

AMENDED FINAL PLAN OF REMEDIAL ACTION



Reichhold Chemical Inc. OU-1

*144 Fork Branch Road
Dover, Delaware*

*November 2015
DNREC Project No. DE-0245*

This Final Plan of Remedial Action (Final Plan) presents clean-up actions required by the Department of Natural Resources and Environmental Control (DNREC) to address environmental contamination at the Reichhold Chemical Inc. operable unit 1 (OU-1).

DNREC issued public notice of the Amended Proposed Plan of Remedial Action (Proposed Plan) for the Site on October 20, 2015 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments from the public; therefore, the Proposed Plan is adopted as the Final Plan.

Approval:

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



Timothy T. Ratsep, Program Administrator
Site Investigation and Restoration Section

December 2, 2015

Date



AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Reichhold Chemical Site OU-1
Dover, Delaware
DNREC Project No. DE-0245



October 2015

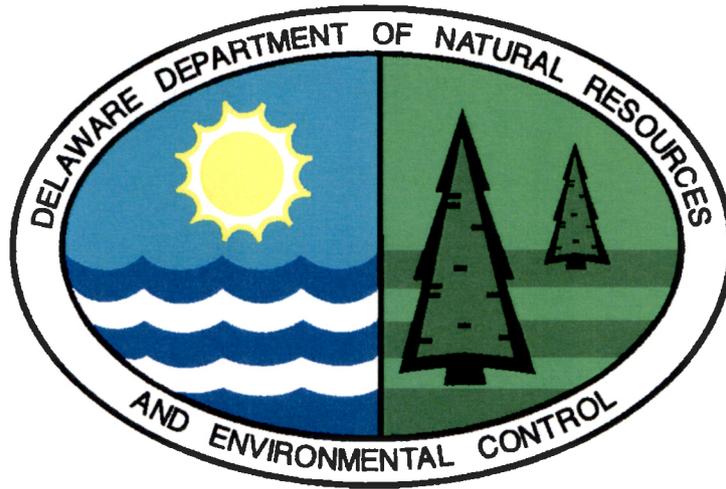
Delaware Department of Natural Resources and Environmental Control
Division of Waste and Hazardous Substances
Site Investigation & Restoration Section
391 Lukens Drive
New Castle, Delaware 19720

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Dover, Delaware
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Approval:

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Approved by:

Timothy Ratsep, Environmental Program Administrator Site Investigation & Restoration Section

Date



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 for 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.

Why is an Amended Proposed Plan of Remedial Action necessary for the Reichhold Chemical Site OU-1?

A Final Plan of Remedial Action (Final Plan) for the Site was initially advertised on September 1999. The Final Plan remedy included: monitoring of marsh area, rerouting of drainage ditches and deed restriction. The marsh component of the Final Plan was amended in June 2004 to require a wetlands cap over the sediment to protect trespassers and prevent ecological impact. The actions required under the Final Plan, as amended, have been completed.

A subsequent Phase II Environmental Site Assessment (Phase II) identified previously unknown chlorinated volatile organic compounds (VOCs) tetrachloroethene (PCE) as well as the PCE breakdown products in groundwater above DNREC groundwater standard in one section of the Site. Accordingly, the Site is now divided into two operable units (OUs).

OU-1 is the relatively unimpacted area and will be redeveloped first. OU-2 includes the area with VOC contamination, which will require further investigation, as well as the marsh that is capped with the constructed wetlands cap.

An Amended Proposed Plan is necessary so DNREC-SIRS will be able to address the contamination in the OU-2 area while allowing redevelopment in OU-1.

What is the Reichhold Chemical Site OU-1?

The Reichhold Chemical Site is located at 144 Fork Branch Road in Dover, Delaware, and consists of 6 tax parcels (02-057.00-01-9.00, 10.00, 11.00, 12.00, 13.00 and 14.00), totaling approximately 110 acres (Figure 1). The nearest intersection to the Site is Fork Branch Road and Route 13. The Site consists of a fenced grass lot with one building and is zoned general industrial (Figure 2).

This proposed plan addresses Operable Unit-1 (OU-1). The location of the OUs is shown in Figure 2. A brief description of the OUs is provided in the table below.

<i>Operable Units</i>	<i>Description</i>
OU-1	Tax Parcels- 02-057.00-01-9.00, 10.00, 11.00, 12.00, 13.00 and 14.00
OU-2	Tax Parcels- portions 02-057.00-01-11.00 and of 13.00.

OU-2 will be addressed in separate Proposed Plan.

What happened at the Reichhold Chemical Site OU-1?

The Site was developed in 1957. The Site produced styrene butadiene and polyvinyl acetate emulsion for use in the textile, adhesive, paint and paper industries. The plant was closed in 2008 and most structures have since been demolished. Releases occurred at the Site likely as a result of historic operations, which impacted the groundwater beneath the Site.

What is the environmental problem at the Reichhold Chemical Site OU-1?

A 1999 Remedial Investigation and the Phase II found poly-nuclear aromatic hydrocarbons (PAHs) in groundwater over DNREC drinking standards. This contamination is not impacting any downgradient drinking water receptors.

What clean-up actions have been taken at the Reichhold Chemical Site OU-1?

Pursuant to the Final Plan and the amendments thereto, the following actions have been taken on the Reichhold Chemical Site OU-1: rerouting and monitoring of drainage ditches and deed restrictions. Additionally, DNREC executed a September 2011 Memorandum of Agreement between DNREC Division of Waste and Hazardous Substances and Division of Water regarding a Groundwater Management Zone that covers approximately 115 acres, including groundwater beneath the Site

What does the new owner want to do at the Reichhold Chemical Site OU-1?

The Site will be developed into an industrial park.

What additional clean-up actions are needed at the Reichhold Chemical Site OU-1?

DNREC proposes the following remedial actions for the Site, which need to be completed before a new Certificate of Completion of Remedy (COCR) can be issued for OU-1. The remedial actions proposed are proposed on an OU basis.

- 1) An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 Del.C. Chapter 79, Subchapter II) must be recorded in the Office of the Kent 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.] Use Restriction. Use of the Property shall be restricted solely to those non-residential type uses permitted within Commercial, Manufacturing, or Industrial Districts;
 - [b.] Interference with Remedy. There shall be no digging, drilling, excavating, grading, constructing, earth moving, or any other land disturbing activities on the Property without the prior written approval of DNREC;
 - [c.] 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-SIRS and DNREC Division of Water; and
 - [e.] Compliance with Contaminated Materials Management Plan. All work required by the Contaminated Materials Management Plan must be performed to DNREC's satisfaction in accordance with the Plan.
- 2) A Contaminated Materials Management Plan (CMMP) must be submitted to DNREC within 60 days of the issuance of the Final Plan of Remedial Action. The CMMP will provide guidance to enable construction workers to safely handle any potential contaminated soil and groundwater at the Site.
 - 3) The CMMP will be implemented upon its approval by DNREC.
 - 4) Remedial Action Completion Report must be submitted to DNREC within 60 days of the completion of the remedial actions required in this Proposed Plan.
 - 4) A request for a Certification of Completion of Remedy (COCR) must be submitted to DNREC within 60 days of approval of the Remedial Action Completion Report.

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

The Site will be used as industrial park.

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

The complete file on the Site including the Remedial Investigation Report and the various reports 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/>

The 20-day public comment period begins on October 25, 2015 and ends at close of business (4:30 pm) on November 16, 2015. Please send written comments to the DNREC office at 391

Lukens Drive, New Castle, DE 19720 to Rick Galloway, Project Officer or Robert Newsome,
Public Information Officer.

Figure 1: Site Location Map

Figure 2: Site Map with Operable Units

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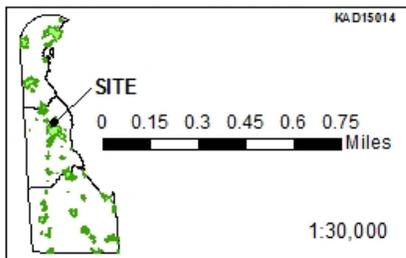
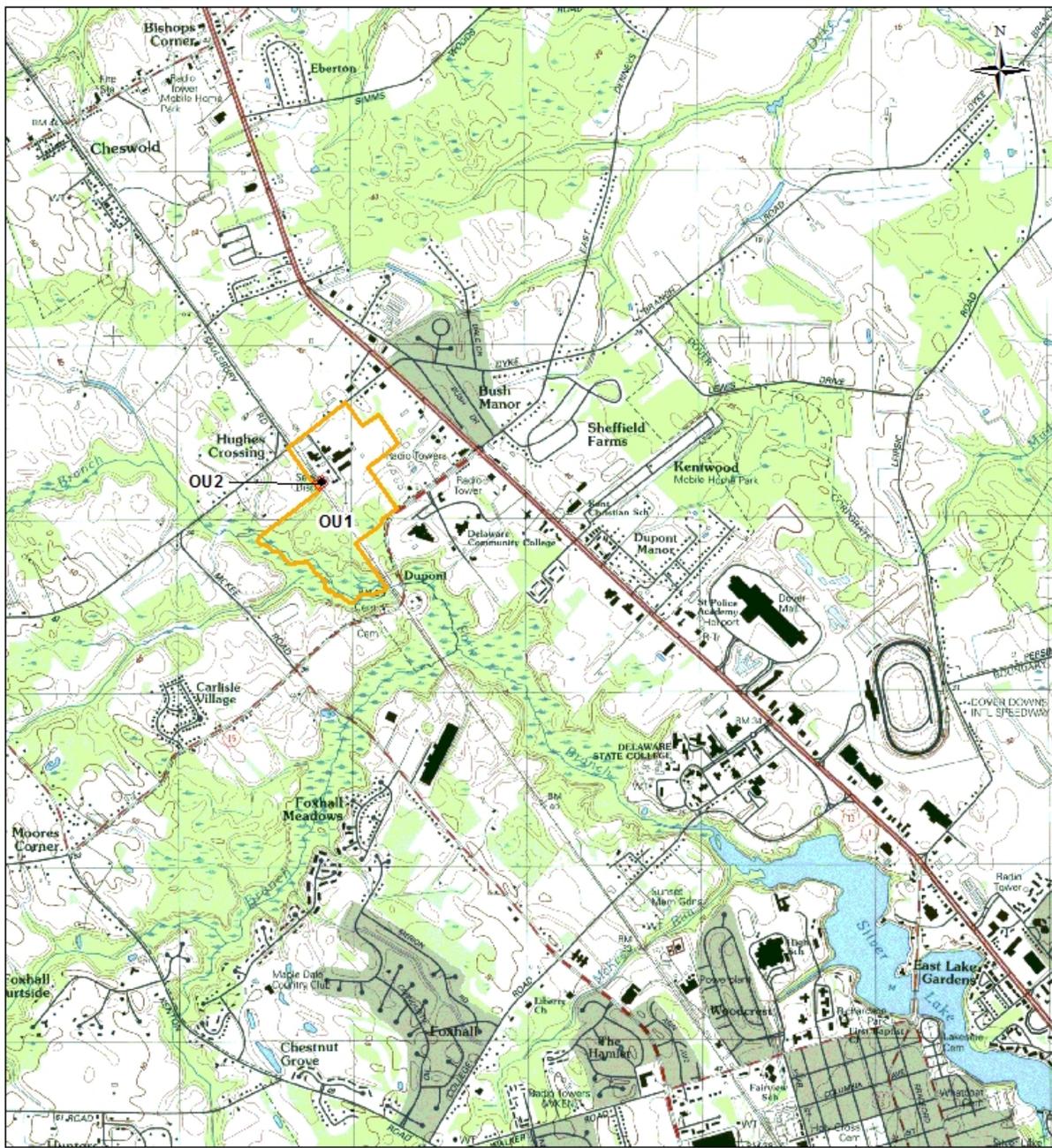


FIGURE 1
SITE LOCATION MAP
REICHOLD CHEMICALS, INC.
DOVER, DE (DE-0245)
USGS 7.5 MIN TOPO

This map is provided by the DNREC-SIRS solely for display and reference purposes and is subject to change without notice. DNREC-SIRS will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purpose.

August 2015

Figure 1

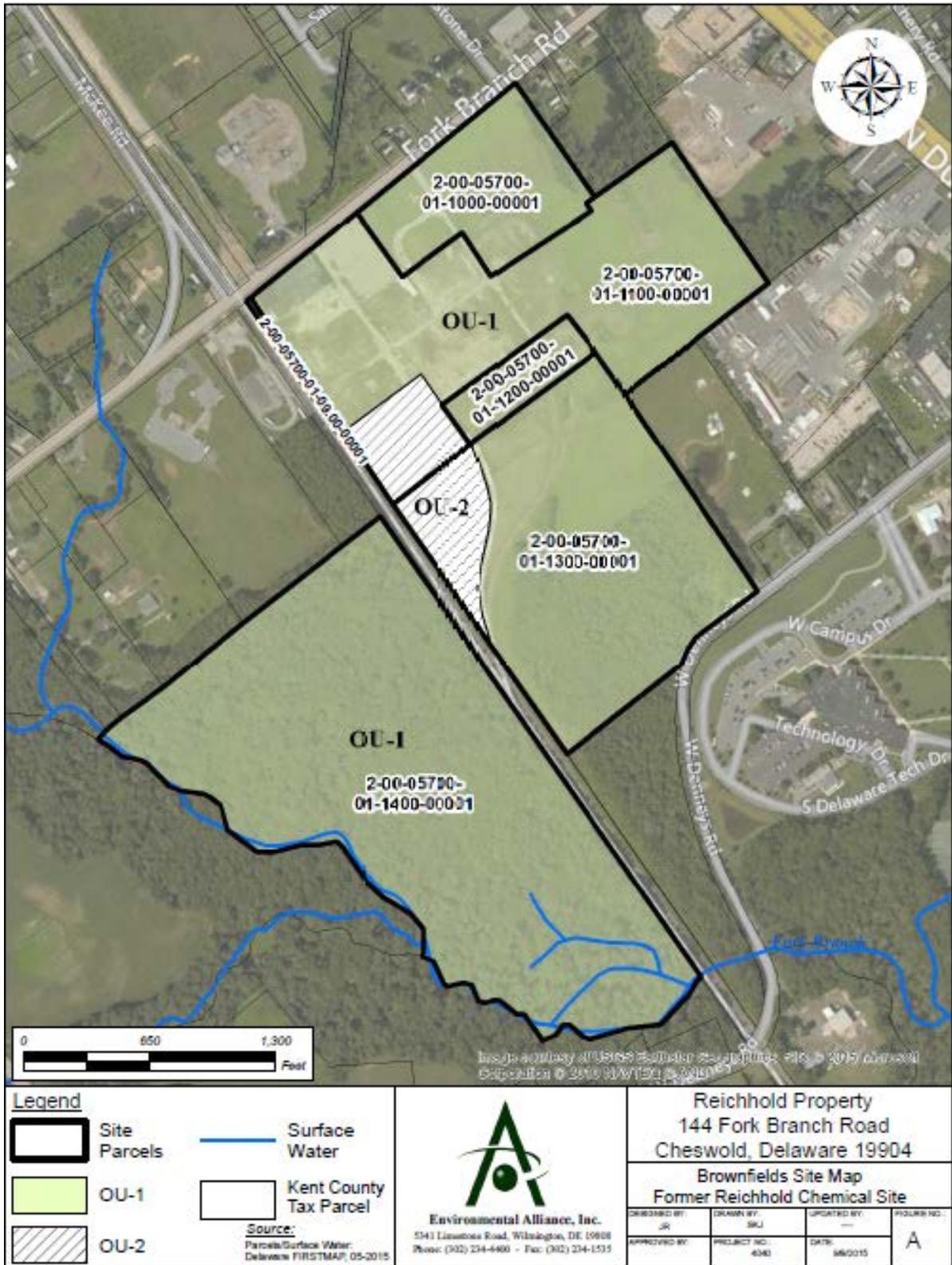


Figure 2

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.
Contaminated Materials Management Plan	A written plan specifying how potentially contaminated material at a Site will be sampled, evaluated, staged, transported and disposed of properly.
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Risk	Likelihood or probability of injury, disease, or death.
Restricted Use	Commercial or Industrial setting
SIRS	Site Investigation Restoration Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use, from dry cleaners to chemical companies