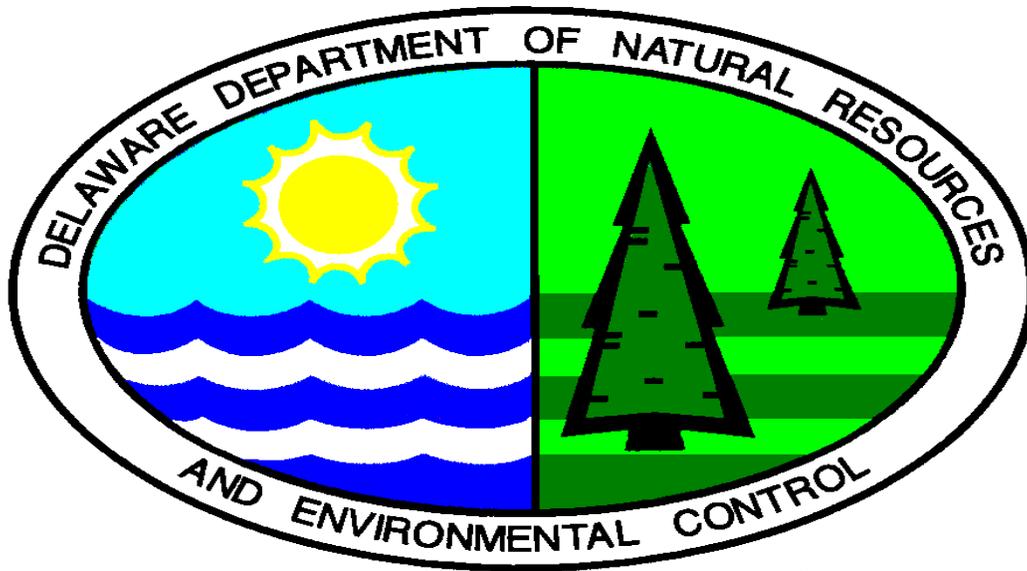


ROUTE 40 DRUM SITE
FINAL PLAN OF REMEDIAL ACTION



JUNE 1998

DNREC PROJECT DE 141

DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

DIVISION OF AIR & WASTE MANAGEMENT

SITE INVESTIGATION & RESTORATION BRANCH

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I. INTRODUCTION

This Final Plan of Remedial Action (“Final Plan”) is issued under the authority of the State of Delaware’s Hazardous Substance Cleanup Act, 7 Del. C. Chapter 91 (“HSCA”). The purpose of the Final Plan is to present to the public the Department of Natural Resources and Environmental Control’s (DNREC’s) approach to manage the risks posed by the Route 40 Drum Site to public health, welfare and the environment.

The DNREC completed a Remedial Investigation (RI) in August of 1997 under HSCA. The RI was performed pursuant to a scope of work that had identified data gaps from an Expanded Site Inspection (ESI). The RI concluded that, at the present time, the site poses no threat to human health, welfare and the environment. To ensure the site does not present a threat, the DNREC has determined that a restriction in the form of a ground water management zone (“GMZ”) be placed on the property.

II. SITE DESCRIPTION

The Route 40 Drum Site, formerly known as the First State Steel Drum Site, is located along U.S. Route 40 west of the intersection of Route 40 and Route 72 in Bear, Delaware. A site location map is provided as Figure 1.

The site is approximately one acre in size and consists of three parcels. The parcels are identified as parcels 1, 2 and 3. A site map is provided in Figure 2. Parcel 1 is the location of Newark Kubota. Newark Kubota is a lawn and tractor retail business. Parcel 2 is the home of Beeson’s Funeral Home. Parcel 3 is an undeveloped and grassed lot.

The site is bordered by U. S. Route 40 to the south, Belltown Run to the west, woods and a small drainage ditch to the north and Belltown Woods, a residential subdivision to the east.

III. SITE HISTORY

The site has had numerous owners and industrial purposes since the late 1940’s. Nunzioto Micucio, owner of Micucio Service Company, held the property from 1948 until 1962. Samuel Ennis and Lee Deakyne purchased the property in 1962 and retained it until 1966, when Ennis sold the property back to Micucio. No information is available as to how the property was utilized from the late 1940’s until the early 1970’s.

In the early 1970’s, Carmen Micucio, son of Nunzioto, opened Auto Pallets, Inc. The business refurbished wooden pallets. In 1978, Micucio leased the property to the First State Steel Drum Company. This business cleaned, reconditioned and resold chemical drums. First State Steel Drum Company operated at the site until 1985.

In 1985, Micucio sold the property to Merritt Burke, Jr. Burke opened Newark Kubota. In 1989, Burke sold Parcel 2 to James Beeson, Jr. Beeson opened Beeson's Funeral Home. Fill dirt was brought in to construct the parking lot for the funeral home and fill-in parcel 3.

IV. PREVIOUS INVESTIGATIONS

The site has a history of several investigations. In 1984, DNREC officers observed potentially hazardous wastes stored at the site and determined that an EPA Hazardous Waste Number was necessary. Wastes indicated to be ignitable and corrosive. An EPA identification number was applied for and issued that same year.

In 1986, a Preliminary Assessment was performed by DNREC. A pit containing drum fragments was observed in the woods adjacent to the Belltown Woods subdivision. The site was the subject of a Site Inspection (SI) in 1987. The SI consisted of soil, sediment and surface water samples. Sample results showed slightly elevated levels of volatile organics and some inorganics.

Also in 1987, a DNREC officer observed hundreds of drums and a tanker trailer on the site after operations had supposedly ceased.

In 1991, an ESI was conducted by DNREC. The investigation focused on ground water. Trace organic contaminants were detected in three of the four wells sampled. However, only one well exhibited concentrations of contaminants in excess of 1 ppb. Several Maximum Contaminant Levels ("MCLs") were exceeded in the well. 1,2 Dichloroethene was detected at 15 ppb, tetrachloroethylene was detected at 79 ppb and trichloroethylene was found at 15 ppb. The respective MCLs for these compounds are 6 ppb, 5 ppb, and 5 ppb.

Exposure to humans via consumption of ground water was not considered a completed pathway because ground water in the immediate area was not used for domestic consumption or public water supply. Future use of ground water at the site was determined to pose an unacceptable risk and additional characterization was recommended.

V. REMEDIAL INVESTIGATION

The Remedial Investigation (RI) focussed on two areas. The investigation searched for potential source areas remaining on the site and evaluated off-site migration of contaminants in surface water and stream sediments. If substantial ground water contamination was present, it was believed the problem would manifest itself in sediment and surface water.

In an effort to identify and locate historic disposal areas, aerial photographs were reviewed and four potential source areas were identified. Several soil borings were advanced in each area. One sample was analyzed from a composite of soils from each source area. Soils chosen to be composited were selected based on visual inspection and field screening. No sample indicated a positive response from field screening equipment. In conclusion, this worst-case approach to sample analysis revealed no visual or chemical evidence of soil contamination.

In order to evaluate off-site migration of contamination, surface waters were analyzed for volatiles and metals and sediments were analyzed for volatiles, semi-volatiles and metals. Results did not indicate any clear pattern of pollution. No volatiles indicative of site-related contamination were detected in surface water samples. Select metals were detected in the drainage ditch and in Belltown Run. Metals' concentrations were highest in the drainage ditch and highest in the most upstream sample of drainage ditch location.

Trace concentrations of toluene and polynuclear hydrocarbons were found in the sediments of the drainage ditch and Belltown Run. Concentrations were highest in the drainage ditch and highest in the most upstream sample location. Concentrations of contaminants did not merit further evaluation in sediments, surface waters or soils.

VI. REMEDIAL GOALS

The DNREC recommends a restriction prohibiting use of ground water at the site be placed on the property.

VII. FINAL REMEDY

The DNREC believes that placing a GMZ on the property is protective of public health or welfare or the environment.

VIII. PROPOSED PLAN AND PUBLIC PARTICIPATION

The DNREC drafted and issued a Proposed Plan of Remedial Action (Proposed Plan) in May, 1998. The notice of the Proposed Plan was published on June 7, 1998, in the News Journal and Delaware State News newspapers. The public comment period closed on June 26, 1998. No comments were received by the DNREC during the public comment period.

IX. DECLARATION

This Final Plan of Remedial Action for the Route 40 Drum Site is protective of human health, welfare and the environment and is consistent with the requirements of the Delaware Hazardous Substance Cleanup Act.

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

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