MEMORANDUM

TO: The Honorable Shawn M. Garvin
Cabinet Secretary, Dept. of Natural Resources and Environmental Control

FROM: Lisa A. Vest
Regulatory Specialist, Office of the Secretary
Department of Natural Resources and Environmental Control

RE: **Proposed Plan of Remedial Action for the General Motors Wilmington Assembly Plant Operable Unit 4**

DATE: May 11, 2020

I. Background:

A virtual public hearing was held on Thursday, April 9, 2020, at 6:00 p.m. via the State of Delaware Cisco WebEx Meeting Platform by the Department of Natural Resources and Environmental Control ("DNREC," "Department") to receive comment on the Department's Proposed Plan of Remedial Action for the General Motors Wilmington Assembly Plant - Operable Unit 4 ("Proposed Plan"). This Proposed Plan is issued pursuant to the statutory authority granted to the Department in 7 *Del.C.* Chapter 91, the *Delaware Hazardous Substance Cleanup Act* ("HSCA"). Specifically, 7 *Del.C.* §9107(e)(1), *Remedies*, directs that the Department shall "… before conducting a remedial action, propose a plan of remedial action based on any investigation or study conducted by or for the Secretary, the potentially responsible party, or others."

This Proposed Plan summarizes the clean-up (remedial) actions that the Department is proposing to address contamination found at the General Motors Wilmington Assembly Plant ("Site"), specifically, at Operable Unit 4 ("OU-4"). The Site is located at 801 Boxwood Road in Wilmington, Delaware, and consists of five tax parcels (07-042.10-055, 07-042.10-143, 07-042.10-144, 07-038.40-052 and 07-042.20-010), totaling approximately 141 acres. The nearest intersection to the Site is Boxwood Road and Centerville Road.

The Remediation Section of the Department's Division of Waste and Hazardous Substances issued its Proposed Plan in this matter on March 8, 2020, pursuant to the statutory requirements referenced above. Given the level of public interest that had been previously expressed in the Spring of 2019 with regard to the Department's Proposed Plan of Remedial Action for this Site at Operable Unit 5, the Department made the decision to proactively hold a public hearing regarding this matter, even though no specific request for a hearing had been received. Thus, the Department held its hearing regarding this matter on April 9, 2020.

This Site was originally developed in 1945 by General Motors Corporation for the purpose of automobile assembly. Prior to 1945, the Site was undeveloped land. General Motors Corporation began operations at the Site in 1946, and continued automobile assembly operations until July 2009, at which time the plant was idled. The Site was sold to Fisker Automotive, Inc., in July 2010. On March 31, 2011, the Revitalizing Auto Communities Environmental Response Trust ("RACER Trust") became effective, and began conducting, managing, and funding cleanup at 89 sites, including this former Wilmington Assembly Plant. In April 2014, the Site was purchased by Wanxiang Delaware Real Estate Holdings. Boxwood Industrial Park, LLC ("Boxwood"), purchased the Site in October 2017. On November 7, 2019, DPIF2 DE 1 New Castle, LLC purchased portions of the Site (OU-1, OU-2, and OU-3) from Boxwood. DPIF2 DE 1 New Castle, LLC purchased OU-4 and OU-5 on January 29, 2020. At the present time, DPIF2 DE 1 New Castle, LLC is working to redevelop the Site as a new distribution center, with associated auto parking and truck trailer parking.

The Site historically contained operations for the manufacturing of automobiles, including, but not limited to, petroleum products for fueling and heating, painting, wastewater treatment plant processes, cleaning parts, and hazardous waste storage. Each of these operations used various chemicals.

A portion of OU-4 contained the former Anchor Motor Freight Building. In March of 1990, twelve (12) petroleum Underground Storage Tanks ("USTs") were removed from an area adjacent to the Anchor Motor Freight Building, in accordance with the *Delaware Underground Storage Tank Act* ("DUSTA"). The USTs contained gasoline, diesel, waste oil, heating oil and engine oil. A hydrogeologic investigation was performed, and contaminated soil from the underground storage tank ("UST") was excavated down to the groundwater table and the soil was reportedly bio-remediated. Following satisfactory completion of requirements under DUSTA, the *Delaware Regulations Governing Underground Storage Tank Systems* (7 DE Admin. Code 1351, "UST Regulations"), and UST closure standards, the Tank Management Section of the Department issued a No Further Action ("NFA") letter on November 28, 1990 for the UST area.

Since 1999, additional investigations have been performed at the Site in the former aboveground storage tank area that identified the release of hazardous substances addressed under HSCA. Subsequently, after the GM plant closure, a Remedial Investigations ("RI") was performed at the Site in multiple phases from 2011 to 2014, in accordance with requirements outlined in HSCA. The Department determined that although requirements were met under DUSTA and the UST Regulations during the 1990 remedial actions, contaminated soil below the groundwater table was not removed. These remaining saturated, petroleum contaminated soils impacted the groundwater and soil gas beneath the Site, resulting in an unacceptable risk under current HSCA risk assessment guidance.

Due to the risk associated with the presence of soil gas petroleum concentrations at OU-4, a Soil Vapor Extraction ("SVE") system with six (6) extraction wells was installed in February 2015 as an interim action to address the soil gas migration offsite. The SVE system operated until June 2018. During its three years of operation, the SVE system removed approximately 8,065 pounds of petroleum hydrocarbons.

Over time, the SVE recovery of petroleum hydrocarbons slowed. Additional temporary extraction wells were installed, but recovery was very slow. The Department subsequently approved turning off the system. After the SVE system was turned off, indoor, sub-slab, ambient air and soil gas samples were collected in and around the townhouses, which demonstrated that turning off the system did not cause GM contamination to be a risk to the public.

The final RI Report, which provided a summarization of the multiple-phase RI that occurred from 2011 to 2014 as noted above, was completed in 2015. The risk assessment performed as part of that RI report concluded that the risk from the unsaturated soil in OU-4 was within acceptable standards, and thus the Department did not find a risk from the soil in OU-4. Groundwater in OU-4, however, was found to contain volatile organic compounds ("VOCs"), specifically, ethylbenzene, 1,2,4-trimethylbenzene and xylene, and the semi-volatile organic compound ("SVOC"), naphthalene, which were above the acceptable standards for potable use. Given those findings, the use of the groundwater for potable use is restricted by an environmental covenant established by previous Final Plans for the entire Site.

Groundwater contamination above the acceptable DNREC standard for potable use was found to be migrating offsite from OU-4 in a northeast direction, across Dodson Avenue, and under a few of the townhouses located to the east of Dodson Avenue. The offsite groundwater contaminant concentrations are lower than the onsite groundwater contaminant concentrations. In addition, the groundwater contamination migrating offsite from OU-4 is reducing in concentrations. Currently, there are no potable wells within one (1) mile of OU-4. The townhouses and surrounding areas are provided potable water by a public water system. Based on this information, it is concluded that there is no current risk for potable use of the groundwater at these properties and beyond.

Groundwater monitoring will be performed as part of a Long-Term Stewardship ("LTS") plan to allow periodic evaluation of contaminant concentrations and associated risk. Additional measures may be required if an unacceptable risk is identified. In addition, if a groundwater well is planned in the future, the request will be evaluated by DNREC for approval and additional measures may be required according to the LTS plan required in the proposed plan.

In addition to the elevated groundwater contamination found in the OU-4, non-aqueous phase petroleum ("NAPL") was also found floating on top of the groundwater in one of the monitoring wells in OU-4. The extent of the NAPL was delineated in subsequent investigations in OU-4 and was not found to extend off the GM property. Groundwater monitoring will be performed as part of the LTS plan. The groundwater monitoring will include periodic evaluation for NAPL, and additional measures may be required if NAPL is identified.

Based on the proximity of the townhouses, and the migration of contaminated groundwater offsite from OU-4, the vapor intrusion pathway was investigated both onsite and offsite. Vapor intrusion is the migration of contamination from contaminated groundwater to soil gas as a vapor, which can travel into buildings where it can present a health risk. Vapor intrusion is a complicated pathway to evaluate, where many factors need to be considered together to determine if vapor intrusion is occurring.

For possible future onsite indoor workers in OU-4, the RI indicated a potential vapor intrusion risk above DNREC standards for the VOCs, 1,2,4-trimethylbenzene and xylene. It should be noted, however, that there is no building on OU-4, nor are there plans to construct a building on OU-4, thus there is no current risk for onsite indoor workers. However, new data was collected after the RI, and the vapor intrusion risk to onsite workers was re-evaluated.

This re-evaluation indicated that there is no vapor intrusion risk to current workers on OU4 and would not present a risk to indoor workers, if a new building is constructed in OU-4. To evaluate the possibility of offsite impacts, samples were collected from the townhouse properties across Dodson Avenue from GM OU-4 (the closest residences to OU-4). Groundwater, soil gas, sub-slab (under the concrete floor), indoor air (air collected inside a building) and outdoor air samples were collected during numerous monitoring events.

For the offsite townhouses, elevated levels of benzene, 1,2,4-trimethylbenzene and ethylbenzene were detected in indoor air and outdoor air, but not in the sub-slab air, indicating a likely outdoor or indoor air source. Since the source for the VOCs was determined to be from an outdoor or indoor air source, the groundwater contamination from GM did not appear to be causing vapor intrusion impact to the indoor air. As a result, there is no vapor intrusion risk from groundwater migrating offsite from GM.

Based on the NAPL contamination in OU-4 and the possibility that vapors could migrate over time to the residences on the east side of Dodson Avenue, the Department (out of an abundance of caution) decided to implement an interim action to remediate the OU-4 groundwater before all the investigations on OU-4 were complete. As noted previously, the SVE system installed in OU-4 in February 2015 continued to operate until June 2018. Samples of indoor, sub-slab, ambient air and soil gas collected in and around those residences subsequent to the system being turned off confirmed that (1) turning off the system did not cause GM contamination to be a risk to the public; and (2) there was still no offsite vapor intrusion risk caused by GM contamination.

It should be noted that the current property owner is constructing a new distribution center with associated parking for both automobiles and truck trailers. As a result, OU-4 will be paved, and used primarily for truck trailer parking.

The Department's Proposed Plan for OU-4 contains a five-part plan of remedial action. The Proposed Plan, which was presented in detail at the public hearing held on April 9, 2020, can be summarized as follows:

1. **An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 *Del.C.*, Ch. 79, Subchapter II), must be recorded with the New Castle County Recorder of Deeds within 90 days of the issuance of the Final Plan of Remedial Action.** The Environmental Covenant will cover New Castle County tax parcel 07-042.10-144. The restrictions will cover OU-1 to OU-5, even if the restrictions are not necessary for every OU.

   The Environmental Covenant must include the following activity and use restrictions: (a) Site Use Restrictions to non-residential use; (b) Limitation of Groundwater Withdrawal; (c) Compliance with Contaminated Materials Management Plan; and (d) Compliance with the Long-Term Stewardship Plan.

2. **A Long-Term Stewardship Plan, updated with OU-4 requirements, must be submitted to DNREC within 60 days of the issuance of the Remedial Action Work Plan.** This will detail the groundwater monitoring program to ensure that groundwater concentrations in OU-4 are not increasing to a level that would present a risk to offsite receptors.

3. **A Contaminated Materials Management Plan ("CMMP"), updated with OU-4 requirements, shall be submitted to DNREC within 60 days of the end of the Final Plan of Remedial Action appeal period.** The CMMP will provide guidance to enable construction workers to safely handle any potential contaminated soil, prevent soil migration (soil and airborne dust) and groundwater at the Site (Completed).

4. **A Remedial Action Completion Report must be submitted to DNREC within 60 days of the completion of the remedial actions required in this Proposed Plan.** This report will document all remedial actions that have been performed at OU-4.

5. **A Request for Certification of Completion of Remedy must be submitted to DNREC within 60 days of approval of the Remedial Action Completion Report.** This is the certification that the Department will give to the property owners to verify that all remedial actions have been successfully completed.

As noted previously, the Department has the statutory basis and legal authority to act with regard to this Proposed Plan, pursuant to 7 *Del.C.* Ch. 91, specifically, at §9107(e)(1), *Remedies.* Members of the public attended the virtual hearing held on April 9, 2020. The hearing record formally closed for comment in this matter on April 24, 2020, with no public comment having been received by the Department during any phase of this hearing matter.

It should be noted that all noticing requirements concerning this matter were met by the Department. Proper notice of the hearing was provided as required by law.

II. SUMMARY OF THE PUBLIC HEARING RECORD:

The public hearing record ("Record") consists of the following documents: (1) a verbatim transcript of the virtual public hearing held on April 9, 2020; and (2) fifteen documents introduced by Department staff at the aforementioned public hearing, and marked by this Hearing Officer accordingly as Department Exhibits 1-15. The Department's person primarily responsible for this Proposed Plan, Richard Galloway, Hydrologist with the Department's Division of Waste and Hazardous Substances, Remediation Section, developed the Record with the relevant documents in the Department's files.

As stated previously, members of the public attended the virtual public hearing on April 9, 2020, however, no comments were received by the Department from members of the public during any phase of this hearing matter.

For the Secretary's review, a copy of the Department's Proposed Plan of Remedial Action for OU-4, dated March 8, 2020, is attached hereto as Appendix "A."

III. RECOMMENDED FINDINGS AND CONCLUSIONS:

Based on the Record developed, I find and conclude that the Department has provided appropriate reasoning regarding the need for its Proposed Plan of Remedial Action for OU-4, as noted above, and that the Record supports the implementation of the same. Accordingly, I recommend the Department's Proposed Plan be adopted as the Final Plan of Remedial Action for OU-4, in the customary manner provided by law, and with appropriate conditions, to ensure continued improvement of environmental quality within OU-4.

Further, I recommend the Secretary adopt the following findings and conclusions:

1. The Department has the statutory basis and legal authority to act with regard to its Proposed Plan of Remedial Action for the General Motors Wilmington Assembly Plant - Operable Unit 4, pursuant to 7 *Del.C.* Ch. 91, specifically, at §9107(e)(1), *Remedies*;

2. The Department has jurisdiction under its statutory authority, pursuant to 7 *Del.C.* Ch. 60, to issue an Order adopting this Proposed Plan as a Final Plan of Remedial Action for OU-4;

3. The Department provided adequate public notice of this Proposed Plan, and of all proceedings in a manner as required by the law and regulations. The Department also provided the public with an adequate opportunity to comment on the same, including holding the Record open for receipt of public comment subsequent to the date of the hearing (through April 24, 2020) before making any final decision;

4. The Department has carefully considered the factors required to be weighed with regard to the implementation of the aforementioned Proposed Plan, and finds that the Record supports adoption of the same as its Final Plan of Remedial Action in this matter;

5. Adoption of the aforementioned Proposed Plan as the Department's Final Plan of Remedial Action for the General Motors Wilmington Assembly Plant OU-4 will enable the Department to ensure continued improvement of environmental quality at OU-4, as referenced above;

6. The Department has an adequate Record for its decision, and no further public hearing is appropriate or necessary; and

7. The Department shall serve and publish its Order on its internet site.

/s/Lisa A. Vest
LISA A. VEST
Public Hearing Officer

\ahear\ Proposed Plan Remed. Action GM OU4

Attachments/Appendix:
Appendix A: Proposed Plan of Remedial Action GM OU-4 (03/08/20)

Exhibit 12
GM-OU-4 Public Hearing
April 9, 2020

PROPOSED PLAN OF REMEDIAL ACTION

General Motors Corp. Wilmington Assembly Plant OU-4
Wilmington, Delaware
DNREC Project No. DE-1149

March 2020

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

CONTENTS

PROPOSED PLAN OF REMEDIAL ACTION

General Motors Corp. Wilmington Assembly Plant OU- 4
Wilmington, Delaware
DNREC Project No. DE-1149

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

Approved by:

Qazi Salahuddin, Environmental Program Administrator
Remediation Section

3/4/2020
Date

General Motors Corp. Wilmington Assembly Plant OU-4

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-4?

The General Motors Corp. Wilmington Assembly Plant is located at 801 Boxwood Road in Wilmington, Delaware, and is approximately 141 acres in size (Figure 1). The Site originally consisted of two New Castle County tax parcels: 07-042.10-055 and 07-042.20-010. In March 2019, a new subdivision plan was approved that reduced the size of original tax parcel number 07-042.10-055 and created three new tax parcels (07-042.10-143, 07-042.10-144 and 07-038.40-052) out of the remainder of 07-042.10-055. The Site now consists of five (5) tax parcels: 07-042.10-055, 07-042.10-143, 07-042.10-144, 07-038.40-052 and 07-042.20-010 (Figure 2). OU-4 now consists of tax parcel 07-042.10-144.

The nearest intersection to the Site is Boxwood Road and Centerville Road. The Site formerly consisted of a 3.2 million square foot Main Assembly Building, Waste Water Treatment Plant (WWTP), Pump Houses, and Powerhouse. The buildings have been demolished pending upcoming development of a large commercial building and parking lots. Townhouses are present to the east of Dodson Avenue.

This proposed plan addresses Operable Unit-4 (OU-4). The location of the OUs is shown on Figure 2. A brief description of the OUs is provided in the table below.

Operable Units	***Description***
OU-1	The former pump house and aboveground storage tanks (AST) L through Tank O in the AST containment area. Covers soil and groundwater
OU-2	Former large AST Area/Truck Unloading Rack and surrounding areas. Cover Soil and groundwater.
OU-3	Former Main Assembly Plant Area soil and groundwater not included in other OUs.
OU-4	Former Petroleum Dispensing and underground storage tank (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-3, OU-5 and OU-6 have been addressed in separate Proposed/Final Plans and have all been issued Certificates of Completion of Remedy (COCR).

What happened at the GM Site OU-4?

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) on July 19, 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. On March 19, 2014, the Site was purchased by WX Delaware Real Estate Holding Company, LLC (Wanxiang). Boxwood Industrial Park, LLC (Boxwood) purchased the property from Wanxiang on October 25, 2017. On November 7, 2019, DPIF2 DE 1 New Castle, LLC purchased portions of the site (OU-1, OU-2 and OU-3) from Boxwood. DPIF2 DE 1 New Castle, LLC purchased OU-5 and OU-4 on January 29, 2020. DPIF2 DE 1 New Castle, LLC is working to redevelop the Site with a new distribution center with associated auto parking and truck trailer parking.

The Site historically contained operations for the assembly of automobiles which activity included 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.

A portion of OU-4 contained the former Anchor Motor Freight Building. Twelve (12) petroleum USTs were removed from adjacent to the former Anchor Motor Freight Building in 1990. A hydrogeologic investigation was performed and contaminated soil from the UST excavations was reportedly bio-remediated. DNREC Tank Management Section (TMS) issued the area a no further action (NFA) letter on November 28, 1990. Investigations in 2014 indicated that this petroleum contamination was still present and had impacted the groundwater and soil gas beneath the Site.

What is the environmental problem at the GM Site OU-4?

A Remedial Investigation (RI) Report completed in 2015 did not find a risk from the soil in OU-4.

Groundwater in OU-4 contained **volatile organic compounds (VOCs)** (ethylbenzene, 1,2,4-trimethylbenzene and xylene) and the **semi-volatile organic compound (SVOC)**, naphthalene, above the standards for potable use. Use of the groundwater for potable use is restricted by an environmental covenant by previous Final Plans for the entire Site.

Groundwater contamination over DNREC standards for potable use was found to be migrating offsite from OU-4 to the northeast across Dodson Avenue under Townhouses located to the east

of Dodson Avenue (Figure 3). The offsite groundwater contaminant concentrations are lower than the onsite groundwater contaminant concentrations. Offsite investigations are described in detail in the RI, Appendix B. There are no potable wells within 1 mile of OU-4. Therefore, no one was ingesting the impacted groundwater either onsite or offsite of OU-4.

In addition to the elevated groundwater contamination found in the OU-4, non-aqueous phase petroleum liquid (NAPL) was also found floating on top of the groundwater in one of the monitoring wells in OU-4. The extent of the NAPL was delineated in subsequent investigations in OU-4 and does not extend off of the GM property. For a full description of the investigations, please see the January 16, 2020 Feasibility Study for OU-4.

Based on the proximity of the Townhouses and the migration of contaminated groundwater offsite from OU-4, the vapor intrusion pathway was investigated both onsite and offsite. Vapor intrusion is the migration of contamination from contaminated groundwater to soil gas as a vapor which can travel into buildings where it can present a health risk. Vapor intrusion is a complicated pathway to evaluate where many factors need to be considered together to determine if vapor intrusion is occurring.

For possible future onsite indoor workers in OU-4, the RI indicated a potential vapor intrusion risk above DNREC standards for the VOCs, 1,2,4-trimethylbenzene and xylene. However, there is no building on OU-4 nor are there plans to construct a building on OU-4, so there is no current risk for onsite indoor workers.

To evaluate the possibility of offsite impacts, samples were collected from the Townhouse properties across Dodson Avenue from GM OU-4 (closest residences to OU-4) including groundwater, soil gas, sub-slab (under the concrete floor), indoor air (air collected inside a building) and outdoor air during numerous monitoring events.

For offsite Townhouses, elevated levels of benzene, 1,2,4-trimethylbenzene and ethylbenzene were detected in indoor air and outdoor air but not in the sub-slab air, indicating a likely outdoor or indoor air source. The groundwater contamination from GM did not appear to be impacting the indoor air. As a result, there is no vapor intrusion risk from groundwater migrating offsite from GM.

Based on the NAPL contamination in OU-4 and the possibility that vapors could migrate over time to the residences on the east side of Dodson, DNREC out of an abundance of caution decided to implement an interim action to remediate the OU-4 groundwater before all the investigations on OU-4 were complete. More details on the interim action(s) are presented in the sections below.

What clean-up actions have been taken at the GM Site OU-4?

As noted in the sections above, in 1990, petroleum contaminated soil was removed from the UST excavations and bio-remediated. The Site was issued a NFA letter. DNREC believes that contamination remained in the excavations below the groundwater table which was not removed during the 1990 remedial actions.

In February 2015, a soil vapor extraction (SVE) system with six (6) extraction wells was installed in OU-4. The SVE operated until June 2018. The system removed approximately 8,065 pounds of petroleum hydrocarbons. Over time, the SVE recovery of petroleum hydrocarbons slowed. Additional temporary extraction wells were installed but recovery was very slow. DNREC-RS approved turning off the system. After the SVE system was turned off, indoor, sub-slab, ambient air and soil gas samples were collected in and around the Townhouses. The results did not indicate a risk from the GM groundwater contamination.

What does the owner want to do at the GM Site OU-4?

The property owner is constructing a new distribution center with associated car and truck trailer parking. OU-4 will be paved and used primarily for truck trailer parking.

What additional clean-up actions are needed at the GM Site OU-4?

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. The remedial actions 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 New Castle County Recorder of Deeds within 90 days of the issuance of the Final Plan of Remedial Action. The environmental covenant will cover New Castle County tax parcel 07-042.10-144. The restrictions will cover OU-1 to OU-5 even if the restrictions are not necessary for every OU. 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. All work required by the Long Term Stewardship Plan must be performed to DNREC's satisfaction in accordance with the Plan.

2) A Long-Term Stewardship Plan (LTS) updated with OU-4 requirements shall be submitted to DNREC for approval within 60 days of the end of the Final Plan of

Remedial Action appeal period. The LTS plan will detail the groundwater monitoring program to ensure that groundwater concentrations in OU-4 are not increasing to a level that would present a risk to offsite receptors.

3) A Contaminated Materials Management Plan (CMMP) updated with OU-4 requirements shall be submitted to DNREC within 60 days of the end of the Final Plan of Remedial Action appeal period. The CMMP will provide guidance to enable construction workers to safely handle any potential contaminated soil, prevent soil migration (soil and air borne dust) and groundwater at the Site. (Completed)

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.

3) 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 property owner is planning to use OU-4 primarily for truck trailer parking.

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/

DNREC will hold a public hearing on the General Motors Operable Unit 4 (OU-4) on April 9, 2020 from 6 pm to 8 pm at DNREC-RS Office at 391 Lukens Drive, New Castle, DE. This public hearing is identified on the Hearing Docket as **Hearing Docket No.: 2020-R-WH-0008.**

The 20-day public comment period begins on March 9th, 2020 and ends at close of business (4:30 pm) on March 30th, 2020. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Rick Galloway, Project Officer or via email to RS_Public_Comments@delaware.gov.

Figure 1: Site Location Map
Figure 2: Site Map with Operable Units
Figure 3: OU-4 Plume Map

RMG: jk
RMG 20022.doc
DE 1149 II B 8

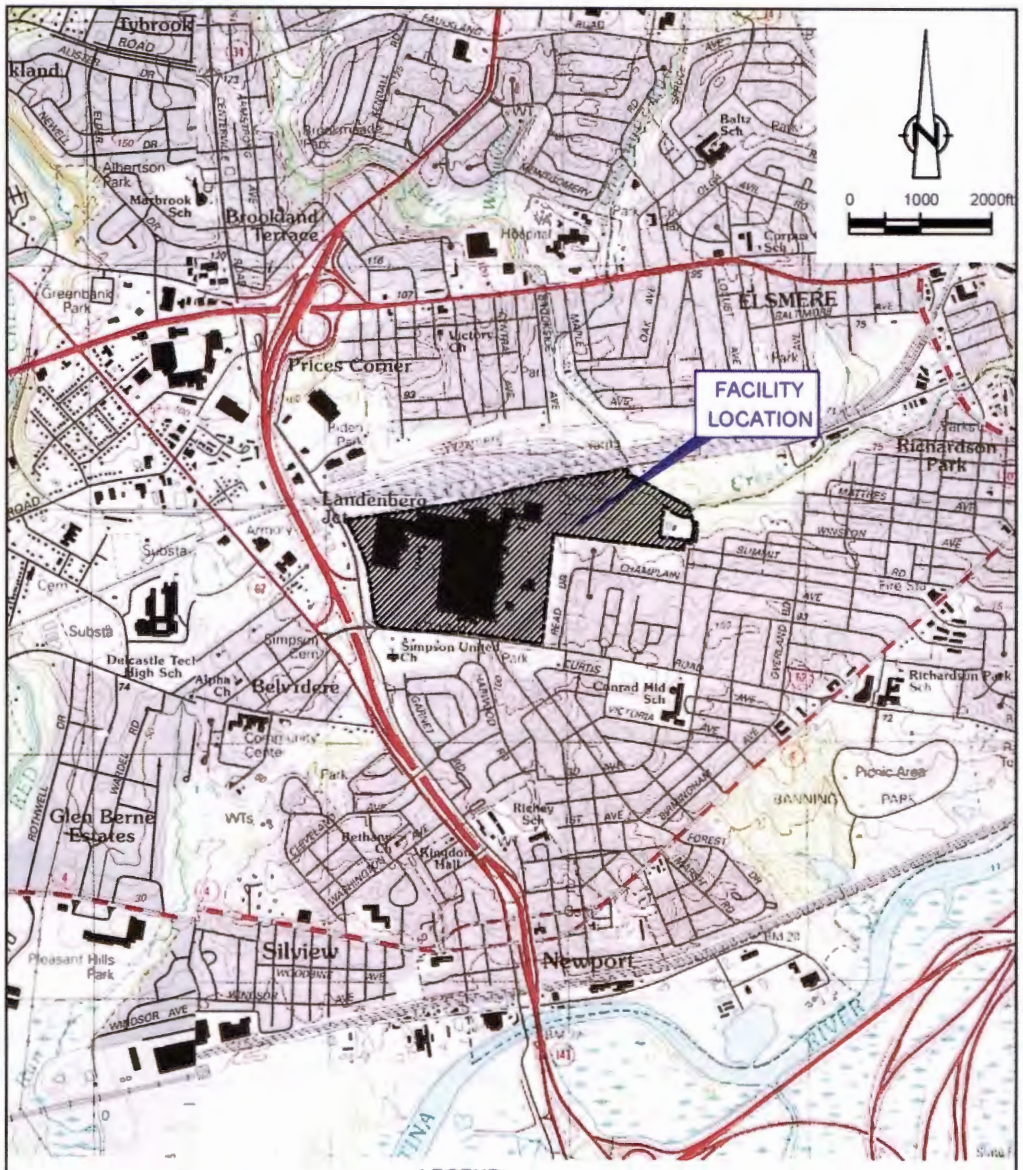
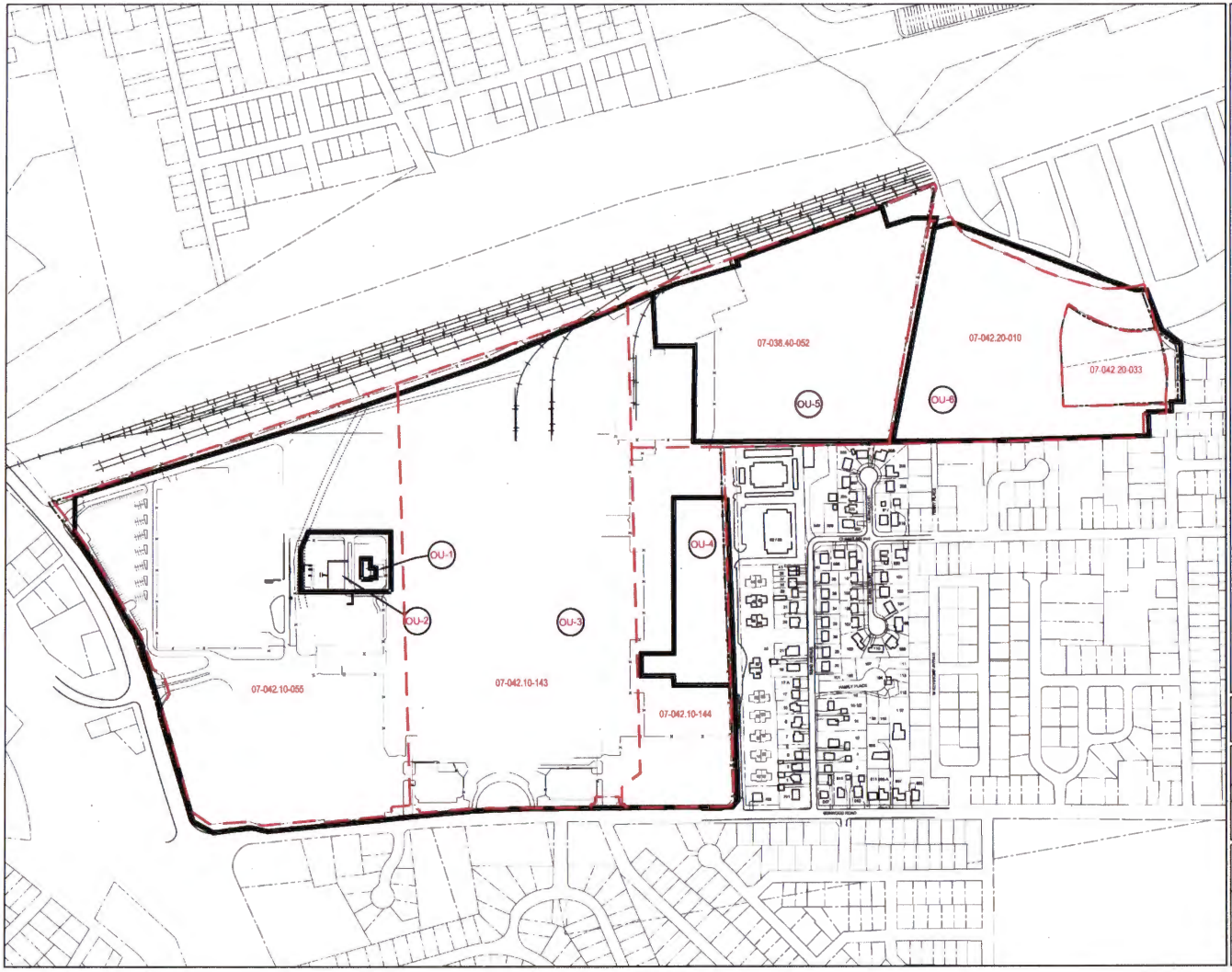


FIGURE 1
FACILITY LOCATION
REMEDIAL INVESTIGATION REPORT
FORMER GM WILMINGTON ASSEMBLY PLANT
Wilmington, Delaware

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

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



0 100 200ft

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FENCELINE
- RAILWAY
- APPROXIMATE LOCATION OF FORMER OPEN DITCH
- OPERABLE UNIT BOUNDARY
- TAX PARCEL BOUNDARY

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY

FORMER WILMINGTON ASSEMBLY PLANT

COCR

2019 SITE TAX PARCELS

GHD

Source Reference:		
Project Manager: G. CARLI	Reviewed By:	Date: DECEMBER 19
Scale: 1"=500'	Project N°: 17338-00	Report N°: PRES008 / Drawing N°: 2

17338-00(PRES008)-F-02 2 DEC 19

FIGURE 3


MW-29
MW-35
MW-111
DA-MW44
MW-47
DA-MW43
MW-37
MW-46
DA-MW42
DA-MW-41
SVE-01
SVE-02
DA-MW-50
DA-MW45R
DA-MW-40
SVE-03
MW-36D
DA-MW-49
SVE-04
MW-36S
SVE-05
DA-MW-39
ANCHOR BUILDING
SVE-06
MW-30
DA-MW-38
MW-31
READ AVENUE
FAMILY PLACE
DODSON AVENUE
LEGEND
APPROXIMATE FACILITY BOUNDARY
FENCELINE
RAILWAY
BENZENE GROUNDWATER PLUME (ABOVE DNREC SCREENING LEVEL 0.46 ug/L) BASED ON 2012, 2015 AND 2018 DATA
BENZENE GROUNDWATER PLUME (ABOVE USEPA MCL 5.0 ug/L FOR BENZENE) BASED ON 2012, 2015 AND 2018 DATA
INFERRED GROUNDWATER PLUME EXTENT
OU-4 BOUNDARY AREA
SVE CONVEYANCE PIPING
SVE CATALYTIC OXIDIZER UNIT
LEGEND FOR SAMPLES:
GROUNDWATER MONITORING WELL
SOIL VAPOR EXTRACTION WELL
MW-44, WHICH IS UPGRADIENT FROM MW-47, IS NON-DETECT AND IS SCREENED AT THE SAME ELEVATION AS MW-47
figure 3
OU-4 PROPOSED PLAN OF REMEDIAL ACTION
FORMER GM WILMINGTON ASSEMBLY PLANT
Wilmington, Delaware
17338-00(PRES010)-FIGURE 3 FEB 21/2020

Glossary of Terms Used in this Proposed Plan

Bio-remediated	Using naturally occurring or introduced micro-organisms to consume and break down environmental pollutants in order to clean up a polluted site.
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.
Contaminated Materials Management Plan (CMMP)	A written plan specifying how potentially contaminated material at a Site will be sampled, evaluated, staged, transported and disposed of properly.
Environmental Covenant	Environmental covenant is a document attached to a property deed that restricts the use of the property due to environmental contamination to protect human health.
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Non-Aqueous Phase Liquid (NAPL)	NAPLs are petroleum hydrocarbons that exist as a separate phase when in contact with water and/or air.
Risk	Likelihood or probability of injury, disease, or death.
Restricted Use	Commercial or Industrial setting
Remediation Section (RS)	Remediation Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use, from dry cleaners to chemical companies.
Sub-Slab	Beneath a concrete floor slab.
Underground Storage Tanks (USTs)	Storage tanks under the ground surface typically used to hold petroleum products or other chemicals.
Vapor Intrusion	Vapor intrusion is a process by which chemicals in groundwater, soil gas or soil can migrate from the sub-surface into buildings where they can present a health risk.