



## DuPont Engineering

March 20, 2009

Mr. Frank Faranca  
New Jersey Department of Environmental Protection  
Bureau of Federal Case Management  
P.O. 028  
401 East State Street, Fifth Floor  
Trenton, NJ 08625

**RE: Groundwater Remedial Action Work Plan Addendum  
DuPont Pompton Lakes Works  
PI #007411**

Dear Mr. Faranca:

As per the modifications to regulations applicable to the discharge to groundwater permit for the existing system and according to the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharges to Groundwater Technical Manual, section IV. E. *Individual Permits* the NJDEP will not renew existing permits, but recommends a permit-by-rule be issued under N.J.A.C. 7:26E-6.3(c).

In accordance with the requirements listed in the technical manual referenced above, DuPont is submitting an addendum to the existing remedial action work plan for review. It is our understanding that the existing discharge to groundwater permit will remain in effect until the permit-by-rule has been approved. If you have any questions please feel free to call me at 973.492.7733.

Sincerely,

A handwritten signature in black ink that reads "David E. Epps".

David. E. Epps, P.G.  
DuPont Pompton Lakes Works  
Project Director, Corporate Remediation Group

cc: PLW Files  
Enclosures (1)

# ADDENDUM TO GROUNDWATER REMEDIAL ACTION WORK PLAN DUPONT POMPTON LAKES WORKS

Date: March 2009

Project No.: 507028  
18985541.09051



CORPORATE REMEDIATION GROUP

*An Alliance between  
DuPont and URS Diamond*

Barley Mill Plaza, Building 19  
Wilmington, Delaware 19805

ADDENDUM TO GROUNDWATER  
REMEDIAL ACTION WORK PLAN

CERTIFICATION I

"I certify under penalty of law that the information provided is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."



Albert J. Boettler  
DuPont Corporate Remediation Group  
Senior Consultant

3/19/09  
Date

WITNESSED THIS 19 DAY OF March, 2009




\_\_\_\_\_  
Amanda L. Guaglione  
Notary Public

AMANDA L. GUAGLIONE  
NOTARY PUBLIC  
STATE OF NEW JERSEY  
MY COMMISSION EXPIRES JUNE 08, 2010

ADDENDUM TO GROUNDWATER  
REMEDIAL ACTION WORK PLAN

CERTIFICATION II

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

  
\_\_\_\_\_  
Isidoros J. Zanikos  
DuPont Corporate Remediation Group  
Remediation Team Manager

3/20/09  
Date

WITNESSED THIS 20 DAY OF March, 2009

  
\_\_\_\_\_  
Amanda L. Guaglione  
Notary Public

AMANDA L. GUAGLIONE  
NOTARY PUBLIC  
STATE OF NEW JERSEY  
MY COMMISSION EXPIRES JUNE 08, 2010

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- Attachment 1 References to the Date and Title of the Previously-Approved RAW
- Attachment 2 References to the RAW Approval Letter
- Attachment 3 NJPDES Individual Permit Number NJ001851
- Attachment 4 Total and Dissolved Lead Results, April 2008 through January 2009
- Attachment 5 Public Notification Form

## 1.0 INTRODUCTION

On July 5, 2005, amendments to the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations N.J.A.C. 7:14A-2.5, 7.5, 8.5, 10.2 and 22.4 and the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-6.3(c) were adopted that significantly modified and streamlined the NJPDES process for site remediation. Before the July 2005 amendments to the NJPDES and the Technical Rules, a separate NJPDES application and individual permit was required for any long-term water remediation projects that included a discharge to the ground. In order to facilitate the investigation and remediation of sites under the New Jersey Department of Environmental Protection (NJDEP) oversight, lead programs in the NJDEP are now able to approve most discharges to the ground waters of the State of New Jersey under the permit-by-rule provisions of N.J.A.C. 7:14A-7.5(b) and 8.5 (b).

The purpose of this document is to provide the information required by the Technical Requirements for Site Remediation N.J.A.C. 7:26E-6.3(c) and NJPDES Discharges to Ground Water Technical Manual for the Site Remediation Program dated June 2007 (DGWTM) relative to obtaining a permit-by-rule for the discharge of treated water generated by the groundwater remedy installed under the approved remedial action plan at the DuPont Pompton Lakes Works site.

### 1.1 Background

DuPont currently operates a groundwater extraction system that was installed as part of an NJDEP approved remedial action work plan (RAW) dated July 1993 that was fully implemented in 1998. Groundwater is withdrawn from an unconsolidated alluvium aquifer along the southern boundary of the site to establish a hydraulic capture zone that prevents groundwater containing volatile organic constituents (primarily tetrachloroethylene and trichloroethylene) from migrating off-site. Water that is withdrawn is treated and re-introduced into the aquifer via a series of infiltration galleries located along the south and southeastern boundary of the site that are partially within the capture zone of the groundwater extraction system and entirely within the classification exception area (CEA) established for the off-site groundwater.

The infiltration galleries are currently permitted under an individual NJPDES discharge-to-groundwater permit. According to the NJPDES DGWTM, section IV.E, Individual Permits, NJDEP does not plan to renew existing individual NJPDES discharge-to-groundwater (DGW) permits for non-hazardous waste discharges, and as such the NJDEP recommends that these types of discharges have a permit-by-rule pursuant to N.J.A.C. 7:14A-16.3(h). A review of the requirements for discharges to groundwater at remediation sites included in the permit-by-rule provisions of NJPDES listed in the DGWTM indicates that the currently permitted discharge under a DGW permit meets the requirements listed in the DGWTM, section IV.E, Individual Permits, and as such these requirements will be used to apply for a permit-by-rule.

As stipulated in the DGWTM, the RAW requirement can be fulfilled by submitting a proposed addendum to the existing RAW that includes the following:

- ❑ References to the date and title of the previously approved RAW and the RAW approval letter.
- ❑ A copy of the already established effluent and monitoring requirements. Any proposal to modify the discharge, or the established requirements, should also include justifications for the changes as appropriate.
- ❑ Public notice of the work plan for the discharge following the model public notice provided in Appendix H of the Technical Rules.

This document is being submitted as that addendum to the DuPont Pompton Lakes Works site Groundwater RAW.

## 2.0 PERMIT-BY-RULE SUBMITTALS

A remedial action work plan has been approved by NJDEP for the discharge. As required on page 15, Section IV.E. in the NJPDES DGWTM, the following information is being provided in this RAW addendum:

- References to the date and title of the previously approved RAW:
  - The DuPont Pompton Lakes Works (PLW), Pompton Lakes, Passaic County, Groundwater Remedial Action Plan (RAP) dated July 21 1993. The document title page and cover letter are included in Attachment 1.
- References to the RAW approval letter:
  - The NJDEP letter dated September 27, 1993, finding the RAP conditionally acceptable is included in Attachment 2.



### 3.0 EXISTING PERMIT REQUIREMENTS

As required in the DGWTM, the existing discharge to groundwater requirements related to the groundwater extraction system remedy as per NJPDES individual permit (NJ001851) are provided below. A copy of the original permit is provided as Attachment 3.

#### 3.1 Effluent Quality

The table below lists the effluent limits contained in the current discharge to groundwater permit.

**Table 1**  
**Effluent Limits**

Parameter	Effluent Limits (ppb <sup>1</sup> )
Tetrachloroethene	1
Trichloroethene	1
1,1,1-trichloroethane	30
1,1-dichloroethene	2
trans-1,2dichloroethene	100
cis-1,2dichloroethene	70
1,1-dichloroethane	50
1,2-dichloroethane <sup>3</sup>	2
Vinyl Chloride	5
Carbon Tetrachloride <sup>3</sup>	2
Lead (total and dissolved)	10
Selenium <sup>2</sup>	50
Copper <sup>2</sup>	1000
Mercury <sup>2</sup>	2
pH <sup>3</sup>	5-7

1. ppb = parts per billion

2. Parameter sampled for purge water, which is not from wells in the comprehensive monitoring program, is discharged to stripper.

3. Monitored in effluent to the on-site pond only after an acid solution is used for air stripper maintenance.

#### 3.2 Monitoring Requirements

Monitoring groundwater elevations, chemical constituents, and system operating parameters is required to demonstrate the effectiveness of the interim remedial measure (IRM). The Comprehensive Groundwater Monitoring Program (CGMP) was developed for the site under the Administrative Consent Order (ACO). The program documentation was submitted to the New Jersey Department of Environmental Protection (NJDEP) on November 14, 1995, and approved by the NJDEP in a June 21, 1996 letter. The CGMP monitors the groundwater in select wells located on-site and off-site semiannually (May

and November) for the site constituents of concern listed in the previous table excluding lead, which was removed from the program in March 2004. In addition, groundwater elevations are measured semiannually for all site wells for gradient determination. All data is summarized and presented in an annual report. To demonstrate the effectiveness of the pump-and-treat system, additional monitoring activities are conducted, as outlined in the subsections that follow.

### **3.2.1 Groundwater Elevations**

Groundwater elevations are collected from all south plant and off-site wells on a monthly basis to verify that the goal of hydraulic containment is being met. At least one piezometer is monitored near each injection bed pair to determine groundwater mounding, as specified in the table that follows. In addition, at least one piezometer, installed within each bed, is measured to monitor the bed's water level.

### **3.2.2 Constituent Concentrations**

The treatment system's influent and effluent are currently monitored for the ten volatile organic compounds (VOCs) identified in the CGMP (see Table 1) and lead. Monitoring is conducted on a monthly basis. All influent and effluent monitoring and sampling is conducted in accordance with the NJDEP Field Sampling Procedures Manual (August 2005). Analytical methods are the same as in the CGMP, Environmental Protection Agency (EPA) Method 601 for the ten VOCs of concern, and EPA Method 239.2 for lead until December 2006 when the analytical method for lead was changed to EPA SW-846 Method 6020. Additionally, VOC samples are collected quarterly from the influent for air permit compliance and analyzed using SW-846 Method 8260B.

### **3.2.3 System Operating Parameters**

Groundwater pumping rates are measured and recorded for each individual recovery well, as well as summed influent rate and volume. These values are recorded on operator log sheets. The air flow rate through the air stripping column is also recorded. Air emissions are calculated quarterly using influent VOC constituent concentrations and the maximum pumping rate per quarter. Calculations assume 100 percent removal of constituents, which is confirmed by groundwater effluent analytical data.

Additional operating data is recorded on the operator log sheets to track system performance. Additional samples may be collected and analyzed for parameters to track and optimize operation of the treatment system. The specific data required are specified in the operation and maintenance manual, which was developed following final design. All operational logs and copies of analytical data are maintained on-site.

## **3.3 Reporting**

Operational summary reports of all monitoring requirements are created monthly and submitted quarterly to the NJDEP case team who administers both the ACO and the Discharge-to-Groundwater (DGW) permit. The report includes groundwater gradient maps, influent and effluent concentration data, groundwater pumping rate, and airflow

data. DuPont may request as part of this permit-by-rule an adjustment to the monitoring and reporting frequency after sufficient data has been collected to justify a change.

## 4.0 MONITORING PROGRAM MODIFICATIONS

The following modifications to the existing individual DGW permit are being requested based on the data collected since the implementation of the RAW.

### 4.1 Effluent Monitoring

The occurrence of lead in groundwater has been evaluated using influent/effluent data over the past 10 years of treatment system operation. These data, presented in Attachment 4, shows the concentration of lead has been below the practical quantitation limit or non-detect since 2002. Based on this data, DuPont requests that lead be removed from the monitoring program.

### 4.2 Groundwater Elevation Monitoring Program

DuPont has been collecting groundwater elevations a 10-year time frame. Water levels in the wells have shown minimal fluctuation over this time period, and the flow patterns within the aquifer are well documented. As such, the following modifications to the water-level monitoring program are proposed as follows:

- Continue monthly groundwater elevation monitoring for wells located within the capture zone only.
- Institute quarterly groundwater elevation monitoring for wells located off-site in the CEA.
- Institute biennial groundwater elevation monitoring for the remaining wells.

## **5.0 PUBLIC NOTIFICATION**

Since the original RAW was public noticed, DuPont is requesting a variance to the public notification requirements as allowed in the DGWTM by downgrading the requirement to send the entire RAW to the local entities listed in N.J.A.C. 7:26E-6.3(c) 3. Upon approval of the permit-by-rule by NJDEP, DuPont will send a copy of the public notice provided in Attachment 5 to those entities along with a written commitment to provide additional information regarding the discharge if requested by the local officials/entities.

**ATTACHMENT 1**

**REFERENCES TO THE DATE AND TITLE OF THE  
PREVIOUSLY-APPROVED RAW**



DU PONT CHEMICALS  
Pompton Lakes Works  
Pompton Lakes, N. J. 07442

cc: M. Vetter  
~~E. S. Seger~~  
A. D. Bedsole  
M. Swindoll  
N. Kramer  
File: EV-02-58

July 22, 1993

A. Park, USEPA (2)  
Air and Waste Management  
Hazardous Waste Facilities Branch  
Region II  
26 Federal Plaza  
New York, NY 10278

United States Environmental Protection Agency (1)  
Office of Policy and Management  
Permits Administration Branch  
Region II  
26 Federal Plaza  
New York, NY 10278

Mr. Gerald Hahn (3)  
State of New Jersey  
NJDEPE  
Div. of Responsible Party Site Remediation  
401 East State Street  
CN 028  
Trenton, NJ 08625

Post-It™ brand fax transmittal memo 7671		# of pages	1
To	Marcia Watkins	From	Ed Seger
Co.		Co.	
Dept.		Phone #	
Fax #		Fax #	

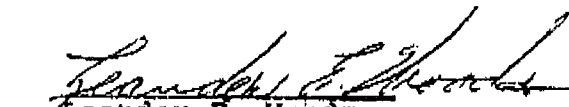
Dear Sirs:

Re: Groundwater Remedial Action Plan  
July, 1993, DuPont Pompton Lakes Works

Attached are copies of the Pompton Lakes Works revised Groundwater Remedial Action Plan. It is submitted in accordance with agreement reached between the NJDEPE and DuPont in the March 24th meeting.

If need you additional information, please call me at (201) 492-7733.

Sincerely,

  
Leander E. Woods  
Plant Manager

LEW:ss  
Attach.

# <sup>R</sup>GROUNDWATER REMEDIAL ACTION PLAN

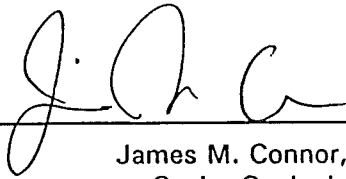
DuPont Pompton Lakes Works  
Pompton Lakes, New Jersey

July 21, 1993

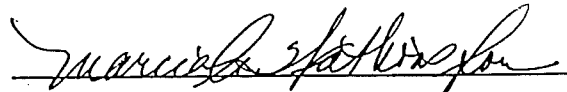
DERS Project No. 2765

*Prepared by*

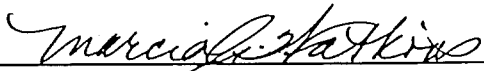
DuPont Environmental Remediation Services  
Bellevue Park Corporate Center  
300 Bellevue Parkway, Suite 390  
Wilmington, Delaware 19809-3722



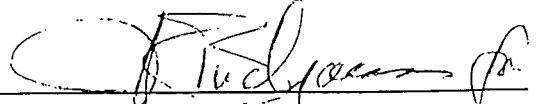
James M. Connor, PG  
Senior Geologist



C. Michael Swindoll, PhD  
Senior Environmental Scientist



Marcia A. Watkins  
Senior Engineer



Edward S. Seger, PE  
Project Director



## **ATTACHMENT 2**

### **REFERENCES TO THE RAW APPROVAL LETTER**



EV-02-58  
EV-02-57

Rec'd 9-29-93  
Domi  
Leader Mike Swindoll

State of New Jersey  
Department of Environmental Protection and Energy  
Division of Responsible Party Site Remediation  
CN 028  
Trenton, NJ 08625-0028

CC: Mary Kattic ✓  
Ed Sigan ✓  
N. Kramer ✓  
Mark Vetter ✓  
A.D. Bedsole ✓

1310  
2400  
1310

Karl J. Delaney  
Director

Scott A. Weiner  
Commissioner

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
NO. P261030897  
Mr. Leander Woods  
Plant Manager  
E. I. du Pont de Nemours and Co.  
Cannonball Road  
Pompton Lakes, NJ 07442

SEP 27 1993

Dear Mr. Woods,

Re: Dupont Pompton Lakes Works (PLW), Pompton Lakes, Passaic County  
Ground water Remedial Action Plan (RAP) dated July 21, 1993

The New Jersey Department of Environmental Protection and Energy (Department or the NJDEPE) has reviewed the above referenced submittal and finds it conditionally acceptable based on Du Pont addressing the following comments:

- 1) p. 7 The report indicates that two area wells exceeded the NJDEPE ground water quality standards for lead and mercury in 1992. Du Pont shall investigate the possibility that metals treatment may be a necessary component of the treatment system.
- 2) All necessary permits must be obtained prior to the implementation of the pilot studies and the chosen remedial alternative (i.e.: Air and Treatment Works Approval permits). Du Pont must verify whether the above permits and air emission controls are required. The Department will review these submissions and make a determination.
- 3) Du Pont shall be aware that the frequency and analytical parameters required for the start-up sampling of the effluent water will be specified in the surface water or ground water discharge permit.
- 4) p. 11 DERS states that PCE degrades to CO<sub>2</sub>. To be accurate, PCE degrades to CO<sub>2</sub>, H<sub>2</sub>O and Cl<sup>-</sup> ion.
- 5) p. 14 Since the retardation factors calculated for the compounds range from 1.1 to 9.2 some of the compounds move at a slower velocity than the ground water. Therefore, Du Pont must clarify the statement that the constituents are relatively mobile with little potential to absorb to aquifer materials.
- 6) p. 24 Du Pont shall be aware that since the ground water withdrawal rate is greater than 70 gallons per minute (gpm) a Water Allocation Permit is required. This permit may be obtained from the Bureau of Water Allocation at (609) 292-2957.
- 7) p. 33 The Department requires that Du Pont use actual contaminated ground water in the pilot scale test. It will be more accurate to test with actual ground water because it will be difficult to approximate actual aquifer conditions and predict fouling of the system with a synthetic waste stream.

8) p. 35 At a minimum Du Pont must sample monitor wells as required under the terms and conditions of the NJPDES-(Discharge to Ground Water) DGW permit. If Du Pont wishes to sample additional wells or for additional parameters, it may do so. Any additional sampling information must be submitted to the Department.

9) p. 36 The ground water contour maps generated shall include data from as many wells as possible for each ground water zone. The contour maps should encompass the southern plant area and include data from some off-site wells to provide an accurate interpretation of the area.

Additional piezometers shall be proposed around RW-1, RW-2, and RW-3 in order to provide a concise depiction of the shallow ground water contours. The Department recommends that two additional piezometers be installed perpendicular to each other at different distances (example: 10' and 50') from the recovery wells. One of the piezometers at each well location should be downgradient of the recovery well.

10) p. 37 The Department recommends that well cluster 106, in addition to 107, also be evaluated for vertical gradients since, according to Du Pont's records, well cluster 107 is outside of the capture zone.

11) p. 39 Reporting requirements shall also include the volume of water pumped from each well on a monthly basis and the average pumping rate per month. Contour maps shall include the pumping rate for each well as the data water level measurements are taken. Du Pont shall also report any down time associated with the pumps and reasons for the occurrences.

#### Appendix A

12) p. 3 DERS states that the listed halogenated ethanes and ethenes are degradable and that this information is known through the experience of Du Pont. Any additional information that Du Pont could supply on these degradation factors could prove useful to the Department. It would also be beneficial to individuals in the Department, who perform periodic peer review, that Du Pont list these compounds and their associated relationships with the sites manufacturing and waste disposal experiences in this RAP.

13) p. 3, third paragraph DERS states that the redox potential of the aquifer controls the microbe types and activity. This is partially incomplete. It is also true that the microbial activity will maintain a redox potential in a media. In reality, the availability and type of electron acceptors and energy source control the redox of the aquifer.

14) p. 11, Concerning the use of septum sealed experimental vessels, in bioremediation studies that are to occur in anaerobic conditions, appropriate system seals need to be used. Teflon and silicon rubber are highly permeable to oxygen and the use of seals made with either material will render most anaerobic bioremediation studies invalid. Butyl rubber is resistant to gases and is a better choice for a flask or bottle seal. If chemical resistance is required, then a teflon membrane lined butyl rubber seal can be used. To assure the integrity of anaerobic conditions, incubation of individual experimental flasks or systems should be performed in an anaerobic jar or incubator.

15) p. 11 In monitoring the degradation of halogenated compounds, measurement of excess chloride ion has been used to evaluate the microbial breakdown of the parent compound. The concentration of the initial material must be high enough to detect the excess chloride. Ion specific probes can resolve levels of chloride greater than 2 ppm.

16) p. 12 Du Pont should provide more detail as to the wells which will be used for the tracer study.

17) Since chemicals will be discharged into the ground water during the tracer study, Du Pont shall require a waiver letter from a Discharge to Ground Water

Permit for this study only. This letter can be obtained by sending a written request to Anne Pavelka of the Bureau of Groundwater Pollution Abatement outlining the purpose of the tracer test, duration of the discharge, composition of the discharge, volume of the discharge, location of the discharge, and the impact of the discharge on the aquifer. If water is being withdrawn from the aquifer, the location and rate of withdrawal should be included. The letter should be sent to the address listed below.

Anne Pavelka  
NJDEPE/Division Of Publicly Site Remediation/  
Bureau Of Ground Water Pollution Abatement  
CN-413  
Trenton, N.J. 08625

18) p. 15 The report shall include more details on the in-situ pilot test proposed, such as which wells will be used, pumping rates, and location of pumping wells.

19) p. 15 If the discharge from the in-situ pilot study is back to the ground water either through injection into monitor wells or discharge into a lagoon, specific approval for this activity is needed from the Bureau of Ground-Water Pollution Abatement in the form of a waiver from a Discharge to Ground Water Permit. A request should be sent to the Bureau of Groundwater Pollution Abatement similar to the letter discussed in comment 9 above.

20) Du Pont shall clarify why it is proposed in Table 2 to use USEPA Method 8010 instead of USEPA Method 624 for the analysis of VOC's. The use of Method 624 would be consistent with the site wide monitoring program.

21) The Department should be notified at least two weeks prior to any field activities including the tracer test and the in-situ pilot study.

The Department reserves approval of the schedule of the pilot study pending receipt of additional information to justify the schedule in the present proposal. Should you have questions regarding this letter please call me at (609) 633-1455.

Sincerely,



Gerald M. Hahn, Case Manager  
Bureau of Federal Case Management

c. Diane Groth, BEERA  
Anne Pavelka, BGWPA  
Andrew C. Marinucci, BEERA  
Kathleen M. Grimes, BEMQA  
Andy Park, USEPA

**ATTACHMENT 3**

**NJPDES INDIVIDUAL PERMIT NUMBER NJ001851**



2400

# State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

JUN 25 1998

No. **P249 580 637**

DuPont Pompton Lakes Works  
2000 Cannonball Road  
Pompton Lakes, NJ 0 442

Re: DuPont Pompton Lakes Works  
Pompton Lakes Borough, Passaic County  
NJPDES Permit No. NJ7001851

Dear Permittee:

Enclosed is the final New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water Permit to discharge to the ground waters of the State, issued in accordance with the NJPDES Regulations, N.J.A.C. 7:14A-1 et seq. Violation of any condition of this permit may subject you to significant penalties.

On April 24, 1998 the New Jersey Department Of Environmental Protection (NJDEP or Department) issued a Draft NJPDES/Discharge to Ground Water (NJPDES/DGW) permit. Comments were received by the Department from DuPont on June 1, 1998. These Comments and the Department responses are as follows:

1. Comment: The NJPDES-DGW permit refers to the site owner as DuPont Specialty Chemicals throughout the draft permit. The Pompton Lakes facility is no longer part of DuPont Specialty Chemicals Division, therefore the owner should be referred to in the final permit only as DuPont.

Response: The references to the site owner in the final permit have been changed to DuPont.

2. Comment: On page 1 of the Public Notice and Statement of Basis, and on page 1 of the Fact Sheet, the NJDEP states that DuPont's groundwater treatment facility will treat the recovered water using an air stripper so the contaminant levels discharged back to the ground are at, or below, the Ground Water Quality Standards. DuPont wishes to clarify this statement such that the air stripper will remove only the ten organic compounds listed in the permit to a concentration at or below the groundwater quality standards. These ten compounds are also identified in DuPont's Comprehensive Groundwater Monitoring Program (November, 1995) as being the only constituents of concern in the site's groundwater.

Response: The final permit has been modified to reflect Du Pont's concerns.

3. Comment: On page 2 of Part II-DGW-K under II System Operation item B, the permit requires DuPont to inspect all visible portions of the infiltration system on at least a weekly basis and after storms. DuPont believes that since the infiltration system is buried below ground surface that inspections after storms are not necessary. The remote transmitters located at infiltration beds 1, 2, and 5 will alert DuPont to any unacceptable increases in water elevations at the infiltration beds that are the result of storm events.

Response: Part II of the permit is a standard section for many types of ground water discharge systems and all conditions may not be applicable to a specific.

site. The condition referenced above refers to visible portions of the ground water discharge system. If DuPont's system is totally buried, then there are no visible parts to inspect and the condition is not applicable. No changes have been made to the permit.

4. Comment: On page 2 of Part III-DGW-K, the permit states that the permittee must obtain water levels from all on-site southern plant and all offsite monitoring wells and piezometers. Due to the large number of wells in the south plant area, especially in the former bio-pilot area, DuPont proposes to monitor a sufficient number of these wells so that an accurate depiction of the capture zone can be obtained. DuPont proposed to eliminate the following south plant (bio-pilot) wells from monitoring: 31, 32, 33, 34, 35, 36, 37, 39, 43, and 45. The following wells would be available for water level measurements in the bio-pilot area: 2, 38, 40, 41, 42, 48 and 102-I.

Response: The permit has been changed to exclude wells 31, 32, 33, 34, 35, 37, 39, 43, and 45 from having to be used for ground water elevation monitoring.

5. Comment: On page 4 of Part III-DGW-K, the permit states that pH must be monitored in the effluent to the lagoon only after an acid solution is used for lagoon maintenance. DuPont believes the NJDEP meant stripper maintenance. Also, should DuPont use an acid solution for stripper maintenance, the pH will be tested and adjusted to within the range established by the permit prior to discharging the solution into Lagoon 3.

Response: The term "lagoon" has been changed to "air stripper" in the final permit.

Any request for an adjudicatory hearing to contest the conditions of this permit must be made within 30 calendar days following your receipt of this permit. The request must follow the procedure outlined in N.J.A.C. 7:14A-8.9 and must include the information on the attached checklist. Failure to follow this procedure will result in denial of the request pursuant to N.J.A.C. 7:14A-8.9(e).

If you have any questions regarding this permit, please contact Jonathan Berg of the Bureau of Federal Case Management at 609-633-1455.

Sincerely,



Bruce Venner, Chief  
Bureau of Federal Case Management

C: w/ enclosures  
A. Pavelka, DEP  
J. Boyer, DEP  
Mayor John Murrin  
Carol Kehoe, Borough Clerk  
Ed Merrill, Envl. Officer  
Kenneth Hawkswell, Health Officer  
Planning Board, Pompton Lakes Borough  
Pompton Lakes MUA  
Ed Seger



# State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

## Administrative Hearing Request Checklist and Tracking Form for Permits

### I. Permit Being Appealed:

\_\_\_\_\_  
Title and Type of Permit

\_\_\_\_\_  
Issuance Date of Permit

\_\_\_\_\_  
Permit Number

### II. Person Requesting Hearing:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name of Attorney (if applicable)

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address of Attorney

### III. Please Include the Following Information as Part of Your Request

- A. The date the permittee received the final permit;
- B. A list of all permit conditions and issues contested;
- C. The legal and factual questions at issue;
- D. A statement as to whether or not the permittee raised each legal and factual issue during the public comment period;
- E. Suggested revised or alternative permit conditions;
- F. An estimate of the time required for the hearing;
- G. A request, if necessary, for a barrier free hearing location for physically disabled persons;
- H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Department's processing of your hearing request to the Office of Administrative Law; and
- I. This form, completed, signed, and dated, with all of the information listed above, including statements, to:

Attention: Adjudicatory Hearing Request  
Department of Environmental Protection  
Office of Legal Affairs  
CN-402  
Trenton, NJ 08625

J. Copies of this submission (w/attachments) shall be sent to:

- 1. Case Manager
- 2. All co-permittees, if applicable

IV. Signature: \_\_\_\_\_

Date: \_\_\_\_\_





## State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

### FACT SHEET

For Final NJPDES Permit to Discharge Into the Ground Waters of the State

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#### NAME AND ADDRESS OF APPLICANT:

DuPont, Pompton Lakes Works  
2000 Cannonball Road  
Pompton Lakes, NJ 07442

#### NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

DuPont, Pompton Lakes Works  
2000 Cannonball Road  
Pompton Lakes Borough and Wanaque Borough, Passaic County

#### RECEIVING WATER:

The receiving waters are the ground waters of the State. The discharge is to Pleistocene Age glacial alluvial deposits. These deposits are in general fine to coarse grained sand with gravelly, cobbly/bouldery and silty layers.

#### DESCRIPTION OF FACILITY:

The DuPont site is a former explosives manufacturing facility that is now closed except for environmental activities. It is about 570 acres and is located in Pompton Lakes Borough with a small portion located in Wanaque Borough in central Passaic County. Explosives have been manufactured at this site since the 1880's and Du Pont has owned the facility since 1902.

#### DESCRIPTION OF DISCHARGE:

DuPont will be implementing a ground water recovery system at the site to control the on-site portion of the volatile organic ground water contamination which resulted from past site activities. The maximum ground water extraction rate will be 280 gallons-per-minute (GPM). The recovered water will be treated for the ten organic compounds identified in the permit as site contaminants of concern using an air stripper so the contaminant levels for these ten contaminants discharged back to the ground are at or below the Ground Water Quality Standards (N.J.A.C. 7:9-6 et. seq.). The treated water will be discharged back to the ground in a series of covered trenches which are located down-gradient of the recovery system between the on-site and off-site portions of the contaminated ground water plume. The purpose of this permit is to approve the discharges of treated water to the trenches and limited discharge of treated water to on-site lagoon 3 during start-up and air stripper maintenance. Lagoon 3 is in the capture zone of the recovery system and the water will be recirculated through the recovery system.

PERMIT CONDITIONS:

New Jersey Pollutant Discharge Elimination System/Discharge to Ground Water Permit (NJPDES/DGW) NJ7001851 is being issued for a discharge of treated ground water back to the ground which is part of a ground water remediation system. The remedial action is being monitored under the authority of the Division of Responsible Party Site Remediation, Bureau of Federal Case Management.

This draft permit sets effluent limits or other applicable restrictions for the treated ground water that is to be discharged. These conditions were set forth in consideration of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and its implementing regulations, the New Jersey Pollutant Discharge Elimination System (NJPDES), N.J.A.C. 7:14A-1 et seq. The subchapters applicable to NJPDES Discharge to Ground Water permits include: Subchapter 1, Abbreviations, Acronyms, and Definitions; Subchapter 2, Program Requirements; Subchapter 6, Conditions Applicable to all NJPDES Permits; Subchapter 7, Requirements for Discharge to Ground Water; Subchapter 8, Additional Requirements for Underground Injection Control Program; Subchapter 15, Procedures for Decision Making - NJPDES Permit Processing Requirements; Subchapter 16, Transfer, Modification, Revocation, Reissuance, Renewal, Suspension and Revocation of Existing Permits; Subchapter 17, Procedures for Decision Making - Adjudicatory Hearing and Stays of Permit Conditions; Subchapter 18, Public Access to Information and Requirements for Determination of Confidentiality. The conditions are also based on the administrative record, which contains any permit application submitted, correspondence concerning the permit, the Fact Sheet and documents cited therein, the results of any past monitoring, any Administrative Order, Administrative Consent Order, or Memorandum of Agreement information submitted pursuant to the Department's Technical Requirements for Site Remediation (N.J.A.C. 7:26E-1.1 et seq.), Underground Storage of Hazardous Substances Act or the Industrial Site Recovery Act, the draft permit, and any past permits issued to the facility.

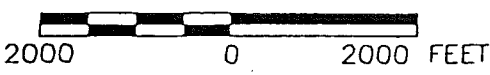
The permit conditions are consistent with the New Jersey Ground Water Quality Standards, N.J.A.C. 7:9-6 et seq.

CONTACT PERSON

Additional information concerning the draft NJPDES Permit may be obtained from Jonathan Berg at 609-633-1455.



SCALE



SOURCE:  
 WANAQUE, NEW JERSEY QUADRANGLE 7.5' SERIES



**The W-C Diamond Group**

*A Division of Woodward-Clyde serving DuPont*



Borley MM Plaza, Building 27  
 Wilmington, Delaware 19880-0027

**SITE LOCATION MAP**

**DUPONT POMPTON LAKES WORKS  
 POMPTON LAKES, NJ**

SCALE 1"=2000'	DATE 1/23/98	FILE NO. TITLE	PAGE 1
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# New Jersey Pollutant Discharge Elimination System

The New Jersey Department of Environmental Protection hereby restricts and controls the discharge of pollutants to waters of the State from the subject facility/activity in accordance with applicable laws and regulations. The permittee is responsible for complying with all terms and conditions of this authorization and agrees to said terms and conditions as a requirement for the construction, installation, modification or operation of any facility for the collection, treatment or discharge of any pollutant to waters of the State.

PERMIT NUMBER NJ7001851

Permittee

DuPont SPECIALTY CHEMICALS,  
POMPTON LAKES WORKS  
2000 CANNONBALL ROAD  
POMPTON LAKES, NJ 07442

Co-Permittee

Property Owner

E. I. du Pont Denemours & Company  
1007 MARKET STREET  
WILMINGTON, DE 19898

Location of Facility

DUPONT SPECIALTY CHEMICALS  
POMPTON LAKES WORKS  
2000 CANNONBALL ROAD  
POMPTON LAKES, NJ 07442

Current Authorization

Covered By This Approval  
And Previous Authorization

Issuance  
Date

Effective  
Date

Expiration  
Date

K UNDERGROUND INJECT(UIC) INDUST	07/01/98	08/01/98	07/31/03
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By Authority of:

  
DEP AUTHORIZATION

(Terms, conditions and provisions attached hereto)

State of New Jersey Department of Environmental Protection

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION  
GENERAL CONDITIONS FOR ALL NJPDES/DGW PERMITS

The New Jersey Pollutant Discharge Elimination System (NJPDES) regulations (N.J.A.C. 7:14A-1 et seq.) as authorized by the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) identify requirements for all Discharge to Ground Water Permits. Information concerning these general permit requirements may be found in the following sections of the NJPDES regulations:

<u>Permit Requirements</u>	<u>Citation</u>
Abbreviations, Acronyms, and Definitions	Subchapter 1
Program Requirements	Subchapter 2
Conditions Applicable to all NJPDES Permits	Subchapter 6
Requirements for Discharge to Ground Water	Subchapter 7
Additional Requirements for Underground Injection Control Program	Subchapter 8
Procedures for Decision Making - NJPDES Permit Processing Requirements	Subchapter 15
Transfer, Modification, Revocation, Reissuance, Renewal, Suspension and Revocation of Existing Permits	Subchapter 16
Procedures for Decision Making - Adjudicatory Hearing and Stays of Permit Conditions	Subchapter 17
Public Access to Information and Requirements for Determination of Confidentiality.	Subchapter 18

**ADDITIONAL GENERAL CONDITIONS FOR CONSTRUCTION AND OPERATION OF A  
GROUND WATER TREATMENT SYSTEM DISCHARGING TO INFILTRATION PERCOLATION  
LAGOONS, TRENCHES AND SPRAY IRRIGATION SYSTEMS**

This permit authorizes the discharge of treated groundwater from an approved ground water remediation program back to the ground waters of the State via an approved recharge system. The recharge shall be performed in conformance with the requirements of this NJPDES-DGW permit.

**I. Construction Requirements**

- A. Recharge of treated ground water is only permitted in areas where ground water quality has been previously determined.
- B. The infiltration percolation lagoons shall be designed, constructed, maintained and operated to prevent overtopping.
- C. All infiltration percolation lagoons, trenches and spray irrigation systems shall be fenced or otherwise have access or entry restricted. Where the entire facility is fenced, the Department will make a determination as to whether this constitutes adequate protection against unauthorized entry.
- D. When flow is to, from, or between lagoons, all interconnections shall be piped or lined in a manner which will prevent degradation of the lagoon banks or dikes.
- E. For new construction, all piping, manholes, etc., must be installed prior to the construction of the foundation, banks or dikes.

**II. SYSTEM OPERATION**

- A. The treatment and recharge systems shall operate on a 24-hour basis, seven days per week, except for routine maintenance of the system. The permittee must notify the Department, in writing, within seven days of a planned system shutdown that will last longer than 48 hours. If for any reason the system is inoperable for more than 48 hours, the permittee shall notify the Department, in writing, within ten days outlining; 1) why the system is not operable, 2) steps that are being taken to repair the system, and 3) when the system will again be operable.
- B. The permittee shall perform a physical inspection of all visible portions of the infiltration percolation lagoons, trenches or spray irrigation systems on at least a weekly basis and after storms to detect evidence of any deterioration, malfunctions or improper operation of the control system(s). When malfunctions or failures are observed or suspected, the permittee shall notify the Department pursuant to N.J.A.C. 7:14-6.10 *et seq.*
- C. The permittee shall take appropriate measures to detect erosion or other signs of deterioration in banks, dikes or other containment devices. When malfunctions or failures

are observed or suspected, the permittee shall comply with section 7:14A-6.10 et seq. of the NJPDES regulations.

- D. An operation log of the treatment system must be kept and must remain on site to document the operation and maintenance of the system.
- E. Ground water recharge shall be managed so it does not adversely impact the behavior of the plume, create an unpermitted discharge to any surface water of the State, create overland flow or adversely impact a water supply well. The permittee shall take any and all action necessary above and beyond the requirements of this permit to prevent any ground water contamination from impacting a water supply well.

### III. CONSTRUCTION APPROVAL

This NJPDES-DGW permit serves as a construction approval for the ground water treatment facility. Pursuant to this construction approval, the following construction conditions must be met:

- A. The permittee and operator of the treatment system must meet the licensing requirements pursuant to the Rules Governing the Examining and Licensing of Operators, N.J.A.C. 7:10-13.
- B. An engineer's report and as-built construction plans/specifications for the treatment system must remain on file with the permittee and be available for DEP inspection as soon as construction of the treatment system is complete.
- C. A New Jersey certified Professional Engineer shall submit two copies of the following to the lead Bureau prior to start-up of the treatment system:
  - 1) certification that the treatment system is adequate to meet the effluent limits and/or performance criteria specified in Part III of this permit;
  - 2) certification that the treatment system has been built in conformance with the plans that are on file with the permittee.
- D. If the "as built" design differs from the original plans, the "as built" plans and specification must replace the original plans in the permittee's files and must be available for DEP inspection prior to start-up of the system. If this occurs a new certification as specified in C above must be submitted prior to the start-up of the treatment system.
- E. An Operation and Maintenance Plan for the treatment system must be prepared, and kept on file with the permittee and remain available for DEP inspection prior to start-up of the treatment system.

## EFFLUENT AND GROUND WATER MONITORING REQUIREMENTS AND LIMITATIONS

### I. DISCHARGE STANDARDS, LIMITATIONS, AND REQUIREMENTS

A. The treated water is being discharged into infiltration trenches which are located down-gradient of the capture zone but in an area that is already contaminated. Therefore, the effluent limits can be less stringent than dictated by the Anti-degradation Policy. The effluent limits are the Ground Water Quality Standards for Class IIA groundwater as listed in Table 1. For a view of the recovery well and infiltration beds see the attached Figure 1.

B. During start up treated effluent will be discharged into on-site lagoon 3. This lagoon is in the capture zone of the recovery system.

C. During air stripper maintenance the fluid used to clean the stripper which may be water, acid solution or chlorine solution will be discharged into on-site lagoon 3. This lagoon is in the capture zone of the recovery system.

D. Purge water from ground water sampling may be discharged into the air stripper for treatment. However, additional metals will be added to the permit effluent limits because wells in the northern plant area have metal contamination.

E. The ground water quality both on-site and off-site is being monitored under a Comprehensive Monitoring Program administered through the site Administrative Consent Order entered into by the Department and Dupont on September 15, 1988.

### II. SAMPLING AND REPORTING REQUIREMENTS

A. Treated groundwater will be sampled at the outfall point from the on-site treatment system prior to discharge into the aquifer. Influent and effluent sampling from the treatment system must be performed monthly for at least the first year. Du Pont may petition for less frequent sampling after one year. Changes in the sampling frequency will not be considered a major modification of the permit.

B. All sampling and monitoring shall be performed according to the methodology specified in the most recent edition of the Department's Field Sampling Procedures Manual. All samples are to be analyzed by a New Jersey Certified Laboratory except those samples analyzed for field-determined parameters.

C. Analysis for parameters in Table 1 must be performed using the appropriate analytical methods capable of attaining the limits specified in Table 1.

D. During air stripper maintenance if an acid solution is used the effluent must be sampled for pH.

E. Within 60 days of the day when the chlorine solution will be discharged into lagoon 3, Du Pont must submit a proposed effluent sampling plan for the discharge of the chlorine solution into the lagoon or submit a report which justifies that based on the nature of chlorine and/or the volume of solution discharged, that effluent monitoring is not necessary. Based on Du Pont's proposal effluent sampling



for the chlorine or related compound may be required and/or the ground water monitoring may be required under the oversight document.

F. The stripper effluent will have to be sampled for selenium, copper and mercury if the purge water is not from wells in the Comprehensive Monitoring Program.

F. The permittee must follow the sampling and quality assurance/quality control guidelines set forth in the Technical Requirements for Site Remediation (N.J.A.C. 7:26E-2.1 et seq.)

G. If the required effluent standards have been exceeded, the permittee must notify the Department within 24 hours from the time the permittee becomes aware of the exceedance. Where the information is provided verbally a written submission must be provided within 5 working days of the time the permittee becomes aware of the exceedance.

H. The permittee must submit ground water elevations and utilize this information to generate contour maps indicating ground water flow direction. The maps must be generated at least monthly for the first year. Also, for the first year ground water elevations must be collected from all on-site wells and piezometers in the southern plant area except wells 31, 32, 33, 34, 35, 36, 39, 43, 45, and all off-site wells and piezometers. After one year DuPont may propose to decrease the water level elevation measuring points and the frequency of measurement and map submittals. This will not be considered a major modification of the permit.

I. An operational summary report including at least ground water contour maps for each alluvial zone, influent and effluent sampling data, average flow rate, volume of water pumped per month and air flow data must be submitted at least quarterly for the first year. An influent/effluent monitoring reporting form is included in Table 2. After a year Du Pont may petition to reduce reporting frequency. Changes in reporting frequency will not be considered a major modification of the permit.

J. All original reporting forms and other submittals required by this permit must be sent to:

NJDEP  
Jonathan Berg  
Bureau of Federal Case Management  
P.O. Box 028  
Trenton, NJ 08625

### III. MISCELLANEOUS

A. In the event that the oversight document concerning this facility is terminated, the permittee must at that point cease discharging to the ground water. The Department will take appropriate action to terminate or revoke this permit.

Table 1, Effluent Limits

Parameter	Limit (ppb)
Tetrachloroethene	1
Trichloroethene	1
1,1,1 Trichloroethane	30
1,1 Dichloroethene	2
trans 1,2 Dichloroethene	100
cis 1,2 Dichloroethene	10
1,1 Dichloroethane	50
1,2 Dichloroethane	2
Vinyl Chloride	5
Carbon Tetrachloride	2
Lead	10
Mercury*	2
Selenium*	50
Copper*	1000
Ph**	5-7

\*These metals need be sampled for after purge water which is not from wells in the comprehensive monitoring program is discharged into the stripper.

\*\*pH needs to be monitored in the effluent to the lagoon only after an acid solution is used for air stripper maintenance.

NOTES:

1 The permittee must select EPA 40 CFR Part 136 Method 601, 602 or an appropriate equivalent methodology for the limits specified above, quality assurance and quality control methodologies specified in 40 CFR Part 136 shall be utilized. In the event that a laboratory cannot achieve the required detection limit, the permittee must be able to document why these limits cannot be achieved (i.e. the specific instrument limitations). Alternate quantification limits are subject to Departmental approval. Any alternate quantification limit must be the lowest level that can be reliably achieved within the limits of precision and accuracy specified in 40 CFR Part 136. Documentation of these quality assurance and quality control measures, including the results of field, trip and method blanks, must be submitted within 30 days of a written request from the Department.

2 The appropriate methodology for metals is as follows: CFR Part 136 method 200.7 for all metals listed, or an appropriate equivalent methodology for the limits specified above, quality assurance and quality control methodologies specified in 40 CFR Part 136 shall be utilized. Alternate quantification limits are subject to Departmental approval. Any alternate quantification limit must be the lowest level that can be reliably achieved within the limits of precision and accuracy specified in 40 CFR Part 136. Documentation of these quality assurance and quality control measures, including the results of field, trip and method blanks, must be submitted within 30 days of a written request from the Department.

TABLE 2

DATES OF SAMPLING \_\_\_\_\_ REPORTING MONTH/YEAR \_\_\_\_\_

INFLUENT/EFFLUENT MONITORING REPORT

SAMPLE PARAMETER	PERMIT LIMITS	REPORTED INFLUENT/EFFLUENT VALUES
Tetrachloroethene.....	1ppb	_____
Trichloroethene.....	1ppb	_____
1,1,1 Trichloroethane.....	30ppb	_____
1,1 Dichloroethene.....	2ppb	_____
trans 1,2 Dichloroethene....	100ppb	_____
cis 1,2-Dichloroethene.....	10ppb	_____
1,1 Dichloroethane.....	50ppb	_____
1,2 Dichloroethane.....	2ppb	_____
Vinyl Chloride.....	5ppb	_____
Carbon Tetrachloride.....	2ppb	_____
Lead (total).....	10ppb	_____
Lead (dissolved).....	10ppb	_____
Mercury (total)*.....	2ppb	_____
Selenium (total)*.....	50ppb	_____
Copper (total)*.....	1000ppb	_____
pH**.....	5-7	_____

\*These metals need be sampled for after purge water which is not from wells in the comprehensive monitoring program is discharged into the stripper.

\*\*pH needs to be monitored in the effluent to the lagoon only after an acid solution is used for lagoon maintenance.

Volume Discharged During Reporting Period \_\_\_\_\_ gallons

Average pumping rate \_\_\_\_\_

1. Flow shall be reported in gallons since the last sampling date per day.

2. Qualifiers

- FB - Found in Field Blank.
- J - Detected below method detection limit. Concentration given is an approximation.
- K - Not detected. Number given is the method detection limit.
- MB - Found in Method Blank.
- TB - Found in Trip Blank.





**DuPont Engineering**

CC: Andy Park-USEPA  
Anne Pavelka-NJDEP  
A. Boettler  
E. Seger  
Mj. Vetter  
E. Cahill  
E. Merrill  
PL Library  
Book  
File

January 29, 2004

Mr. Frank Faranca  
NJDEP  
Division of Responsible Party Site Remediation  
401 East State Street  
P.O. Box 028  
Trenton, NJ 08625

Dear Mr. Faranca,

**Pump and Treat Discharge to Groundwater Permit Renewal Application**  
**DuPont Pompton Lakes Works, Pompton Lakes, New Jersey**

Enclosed are one (1) paper and two (2) electronic copies of the *Discharge to Groundwater Permit Renewal Application* for permit NJ7001851 for the DuPont, Pompton Lakes Works Pump and Treat System. This version incorporates the changes/modifications to the permit application requested by Anne Pavelka in an e-mail dated April 24, 2003. Also, as requested, one electronic copy is in Adobe® PDF format, and one is in Microsoft Word®.

Should you have any questions, please contact Al Boettler at (302) 892-0647.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Sloat", positioned above a horizontal line.

Ralph H. Sloat  
Sr. Site Director

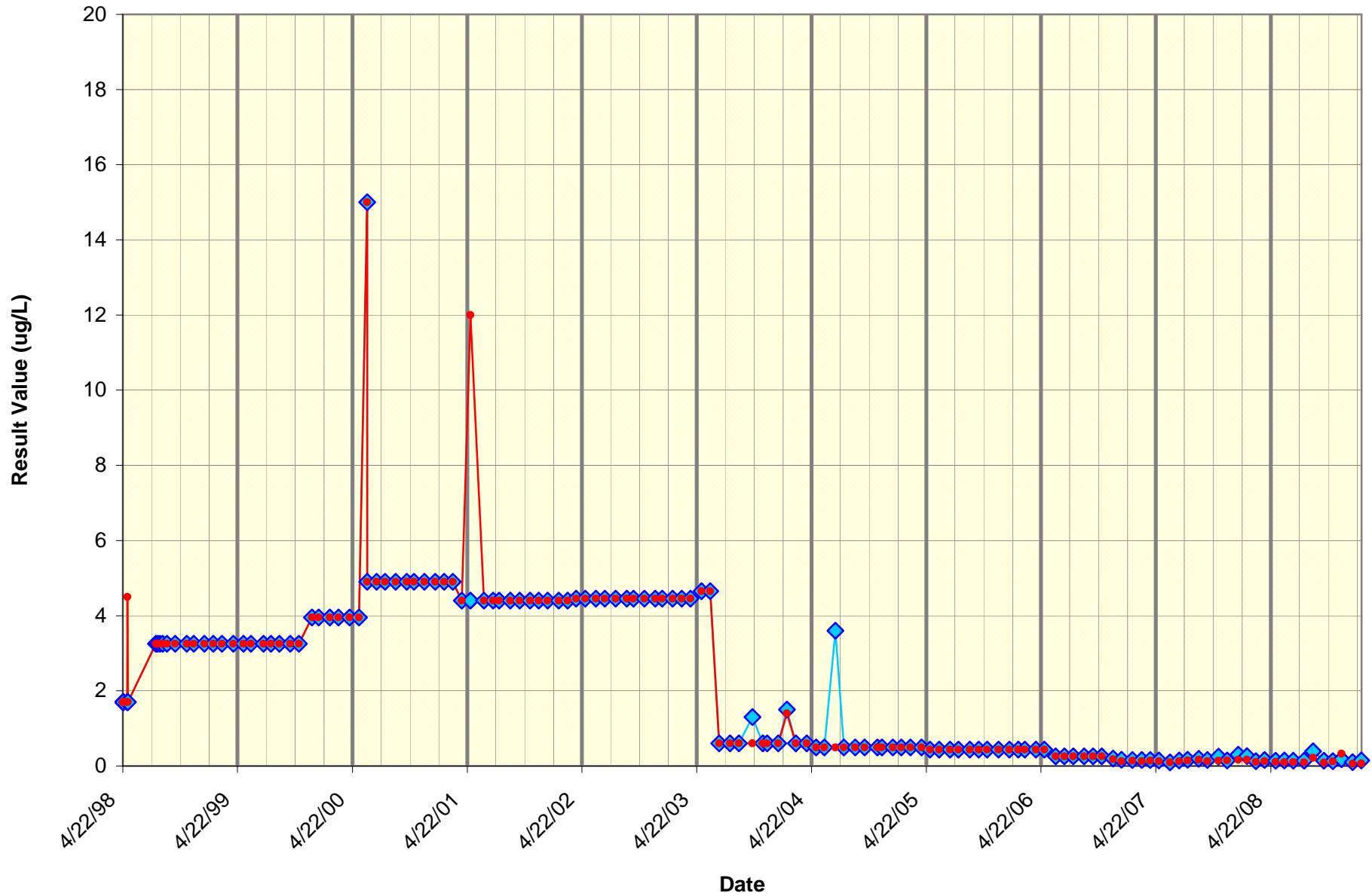
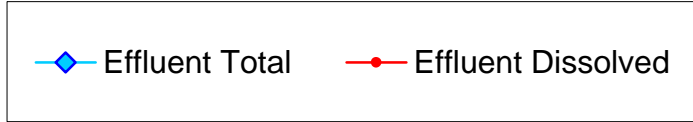
RHS:bb  
Enc.

**ATTACHMENT 4**

**TOTAL AND DISSOLVED LEAD RESULTS, APRIL 2008  
THROUGH JANUARY 2009**

# Pump & Treat Effluent Lead Results

NJGWIA Criterion for Pb is 10 ug/L







**ATTACHMENT 5**  
**PUBLIC NOTIFICATION FORM**

### **Public Notice**

This notice is being given to inform the public that as part of the remediation of DuPont Pompton Lakes Works at 2000 Cannonball Road, Block: 3, Lot: 100, in Pompton Lakes, Passaic County, an addendum to the remedial action work plan for on site groundwater has been submitted to the New Jersey Department of Environmental Protection (NJDEP) requesting a permit-by-rule authorization to discharge treated groundwater in accordance with the provisions of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., its implementing regulations the New Jersey Pollutant Discharge Elimination System, N.J.A.C. 7:14A; the Ground Water Quality Standards, N.J.A.C. 7:9-6; and the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. The NJDEP Bureau of Case Management is overseeing the remediation under the Program Interest Number: 007411.

Brief description of the proposed discharge: A groundwater extraction system is currently in operation that prevents groundwater containing volatile organic compounds (VOCs) present in the overburden aquifer from moving off the site. A treatment system removes the VOCs and the treated water is re-introduced into the aquifer via a series of infiltration beds located along the southern and southeastern boundary of the site. This results in no net withdrawal from the Highlands Aquifer System. In accordance with amendments to the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations (N.J.A.C. 7:14A-2.5, 7.5, 8.5, 10.2 and 22.4), DuPont is applying for a permit-by rule to replace the existing NJPDES permit for discharge of treated water from the groundwater extraction system

Site Description: The 570-acre Pompton Lakes Works site is located in the boroughs of Pompton Lakes and Wanaque in Passaic County, New Jersey. Approximately 285 acres is located in the Borough of Pompton Lakes. Operations began in the late 1800s when the H. Julius Smith Blasting Cap Plant and the American Smokeless Powder Plant were operating on the Wanaque River and the Metallic Cap Company was operating in the Acid Brook Valley (Pompton Lakes). DuPont use of the property began in 1902 with the construction and operation of the DuPont Electric Exploder Company in the Wanaque River Valley, and in 1908 with the opening of the DuPont Cap Works in the Acid Brook Valley. From that time until the plant closed in April 1994, DuPont operations generated a variety of explosive products.

Approved Remedial Action: The system is operated under an NJDEP approved remedial action work plan dated July 21, 1993. Discharge from the treatment system has been regulated by NJPDES individual permit number NJ001851 starting in 1998. An addendum to the work plan has been submitted requesting the permit-by-rule.

Copies of the remedial action work plan addendum, which describes the permit-by-rule application have been sent to the Mayor, Municipal Clerk, Planning Board, Sewerage Authority, Health Officer, and Environmental Commission of Pompton Lakes, Passaic County.

The remedial action work plan addendum which addresses this change is available as part of the administrative record, which is on file at the offices of the NJDEP Bureau of Case Management, located at 401 East State Street, Trenton, Mercer County, New Jersey, 08625. The file may be reviewed under the New Jersey Open Public Records Act ("OPRA"), N.J.S.A 47:1A-1 et seq. Information regarding the OPRA procedures is available at <http://www.state.nj.us/state/opra>.

Interested persons may submit written comments regarding the discharge to groundwater portion of remediation to Mr. Frank Faranca, Site Manager, NJDEP Bureau of Case Management, 401 East State Street, P.O. Box 028, Trenton, NJ 08625-0028 and to the owner or operator of the facility, Mr. David Epps, DuPont Project Director, at 2000 Cannonball Road, Pompton Lakes, NJ 07442. All comments shall be submitted within 30-calendar days of the date of this public notice. All persons who believe that any condition specific to the proposed discharge to groundwater within the remedial action work plan is inappropriate, must raise all reasonably ascertainable issues and submit in writing to the NJDEP all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period. All comments submitted by interested persons that relate to the requirements to be applied to the proposed discharge will be considered by the NJDEP, provided that the NJDEP receives the comments by the close of the public comment period. After the close of the public comment period, the NJDEP will approve or modify the proposed discharge. The NJDEP will respond to all significant and timely comments with its final decision. Each person who has submitted written comments will receive notice of the NJDEP's final decision.

Any interested person may request in writing that the NJDEP hold a non-adversarial public hearing on the plan to discharge to groundwater. This request shall state the nature of the issues to be raised in the proposed meeting and shall be submitted within 30-calendar days of the date of this public notice to the Case Manager, at the address cited above. A public hearing will be conducted whenever the NJDEP determines that there is a significant degree of public interest in the discharge to groundwater decision. If a public hearing is held, the public comment period in this notice shall automatically be extended to the close of the public meeting.

Comments and written requests for a non-adversarial public hearing shall be sent to:

Frank Faranca, CHMM  
Site Manager  
NJDEP Bureau of Case Management  
401 East State Street  
P.O. Box 028  
Trenton, NJ 08625-0028

Additional information concerning the proposal may be obtained from Mr. David Epps, DuPont Project Director, 973-492-7733 or Mr. Frank Faranca, Bureau of Case Management Site Manager, 609-984-4071.