



Annual Performance Report

OMB No. 2010-0032
Expiration Date: 06/30/03

Facility Name: Spruance Plant
Performance Track ID #: A030022
Annual Performance Report #: 1
Reporting Year: 2001
Due Date: 07/01/2002

Section A. General Facility Information

Please supply or revise information in A.1 – A.8 as is necessary to ensure that it is accurate, complete, and up-to-date. Items A.9 and A.10 cannot be pre-completed; please respond as directed in A.9 and A.10 below.

- A.1 Name of your facility:** Spruance Plant
- A.2 Name of your parent company:** E.I. duPont deNemours and Co., Inc.
- A.3 Facility contact person for the Performance Track program:**
Name: Robert Dunn
Title: Environmental Manager, DuPont Virginia
Phone: (804) 383-3895
Fax: (804) 383-3785
E-mail: Robert.L.Dunn@usa.dupont.com
- A.4 Facility's location**
Street Address: 5401 Jefferson Davis Highway

Address (cont.):

City: Richmond

State: VA

Zip Code: 23234

A.5 Facility's Website address (if any):

www.dupont.com/virginia/spruance/spruance.html

A.6 Number of employees (full-time equivalents) who currently work in the facility:

More than 1000

A.7 Does your company meet the Small Business Administration definition of a small business for your sector?

No

A.8 North American Industrial Classification System (NAICS) Code(s) that are used to classify business at the facility:

325222 325211 31323

A.9 In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? If so, please list them here:

No

A.10 Please update the list of environmental requirements that apply to your facility by listing any changes that have taken place during this reporting period. If you have no changes to report, please enter "No changes".

No changes.

**Section B.
Environmental Management System**

B.1 Environmental Management System Assessment. Please summarize EMS assessments conducted *during the year*.

a. Was an EMS audit or other assessment done by an independent third party?

No

If yes, please provide the type (e.g., ISO 14001 certification), the scope, and the dates (mo/yr) of each assessment.

Type	Scope	Dates (mo/yr)

b. Was an internal or corporate EMS audit conducted? No

If yes, please provide the scope and dates (mo/yr) of each audit.

Scope	Date (mo/yr)
Corporate 2nd party audit is scheduled for later this year (4th Quarter).	

c. Was a compliance audit conducted?

Yes

If yes, please provide the scope and the dates (mo/yr) of each audit, and indicate who conducted the audit(s) (e.g., facility staff, corporate groups, third party).

Scope	Dates	Who conducted the audit
Approximately 20 first party audits (at least once/month) have been conducted by Site Environmental in conjunction with the various business and support areas on the site. These audits focus on the various environmental media and on compliance with all applicable regulations, standards as well as waste minimization and pollution prevention efforts.		

d. (Optional) If you would like to describe any other audits or inspections that were conducted at your facility, please do so here.

On 3/12-13, an EPA unannounced RCRA audit was conducted. No major deficiencies were noted in respect to overall management systems.

e. Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audit

A summary of corrective actions taken as well as some examples of improvements made as a result of EMS assessments and compliance audits are as follows:

Improved recordkeeping, improving annual dike/curb inspections, improved follow-up of audit recommendations, waste pad and dike surface crack repairs, developed/improved written procedures, upgraded training procedures, improved housekeeping/order/arrangement of waste storage areas, improved management procedures for completing incident reports,

improved waste aerosol can disposal, ensuring drum waste management systems such as labeling, training, inspections, and documentation are being conducted in a required manner, a 30% reduction in environmental incidents compared to year 2000, two major sewer segments were upgraded to assure optimum performance, improved the operating efficiency of the waste water treatment system through utilization of cooling towers to reduce utilization and treatment of once-through cooling water, improved method of DuPont and contractor lab data to our central database resulting in less transcription errors and more timely response to potential water quality issues, standardized the sanitary sewer pump station design to improve operating efficiency and maintenance and added a full-time chemist to the laboratory quality control function to allow improved compliance with water quality control testing needs.

f. Has your facility corrected all instances of potential non-compliance and EMS non-conformance identified during your audits and other assessments?

No

If no, please explain your plans to correct these instances.

All identified instances of potential non-compliance and EMS non-conformance identified are monitored on a routine basis until they are completed. Some items are identified as long-term, meaning they may take longer than 90 days to complete. A discussion of such items is a regular/routine agenda topic at our monthly Site Environmental Leadership Team meetings.

g. When was the last Senior Management review of your EMS completed?

11/2001

Who headed the review? Name: Mr. Robert L. Dunn **Title:** Environmental and Community Affairs Manager

B.2 ISO 14001 Certification. Is your facility currently certified to ISO 14001?

No

B.3 Environmental Aspects Identification. When did your facility last conduct a systematic identification and/or review of your environmental aspects?

9/2001

B.4 Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets. You may limit the summary to environmental aspects that are *significant* and towards which progress has been made during the *reporting year*. In cases where *progress* relates specifically to a Performance Track performance commitment, complete the Environmental Aspect column, but in the *Progress* column simply refer to the performance commitment tables in Section C, i.e. "See Section C."

<i>Environmental Aspect</i>	<i>Progress Made This Year (e.g., quantitative or qualitative improvements, activities conducted)</i>
Non-Hazardous Solid Waste (Kevlar® AFS)	Refer to performance commitment tables in Section C
EPCRA 313 Releases - Carbon Disulfide (Teflon® AFS)	Refer to performance commitment tables in Section C
Non-Hazardous Solid Waste (Nomex® AFS)	Refer to performance commitment tables in Section C
Hazardous Waste - Acid Crumb (Kevlar® AFS)	A Six Sigma program was initiated during the 4th quarter of 2000 to reduce pounds of acid crumb at start-ups by 50%. This project has demonstrated good success in the reduction of acid crumb. Since this upgrade was made, numerous "no acid crumb" start-ups have been achieved.
Non-Hazardous Solid Waste - Kevlar® Pulp	Programs have been added to reduce off-specification pulp landfilling. By simplifying and improving pulp product grading, better use of off-specification pulp into alternate products was enabled. This reduced landfilling of off-specification pulp by 100,000 lbs/yr.

EPCRA 313 As
Generated and Releases
and Transfers (Nomex®
AFS)

EPCRA 313 As Generated and Releases and Transfers continue to trend down. A significant decrease has been achieved compared with the 1995 base year. As of 2000, there has been a 55.8% decrease in EPCRA 313 As Generated and a 83% drop in EPCRA Releases and Transfers.

**Section C.
Environmental Performance Commitments**

Please use the tables below to summarize your facility's environmental performance against your Performance Track performance commitments. Complete only those boxes related to the baseline, current year, and performance commitment.

C.1 Performance Commitment 1

a. Use this table to report data related to your first performance commitment.

Category:	Waste				
Aspect :	Total Solid Waste				
	Aspect Specifics (Optional):				
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	2000	2001	2002	2003	2003
Actual Quantity (per year)	365000	4228			Optional:
Measurement Units	lbs				
Normalizing Factor	1.0	1.084			Optional:
Basis for your Normalizing Factor	pounds of polymer produced				
Normalized Quantity* (per year)	365000	3900.4			180000
*Calculated for you					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

A \$550M project to enable recycling of prepolymer waste generated during process start-ups and shutdowns was installed and commissioned in the 3Q2000. This program has been extremely successful in reducing this waste stream by almost 99%, well beyond the performance commitment.

If you have additional information that you would like to include please attach it here:

Any attachments will be located at the end of the report.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).

C.2 Performance Commitment 2

- a. Use this table to report data related to your second performance commitment.

Category :	Air Emissions				
Aspect :	Emissions of Toxics				
	Aspect Specifics (Optional): EPCRA 313 Releases				
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	1999	2001	2002	2003	2003
Actual Quantity (per year)	50400	0			Optional:
Measurement Units	lbs				
Normalizing Factor	1.0	1.051			Optional:
Basis for your Normalizing Factor	pounds of product produced				
Normalized Quantity* (per year)	50400	0			0
*Calculated for you					

- b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

Carbon disulfide was replaced with a low hazard/toxicity spin matrix. The new spin matrix is in powder form. Use of carbon disulfide was discontinued as of 3/29/2000. This represents a significant achievement since it effectively eliminated a HAP emission as well as a source of hazardous waste.

Attach:

Any attachments will be located at the end of the report.

- c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).

C.3 Performance Commitment 3

a. Use this table to report data related to your third performance commitment.

Category :	Waste				
Aspect :	Hazardous Solid Waste				
	Aspect Specifics (Optional):				
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	2000	2001	2002	2003	2003
Actual Quantity (per year)	2620592	2812801			Optional:
Measurement Units	lbs				
Normalizing Factor	1.0	0.922			Optional:
Basis for your Normalizing Factor	pounds of spun product				
Normalized Quantity* (per year)	2620592	3050760.3			2360000
*Calculated for you					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

There was an increase vs. the base year (2000). It is believed this increase resulted from lower production rates resulting in less efficient operation, high employee turnover and the loss of a number of experienced operators. In a side but related note, discussions were held in late 2001 between DuPont Spruance and Virginia DEQ waste officials. Based on these discussions, State officials agreed with DuPont that the majority of this waste stream can be appropriately re-designated as non-hazardous industrial waste based on the physical characteristics of this material. This official re-designation will take effect in 2002 and will result in a significant decrease in the amount of hazardous waste generated by this area.

Attach:

Any attachments will be located at the end of the report.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).

C.4 Performance Commitment 4

a. Use this table to report data related to your fourth performance commitment.

Category :	Waste				
Aspect :	Total Solid Waste				
	Aspect Specifics (Optional):				
	Baseline (as stated in your application)	Year 1	Year 2	Year 3	Performance Commitment (the goal stated in your application)
Calendar Year	2000	2001	2002	2003	2003
Actual Quantity (per year)	196320	171784			Optional:
Measurement Units	lbs				
Normalizing Factor	1.0	0.904			Optional:
Basis for your Normalizing Factor	Production (in pounds produced)				
Normalized Quantity* (per year)	196320	190026.5			98000
*Calculated for you					

b. Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.

A new polymer waste recycling system was installed which enables the recycling of drum and smaller containers of polymer/dimethylacetamide wastes. This new recycling system was started up during the 4Q2001

Attach:

Any attachments will be located at the end of the report.

c. Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).

**Section D.
Public Outreach and Performance Reporting**

D.1 Please briefly summarize the public outreach and reporting activities that your facility has conducted during the year. Feel free, but not obligated, to attach supporting materials (e.g., meeting agendas, public announcements).

DuPont Virginia Website (<http://www.dupont.com/virginia/spruance/spruance.html>)

Public Announcements Posted In Local Newspaper

Participation In Chesapeake Bay Businesses for the Bay, Friends of Chesterfield's Riverfront, Virginia

Manufacturers Association Community Outreach and Environmental Affairs Committees

The Spruance Site has been certified by the Wildlife Habitat Council as a wildlife habitat area.

Spruance must demonstrate, maintain, and meet outstanding commitment criteria. Renewal is now required every three years and is composed of extensive photographs, objectives and successes of ongoing programs.

In addition, DuPont Spruance employees are very active in a variety of community outreach activities such as the Salvation Army, Christmas In April, the Virginia State University Mathematics and Computer Science Partnership Program, Department of Conservation and Natural Resources Adopt-A-Stream Program, the Bensley Rescue Squad, Shepherd's Club, Adopt-A-School Program, Students Reaching Students, Inc., the annual United Way campaign, Big Brothers/Big Sisters Services, Inc., the Boy Scouts of America, the Girl Scouts of American, Take Your Daughters/Sons to Work Day, Habitat for Humanity, Girls in Science, First Robotics, Chesterfield County Public Education Foundation, Math and Science Center, Virginia Institute for Forensic Science and Medicine, John Tyler Community College and the YMCA.

Attachment:

[Any attachments will be located at the end of the report.](#)

D.2 Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Report available to the public. Please check as many as appropriate.

Web Site

Community Advisory Panel

URL:

www.dupont.com/virginia/spruance/spruance.html

Other:

**Section E.
Self-Certification of Continued Program Participation**

On behalf of **Spruance Plant,**
(name of my facility)

I certify that

- I have read and agree to the terms and conditions as specified in the *National Environmental Performance Track Program Guide*. This facility, to the best of my knowledge, continues to meet all program criteria;

- I have personally examined and am familiar with the information contained in this Annual Performance Report. The information contained in this report is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete;

- My facility has an environmental management system (EMS), as defined in the Performance Track EMS criteria, including systems to maintain compliance with all applicable federal, state, tribal, and local environmental requirements, in place at the facility, and the EMS will be maintained for the duration of the facility's participation in the program;

- My facility has conducted an objective assessment of its compliance with all applicable federal, state, tribal, and local environmental requirements; and the facility has corrected all identified instances of potential or actual noncompliance;

- Based on the foregoing compliance assessments and subsequent corrective actions (if any were necessary), my facility is, to the best of my knowledge and based on reasonable inquiry, currently in compliance with applicable federal, state, tribal, and local environmental requirements.

I agree that EPA's decision whether to accept participants into or remove them from the National Environment Performance Track is wholly discretionary, and I waive any right that may exist under any law to challenge EPA's acceptance or removal decision.

I am the senior manager with responsibility for the facility and am fully authorized to execute this statement on behalf of the corporation or other legal entity whose facility is part of the National Environmental Performance Track program.

Signature/Date

Printed Name

Mr. Michael E. Mayberry

Title

DuPont Spruance Plant Manager

Phone Number

804-383-2698

E-mail Address

michael.e.mayberry@usa.dupont.

Facility Name

Spruance Plant

Facility Street Address

5401 Jefferson Davis Highway

Richmond, VA 23234

Performance Track ID#

A030022

Appendix:**Do you want to add Appendix?****When adding additional comments, please refer to question number.****Comments:****Attachment:**

Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection information is estimated to average 188 hours per respondent annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.