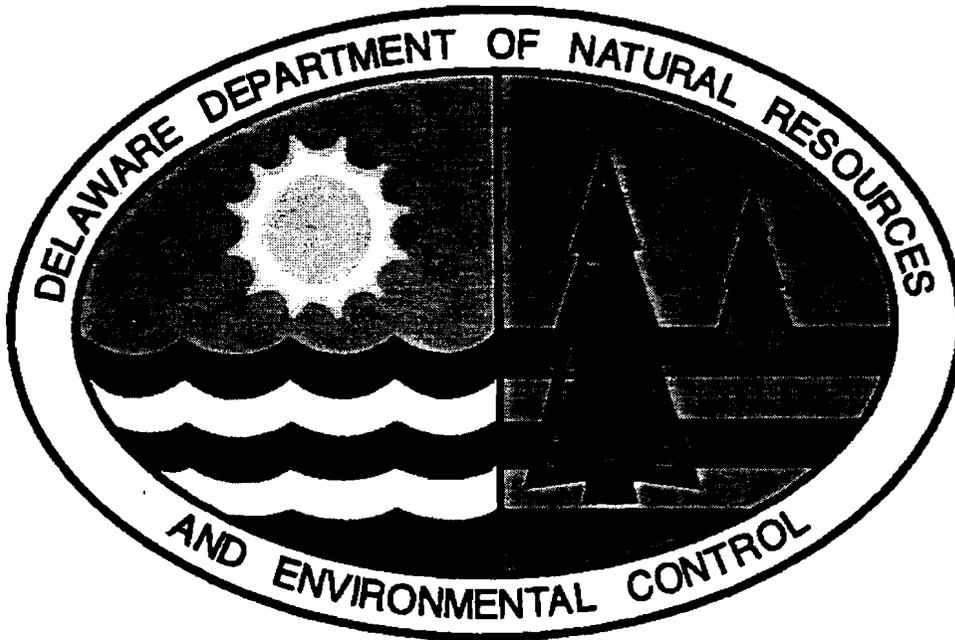


DuPont Louviers Gore - Large Bore Range

Final Plan of Remedial Action



SCANNED

JUN 22 1999

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June 1996

Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch

TABLE OF CONTENTS

1. INTRODUCTION.....1
2. BACKGROUND1
3. PROPOSED PLAN AND PUBLIC PARTICIPATION.....2
4. FURTHER ACTION2
5. DECLARATION.....3

LIST OF FIGURES

FIGURE 1: SITE LOCATION MAP4
FIGURE 2: SITE MAP.....5
FIGURE 3: PUBLIC NOTICE OF PROPOSED PLAN - NEWS JOURNAL.....6
FIGURE 4: PUBLIC NOTICE OF PROPOSED PLAN - STATE NEWS.....7
FIGURE 5: COALITION FOR NATURAL STREAM VALLEYS, INC. LETTER.....8
FIGURE 6: DEPARTMENT RESPONSE TO COALITION FOR NATURAL STREAM VALLEYS.....9

DuPont Louviers Gore - Large Bore Range Final Plan of Remedial Action

1. Introduction

The Delaware Department of Natural Resources ("Department") issues this Final Plan of Remedial Action under the provisions of the Delaware Hazardous Substance Cleanup Act ("HSCA"), 7 Del. C. Chapter 91, and the Delaware Regulations Governing Hazardous Substance Cleanup ("Regulations"). The Final Plan presents to the public, the Department's final selection of remedial activities to occur at the DuPont Louviers Gore - Large Bore Range Site ("Site"), Newark, New Castle County, Delaware, see Figure 1.

2. Background

The Department reached an agreement with E. I. du Pont de Nemours and Company, ("DuPont") the potentially responsible party ("PRP"), to perform a Remedial Investigation/Feasibility Study ("RI/FS") under HSCA in December 1995. The investigation concluded in May 1996.

The Site was the Former DuPont Fish and Game Association Large Bore Range ("LBR") and is located north of Newark in New Castle County, Delaware. The Site is located west of Limestone Road and in the southern most portion of the Former DuPont Louviers Facility, see Figure 1.

The Site operated from 1952 through 1995. The area was tree covered prior to being cleared in 1952 for use as the LBR. The Site is approximately 200 yards long by 100 yards wide and is contained within a natural valley. The range backstops are dirt berms located at 25, 50 and 100 yard intervals from the shooting station, see Figure 2.

The RI/FS process revealed that the total lead concentrations in the berms ranged from 980 to 34,000 milligrams per kilogram (mg/kg). The total lead concentrations for the floor of the LBR ranged from 41 to 180 mg/kg.

In accordance with the Regulations, the Department set remedial action objectives for land use, resource use, and cleanup levels that are protective of human health and the environment for the Site. The following objectives were determined to be appropriate for the Site:

- To continue to use the site as a Commercial/Laboratory with supplied public water for all purposes
- That routine construction, excavation and maintenance activities can occur without any special chemical hazard precaution once the remedial action plan is implemented.

These objectives are consistent with the value of the zoning as a commercial/laboratory facility and the surrounding land use, New Castle zoning policies, state regulations, and worker health and safety.

3. Proposed Plan and Public Participation

The Department drafted a Proposed Plan of Remedial Action for the Site recommending further action limited to the continued use of the Site as zoned as a Commercial/Laboratory with the proper handling, removal, stabilization, and disposal of contaminated soils, and the implementation of all health and safety parameters. The notice of Proposed Plan was published on June 11, 1996 in the News Journal Newspaper and the State News Newspaper, see Figures 3 and 4, respectively.

During the public comment period, the Department responded to several inquires. Of the inquires, only one required a response by the Department which was a letter from the Coalition for Natural Stream Valleys, Inc. dated 24 June 1996, see Figure 5. As a result of the 24 June 1996 letter, the Department with DuPont agreed to delay construction of the remedy until the end of July/beginning of August to allow the hatchlings from the first breeding season to fledge, see Figure 6. The Department did not receive any objections to the implementation of the Proposed Plan. In addition, during the public comment period, the Department did not receive a request for a public hearing.

4. Further Action

In view of the contaminants present at the Site, the Final Plan of Remedial Action is as follows:

- DuPont will excavate the soil berms and a soil arc around the berms;
- DuPont will excavate soils down to 1,000 mg/kg for lead in soils (industrial exposure);
- DuPont will conduct post excavation sampling to confirm the removal of all soils contaminated above 1,000 mg/kg in soils;
- DuPont will submit samples for analysis to a HSCA approved laboratory for analysis;
- DuPont will re-fill the excavated area with clean fill from an off-site location so as to leave the excavation level with the pre-existing grade;
- DuPont will grade and seed the excavated area to promote vegetative growth and prevent erosion; and
- DuPont will treat the excavated materials and dispose of them properly; and
- DuPont will conduct the work as per all appropriate state and federal regulations.

5. Declaration

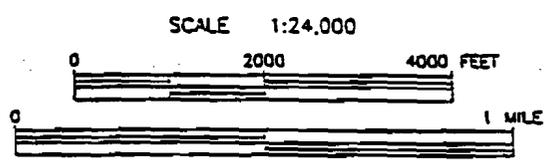
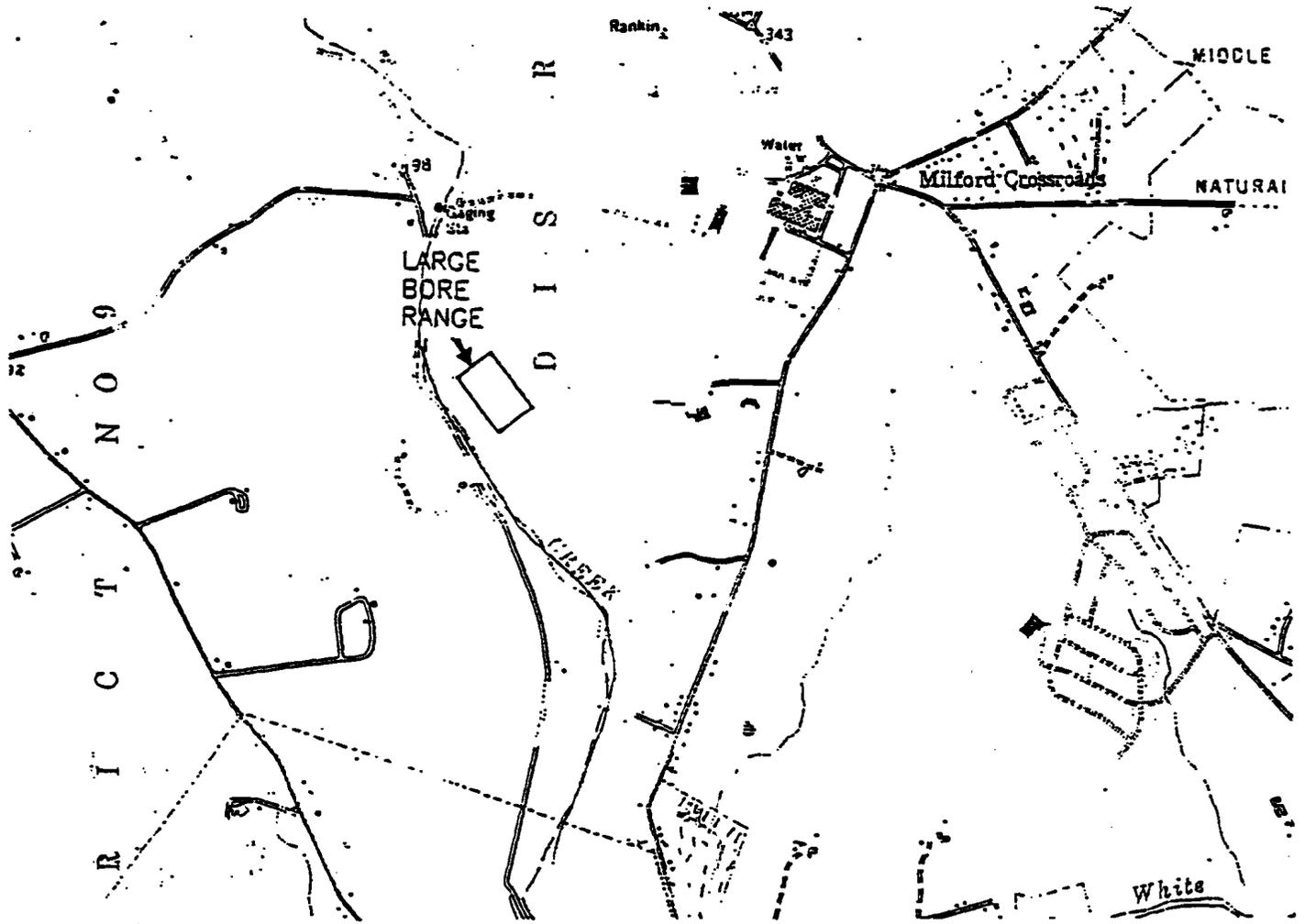
This Final Plan of Remedial Action for the DuPont Louviers Gore - Large Bore Range Site is protective of human health, welfare and the environment and is consistent with the requirements of the Delaware Hazardous Substance Cleanup Act.

 7/26/96

Nicholas A. DiPasquale, Director
Division of Air and Waste Management

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Figure 1: Site Location Map



SOURCE: NEWARK EAST & WEST, DELAWARE
QUADRANGLE 7.5' SERIES

	FIGURE 1 SITE LOCATION MAP			
	SCALE 1" = 2000'	DESIGNED BY SMF	DRAWN BY SMF	CAD DRAWING NO.
	DATE 7/7/94	CHECKED APPROVED	PROJECT NO. 3113	
LOUIERS GUN CLUB NEWARK, DELAWARE				
DuPont Environmental Remediation Services				

Figure 2: Site Map

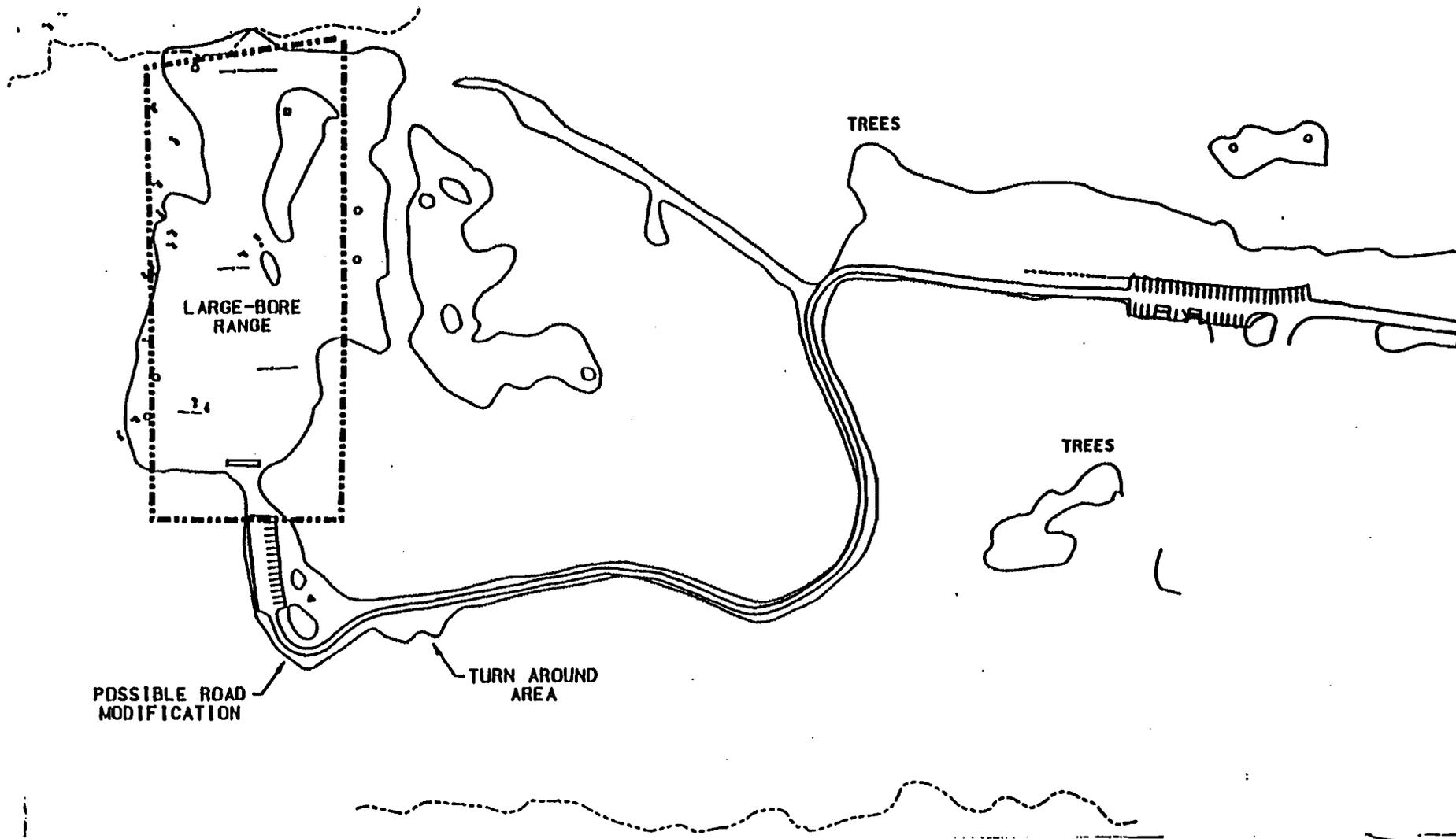


Figure 3: Public Notice of Proposed Plan - News Journal

**PROPOSED PLAN OF
REMEDIAL ACTION
FOR THE
DuPONT LOUVIERS
LARGE BORE
RANGE SITE**

The Delaware Department of Natural Resources and Environmental Control (DNREC) Announces the Release of the Proposed Plan of Remedial Action for the DuPont Louviers Large Bore Range Site, located in Newark, Delaware under the authority of the Hazardous Substance Cleanup Act (HSCA).

DNREC reached an agreement with the E.I. du Pont de Nemours and Company, (DuPont) to perform a comprehensive environmental investigation and risk assessment of the DuPont Louvier Large Bore Range Site located west of Limestone Road and in the southern most portion of the Former DuPont Louviers Facility. The investigation was performed under the authority granted to the Secretary of DNREC by the Delaware Hazardous Substance Cleanup Act, 7 Del. C. Chapter 91.

The results of this investigation concluded that the Site, in its present condition, presents an unacceptable risk to public health, welfare or the environment.

According to the Proposed Plan of Remedial Action, DNREC recommends the following: a) DuPont to excavate the soil berms and a soil arc around the berms to a concentration for lead equal to or less than 1,000 mg/kg; b) DuPont will conduct post excavation sampling to confirm removal of all soils contaminated above 1,000 mg/kg; c) DuPont will refill the excavated area with clean fill from an off-site location so as to leave the excavation level with the pre-existing grade; d) DuPont will grade and seed the excavated area to promote vegetative growth and prevent erosion; e) DuPont will treat the excavated materials and dispose of them properly; f) DuPont will conduct the work as per all appropriate state and federal regulations.

A copy of the Proposed Plan of Remedial Action for DuPont Louviers Large Bore Range Site is available at the following location:

DNREC's
New Castle Office
715 Grantham Lane
New Castle, De 19720-
(302) 323-4540

DNREC invites written comments on this Plan. The comment period begins on Tuesday, June 11, 1996 and ends at 4:30 p.m. on June 30, 1996.

Comments may be submitted in writing to Jane Biggs Sanger by 4:30 p.m. On June 30, 1996 at the above address.

6/11N1 21521

716076

Figure 4: Public Notice of Proposed Plan - State News



p.m. On June 30, 1996 at
above address.
69227 - DSN 8/11/96

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