

## **PROPOSED PLAN OF REMEDIAL ACTION**

### Osprey Point Subdivision Site Rehoboth Beach, Delaware DNREC Project No. DE-1647



December 2019

Delaware Department of Natural Resources and Environmental Control Division of Waste and Hazardous Substances Remediation Section 391 Lukens Drive New Castle, Delaware 19720

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#### **Approval:**

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

	Approved by:
Rus	Salehach
Qazi Salah Remediatio	uddin, Environmental Program Administrator
12/6	5/2019
Date	

PROPOSED PLAN Questions & Answers



#### What is the Proposed Plan of Remedial Action?

The Proposed Plan of Remedial Action (Proposed Plan) summarizes the clean-up (remedial) actions that are being proposed to address contamination found at the Site for public comment. A legal notice is published in the newspaper advertising the start of a 20-day comment period. DNREC considers and addresses all public comments received and publishes a Final Plan of Remedial Action (Final Plan) for the Site.

#### What is the Osprey Point Subdivision Site?

The Osprey Point Subdivision Site is located at 20836 Old Landing Road near Rehoboth Beach, Delaware, and consists of one tax parcel, 334-18.00-83.00, and is approximately 135 acres in size (Figure 1). The nearest intersection to the Site is Old Landing Road and Marabella Lane. The Site consists of an 18-hole golf course, a two-story building, and an associated paved parking lot (Figure 2).

#### What happened at the Osprey Point Subdivision Site?

Prior to 1968, the Site was utilized for agricultural purposes. Golf course operations were conducted on the Site from approximately 1968 until 2017.

#### What is the environmental problem at the Osprey Point Subdivision Site?

In 2017, Duffield Associates, Inc. (Duffield), an environmental consultant, initiated a Remedial Investigation (RI) at the Site, on behalf of the property owner. Soil, groundwater, surface water, and sediment samples were collected during the investigation. The RI confirmed that the application of pesticides to the golf course, throughout its operational history, resulted in "hot spots" of the pesticide - chlordane, and the metals - arsenic, chromium, mercury, and thallium, in the soils on select greens and sand traps. Elevated concentrations of the pesticide and metals were detected in the soils of the greens and sand traps at concentrations significantly exceeding DNREC Screening Levels. A risk assessment indicated that exposure to these soils could potentially cause an unacceptable risk to future residents, and therefore, a remedial action for these soils was determined to be necessary.

Based on the evaluation of groundwater during the RI, due to elevated concentrations of the metals – cobalt, iron, manganese, and cyanide, the consumption of groundwater flowing beneath the Site could potentially cause an unacceptable human health risk. The development plans for the Site include providing water from a public water supplier to the future residents, therefore, the groundwater beneath the Site will not be utilized for drinking water purposes, and residents will not be exposed to the groundwater. DNREC will require a restriction to be placed on the use of groundwater to prevent any potential future exposure to residents.

Mercury and select polycyclic aromatic hydrocarbons were detected in the sediment of the onsite pond, and the metals - arsenic and cyanide, were detected in the surface water of Arnell Creek, which is located immediately adjacent to the Site at concentrations exceeding DNREC Screening Levels for ecological impacts. Evaluation of these exceedances did not result in an unacceptable risk to the environment, and therefore no remedial action was determined to be necessary for sediment or surface water.

#### What clean-up actions have been taken at the Osprey Point Subdivision Site?

On behalf of the property owner, Duffield Associates, conducted interim action activities on the Site in October/November 2018 and February 2019, in accordance with a DNRECapproved work-plan. The interim action consisted of blending of surface soils with soils up to 18 inches below ground surface, in the areas of the greens and sand traps where the select metals and pesticide concentrations exceeded the corresponding DNREC Screening Levels. Confirmatory samples were collected in the areas that the blending was completed. The samples were analyzed and evaluated in a human health risk assessment to document that the remaining soil was of such quality that future exposure to it does not pose an unacceptable risk under a residential use scenario. Therefore, no additional remedial actions are necessary for soil.

#### What does the owner want to do at the Osprey Point Subdivision Site?

The Site will be redeveloped into the residential housing development, Osprey Point.

## What additional clean-up actions are needed at the Osprey Point Subdivision Site?

## DNREC proposes the following remedial actions for the Site, which need to be completed before a Certification of Completion of Remedy (COCR) can be issued.

- 1. An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 <u>Del.C</u>. Chapter 79, Subchapter II) must be recorded in the Office of the Sussex County Recorder of Deeds within 60 days of the issuance of the Final Plan of Remedial Action. The Environmental Covenant must include the following activity and/or use restrictions:
  - a. Limitation of Groundwater Withdrawal. No groundwater wells shall be installed and no groundwater shall be withdrawn from any well on the Property without the prior written approval of DNREC's Division of Waste and Hazardous Substances and DNREC's Division of Water;
- 2. A request for a Certification of Completion of Remedy (COCR) must be submitted to DNREC within 60 days of recording the Environmental Covenant.

#### How can I find additional information on the Proposed Plan for the Osprey Point Subdivision Site?

The complete file on the Site, including the Remedial Investigation, are available at the DNREC office, 391 Lukens Drive in New Castle, 19720. Most documents are also found on:

http://www.nav.dnrec.delaware.gov/DEN3/

# How can I comment on the Proposed Plan for the Osprey Point Subdivision Site?

The 20-day public comment period begins on December 8, 2019 and ends at close of business (4:30 pm) on December 30, 2019. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Lindsay Hall, Project Officer, or via email to Lindsay.Hall@delaware.gov.

Figure 1: Site Overview Map Figure 2: Site Location Aerial Map

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PROJECT NO. 10525.EC	Osprey Point Subdivision (DE-1647) 20836 Old Landing Road	CHECKED BY: WAJ	TEL. (302)239-6634 FAX (302)239-8485 OFFICES IN PENNSYLVANIA,	
SHEET:	REHOBOTH BEACH~SUSSEX COUNTY~DELAWARE	FILE: 10525.EC.Old Landing Golf Course mad	SOUTHERN DELAWARE, MARYLAND AND NEW JERSEY	
FIGURE 1			EMAIL DUFFIELD&DUFFNETCOM	

Figure 1



## Glossary of Terms Used in this Proposed Plan

Certification of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Hazardous Substance Cleanup Act (HSCA)	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.
"Hot Spot"	Distinct areas on a site where there are significantly elevated concentrations of contaminants
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Preliminary Risk Assessment	A quantitative evaluation of only the most obvious and likely risks at a site
Remedial Investigation (RI)	Thorough environmental study of a site which includes 1) sampling of site environmental media and/or wastes on the property and 2) conducting a preliminary risk assessment using the data collected to determine the risk posed to human health and the environment.
Diek	Likelihood or probability of injury disease or death
Remediation Section	Section within DNREC's Division of Waste and Hazardous
	Substances, which provides oversight of the cleanup of sites that were contaminated as a result of past use
Surface soil	Soil in the interval between 0 to 6 inches below ground surface

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