis.
- 3. The Study will be conducted under the direction and oversight of a DuPont Project Director. In addition, DuPont will contract with an outside Manager to handle the

day-to-day management of the Study. The Director and the outside Manager will oversee the design and implementation of the Study. The Manager will be responsible for managing field and laboratory studies. The Director and the Manager will assure accountability for proper execution of the Study against written protocols, the safety of contract personnel involved in fieldwork, the quality of the results obtained, documentation of procedures and protocols, and proper scientific investigation. DuPont plans to coordinate the Study with the work of the South River Science Team. It is anticipated that the Director and Manager will serve on the South River Science Team and will consult with the South River Science Team on all aspects of the Study. The Director and the Manager may involve the South River Science Team members in performing aspects of the Study.

- 4. The Study work will be conducted under specific, written protocols to insure proper documentation of the efforts. Quality assurance, quality control programs, chain of custody documentation and the use of data quality objectives will be incorporated into the Study plans. A qualified statistician will help in the design and interpretation of field and laboratory experiments. Statistical methods will be fully described in all written reports and will be consistent with currently accepted scientific practices. A data management system will be developed under the care, custody, ownership and control of DuPont. Study information will be kept in a single repository where feasible. Study data will be made available to the South River Science Team, to regulatory agencies, NRDC, the Sierra Club and to others. Scientists involved with the Study will be able to publish their data in peer-reviewed journals and make presentations at scientific meetings.
- 5. A written program management plan will be developed describing how the studies will be conducted, scheduled, and integrated to answer the research questions.

The written plan will include statistical analyses and analytical tools to be used in the integration of the various components. A tiered approach will be used in evaluations. The various groups associated with the study will report all data to the Director and Manager. The Study will integrate information taken in various disciplines over differing time periods. Research questions will be formulated according to hypothesis-test formats. Sample locations, tests or analytes may be dropped if such locations, tests or analytes do not materially affect the outcome of the Study. The "weight of evidence" approach will be used in the analyses of all field and experimental data.

6. Based on the completed Study a voluntary program of remediation will be developed if it is safe, effective and reasonably necessary to address ecological impacts, human health impacts or the alleged imminent and substantial endangerment to human health or the environment caused by mercury contamination in the Study area.

Phase I

7. Phase I of the Study will involve extensive design, set-up and characterization of the Reference area, the Study area and their habitats. Specific reaches of the North River and a section of the Middle River prior to its merger with the North River are candidates as Reference areas. The ultimate selection of the Reference areas that are comparable or similar to the Study area, however, will depend on the results of habitat stratification and delineation evaluations and accumulated field data. Based on the results of fish tissue monitoring in 1999 - 2002 it is expected that the Study area will include the South River beginning within the mile upstream of the former DuPont Waynesboro facility and continuing downstream into the first five to seven (5–7) miles of the South Fork Shenandoah River.

- 8. Each river will be divided into reach segments based on physical, chemical and biological criteria. Habitats will be fully evaluated, stratified and mapped. The sampling and testing in the Reference areas will be limited to sampling and testing necessary for evaluating the areas as Reference areas. Among other criteria, habitat stratification and delineation will be used in selecting the comparable reaches of the Reference areas, Study area and field station locations. Reference areas will be selected that resemble the Study area, but for the mercury contamination. Reference areas will be selected that have similar microhabitat characteristics (e.g., rocky vs. silty bottoms, stream current, sediment/water quality factors) to the Study area. Points of mercury loading to the system will be identified based on chemical and biological evaluations made over the course of a full cycle of seasons, including observations during episodic heavy rainfall and flooding.
- 9. The hydrology and geomorphology evaluations will include a study of sedimentary transport in the river reaches over the course of a full cycle of seasons. This will include a physical evaluation and GIS-based mapping of the surrounding riparian and terrestrial areas, documenting springs, tributaries, outfalls, dams, and land use patterns that might have an influence on the flows of the rivers. Flows will be measured and augmented with information derived from USGS or state-based flow stations. From these data a quantitative flow budget will be developed that reflects both "normal" and "episodic" patterns (wet/dry seasons, flooding). The hydrology and geomorphology evaluations also will involve a study of sediment transport over the course of a full cycle of seasons, and include episodic and normal flow conditions. Results of the hydrology and geomorphology studies will be used to help determine station distributions, timing of monitoring and experimental operations and loading of mercury into the river from various sources. The hydrology and geomorphology data will

be used in mercury loading analyses, bioavailability and food web concentration analyses.

- 10. Surface sediment and soil samples will be taken in the rivers, wetlands and immediately adjacent floodplain areas to examine contaminant movement. From these evaluations a soil erosion, soils and sediments budget (including deposition) will be developed for the river reaches, wetlands and immediately adjacent floodplain areas.
- 11. Baseline chemical constituents in the river water, in media in the wetlands and adjacent floodplain areas and in biological tissues will be measured on a monthly basis for a minimum of one (1) year over the course of a full cycle of seasons. Sample locations, tests or analytes may be dropped if such locations, tests or analytes do not materially affect the outcome of the Study. Chemical constituents measured monthly in the surface water will include: total organic carbon, pH, total suspended solids, phosphate, nitrate, sulfate, ammonia nitrogen, organic and inorganic mercury, selected inorganic metals (selenium, copper, zinc, cadmium, chromium, lead), and polycyclic aromatic hydrocarbons (PAHs) and pesticides (organochlorine based). A substantial water quality database (turbidity, suspended solids, etc.) exists for the South River and South Fork Shenandoah River and it will be used where possible to avoid duplication of effort. Sediments and soils will be tested for grain size, organic carbon, mineral characteristics, pH, and the metals and PAHs will be measured as noted above.
- 12. Results of metal and PAH measurements will be compared with screening benchmarks for sediments (NOAA ER-L or ER-M, or equivalent), surface water (USEPA or Virginia Ambient Water Quality Criteria) or soils (USEPA Ecological Soil Screening Levels).

- 13. Baseline biological evaluations also will be conducted in Phase I and include the collection and identification of benthic macroinvertebrates, phytoplankton, zooplankton and fish. Vegetative communities in the rivers and riparian corridor will be identified and mapped. Biological tissues from selected species will be subjected to chemical analyses for metals and PAHs as noted above. Tissue levels of mercury (total and methyl) in selected species will be measured and will help determine potential areas of bioavailable mercury production. Numerous sampling stations for further study in Phase II will be established based on loading and fate of mercury.
- 14. The chemical, physical and biological data from the preceding efforts will be used in the habitat stratification and delineation evaluation. Data will be assembled to present and illustrate the chemical, physical and biological elements for the habitat evaluation. GIS-based mapping will be used to display results of the chemical, physical and biological results of the Phase I study.

Phase II

- 15. Using information collected during the habitat stratification and delineation efforts, potential sites of mercury methylation (e.g., wetlands) will be identified and studied for their ability to produce and transport bioavailable mercury to the rivers. Attention will be given to seasons conducive to methylation. The chemical data produced in this part of the study will be used to design and select locations for bioaccumulation studies.
- 16. To help to understand whether the wetland and immediately adjacent areas have been historical sites of mercury deposition and possibly methylation, deep cores in selected Study area sediments, wetlands and immediately adjacent areas will be taken and evaluated for mercury content and for deposition over time.

- 17. In addition surface wetland and immediately adjacent floodplain soils at the points of mercury loading will be sampled and chemically evaluated for mercury contamination. Laboratory tests of adjacent floodplain soils will be conducted to simulate the leaching of inorganic and organic mercury from mercury contaminated soils during rainfall and flooding events, and wetting/drying cycles. These data will be coupled with the erosional and sedimentary transport data to develop an analysis of the sediments, soils and their mercury content.
- 18. Information from wetlands and adjacent floodplain soils will be coupled with the previous analytical data collected on the mercury content of river water, in media in the wetlands and immediately adjacent floodplain areas and in biological tissues to estimate mercury loading to the rivers.
- 19. Selected aquatic species will be collected at points of mercury loading and analyzed to determine the movement of mercury through the aquatic food web. Attention will be given to targeted species more likely to enter the bird and human food chain such as insects, oligochaetes, clams and fish.
- 20. These initial tissue burden studies will inform the design of site-specific and laboratory bioaccumulation studies. Field bioaccumulation tests using weir systems, microcosms or caged organisms will be conducted at the points of mercury loading identified previously. Laboratory bioaccumulation studies will be conducted to measure the uptake and depuration rates of mercury under controlled conditions. Data from fish diet studies, including analysis of mercury in food items, will be applied to the foodweb analysis. The combined work from the field and laboratory will be used to construct a food-web analysis that illustrates the movement and disposition of inorganic and methyl mercury in the aquatic environment.

- 21. The sediment quality Triad will be conducted in those locations determined in Phase I of the Study to be likely loading points for bioavailable mercury. The bioassay tests will be carried out at similar sampling sites in the comparable reaches of the Reference areas. The Triad will include measurements of toxicity of sediments to benthic macroinvertebrates, determinations of benthic community abundance and diversity (macroinvertebrates), and synoptic measurements of chemicals (metals, PAHs and pesticides as noted previously) in the sediments being tested. Samples for the Triad studies will be taken on a bi-monthly basis for one (1) year over the course of a full cycle of seasons.
- 22. To determine potential for dietary impacts to higher trophic-level organisms a multi-seasonal, in-depth, study of a piscivorous bird species will be conducted. Selection of the appropriate bird species for detailed study will be made after an initial survey of piscivorous bird species in relation to the Reference and Study area. Measurements in the detailed study of the selected species will include the number of nests, nesting pairs, clutch size, hatching success and fledgling rates and success. Selected tissues from eggs, offspring and adults will be collected to estimate relative body burdens of mercury. Chemical exposure estimates will be based on site specific data. Data collected previously from within the aquatic systems, wetlands and immediately adjacent floodplain will be used to augment the exposure estimates.

Description of Fish Consumption Survey and Health Advisories

- 1. A Survey will be conducted with resident and tourist/non-resident persons who fish in the Study area. The Survey will include all species caught in the Study area and will be conducted by in-person interviews. The Survey will be designed to determine fishing and fish consumption patterns (fish eating habits, species of fish caught, numbers caught, consumption avoidance due to concerns about mercury, awareness of fish consumption advisories). The Survey should take six (6) months to one (1) year. DuPont shall complete the Fish Consumption Survey within one year after completion of the next regularly scheduled fish tissue sampling by the Commonwealth of Virginia.
- 2. DuPont proposes to work through the Virginia Department of Health to develop a Spanish language information sheet concerning the local fish advisories. The information sheet would be provided free of cost to physicians in the local area who serve the Spanish speaking community. The physicians would be urged to provide the information sheet to their patients. DuPont and the South River Science Team already have worked with James Madison University to develop a public service message to be played on the local Spanish language radio stations regarding fish advisories.
- 3. DuPont proposes to work with the VA Department of Health and the VA Department of Game & Inland Fisheries to enhance the fish advisory signs in the Study area by making replacement signs more readily available, translating signs into Spanish, by increasing the frequency of signs in the Study area and by introducing signs that face in the direction of the river.