



# PHASE I ENVIRONMENTAL SITE ASSESSMENT



*Prepared for:*

**Premier Storage Investors**  
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Chip Campbell

## Phase I Environmental Site Assessment

2419 Route 33  
Neptune, New Jersey 07753

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**EMG Project Number:**  
138092.19R000-001.135

**Date of Report:**  
May 24, 2019

**On Site Date:**  
May 16, 2019



engineering | environmental | capital planning | project management

A Bureau Veritas Group Company



### Project Summary Table

Report Section	Acceptable	Routine Solution	Phase II	REC	Estimated Cost
Significant Data Gaps	Yes				
Current Use of Project	Yes				
Hazardous Materials	Yes				
Storage Tanks	Yes				
Waste Generation	Yes				
Surface Areas	No (1)	Yes		No	To Be Determined
Adjoining Property Use	Yes				
Historical Review	No (2)			Yes	TBD
Project Regulatory Database Review	Yes (3)			Historical	N/A
Off-Site Regulatory Database Review	Yes				
Vapor Migration	Yes				
Asbestos	No (4)	Yes		No	N/A
Radon Gas	Yes				
Lead-Based Paint	Yes				
Lead in Drinking Water	Yes				
Moisture Conditions	No (5)			No	NA

Conditions noted in the Project Summary Table are representative of the overall conditions of the property. The Project Summary Table should not be used as a stand alone document. REC - Recognized Environmental Condition, as defined by ASTM E1527-13.

**Footnotes:**

1. One apparent potable well was identified on the eastern portion of the Project. According to the POC, the well has been out of use since the Project was connected to city water.

EMG recommends that documentation confirming proper abandonment of all onsite wells be provided for review. If this information is unavailable or inconclusive, EMG recommends an inspection of the well be performed and the well closed according to all applicable regulations.

2. An gasoline underground storage tank (UST) was reportedly formerly located at the Project on the northern side of the eastern garage building. In addition, a previous 1996 Phase I ESA identified or suspected six USTs to be located at the Project. Two of these were recently removed and are discussed in the Regulatory Review discussion below. The remaining were reportedly located between the garage buildings. Furthermore, a vent pipe was identified adjacent to the residential structure. However, it could not be verified whether the vent was associated with an AST within the structure or a potential UST. No information was provided by the client or identified via local governmental agencies concerning the disposition of the USTs. EMG has no knowledge of on-site subsurface conditions or whether or not the USTs were removed or abandoned in place. Based on this information, the potential former USTs at the Project represents a recognized environmental condition.



The Project utilizes two septic systems. One is associated with the residence at the Project and the other is associated with the commercial operations and is located on the eastern portion of the Project. Based on the commercial use of the Project and unknown disposal practices, the septic system represents a recognized environmental condition associated with the Project.

EMG recommends that a Phase II subsurface investigation to include GPR be conducted to further evaluate the identified recognized environmental conditions. Additional actions may be recommended based on the results of the subsurface investigation.

3. The review of the historical activities at the Project identified LUST and SHWS cases and three removed USTs. A Site Investigation Report/UST Closure Report was prepared by Lisko Environmental, LLC, dated May 16, 2019. The two USTs were removed on October 20 and December 3, 2018. Tank 1 was a 5,000-gallon heating oil UST and tank two was a 4,000-gallon heating oil UST. A third UST was discovered near Tank 1 and was removed on December 3, 2018 as well. Tank 3 was an 8,000-gallon fuel oil UST. Tanks 1 and 3 were located on the northwestern portion of the Project in a vegetated area. Tank 2 was located west of the greenhouse buildings on the southern portion of the Project. Fifteen soil borings were advanced in the areas of the USTs. Three temporary groundwater monitoring wells were installed downgradient of the USTs. The results from the soil sampling identified extractable petroleum hydrocarbons above 1,000 ppm in soil samples SB-13 and SB-14, sample SB-13 was further analyzed for naphthalene and 2-methylnaphthalene. The results indicated that the 2-methylnaphthalene was above the screening level for impact to groundwater of 5 ppm. As such the sample was further analyzed via synthetic precipitation leachate procedure (SPLP). The report concluded that the results from the samples collected were not above applicable NJDEP standards, as such, no additional action or investigation was recommended. A Draft RAO for unrestricted use was submitted to the NJDEP on May 16, 2019.

Based on the above information, the recently removed USTs represent a historical recognized environmental condition associated with the Project. No further action or investigation is recommended regarding the recently removed USTs or LUST/SHWS case.

4. Based on the date of construction (1931), there is a potential that asbestos-containing materials (ACM) exist at the Project. The suspect asbestos containing ceiling tiles were observed in poor condition. The remaining suspect ACM were observed in generally good condition. Based on the scope of work, these materials were not sampled.

The suspect materials should be surveyed prior to demolition by a licensed asbestos contractor in accordance with all applicable federal, state, and local regulations. Removal operations should be supervised by an independent, third-party industrial hygiene firm.

5. A moisture condition was observed in the garages on ceiling tiles. The area affected by the moisture was approximately 100 square feet in size. The structures are planned for demolition; therefore, no further action is recommended.

# TABLE OF CONTENTS

- 1.0 Executive Summary ..... 1
  - 1.1 Findings, Opinions, & Conclusions ..... 2
  - 1.2 Recommendations ..... 4
  - 1.3 Certification ..... 4
  - 1.4 Reliance ..... 4
- 2.0 Scope of Work ..... 5
  - 2.1 Purpose ..... 5
  - 2.2 Scope of Work ..... 5
  - 2.3 ASTM E1527 Non-Scope Considerations ..... 5
- 3.0 User Provided Information ..... 7
  - 3.1 User Questionnaire ..... 7
  - 3.2 Environmental Lien/AUL Search ..... 7
- 4.0 Physical Setting ..... 8
  - 4.1 Topography ..... 8
  - 4.2 Geology ..... 8
  - 4.3 Hydrogeology ..... 8
  - 4.4 Soils ..... 9
- 5.0 Site Reconnaissance ..... 10
  - 5.1 Units Observed ..... 10
  - 5.2 Project Use ..... 13
  - 5.3 Hazardous Materials and Petroleum Products ..... 15
  - 5.4 Waste Generation, Storage, and Disposal ..... 19
  - 5.5 Surface Areas ..... 22
  - 5.6 Utilities, Heating, and Cooling ..... 23
  - 5.7 Adjoining Property Use ..... 24
  - 5.8 Interviews ..... 25
    - 5.8.1 Key Site Manager ..... 25
    - 5.8.2 Current Occupants ..... 26
    - 5.8.3 Current Owner ..... 26
    - 5.8.4 Past Owners and Occupants ..... 26
    - 5.8.5 Nearby Owners and Occupants ..... 26



**6.0 Historical Use Information** ..... 27

**6.1 Project Historical Use** ..... 27

**6.2 Off-Site Historical Use** ..... 29

**6.3 Historical Environmental Documentation** ..... 29

**7.0 Environmental Records Review** ..... 32

**7.1 Regulatory Database Review** ..... 32

        7.1.1 Project Regulatory Database Review ..... 33

        7.1.2 Off-Site Regulatory Database Review ..... 34

        7.1.3 Vapor Migration ..... 37

**7.2 Local Agency Records** ..... 38

**8.0 ASTM E1527 Non-Scope Considerations** ..... 40

**8.1 Asbestos** ..... 40

**8.2 Radon Gas** ..... 41

**8.3 Lead-Based Paint** ..... 41

**8.4 Lead in Drinking Water** ..... 42

**8.5 Moisture Conditions** ..... 42

**8.6 Wetlands** ..... 43

**8.7 Flood Zone** ..... 43

**9.0 Limitations, Key Terms, and References** ..... 45

**9.1 Limitations** ..... 45

**9.2 References** ..... 45

**9.3 Key Terms** ..... 46

## TABLE OF APPENDICES

Appendix A: Photographs

Appendix B: Field Sketch

Appendix C: Maps and Aerial Photographs

- Tax Map
- Aerial Photographs
- Fire Insurance Maps
- Topographic Maps
- Other Maps

Appendix D: Questionnaires

Appendix E: Laboratory Analytical Results

Appendix F: Supporting Documentation

- Assessor Records
- Local Agency Records
- City Directories

Appendix G: Historical Environmental Documents

Appendix H: Regulatory Database Report and Physical Setting Report (PSR)

Appendix I: Key Personnel Resumes

## 1.0 Executive Summary

EMG performed a Phase I Environmental Site Assessment of the property summarized below on May 16, 2019.

Project Description	
<b>Project Name:</b>	2419 Route 33 (the "Project")
<b>Project Address:</b>	2419 Route 33, Neptune, Monmouth County, New Jersey 07753
<b>Additional Current/Historical Addresses:</b>	2425 Corlies Avenue 2419 through 2425 Route 33
<b>Assessor Parcel Number(s):</b>	Block 1709, Lot 1
<b>Site Visit Date:</b>	May 16, 2019
<b>Property Type:</b>	Agricultural
<b>Land Area (acres)/Source:</b>	3.75 from assessing records
<b>Number of Units:</b>	1 unit
<b>Number of Buildings:</b>	3 plus 22 greenhouses
<b>Year Constructed:</b>	1931
<b>Basement:</b>	Yes
<b>Building Area (SF)/Source:</b>	Not reported from client
<b>Domestic Sewage:</b>	Septic system



Project facing north



Project facing east



Project facing south



Project facing west

## 1.1 Findings, Opinions, & Conclusions

EMG performed a *Phase I Environmental Site Assessment* using methods and procedures consistent with good commercial and customary practice in conformance with ASTM E1527-13 of 2419 Route 33, Neptune, Monmouth County, New Jersey 07753. Any exceptions to, or deletions from, this practice are described in Section 2 of this report.

This assessment has revealed no evidence of recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), controlled recognized environmental conditions (CRECs), significant data gaps, or significant business environmental risks in connection with the Project, except as discussed below.

### Surface Areas

#### **Business Environmental Risk: Well identified**

One apparent potable well was identified on the eastern portion of the Project. According to the POC, the well has been out of use since the Project was connected to city water.

***EMG recommends that documentation confirming proper abandonment of all onsite wells be provided for review. If this information is unavailable or inconclusive, EMG recommends an inspection of the well be performed and the well closed according to all applicable regulations.***

### Historical Review

#### **Recognized Environmental Condition: Former USTs**

An gasoline underground storage tank (UST) was reportedly formerly located at the Project on the northern side of the eastern garage building. In addition, a previous 1996 Phase I ESA identified or suspected six USTs to be located at the Project. Two of these were recently removed and are discussed in the Regulatory Review discussion below. The remaining were reportedly located between the garage buildings. Furthermore, a vent pipe was identified adjacent to the residential structure. However, it could not be verified whether the vent was associated with an AST within the structure or a potential UST. No information was provided by the client or identified via local governmental agencies concerning the disposition of the USTs. EMG has no knowledge of on-site subsurface conditions or whether or not the USTs were removed or abandoned in place. Based on this information, the potential former USTs at the Project represents a recognized environmental condition.



## Septic System

The Project utilizes two septic systems. One is associated with the residence at the Project and the other is associated with the commercial operations and is located on the eastern portion of the Project. Based on the commercial use of the Project and unknown disposal practices, the septic system represents a recognized environmental condition associated with the Project.

***EMG recommends that a Phase II subsurface investigation to include GPR be conducted to further evaluate the identified recognized environmental conditions. Additional actions may be recommended based on the results of the subsurface investigation.***

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## Project Regulatory Database Review

### **Historical Recognized Environmental Condition: LUST release identified**

The review of the historical activities at the Project identified LUST and SHWS cases and three removed USTs. A Site Investigation Report/UST Closure Report was prepared by Lisko Environmental, LLC, dated May 16, 2019. The two USTs were removed on October 20 and December 3, 2018. Tank 1 was a 5,000-gallon heating oil UST and tank two was a 4,000-gallon heating oil UST. A third UST was discovered near Tank 1 and was removed on December 3, 2018 as well. Tank 3 was an 8,000-gallon fuel oil UST. Tanks 1 and 3 were located on the northwestern portion of the Project in a vegetated area. Tank 2 was located west of the greenhouse buildings on the southern portion of the Project. Fifteen soil borings were advanced in the areas of the USTs. Three temporary groundwater monitoring wells were installed downgradient of the USTs. The results from the soil sampling identified extractable petroleum hydrocarbons above 1,000 ppm in soil samples SB-13 and SB-14, sample SB-13 was further analyzed for naphthalene and 2-methylnaphthalene. The results indicated that the 2-methylnaphthalene was above the screening level for impact to groundwater of 5 ppm. As such the sample was further analyzed via synthetic precipitation leachate procedure (SPLP). The report concluded that the results from the samples collected were not above applicable NJDEP standards, as such, no additional action or investigation was recommended. A Draft RAO for unrestricted use was submitted to the NJDEP on May 16, 2019.

***Based on the above information, the recently removed USTs represent a historical recognized environmental condition associated with the Project. No further action or investigation is recommended regarding the recently removed USTs or LUST/SHWS case.***

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## Asbestos

### **Business Environmental Risk: Suspect ACM Identified**

Based on the date of construction (1931), there is a potential that asbestos-containing materials (ACM) exist at the Project. The suspect asbestos containing ceiling tiles were observed in poor condition. The remaining suspect ACM were observed in generally good condition. Based on the scope of work, these materials were not sampled.

***The suspect materials should be surveyed prior to demolition by a licensed asbestos contractor in accordance with all applicable federal, state, and local regulations. Removal operations should be supervised by an independent, third-party industrial hygiene firm.***

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## Moisture Conditions

### **Business Environmental Risk: Moisture condition identified**

A moisture condition was observed in the garages on ceiling tiles. The area affected by the moisture was approximately 100 square feet in size.

***The structures are planned for demolition; therefore, no further action is recommended.***

## 1.2 Recommendations

EMG recommends the following:

Recommendation	Estimated Cost
A file review is recommended to further evaluate the recognized environmental condition.	\$190/hour
A comprehensive demolition ACM Survey of the Project.	To Be Determined
Inspection of the well be performed and removed according to regulation.	To Be Determined

## 1.3 Certification

EMG certifies that EMG has no undisclosed interest in the subject property, that EMG's relationship with the Client is at arms-length, and that EMG's employment and compensation are not contingent upon the findings or recommendations provided in the Report.

If you have any questions regarding this report, please contact Jennifer L. Upchurch at (800) 733-0660 x7626 or [jlupchurch@emgcorp.com](mailto:jlupchurch@emgcorp.com).

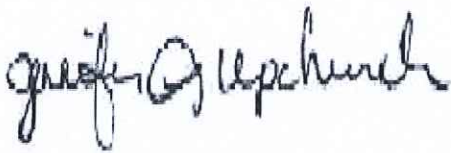
Surveyed By: Josey Curley, Project Manager

Written By: Josey Curley, Project Manager

Environmental Professional and Reviewed By:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Project. I have developed and performed the all appropriate inquiries in conformance with the standard and practices set forth in 40 CFR Part 312.



Jennifer L. Upchurch, Senior Environmental Consultant

## 1.4 Reliance

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and EMG.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of EMG. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk, without liability to EMG.

## 2.0 Scope of Work

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### 2.1 Purpose

The purpose of this report is to provide the Client the results of a commercially prudent and reasonable inquiry designed to identify recognized environmental conditions at the Project taking into account reasonably ascertainable information. In accordance with ASTM E1527-13, the level of environmental assessment was guided by several factors, including the type of property and the risk tolerance of the user.

The user informed EMG that the purpose of the assessment is for financing.

### 2.2 Scope of Work

The assessment was conducted utilizing generally accepted Phase I industry standards, using American Society for Testing and Materials (ASTM) Standard Practice E 1527-13.

This assessment is based on the evaluation of the information gathered, laboratory analyses of samples collected (when required), and accessibility at the time of the assessment.

The Scope of Work included an evaluation of:

- Interviews with individuals knowledgeable about the Project for the purpose of gathering information regarding the potential for contamination at the Project.
- Available pertinent documents obtained by EMG or provided by the client.
- Reasonably ascertainable federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Project.
- The Project history in an attempt to identify possible ownership(s) and/or uses, as identified through review of reasonably ascertainable standard historical sources.
- The physical characteristics of the Project, as identified through review of reasonably ascertainable topographic data, wetlands, soils, geology, and groundwater data.
- Current Project conditions (as applicable) as they pertain to the presence or absence of: facility storage tanks, drums, containers (above or below ground), etc., transformers and other electrical equipment which utilize fluid which may potentially contain PCBs, the use of hazardous materials/chemicals and petroleum products, and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes.
- An evaluation of information contained in programs such as the NPL, SEMS, CERCLIS, SHWS, RCRIS, SWF, LUST, and other governmental information systems within specific search distances of the Project. This evaluation was performed to identify sites that represent a recognized environmental condition. The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The search is designed to meet the requirements of ASTM Standard Practice E 1527-13. The information provided is assumed to be correct and complete.
- Visual observation of the adjoining properties to identify high-risk neighbors and the potential for known or suspected contamination to migrate onto the Project.

### 2.3 ASTM E1527 Non-Scope Considerations

At the Client's request, the assessment included a screening approach for the following Non-ASTM Considerations, which are otherwise beyond the Scope of ASTM E1527-13.

Non-ASTM Considerations	
<b>Asbestos Containing Materials:</b>	The identification of suspect asbestos containing materials in accessible areas. Sampling of suspect materials was not performed.
<b>Radon Gas:</b>	Radon gas propensity, through the review of the USEPA's Map of Radon Zones.
<b>Lead-Based Paint:</b>	The identification of lead-based paint for residential and daycare properties constructed prior to 1978. Sampling of suspect materials was not performed.
<b>Lead In Drinking Water:</b>	A screening for lead in water, based on information provided by the municipal water provider.
<b>Moisture Conditions:</b>	The identification of visible moisture conditions and conditions conducive for moisture conditions. In addition, EMG interviewed Project personnel regarding any known or suspected moisture conditions, water intrusion, or mildew like odors.
<b>Wetlands:</b>	Review of readily available wetlands map data available from the US Fish and Wildlife Service. A site specific wetland delineation is beyond the scope of this assessment.
<b>Flood Zone:</b>	Review of readily available flood zone map designations available from regulatory agencies, such as the Federal Emergency Management Agency (FEMA).

### 3.0 User Provided Information

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In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments") (if desired), the user must provide certain information (if available) identified in the User Questionnaire to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Within this Phase I Environmental Site Assessment, EMG's reference to the Client follows the ASTM guide's definition of user, that is, the party that retains EMG for the preparation of a baseline ESA of the Project. A user may include, without limitation, a purchaser, potential occupant, owner, existing or potential mortgagee, lender, or property manager of the Project.

#### 3.1 User Questionnaire

EMG submitted the following User Questionnaire to the user pursuant to the responsibilities described in Section 6 of ASTM Standard E 1527-13. All Appropriate Inquiries (40 CFR Part 312) requires that these questions be answered by or on behalf of a party seeking to qualify for limited liability protections to CERCLA liability.

The User Questionnaire was completed by a designated representative of the user. Refer to Section 1.1 for further discussion of the USTs identified based on the responses provided by the user. A copy of the User Questionnaire is included in Appendix D.

#### 3.2 Environmental Lien/AUL Search

The presence of an Activity and Use Limitation (AUL) at a property is an indication that there may be residual levels of hazardous substances or petroleum products present above unrestricted land use levels. Although Environmental Liens and AULs are often recorded with the property deed at the local land title office, in some cases they are filed in a separate environmental agency database or in project documentation, such as agency closure letters. ASTM E1527-13 does not require the environmental professional to undertake a review of recorded land title records and judicial records for environmental liens and AULs. Such a review is performed at the discretion of the user, based on their need to meet the requirements of 40 CFR 312.20 and 312.25.

The user did not engage EMG to review title and judicial records for environmental liens or AULs recorded against the Project. Furthermore, these documents were not provided to EMG for review. The lack of this information represents a data gap. However, based on the other information obtained during the completion of this assessment, the lack of the Environmental AUL/Lien search does not represent a significant data gap.

## 4.0 Physical Setting

ASTM E1527-13 requires that the current 7.5-minute USGS Topographic Map (or equivalent) showing the area on which the Project is located be reviewed. Additional physical setting sources, such as soil survey maps, groundwater maps and geologic maps may be obtained and reviewed at the discretion of the environmental professional. The purpose of this review is to evaluate whether hazardous substances or petroleum products are likely to migrate to the Project.

### 4.1 Topography

The most recent version of the USGS Topographic Map available is discussed below. Historical USGS Topographic Maps, if available, are discussed in Section 6.

USGS Topographic Map and Google Earth Review	
<b>Topographic Map Name:</b>	Asbury Park, New Jersey
<b>Topographic Map Year:</b>	2016
Project Topography	
<b>Upper Elevation (feet):</b>	55
<b>Lower Elevation (feet):</b>	45
<b>Surface Slope:</b>	Gently sloping
<b>Slope Direction:</b>	Northeast
General Vicinity Topography	
<b>Slope Direction:</b>	Northeast
<b>Nearest Surface Water Feature:</b>	Hollow Brook
<b>Nearest Surface Water Feature Distance:</b>	1.2 miles
<b>Nearest Surface Water Feature Direction:</b>	Northeast

### 4.2 Geology

The generalized geology of the Project area was researched using seamless USGS geological maps provided in the ERIS Physical Setting Report (PSR) and/or readily available geologic maps. The PSR is included in Appendix H.

Generalized Geology	
<b>Source:</b>	ERIS
<b>Unit Name:</b>	Lower Member of the Kirkwood Formation
<b>Primary Rock Type:</b>	Clay or mud
<b>Secondary Rock Type:</b>	Silt

### 4.3 Hydrogeology

Groundwater conditions at the Project are estimated based on reasonably available data such as groundwater maps, previous subsurface investigations conducted at, or in the vicinity of the Project, and local conditions. Shallow groundwater flow is generally

expected to follow the ground level slope of surface elevations towards the nearest open body of water. Estimated groundwater levels may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations.

Hydrogeology	
<b>Source:</b>	Groundwater well data provided by ERIS
<b>Estimated Depth to Shallow Groundwater:</b>	20 feet below ground surface
<b>Estimated Direction of Shallow Groundwater Flow:</b>	Northeast

#### 4.4 Soils

The Soil Survey Geographic Database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Review of the SSURGO data available in the PSR (Appendix H) and/or from the NRCS Web Soil Survey identified the following soil type(s) at the Project:

Soil Series Name	Drainage	Texture
Evesboro	Excessively drained	Sand
Freehold-Urban land complex	Well drained	Sandy loam
Urban land	Not Applicable	Not Applicable

## 5.0 Site Reconnaissance

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property. In accordance with ASTM E1527-13, EMG visually observed the periphery of the Project and all structures to the extent not obstructed by obstacles. In addition, EMG visually observed interior common areas, maintenance and repair areas, and a representative sample of occupant spaces. In general, EMG does not look under floors, above ceilings, behind walls, in confined spaces, in transformer vaults, or in other areas not considered to be safe to access.

Site Reconnaissance Conditions	
<b>Date Completed:</b>	May 16, 2019
<b>EMG Project Manager:</b>	Josey Curley
<b>Weather Conditions:</b>	Partly cloudy
<b>Temperature (F):</b>	60s
<b>Percent of Units Observed:</b>	100%
<b>Access Limitations:</b>	A representative sample of interior areas was not made available to EMG for access. Specifically, EMG was unable to access the residence. EMG was able to interview the occupant, who stated there are no fuel storage tanks in the basement. The lack of access represents a data gap. However, based on the conditions observed in the accessed areas, discussions with the site contact, and review of other available information, the lack of access does not represent a significant data gap.

### 5.1 Units Observed

The units observed at the Project are discussed below.

Commercial Units			
Unit #	Occupant Name	Observed	Occupant Operations
NA	Variety Growers	Yes	Nursery and sales





Garage



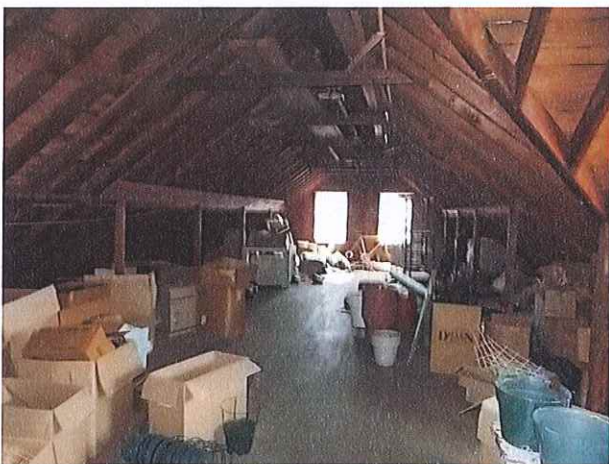
Garage interior



Garage 2 interior



Annex



Attic



Beehives



Cell tower



Foundation slab



Greenhouse storage



Greenhouses



Removed AST



Removed central UST



Removed NW UST



Removed west UST



Residence



Restroom



Vent pipe

## 5.2 Project Use

Environmentally Suspect Project Use	
Project Use	Currently Located at the Project
<b>Cellular Communications Equipment:</b>	Yes. Further discussed at end of Section 5.2.
<b>Commercial Printing:</b>	No
<b>Dialysis Facility:</b>	No
<b>Dry Cleaner:</b>	No
<b>Emergency Generator or Diesel Fire Pump:</b>	No
<b>Gas Station:</b>	No
<b>Significant Industrial Use:</b>	No
<b>Landfill:</b>	No
<b>Machine Shop:</b>	No
<b>Meth Lab:</b>	No
<b>Military Use:</b>	No
<b>Petroleum Exploration/Production:</b>	No
<b>Photograph/X-Ray Developing:</b>	No
<b>Vehicle Repair:</b>	No
<b>Other Environmentally Suspect Project Use:</b>	No

Cellular Communications Equipment	
<b>Location of Equipment:</b>	Western portion
<b>Equipment Owner:</b>	Unknown
<b>Access Available to Interior:</b>	No
<b>Evidence of Emergency Generator:</b>	No
<b>Evidence of Underground Storage Tank:</b>	No
<b>Staining Observed:</b>	No
<b>Listed on Regulatory Database:</b>	No
<b>Conclusion:</b>	Based on the information provided above, this Project use does not represent a recognized environmental condition.



Cell tower

### 5.3 Hazardous Materials and Petroleum Products

Accessible interior and exterior areas of the Project were observed for the presence of hazardous materials and petroleum products.

EMG evaluated any observed manways, vent pipes, fill connections, concrete pads, and unknown saw cuts to determine if USTs are present at the Project, or if USTs were historically located at the Project. In addition, the Key Site Manager and other property management personnel were interviewed regarding the presence of USTs at the Project.

EMG observed the Project for the presence of potentially PCB-containing equipment such as electrical transformers and hydraulic lifts. Equipment installed after 1979 is unlikely to contain PCBs.

EMG observed the Project for visual evidence of petroleum and natural gas pipelines, such as pipeline markers.

Storage and Use of Hazardous Materials and Petroleum Products	
Feature	Identified at Project
<b>Drums and Small Containers:</b>	Yes. Further discussed below.
<b>Underground Storage Tanks (USTs):</b>	No
<b>Aboveground Storage Tanks (ASTs):</b>	Yes. Further discussed below.

Storage and Use of Hazardous Materials and Petroleum Products	
Feature	Identified at Project
<b>Oil Cooled Transformers:</b>	Yes. Further discussed below.
<b>Hydraulic Elevators:</b>	No
<b>Hydraulic Lifts:</b>	No
<b>Other Hydraulic Equipment:</b>	No
<b>Petroleum or Natural Gas Pipelines:</b>	No

Drums and Small Containers			
Material	Quantity	Storage Location	Spills or Leaks
Janitorial and maintenance supplies	Retail-size containers	Janitor closets and other designated areas	No
Propane	3-gallon containers	Garage	No
Pesticides	Retail-size containers	Storage cabinet in garage	No

Review of the hazardous materials use and storage at the Project did not identify any recognized environmental conditions or environmental concerns with regards to the materials listed in the table above.



Pesticide applicator



Pesticide storage



Propane

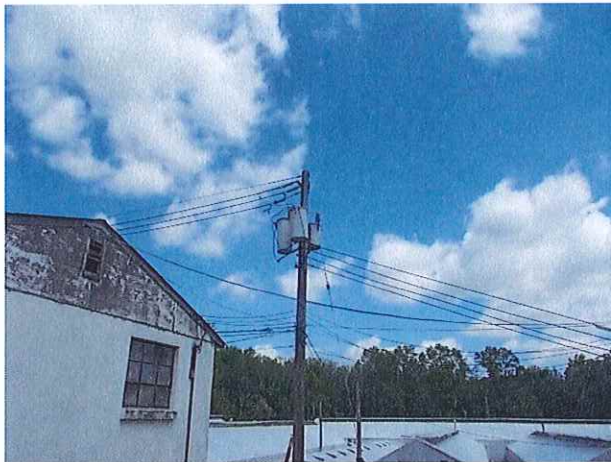
Aboveground Storage Tanks	
<b>Tank #:</b>	1
<b>Owner:</b>	Property
<b>Year Installed:</b>	Unknown
<b>Contents:</b>	Heating oil
<b>Use of Contents:</b>	Agricultural
<b>Capacity:</b>	275 gallons
<b>Visually Observable:</b>	Yes
<b>Weep Holes Present:</b>	Not Applicable
<b>Secondary Containment:</b>	No
<b>Location:</b>	Northwest portion
<b>Tank Construction:</b>	Single-wall steel
<b>Registered With State:</b>	Not required
<b>Leaks Observed:</b>	No
<b>Leaks Reported by POC:</b>	No
<b>Conclusion:</b>	The Key Site Manager was unaware of any past releases from the AST. Furthermore, the AST appeared to be in good condition, with no evidence of current or past releases.



AST



Oil Cooled Transformers	
<b>Type:</b>	Pole-mounted
<b>Number of Units:</b>	4
<b>Owner:</b>	Utility company
<b>Labeled:</b>	Not labeled
<b>Age:</b>	Appears to have been installed after 1979
<b>PCB Status:</b>	Unlikely to be PCB-contaminated based on the apparent age of the equipment.
<b>Spills or Leaks Observed:</b>	No
<b>Conclusion:</b>	Based on the information above, the presence of this equipment does not represent a recognized environmental condition.



Pole transformers

### 5.4 Waste Generation, Storage, and Disposal

Visual observation for the generation, treatment, storage, and disposal of wastes was performed. The areas of waste generation and storage were observed for evidence of current and past releases.

Although a waste disposal regulatory compliance audit is beyond the scope of this assessment, general waste disposal procedures were evaluated to determine if any deficiencies exist that are likely to result in a release to the Project.

Waste Generation and Disposal	
Feature	Identified at Project
<b>Waste Generation:</b>	Yes. Further discussed below.
<b>Septic Systems:</b>	Yes. Further discussed below.
<b>Sewer Lift Stations:</b>	No
<b>Grease Traps:</b>	No
<b>Oil Water Separators:</b>	No
<b>Unknown Drums or Containers:</b>	No
<b>Waste Disposal Ponds or Lagoons:</b>	No

Waste Generation			
Waste Type	Disposal Method	Storage Location	Spills or Leaks
Domestic sewage	Septic system	Not applicable	No
Municipal trash	Contracted waste hauler	Dumpsters	No

Review of waste storage and disposal information did not identify any recognized environmental conditions or environmental concerns with regards to the wastes listed in the table above.



Dumpsters

Septic System	
<b>Type:</b>	Tank with leach field
<b>Wastes:</b>	Domestic sewage
<b>Year Installed:</b>	Unknown
<b>Currently Active:</b>	Yes
<b>Reported Condition:</b>	Good
<b>Leach Field Location:</b>	Adjacent east to each tank
<b>Tank Location:</b>	Shop tank central Residence tank east of house
<b>Health Department Violations:</b>	A written request for information has been submitted. A response is currently pending. A copy of the request is included in Appendix F.
<b>Conclusion:</b>	Based on the information above, the presence of the septic systems do not represent a recognized environmental condition.



Leechfield



Leechfield residence



Septic



Septic residence



Septic vent

### 5.5 Surface Areas

The interior and exterior surface areas were observed for environmentally significant features such as wells, sumps, staining, and pits.

Surface Areas	
Feature	Identified at Project
<b>Environmentally Significant Floor Drains, Sumps and Pits:</b>	No
<b>Pools of Liquid Waste:</b>	No
<b>Environmentally Significant Surface Staining:</b>	No
<b>Unusual or Noxious Chemical Odors:</b>	No
<b>Landfilling:</b>	No
<b>Significantly Stressed Vegetation:</b>	No
<b>Stormwater Retention/Detention Basins:</b>	No
<b>Domestic Water Wells:</b>	Yes. Further discussed below.
<b>Monitoring Wells:</b>	No
<b>Irrigation Wells:</b>	No
<b>Dry Wells:</b>	No
<b>Railroad Tracks:</b>	No

Wells			
Type of Well	# of Wells	Registered	Location
Water (potable)	1	Unknown	Wooded area on the east portion. The well is out of use and Project connected to city service.



Abandoned well

5.6 Utilities, Heating, and Cooling

Utilities	
<b>Domestic Water:</b>	Public utility - Township of Neptune
<b>Electricity:</b>	Public utility - Jersey Central Power and Light
<b>Natural Gas:</b>	Public utility - Jersey Central Power and Light
<b>Domestic Sewer:</b>	Septic system

Heating and Cooling	
<b>Type of Heating:</b>	Natural gas units
<b>Type of Cooling:</b>	Electric units



HVAC

### 5.7 Adjoining Property Use

The adjoining properties were visually observed for evidence of recognized environmental conditions, such as property uses likely to result in a release and visual evidence of surface migration of releases. ASTM E1527-13 defines adjoining properties as any real property that is contiguous or partially contiguous with the Project or that would be but for a street, road, or other public thoroughfare separating them. The following adjoining properties were identified:

North	
<b>Bordering Street/Road:</b>	Route 18
<b>Address Range:</b>	Not applicable
<b>Description of Property Use:</b>	Wooded land
East	
<b>Bordering Street/Road:</b>	Route 18
<b>Address Range:</b>	Not applicable
<b>Description of Property Use:</b>	Wooded land
South	
<b>Bordering Street/Road:</b>	Route 33
<b>Address Range:</b>	Not applicable
<b>Description of Property Use:</b>	Wooded land
West	
<b>Bordering Street/Road:</b>	Route 18
<b>Address Range:</b>	Not applicable
<b>Description of Property Use:</b>	Wooded land
Findings	
<b>Environmentally Suspect Uses:</b>	No environmentally suspect uses, such as gas stations or dry cleaners, were identified.
<b>Visual Evidence of a Release:</b>	No visual evidence of a release, such as staining or monitoring wells, was observed.

<b>Releases Reported:</b>	The adjacent intersection is identified on the Spills databases, indicating a release occurred at this facility.
<b>Conclusion:</b>	Refer to Section 7.1.2 for further discussion of the adjacent regulatory database listing(s). No recognized environmental conditions or environmental concerns were identified with the remaining adjacent properties.



Adjacent north wooded



Adjacent east wooded



Adjacent south wooded



Adjacent west wooded

## 5.8 Interviews

### 5.8.1 Key Site Manager

EMG made a reasonable attempt to interview the Key Site Manager as part of this assessment. In addition, a Questionnaire was provided to the Key Site Manager to assist EMG in determining if recognized environmental conditions exist at the Project. Responses from the Key Site Manager are discussed below.

Key Site Manager Interviews			
Name	Relationship To Property	Years With Property	Telephone Number
Doug Fight	Owner	80 years	732.610.7070

A Key Site Manager Questionnaire was not completed. The lack of this information represents a data gap. However, based on the other information obtained during the completion of this assessment, the lack of the Key Site Manager Questionnaire does not represent a significant data gap. A copy of the Key Site Manager Questionnaire is included in Appendix D.

## 5.8.2 Current Occupants

EMG made a reasonable attempt to interview all major occupants and also those other occupants whose operations are likely to indicate a recognized environmental condition.

No occupants of the Project were available or would agree to an interview. The lack of occupant interviews represents a data gap. However, based on the conditions observed in the accessed areas, discussions with the site contact, and review of other available information, the lack of this information does not represent a significant data gap.

## 5.8.3 Current Owner

EMG submitted an Owner Questionnaire to the client in an effort to identify the owner of the Project who could be interviewed to provide information regarding proceedings involving the Project.

The Owner Questionnaire was completed by a designated representative of the owner. No environmentally significant information was identified based on the responses provided by the owner. A copy of the Owner Questionnaire is included in Appendix D.

## 5.8.4 Past Owners and Occupants

No past owners of the Project, who likely would have material information regarding recognized environmental conditions at the Project, were identified.

## 5.8.5 Nearby Owners and Occupants

The Project was not an abandoned property with evidence of unauthorized uses or uncontrolled access; therefore, interviews were not conducted with adjoining or nearby property owners or occupants.



## 6.0 Historical Use Information

The purpose of the historical review is to determine the previous uses of the Project and surrounding area in order to identify the likelihood of past uses having led to a recognized environmental condition. Historical sources that are both reasonably ascertainable, and likely to be useful are reviewed in an attempt to document the historical use of the Project and surrounding areas dating back to 1940, or the first developed use, whichever is earlier.

Copies of representative historical maps/aerial photographs are included in Appendix C. Other historical documentation, such as City Directory abstracts, copies of building department records, and ownership records are included in Appendix F, when available.

The following standard historical sources were researched:

Standard Historical Sources		
Data Type	Source	Years Covered
<b>Aerial Photographs:</b>	Environmental Risk Information Services (ERIS)	1931, 1953, 1970, 1976, 1981, 1985, 1995, 2006, 2008, 2010, 2013, 2015, 2017
<b>Fire Insurance (Sanborn) Maps:</b>	ERIS	None identified
<b>USGS Topographic Maps:</b>	ERIS	1888, 1893, 1901, 1943, 1954, 1970, 1981, 1989, 1995, 2016
<b>Local Street Directories:</b>	ERIS	1970, 1975, 1980, 1985, 1990, 1995, 1998, 2002, 2006, 2010, 2014, 2018
<b>Building Department Records:</b>	Township of Neptune Building Department	Pending response from agency
<b>Fire Department Records:</b>	Township of Neptune Fire Department	Pending response from agency
<b>Zoning/Land Use Records:</b>	Township of Neptune Planning Department	Current
<b>Property Tax Files and Land Title Records:</b>	Monmouth County Assessor	2018-Current
<b>Key Site Manager Interview:</b>	Pre-Survey Questionnaire	1939-Current
<b>Oil and Gas Well Map:</b>	ERIS	Current
<b>Previous Environmental Reports:</b>	Refer to Section 6.3	Refer to Section 6.3
<b>Other Historical Sources:</b>	Not applicable	Not applicable

EMG was not able to obtain standard historical sources that document the Project history in five-year intervals. Furthermore, EMG was not able to document the use of the Project back to the first developed use, or back to 1940, whichever is earlier. The lack of this information represents a data gap. However, based on the other information obtained during the completion of this assessment, the lack of this information does not represent a significant data gap.

### 6.1 Project Historical Use

Based on review of the historical resources identified in Section 6.0, the following chronological history was developed for the Project.

Chronological History of Project			
From	To	Project Use	Occupants
Not Applicable	1888	No historical data available.	Not applicable
1888	1931	Naturally vegetated	Not applicable
1931	Current	Agricultural greenhouses, structures varying but always utilized as greenhouse facility	Variety Growers

Tax files and land title records can include general property information, current and historical ownership names, and title records provided by the user. Readily available ownership records are reviewed from the local tax assessor. A 50-year chain of title search was not performed based on the Scope of Work. The following ownership history was identified.

Ownership History of Project		
Year Purchased	Owner Name	Environmental Concern
1931	SHORE ORCHID GROWERS-VARIETY GROWER	No

Environmentally Suspect Former Project Use	
Project Use	Formerly Located at the Project
<b>Commercial Printing:</b>	No
<b>Dry Cleaner:</b>	No
<b>Gas Station:</b>	No
<b>Significant Industrial Use:</b>	No
<b>Landfill:</b>	No
<b>Machine Shop:</b>	No
<b>Meth Lab:</b>	No
<b>Military Use:</b>	No
<b>Petroleum Exploration / Production:</b>	No
<b>Railroad Use:</b>	No
<b>Vehicle Repair:</b>	No
<b>Other Environmentally Significant Use:</b>	No

The review of the historical data available for the Project indicated that the Project had operated as greenhouses since approximately 1931. Arsenical pesticides were historically used for control of pests in orchards since 1867. Lead arsenate was the most extensively used of the arsenical pesticides until organochlorine pesticides became available after World War II. Arsenical pesticide use continued until the mid-1960s, when their use effectively ceased due to the use of organic pesticides. Organochlorine pesticides, such as DDT, would likely have been used until the 1970s, when they were replaced with organophosphate pesticides. The organophosphate pesticides have a very short half-life in soils and groundwater and are not likely to accumulate in the environment. The organochlorine pesticides have a longer half-life, but are not likely to still be present in significant concentrations because their use ceased approximately 50 years ago. However, arsenical pesticides are persistent in the environment. Arsenic and lead accumulate in the top soil from frequent applications of lead arsenate over time. Contaminant concentrations are typically higher at the surface and decrease with depth. The application of herbicides and pesticides is typically not considered a release to the environment for regulatory purposes, and therefore does not represent a recognized environmental condition. However, a business environmental risk exists and further assessment of the near-surface soils may be warranted prior to any planned redevelopment of the Project. A previous limited subsurface investigation conducted in 1996, prior to installation of the cell tower, did not identify pesticide levels in soil above applicable regulations in the soil

samples collected. No further action or investigation is recommended.

## 6.2 Off-Site Historical Use

Based on the review of the historical resources identified in Section 6.0, the following chronological history was developed for the adjoining properties. The historical adjoining property uses were reviewed for visible evidence of a release and for environmentally suspect property uses. In addition, the regulatory database report was reviewed for evidence of a release and is discussed in Section 7.1.2.

Chronological History of Adjoining Properties			
From	To	Adjoining Property Use	Environmental Concern
North			
Not Applicable	1888	No historical data available	No
1888	1970s	Agricultural	No
1970s	Current	Agricultural and highway	No
East			
Not Applicable	1888	No historical data available	No
1888	1970s	Agricultural Residential	No
1970s	Current	Agricultural and highway	No
South			
Not Applicable	1888	No historical data available	No
1888	1970s	Agricultural	No
1970s	Current	Agricultural and highway	No
West			
Not Applicable	1888	No historical data available	No
1888	1970s	Agricultural Residential	No
1970s	Current	Agricultural and highway General commercial	No

## 6.3 Historical Environmental Documentation

In accordance with ASTM E1527-13, EMG requested that the user provide copies of previous environmental assessments for review. Furthermore, EMG may have obtained prior environmental assessments and regulatory records from local, state, and federal regulatory agencies. The purpose of reviewing prior environmental assessments is to determine if any recognized environmental conditions have previously been identified. Documentation provided to EMG which is unrelated to the completion of this report may not be reviewed.

Report Title	Prepared By	Report Date	Obtained From	Copy of Report	Concerns Identified
Phase I Environmental Site Assessment	EcolSciences, Inc.	1996	Client	Available Upon Request	Yes. Further discussed below.
Phase II Environmental Site Assessment	Ecolsciences, Inc.	1996	Client	Appended	Yes. Further discussed below.

Report Title	Prepared By	Report Date	Obtained From	Copy of Report	Concerns Identified
Phase I Environmental Site Assessment	Envirotactics	July, 2018	Client	Appended	Yes. Further discussed below.
Site Investigation	LISKO	May 16, 2019	Client	Appended	Yes. Further discussed below.
Draft RAO	LISKO	May 16, 2019	Client	Appended	Yes. Further discussed below.

### **Historical Underground Storage Tank (UST)**

Several USTs and ASTs were identified to be historically and currently present on the Project (at the time of the previous assessment). Documentation for removal of the historical USTs was not provided; the current USTs were pending removal at the time of the previous site walk-through. According to the property owner, the USTs had not been in service for several years, since the conversion of the property to natural gas. In addition to the USTs, staining and stressed vegetation was observed in the area of the AST at the property. Additional investigation of the storage tanks at the property should be conducted, including a geophysical investigation to confirm the absence or presence of additional USTs, removal of all USTs no longer in service, and environmental investigation of all tank areas in accordance with New Jersey Department of Environmental Protection (NJDEP) regulations.

A Site Investigation Report/UST Closure Report was prepared by Lisko Environmental, LLC, dated May 16, 2019. The two USTs were removed on October 20 and December 3, 2018. Tank 1 was a 5,000-gallon heating oil UST and tank two was a 4,000-gallon heating oil UST. A third UST was discovered near Tank 1 and was removed on December 3, 2018 as well. Tank 3 was an 8,000-gallon fuel oil UST. Tanks 1 and 3 were located on the northwestern portion of the Project in a vegetated area. Tank 2 was located west of the greenhouse buildings on the southern portion of the Project. Fifteen soil borings were advanced in the areas of the USTs. Three temporary groundwater monitoring wells were installed downgradient of the USTs. The results from the soil sampling identified extractable petroleum hydrocarbons above 1,000 ppm in soil samples SB-13 and SB-14, sample SB-13 was further analyzed for naphthalene and 2-methylnaphthalene. The results indicated that the 2-methylnaphthalene was above the screening level for impact to groundwater of 5 ppm. As such the sample was further analyzed via synthetic precipitation leachate procedure (SPLP). The report concluded that the results from the samples collected were not above applicable NJDEP standards, as such, no additional action or investigation was recommended. A Draft RAO for unrestricted use was submitted to the NJDEP on May 16, 2019. Refer to Section 1.1 for further discussion.

### **Agriculture and Commercial Greenhouse Operations**

A review of the historic aerial photographs of the subject property and interviews with the Project owner indicates the property was utilized for agricultural and commercial greenhouse purposes from at least 1931 through the date of the site walk-through. The storage and use of pesticides and other hazardous materials onsite is a REC. A Phase II Site Investigation was recommended by Envirotactics for the soil piles, sumps, drains, storm-water drains, and septic system due to the historical property usage. A subsurface investigation was conducted in 1996 prior to construction of the cell tower area. The investigation was limited to the proposed cell tower areas. No constituents were identified above action levels. Refer to Section 1.1 for further discussion.

### **Well**

Although not considered an REC, the potable well reportedly at the property was recommended to be closed in accordance with New Jersey regulations since it is out of service.

### **Suspect Asbestos**

Although inspection for possible asbestos-containing materials (ACM) was not included in the Phase I ESA scope, several areas within Project buildings were observed to contain possible ACM. A formal ACM inspection and sampling was recommended to be conducted prior to any construction or demolition activities at the site.



## 7.0 Environmental Records Review

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions. ASTM E1527-13 requires the review of reasonably ascertainable records from standard sources as defined in Section 8.2.1 of ASTM E1527-13. Additional records sources, such as local fire department records, local building department records, and local environmental health department records may be obtained and reviewed at the discretion of the environmental professional.

The availability of record information varies widely, depending on the source. Reasonably ascertainable records are those records that are publicly available, obtainable within reasonable time and cost constraints, and practically reviewable. In addition, the records must be provided by the agency within 20 calendar days of receiving a request, at no more than a nominal cost intended to cover the source's cost of retrieving and duplicating the information.

### 7.1 Regulatory Database Review

EMG obtained a regulatory database report from a commercial database provider in an effort to determine if the Project is a listed regulatory site and whether there are any mappable regulatory database sites within the search distances specified by ASTM E1527-13. EMG attempted to field-verify the locations of the identified regulatory sites, as well as confirm distances and locations relative to the Project using available mapping software. Therefore, the distances and/or directions noted in this section may not match the Database Report. In addition, EMG reviewed the unmappable sites in the database report, cross-referencing addresses and site names.

In accordance with ASTM E1527-13, regulatory files and/or records associated with standard environmental record sources may be obtained and reviewed when the files and/or records are reasonably ascertainable, the files/records are expected to contain significant information for the purpose of identifying recognized environmental conditions, and an alternative source of the information is not available. Furthermore, review of regulatory files and/or records may be limited by the scope of work. Unless otherwise noted in Section 1.1, further review of regulatory agency files and/or records is not considered to be warranted based on the general nature of the regulatory database listing, the level of detail provided in the regulatory database, the availability of information from alternative sources, and/or the low likelihood that the agency files and/or records will contain information indicating the presence of a recognized environmental condition.

A copy of the full regulatory database report is included in Appendix H.

### Regulatory Report Summary

Database	Search Radius	Target Property	Within 0.12mi	0.12mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
ALL SITES	0.25	0	6	24	-	-	30
BROWNFIELDS	0.5	0	1	0	0	-	1
DSHW	1.0	0	0	0	0	2	2
FINDS/FRS	0.125	0	3	-	-	-	3
HIS SPILL	0.125	0	15	-	-	-	15
HIST LUST	0.5	0	0	3	5	-	8
INST	0.5	0	0	1	0	-	1
LUST	0.5	1	0	2	18	-	21
NJEMS	0.25	1	5	18	-	-	24
RCRA LQG	0.25	0	1	0	-	-	1
RCRA NON GEN	0.25	0	0	3	-	-	3

Database	Search Radius	Target Property	Within 0.12mi	0.12mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
RCRA TSD	0.5	0	0	0	1	-	1
RE EVAL	1.0	0	0	0	0	1	1
SHWS	1.0	1	0	5	25	72	103
SITE REMEDIATION	0.5	1	0	6	24	-	31
SPILLS	0.125	0	11	-	-	-	11
UST	0.25	1	0	5	-	-	6
UST REM	0.5	1	0	2	0	-	3
VCP	0.5	0	0	1	5	-	6

### 7.1.1 Project Regulatory Database Review

On-Site Regulatory Database Listings		
Facility Name	Facility Address	Databases
Variety Growers	2419 Route 33/2425 Corlies Avenue	NJEMS, SITE REMEDIATION, SHWS, UST, LUST, UST REM, ALLSITES

#### **SHWS/SITE REMEDIATION**

The New Jersey Department of Environmental Protection maintains an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

- Facility Name: Variety Growers
- Facility Address: 2419 Route 33
- Status: Active 2018

The information provided is indicative of a recognized environmental condition. Refer to Section 1.1 for further discussion of the SHWS database listing for the Project.

#### **UST/UST REMOVED**

The New Jersey Department of Environmental Protection maintains a listing of all registered underground storage tanks.

- Facility Name: Variety Growers
- Facility Address: 2419 Route 33
- # of Tanks: 3
- Tank # 1 Detail: 4,000-gallons / Heating oil/ Removed
- Tank # 2 Detail: 5,000-gallons / Heating oil/ Removed
- Tank # 3 Detail: 8,000-gallons / Heating oil/ Removed

The information provided is indicative of a recognized environmental condition. Refer to Section 1.1 for further discussion of the UST database listing for the Project.

**LUST**

The LUST database is maintained the New Jersey Department of Environmental Protection and is a listing of leaking underground storage tank (LUST) incident reports. LUST records contain an inventory of reported LUST incidents. The LUST database provides the following pertinent information.

- Facility Name: Variety Growers
- Facility Address: 2419 Route 33
- Incident number: 698421
- Product: Heating oil
- NFA/NFR Letter date: Terminated
- Additional information: UST removed, cleanup pending, contained

The information provided is indicative of a recognized environmental condition. Refer to Section 1.1 for further discussion of the LUST database listing for the Project.

**Facility Index System (FINDS)**

The FINDS database cross-references various federal and state database listings and does not, in and of itself, typically contain environmentally significant information. The FINDS database provides the following pertinent information:

- Facility Name: Variety Growers
- Facility Address: 2419 Route 33
- Program Cross Referenced: NJEMS, RCRA, BR

The information provided is not indicative of a recognized environmental condition and no further action or investigation is recommended.

**Allsites/NJEMS**

These databases cross-reference various federal and state database listings and does not, in and of itself, typically contain environmentally significant information. The information provided is not indicative of a recognized environmental condition and no further action or investigation is recommended.

**7.1.2 Off-Site Regulatory Database Review**

The search distances employed for this assessment were defined by ASTM E 1527-13. Regulatory database listings, including adjoining properties, are discussed below if there is a reasonable potential to impact the Project. This determination is based on, but not limited to, factors such as the topographic gradient in relation to the Project, the estimated groundwater flow direction in the vicinity of the Project, the distance between the listed site and the Project, the type of site or materials involved, and/or whether a release to the environment is known or likely to have occurred. Regulatory database listings for adjacent and adjoining properties are not discussed unless they are deemed to be environmentally significant based on the various factors identified above.

Route 13 and Route 18	
<b>Facility Address:</b>	Route 13 and Route 18
<b>Databases:</b>	HIS SPILL, RCRA, SPILLS
<b>Distance:</b>	Adjacent
<b>Direction:</b>	Southeast
<b>Estimated Groundwater Flow:</b>	Northeast



<b>Relationship to Project:</b>	Away from the Project
<b>Release Reported:</b>	Yes
<b>Release Date:</b>	1991, 1993, 1995, 1997, 1998, 2002, 2007, 2008, 2010
<b>Contaminant(s) of Concern:</b>	Petroleum hydrocarbons Antifreeze
<b>Media Impacted:</b>	Soil Air
<b>Regulatory Status of Release:</b>	Terminated
<b>Regulatory Status Date:</b>	1991, 1993, 1995, 1997, 1998, 2002, 2007, 2008, 2010
<b>Other Significant Database Information:</b>	The spills are related to vehicle accidents or leaks from vehicles, and are considered minor. Cleanups were completed.
<b>Significant Information from Other Sources:</b>	Not Applicable
<b>Significant Factors:</b>	Current regulatory status. Estimated direction of groundwater flow. Lack of reported groundwater contamination.
<b>Conclusion:</b>	Based on the factors discussed above, this facility is unlikely to have impacted the Project and therefore does not represent a recognized environmental condition.
<b>Vapor Migration Concern:</b>	No

101 Donalds Place	
<b>Facility Address:</b>	Route 13 and Route 18
<b>Databases:</b>	HIS SPILL
<b>Distance:</b>	Approximately 50 feet
<b>Direction:</b>	North
<b>Estimated Groundwater Flow:</b>	Northeast
<b>Relationship to Project:</b>	Away from the Project
<b>Release Reported:</b>	Yes
<b>Release Date:</b>	1997
<b>Contaminant(s) of Concern:</b>	Petroleum hydrocarbons
<b>Media Impacted:</b>	Soil
<b>Regulatory Status of Release:</b>	Terminated
<b>Regulatory Status Date:</b>	1997
<b>Other Significant Database Information:</b>	None
<b>Significant Information from Other Sources:</b>	Not Applicable
<b>Significant Factors:</b>	Current regulatory status. Estimated direction of groundwater flow. Lack of reported groundwater contamination.
<b>Conclusion:</b>	Based on the factors discussed above, this facility is unlikely to have impacted the Project and therefore does not represent a recognized environmental condition.
<b>Vapor Migration Concern:</b>	No

Jersey Shore Pest Control	
<b>Facility Address:</b>	Route 13 and Route 18
<b>Databases:</b>	HIS SPILL, NJEMS, ALLSITES, FINDS
<b>Distance:</b>	Approximately 400 feet
<b>Direction:</b>	Northwest
<b>Estimated Groundwater Flow:</b>	Northeast
<b>Relationship to Project:</b>	Away from the Project
<b>Release Reported:</b>	Yes
<b>Release Date:</b>	2016
<b>Contaminant(s) of Concern:</b>	Pesticides
<b>Media Impacted:</b>	Soil
<b>Regulatory Status of Release:</b>	Terminated
<b>Regulatory Status Date:</b>	2016
<b>Other Significant Database Information:</b>	None
<b>Significant Information from Other Sources:</b>	Not Applicable
<b>Significant Factors:</b>	Current regulatory status. Estimated direction of groundwater flow. Lack of reported groundwater contamination. Distance from the Project.
<b>Conclusion:</b>	Based on the factors discussed above, this facility is unlikely to have impacted the Project and therefore does not represent a recognized environmental condition.
<b>Vapor Migration Concern:</b>	No

Shell Service Station	
<b>Facility Address:</b>	Route 133 and Fortunato Place/2439 Corlies Avenue
<b>Databases:</b>	HIS SPILL, NJEMS, ALLSITES, FINDS, BROWNFIELDS
<b>Distance:</b>	Approximately 500 feet
<b>Direction:</b>	Southwest
<b>Estimated Groundwater Flow:</b>	Southeast
<b>Relationship to Project:</b>	Parallel to the Project
<b>Release Reported:</b>	Yes
<b>Release Date:</b>	1994, 1995, 2012
<b>Contaminant(s) of Concern:</b>	Petroleum hydrocarbons Antifreeze
<b>Media Impacted:</b>	Soil and groundwater
<b>Regulatory Status of Release:</b>	Open
<b>Regulatory Status Date:</b>	2016
<b>Other Significant Database Information:</b>	None
<b>Significant Information from Other Sources:</b>	Not Applicable

<b>Significant Factors:</b>	Ongoing remediation Estimated direction of groundwater flow. Distance from the Project.
<b>Conclusion:</b>	Based on the factors discussed above, this facility is unlikely to have impacted the Project and therefore does not represent a recognized environmental condition.
<b>Vapor Migration Concern:</b>	No

206 Poplar Place	
<b>Facility Address:</b>	206 Poplar Place
<b>Databases:</b>	HIS SPILL
<b>Distance:</b>	Approximately 500 feet
<b>Direction:</b>	Northwest
<b>Estimated Groundwater Flow:</b>	Northeast
<b>Relationship to Project:</b>	Away from the Project
<b>Release Reported:</b>	Yes
<b>Release Date:</b>	1988
<b>Contaminant(s) of Concern:</b>	Petroleum hydrocarbons
<b>Media Impacted:</b>	sewer system
<b>Regulatory Status of Release:</b>	Not reported
<b>Regulatory Status Date:</b>	1988
<b>Other Significant Database Information:</b>	None
<b>Significant Information from Other Sources:</b>	Not Applicable
<b>Significant Factors:</b>	Estimated direction of groundwater flow. Lack of reported groundwater contamination. Distance from the Project. Length of time that has passed.
<b>Conclusion:</b>	Based on the factors discussed above, this facility is unlikely to have impacted the Project and therefore does not represent a recognized environmental condition.
<b>Vapor Migration Concern:</b>	No

### 7.1.3 Vapor Migration

Indoor air quality concerns are generally excluded from the scope of ASTM E1527-13 and this assessment. However, the migration of vapors caused by a release of hazardous substances or petroleum products to the environment can represent a recognized environmental condition in certain conditions.

For the purposes of this assessment, the potential for migrating vapors to represent a recognized environmental condition was evaluated using a limited screening method based on technical guidance documents from the US EPA and *ASTM E2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. In addition, screening tools created by regulatory agencies may be used to evaluate the significance of a release with respect to the vapor migration and/or vapor intrusion potential. EMG's vapor migration screening is not a human health risk assessment and is not intended to comply with regulatory requirements that might exist for the evaluation of vapor migration.

Based on the review of regulatory database records in Section 7.1.1 and 7.1.2, no vapor migration concerns were identified.

## 7.2 Local Agency Records

The following additional environmental records were reviewed to supplement the standard environmental record sources discussed in Sections 7.1.1 and 7.1.2.

Reasonably ascertainable records for the Project may be reviewed for evidence of recognized environmental conditions and other environmental concerns such as underground storage tanks, significant hazardous materials use, the presence of septic systems, and/or the presence of wells.

In the case of pending requests, upon receipt and review any significant information not identified through other sources will be provided to the Client.

Building Department	
<b>Name of Agency:</b>	Township of Neptune Building Department
<b>Contact Name/Telephone:</b>	Clerk/732.988.5200
<b>Review Method:</b>	A written request for information has been submitted. A response is currently pending.
<b>Records Date Back To:</b>	Pending response from agency
<b>Summary of Records Reviewed:</b>	No response has been received to date. However, based on review of other historical and regulatory resources, it is not anticipated the information from this agency, if any, would significantly alter the findings and conclusions of this report. Upon receipt and review, any environmentally significant information not identified through other sources will be provided to the Client.
<b>Environmentally Significant Information:</b>	Pending response from agency

Fire Department	
<b>Name of Agency:</b>	Township of Neptune Fire Department
<b>Contact Name/Telephone:</b>	Clerk/732.988.5200
<b>Review Method:</b>	A written request for information has been submitted. A response is currently pending.
<b>Records Date Back To:</b>	Pending response from agency
<b>Summary of Records Reviewed:</b>	No response has been received to date. However, based on review of other historical and regulatory resources, it is not anticipated the information from this agency, if any, would significantly alter the findings and conclusions of this report. Upon receipt and review, any environmentally significant information not identified through other sources will be provided to the Client.
<b>Environmentally Significant Information:</b>	Pending response from agency

Planning/Zoning Department	
<b>Name of Agency:</b>	Township of Neptune Planning Department
<b>Review Method:</b>	Review of online records.
<b>Current Zoning:</b>	C5- Route 33W Commercial

Environmental Health Department	
<b>Name of Agency:</b>	Neptune Township
<b>Contact Name/Telephone:</b>	Clerk/732.988.5200
<b>Review Method:</b>	A written request for information has been submitted. A response is currently pending.
<b>Records Date Back To:</b>	Pending response from agency
<b>Summary of Records Reviewed:</b>	Pending response from agency
<b>Environmentally Significant Information:</b>	Pending response from agency

## 8.0 ASTM E1527 Non-Scope Considerations

The items discussed in this section are outside the scope of ASTM E1527-13. These are included at the discretion of the user based upon the scope of work.

### 8.1 Asbestos

In accordance with the scope of work, EMG performed a screening to document the presence of known and/or suspect asbestos containing materials (ACM) at the Project. This screening approach is not a comprehensive (i.e., AHERA-Style) asbestos survey, nor is it intended to fulfill the NESHAP requirements for demolition or renovation purposes. All materials listed in Appendix G of the United States Environmental Protection Agency (USEPA) publication Managing Asbestos in Place (the "Green Book") are considered suspect.

Some non-friable building products, such as sheet vinyl floor tile, vinyl floor tile, floor tile mastic, asbestos-cement board, and roofing materials can still be manufactured with asbestos and installed in the United States. However, U.S. manufacturers have largely excluded asbestos fibers from their building products since 1981. In addition to a visual assessment, EMG reviewed provided documentation to determine if asbestos has been previously documented at the Project.

Suspect Asbestos Containing Materials		
Material	Friable	Condition
Roofing materials	No	Good
Vinyl composition tile	No	Good
Mastic	No	Good
Wallboard/joint compound	No	Good
Ceiling tile	Yes	Poor

Based on the scope of work, sampling of suspect asbestos-containing materials was not performed. Refer to Section 1.1 for further discussion.



Suspect mold



Suspect mold garage 2



9x9 asbestos suspect

## 8.2 Radon Gas

Radon originates from the natural (radioactive) breakdown of uranium in soil, rock, and water and is the second leading cause of lung cancer in the United States. Radon can move up through the ground and into living spaces through cracks and other holes in the foundation. The USEPA has developed the EPA Map of Radon Zones to assist National, State, and local organizations in implementing radon-resistant building codes. This map assigns each county in the U.S. to one of three zones based on radon potential. The USEPA uses a continuous exposure level of 4.0 pCi/L (picoCuries per liter of air) as an action level at which additional action is recommended.

The USEPA Radon Zones are defined as:

- Zone 1 (Highest potential) - Average indoor radon screening level greater than 4 pCi/L
- Zone 2 (Moderate potential) - Average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3 (Lowest potential) - Average indoor radon screening level less than 2 pCi/L.

For the purposes of this assessment, the radon zone and the use of the Project have been used to determine the level of risk associated with radon. However, the USEPA and the Surgeon General recommend testing all homes for radon, regardless of geographic location.

The property is located in USEPA Radon Zone 1.

Radon sampling was not performed based on the Scope of Work. No further action or investigation is recommended regarding radon.

## 8.3 Lead-Based Paint

All paint applied prior to 1978 is considered suspect. The basis for this determination is taken from the Lead Paint Poisoning Act passed by the Congress of the United States that banned the use of lead paint starting January 1, 1978. This screening approach does not comply with Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing. This approach does not constitute a pre-occupancy survey or the basis of attainment of "Lead Free" certification.

Considering the date of construction (1931), there is a potential that the paint at the Project is lead-based. The painted surfaces were observed to be in generally good condition, with no chipping, peeling, or cracking paint observed. Furthermore, the Project is not a residential use and there is no regulatory requirement to sample suspected lead-based painted surfaces at this time. Therefore, no samples were collected. No further action or investigation is recommended regarding lead-based paint.