

SCANNED

JAN 31 2008

File# 1360 B9

# FINAL PLAN OF REMEDIAL ACTION



## FORMER TIMMONS MARINA SITE

*Dagsboro, Delaware*

*DNREC Project No. DE-1360*

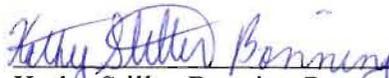
This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) determination that: 1) No further action is required at the Former Timmons Marina site.

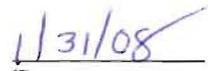
DNREC issued public notice of the Proposed Plan for the Site on December 23, 2007 and opened a 20-day public comment period. The Proposed Plan recommended no further action at the site. The Proposed Plan also includes the location of additional information found on the DNREC web page and in the DNREC office at Lukens Drive in New Castle.

There were no comments or questions from the public regarding the proposed plan. Therefore, the Proposed Plan was adopted as the Final Plan (see attached).

### **Approval:**

**This Final Plan meets the requirements of the Hazardous Substance Cleanup Act.**

  
Kathy Stiller-Banning Program Manager II  
Site Investigation & Restoration Branch

  
Date

# AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Former Timmons Marina Site  
Dagsboro, DE  
DNREC Project No. DE-1360



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File# 1360 88



December 2007

Delaware Department of Natural Resources and Environmental Control  
Division of Air and Waste Management  
Site Investigation & Restoration Branch  
391 Lukens Drive  
New Castle, Delaware 19720

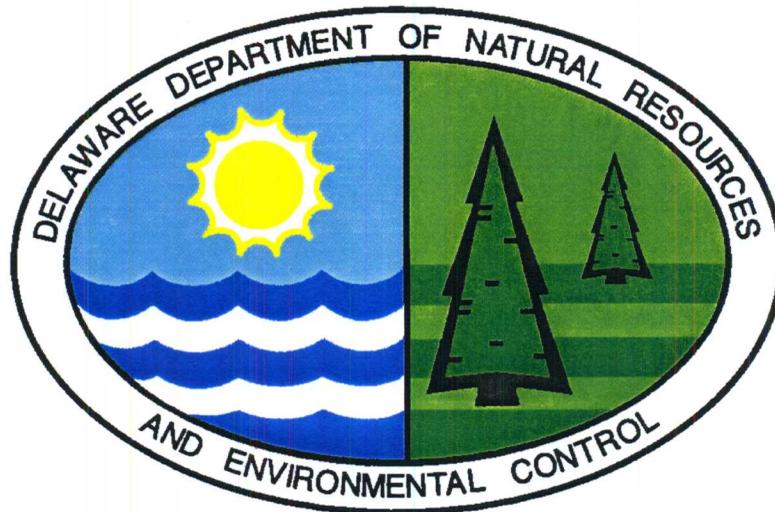
## CONTENTS

- Proposed Plan: Questions and Answers
- Figures 1&2
- Glossary of Terms
- Attachment: *What is a Proposed Plan*

# AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Former Timmons Marina Site  
Dagsboro, DE

DNREC Project No. DE-1360



December 2007

**Approval:**

This Amended Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

**James D. Werner, Director**  
**Division of Air and Waste Management**

19 Dec 2007

**Date**



### **What is the Former Timmons Marina Site**

The site is located in the town of Dagsboro in Sussex County, Delaware. Primarily an agricultural land, it has an underutilized marina overlooking Pepper Creek. The Site was formerly owned by S. K. Pepper Creek before it was later sold to Ocean Atlantic Associates in November 2006.

**Tax Parcel Numbers:** 2-33-7-30 and 2-33-7-28-02

**Address:** Dagsboro, DE 19939

**Nearest major Road:** Piney Neck Road

**Area:** Approximately 50 acres

**Surrounding Property:** Surrounding land use is primarily agricultural.

**Site Utility:** There are no utilities connected to the property.

**Surface water:** Pepper Creek

**Groundwater:** Groundwater flows towards the Pepper Creek.

### **What happened at the Former Timmons Marina Site?**

A phase I Environmental Site Assessment (ESA) report included a 1938 aerial photograph of the site, which shows a predominantly agricultural land with some residential houses on it. The marina was constructed in 1960. It was operated as a 65-slip facility that included shop buildings, boat storage, and other structures. According to the ESA, numerous containers of motor oil and lubricating fluids associated with marina activities were observed onsite.

### **What is the environmental problem at the Former Timmons Marina Site?**

Initial detections of arsenic in marina sediments were above risk-based standards. However, additional sampling eliminated arsenic as a contaminant of concern

A DNREC certified consultant, Duffield associates, conducted a Brownfield Investigation (BFI) beginning in October 2005. A BFI report was submitted to DNREC in November of 2005. The report indicated that of all the metals analyzed for in the soil samples, only arsenic exceeded its Uniform Risk-based Standard (URS). However, 93% of the arsenic detects were all below Delaware's default background level of 11ppm. When the 75/10 rule according to "Remediation Standard Guidance" was applied, it confirmed that none of the detected soil contaminants was of potential concern. In addition, arsenic was largely detected in the sediment samples as well. Initially, the average concentration as well as the concentration at 95 % UCL was above the 11-ppm benchmark. After an additional round of sampling was conducted post dredging, the average concentration of arsenic, as well as the concentration at 95% UCL fell below 11ppm. This indicates

that none of the constituents in the sediments are of potential concern. The groundwater data from the BFI report shows that aluminum and iron are present in groundwater at concentrations above the secondary maximum contaminant level (SMCL). However, since they are secondary contaminants they are not contaminants of concern.

**What does the owner want to do at the Former Timmons Marina Site?**

The current owner will maintain the initial development plans for the site, which are the construction of residential units and the rehabilitation of the marina area.

**What clean-up actions have been taken at the Former Timmons Marina Site?**

No cleanup actions have been taken.

**What additional clean-up actions are needed at the Former Timmons Marina Site?** No Cleanup action is required.

**What are the long-term plans for the Site after the cleanup?**

DNREC will pursue no further action at this site.

DNREC plans to issue a Certificate of Completion of Remedy (COCR) to the owner.

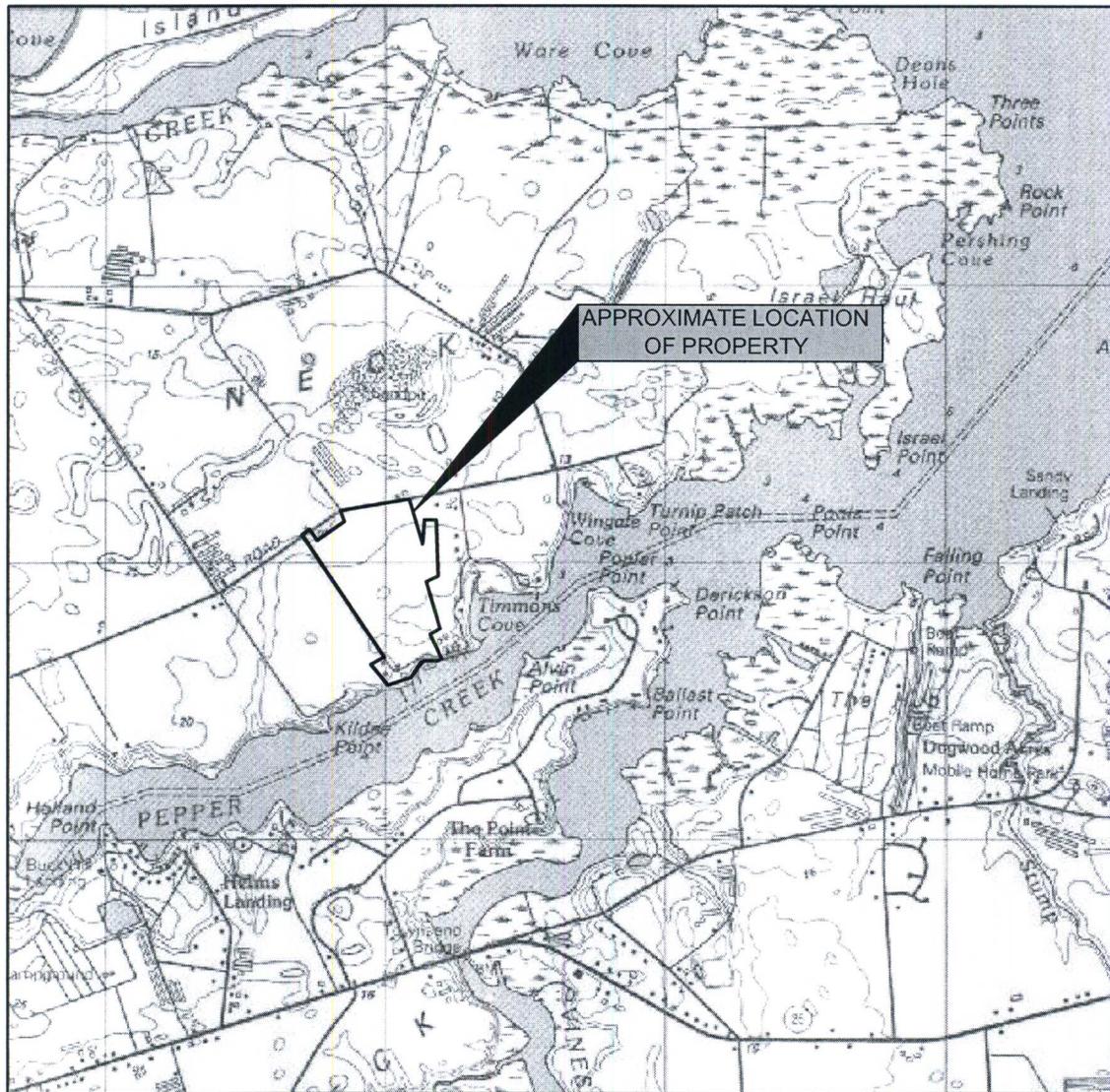
**How can I find additional information or comment on the Proposed Plan?**

The complete file on the site including the Brownfields Investigation and Interim Action Report are available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on:

<http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/>

The 20-day public comment period begins on 12/23 2007 and ends at close of business (4:30pm) on 1/11/2008. Please send written comments to the DNREC office or call Babatunde Asere Project Manager, at 302-395-2600.

**Figure 1. SITE LOCATION MAP**



**NOTE:**  
 THIS LOCATION SKETCH IS ADAPTED FROM THE U.S.G.S. TOPOGRAPHIC MAP,  
 7.5 MINUTE SERIES, FOR FRANKFORD, DELAWARE 1993.

<b>DATE:</b> 8 AUGUST 2005	<b>LOCATION SKETCH</b>  <b>FORMER TIMMONS MARINA          DE-1360</b>  <b>DAGSBORO ~ SUSSEX COUNTY ~ DELAWARE</b>	<b>DESIGNED BY:</b> JLG	 <small>Consultants &amp; Site Geologists</small> 3409 LEBANON ROAD WILMINGTON, DE 19806-1124 TEL. (302) 997-0834 FAX (302) 997-0493 1506 WALNUT STREET, SUITE 725 PHILADELPHIA, PA 19102 E-MAIL: DUFFIELD@DUFFIELD.COM
<b>SCALE:</b> 1"=2000'		<b>DRAWN BY:</b> EMW	
<b>PROJECT NO.</b> 6143.EA		<b>CHECKED BY:</b>	
<b>SHEET:</b> FIGURE 1		<b>FILE:</b> A-6143EA-01	

**Figure 2. SITE PHOTOS**



Photo 1: Old Shoreline and Dock



Photo 2: Old Boathouse and Boat Storage Area



Photo 3: Dredged Sediment in Drying Basin



Photo 4: Outlet Chanel for Sediment Drying Basin



Photo 5: Undeveloped Fields at Site



Photo 6: Revitalized Marina Area

## Glossary of Terms Used in this Proposed Plan

<b>Duffield Associates</b>	A private environmental consulting company that conducted the Phase II investigation for the property owner.
<b>Brownfield</b>	Property that is vacant or underutilized because of the perception or presence of an environmental problem.
<b>Certified Brownfield</b>	A Brownfield that DNREC has determined is eligible for partial funding through the Delaware Brownfields Program.
<b>Contaminant of Concern (COC)</b>	These are potentially harmful substances at concentrations above acceptable levels (eg metals and PAH).
<b>Certificate of Completion of Remedy (COCR)</b>	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
<b>Final Plan of Remedial Action</b>	DNREC's proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
<b>Hazardous Substance Cleanup Act (HSCA)</b>	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
<b>Amended Proposed Plan of Remedial Action</b>	An amendment of the previous proposed plan, which includes no further action to taken by DNREC. It will be submitted by DNREC and subject to public comments.
<b>Risk</b>	Likelihood or probability of injury, disease, or death.
<b>Brownfield Investigation (BFI), Phase I (ESA)</b>	Environmental studies of a site including sampling of soils, groundwater, surface water, sediment and/or wastes on the property.
<b>Timmons Marina</b>	The 50-acre parcel of land that is the subject of this Plan that will be redeveloped into a community center.

## **What is a *Proposed Plan*?**

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC plans to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

<http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/sitefiles.asp>.

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.

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