

FINAL PLAN OF REMEDIAL ACTION



GENERAL MOTORS CORP. WILMINGTON ASSEMBLY PLANT OU-3

*801 Boxwood Road
Wilmington, Delaware*

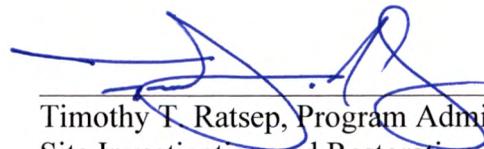
*December 2015
DNREC Project No. DE-1149*

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 General Motors Corp. Wilmington Assembly Plant Operable Unit 3.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on November 22, 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 16, 2015

Date



PROPOSED PLAN OF REMEDIAL ACTION

General Motors Corp. Wilmington Assembly Plant OU-3
Wilmington, Delaware
DNREC Project No. DE-1149



November 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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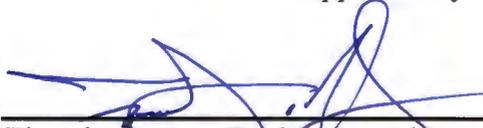
PROPOSED PLAN OF REMEDIAL ACTION

General Motors Corp. Wilmington Assembly Plant OU- 3
Wilmington, Delaware
DNREC Project No. DE-1149



Approval:

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

Approved by:

_____ Timothy Ratsep, Environmental Program Administrator Site Investigation & Restoration Section
<i>November 19, 2015</i>
_____ 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.

What is the GM Site OU-3?

The General Motors Corp. Wilmington Assembly Plant is located at 801 Boxwood Road in Wilmington, Delaware, and consists of two tax parcels (07-042.10-055 and 07.042-20.010), totaling approximately 142 acres (Figure 1). The nearest intersection to the Site is Boxwood Road and Centerville Road. The Site consists of a 3.2 million square foot Main Assembly Building, Waste Water Treatment Plant (WWTP), Pump Houses, and Powerhouse and is zoned heavy industrial (Figure 2).

This proposed plan addresses Operable Unit-3 (OU-3). The location of the OUs is shown on Figure 2. A brief description of the OUs is provided in the table below.

<i>Operable Units</i>	<i>Description</i>
OU-1	The pump house and aboveground storage tanks (AST) L through Tank O in the AST containment area. Covers soil and groundwater
OU-2	Large AST Area/Truck Unloading Rack and surrounding areas. Cover Soil and groundwater.
OU-3	Main Assembly Plant Area soil and groundwater not included in other OUs.
OU-4	Former Petroleum Dispensing and UST Area soil plus groundwater under OU-4
OU-5	Former Test Track Area. Covers soil and groundwater.
OU-6	Wooded Area adjacent to Little Mill Creek. Covers soil and groundwater.

OU-1, OU-2, OU-4, OU-5, and OU-6 will be addressed in separate Proposed Plans.

What happened at the GM Site OU-3?

The Site was developed in 1945 by GM Corporation for the purpose of automobile assembly. Prior to 1945, the Site was undeveloped land. GM Corporation began operations at the Site in 1946 and continued automobile assembly operations until July 2009 when the plant was idled.

The Site was sold to Fisker Automotive, Inc. (Fisker) in July 2010. On March 31, 2011, the Revitalizing Auto Communities Environmental Response Trust (RACER Trust) became effective and has been conducting, managing, and funding cleanup at 89 sites including the former Wilmington Assembly Plant. The Site was purchased by Wanxiang Delaware in April 2014 as part of a purchase by Wanxiang Group of Fisker's assets. At this time, the Site remains idle while Wanxiang evaluates opportunities for the Site.

The Site contained operations for the manufacturing of automobiles including but not limited to petroleum products for fueling and heating, painting, wastewater treatment plant, cleaning parts, and hazardous waste storage. Each of these operations used various chemicals. Releases occurred at the Site likely as a result of historic operations, which impacted the soil and groundwater beneath the Site.

What is the environmental problem at the GM Site OU-3?

A Remedial Investigation (RI) Report completed in 2015 found that the surface soil in OU-3 contained the poly-nuclear aromatic hydrocarbon (**PAH**) benzo (a) pyrene and **metals** (antimony, arsenic, cobalt, lead, manganese, mercury and nickel) over DNREC soil standards for residential use of the property.

The RI found that groundwater in OU-3 contained **VOCS** (1, 1-dichloroethane, benzene, carbon tetrachloride, chloroform, cis-1,2-dichloroethene, ethylbenzene, tetrachloroethene, trichloroethene and xylenes (total)); semi volatile organic compounds (**SVOCS**) (naphthalene); **Metals** (aluminum, arsenic, barium, cobalt, iron, lead, manganese, selenium and vanadium).

There is a groundwater divide under the Main Assembly Building with half of the water flowing to the east and half flowing to the northeast toward Little Mill Creek. The portion flowing toward Little Mill Creek is not impacting Little Mill Creek. In addition, there are no drinking water receptors located to the northeast of the Site. As stated in the sections above, groundwater for OU-4 will be addressed later in a separate Proposed Plan of Remedial Action. The VOCS in groundwater in OU-2 present a potential vapor intrusion risk

What clean-up actions have been taken at the GM Site OU-3?

No interim actions have been conducted in OU-3.

What does the owner want to do at the GM Site OU-3?

There are currently no redevelopment plans for the Site.

What additional clean-up actions are needed at the GM Site OU-3?

DNREC proposes the following remedial actions for the Site, which need to be completed before a Certificate of Completion of Remedy (COCR) can be issued. The remedial actions are proposed on an OU basis. The environmental covenant below will cover New Castle County tax parcel 07-042.10-055 which includes OU-1 to OU-5. Therefore, the restrictions will cover OU-1 to OU-5 even if the restrictions are not necessary for every OU.

- 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 New Castle County Recorder of Deeds within 90 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.] 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;
 - [c.] 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;
 - [d.] Compliance with the Long Term Stewardship Plan. For OU-2 and OU-3, all work required by the Long Term Stewardship Plan must be performed to DNREC's satisfaction in accordance with the Plan.
- 2) Long-Term Stewardship Plan (LTS) shall be submitted to DNREC for approval in accordance with the schedule set forth within. The LTS plan will detail: 1) the groundwater monitoring requirements and schedule to be followed in order to monitor the attenuation of the groundwater Contaminants of Concern (COC); 2) the site-inspection schedule to be followed in order to ensure the long-term integrity of the remedy. If based on the groundwater data, groundwater contamination appears to be migrating out of OU-2 and presents a risk then DNREC will consider active remedies to address the risk; and 3) Prior to re-use of existing structures or any new construction perform a vapor intrusion evaluation which depending on existing data and location may include sampling.
- 3) 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.
- 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?

There are currently no development plans for the Site.

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:

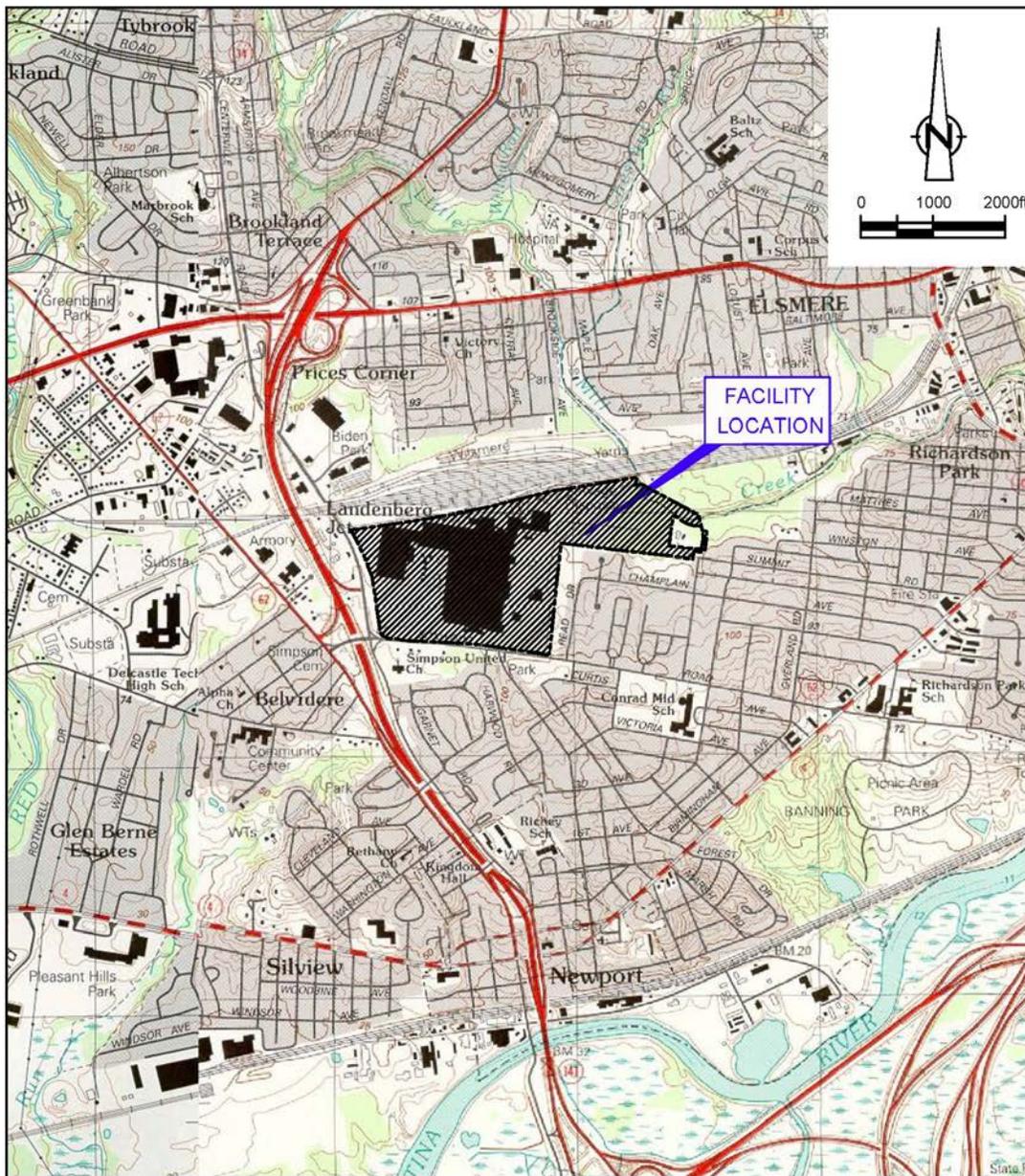
<http://www.nav.dnrec.delaware.gov/DEN3/>

The 20-day public comment period begins on November 22, 2015 and ends at close of business (4:30 pm) on December 14, 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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DE 1149 II B 8



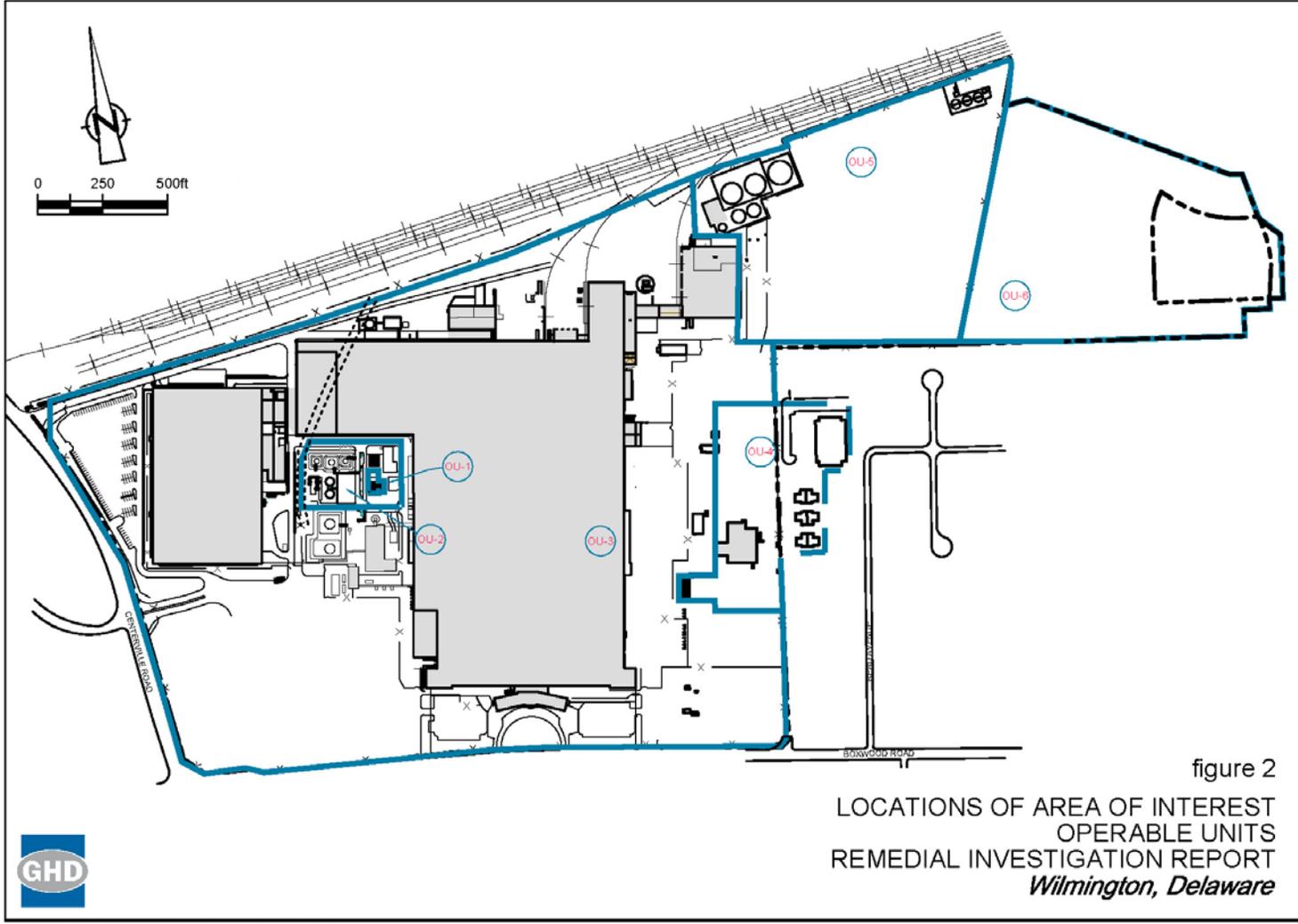
LEGEND
 APPROXIMATE FACILITY BOUNDARY

FIGURE 1
FACILITY LOCATION
REMEDIAL INVESTIGATION REPORT
FORMER GM WILMINGTON ASSEMBLY PLANT
Wilmington, Delaware



REFERENCE:
 USGS WILMINGTON SOUTH QUADRANGLE, DEL TOPOGRAPHIC, 7.5
 MINUTES SERIES 1997 SCALE: 1:24,000

017338-T04(PRES005)GN-SC002 OCT 30, 2015



017338-T04(PRES005)GN-SC001 NOV 16, 2015

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