



**Mid Atlantic**  
Engineering & Environmental Solutions



**Located at:**

66.48-Acre Parcel located at  
8550 Stephenson Road, Apex,  
Wake County, North Carolina

**Prepared for (User):**

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Task 4040

EXPERIENCED  
CUSTOMER FOCUSED  
INNOVATIVE

**Phase I  
Environmental Site  
Assessment Report**

WCPSS  
H-12/E-46 Site



Prepared By:  
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## ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional (EP) as defined in § 312.10 of 40 CFR 312. The undersigned EPs have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



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**In addition to the EP noted above, this report was authored by the following Mid-Atlantic professionals:**

Signatures:



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# WCPSS H-12/E-46 Site 66.48-Acre Parcel at 8550 Stephenson Road Apex, North Carolina

## 1.0 Executive Summary

Mid-Atlantic Associates, Inc. (Mid-Atlantic) has performed a Phase I Environmental Site Assessment (PESA) in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E1527-13 at the parcel located at 8550 Stephenson Road in Apex, Wake County, North Carolina (the “subject site”). The subject site is located approximately 0.25 miles west of the intersection of Thriftwood Drive and Stephenson Road in Apex, North Carolina. Site maps showing the location and layout of the subject site are provided in **Appendix 15.1** and **Appendix 15.2**.

The 8550 Stephenson Road site is currently undeveloped and wooded. The subject site is comprised of 66.48 acres of land according to the Wake County Tax Administration (Tax Office). The subject site is currently zoned Medium Density – Conditional Zoning (MD-CZ) by the Town of Apex Planning Department. According to the tax office and interview information, the land has historically been undeveloped and wooded.

Mid-Atlantic has performed this PESA in general conformance with the scope and limitations of ASTM Practice E1527-13 and 40 CFR Part 312. Any exceptions to, or deletions from, these practices are described in **Section 2.4** and **Section 11.0** of this report. This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject site.

Mid-Atlantic considers the monitoring well located on the southwest portion of the subject site and the operating LCID landfill adjacent to the southwest corner as business environmental risks. 40 CFR Part 112 requires environmental professionals to consider the information collected during performance of this PESA and render an opinion as to whether additional investigation is warranted to detect contamination. Sampling of the monitoring well may provide information to further address this environmental risk. If the well is not going to be used, we recommend that it be properly abandoned by a NC-licensed well driller. Additionally, although we have no indications that the adjacent landfill has or will adversely impact the subject site, we recommend that parties take this site and its current and future operations into account when making decisions about development alternatives.

## 2.0 Introduction

### 2.1 Purpose

The purpose of this PESA was to identify RECs that are indicative of an existing release, past release, or material threat of a release at the subject site. This PESA was performed to satisfy one of the requirements to qualify for the innocent landowner, bona fide prospective purchaser or contiguous property owner defense to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and as amended by the Small Business Liability Relief and Brownfields Redevelopment Act: that is, the practices that constitute “all appropriate inquiries



into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in 40 CFR 312. The PESA was conducted in substantial compliance with ASTM Standard Practice E1527-13 – *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and 40 CFR Part 312, *Innocent Landowners, Standards for conducting All Appropriate Inquiries*.

## 2.2 Scope of Services

This PESA was completed by gathering required information that was publicly available within reasonable time and cost constraints and which could be practically reviewed. This report will be considered valid until a period of one year following the date of our site reconnaissance. Our scope of services included the following:

- **Records Review** – Obtaining and reviewing publicly available records (of both current and historical significance) in order to help identify “recognized environmental conditions” in connection with the subject site. Those specific records reviewed, including those records which were sought and were not readily available or reasonably ascertainable, are identified in the report.
- **Site and Surrounding Properties Reconnaissance** – Conducting a site and surrounding property reconnaissance, the objective of which was to obtain information indicating the likelihood of the existence of “recognized environmental conditions” in connection with the subject site, as defined in ASTM E1527-13 and **Section 2.3**.
- **Interviews** – Conducting interviews with persons associated with the subject site and with appropriate local government officials in order to identify “recognized environmental conditions” in connection with the subject site. The specific parties interviewed and the nature and scope of the interviews are described in the report.
- **Report** – Summarizing the results of our investigation into this report and provide a professional opinion regarding the potential for environmental impact at the site and a list of the RECs.

## 2.3 Significant Assumptions and Definitions

Mid-Atlantic assumes that information provided by the User of the PESA report and those interviewed in conjunction with the PESA is true and accurate to the best of their knowledge. No other significant assumptions were used during the performance of this PESA.

The ASTM Standard Practice E1527-13 provides several definitions that are applicable to the performance of this PESA:

**Data Gap** – “The absence or inability to obtain information required by the standard, despite good faith efforts by the environmental professional (EP) to gather such information. Data gaps may result from incompleteness in any of the activities required by the standard, including, but not limited to site reconnaissance (e.g. an inability to conduct the site visit) and interviews (e.g. an inability to interview the property owner, regulatory officials, etc.).”

**REC (recognized environmental condition)** - “The presence or likely presence of any hazardous substances or petroleum products in, on or at a property: 1) due to release to the environment, 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.” For



the purposes of [the standard], “migrate” and “migration” refer to the movement of hazardous substances or petroleum products in any form including solid and liquid at the surface or subsurface and vapor in the subsurface”. Note: a vapor encroachment condition (VEC) in the subsurface is described in ASTM Guide E2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. Per the authorized contract, Mid-Atlantic was not requested to conduct a Vapor Encroachment Screen in accordance with the E2600-10 guide.

CREC (controlled recognized environmental condition) – “A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g. as evidenced by the issuance of a no further action letter (NFA) or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example property use restrictions, activity and use limitations, institutional controls, or engineering controls)”. A condition identified as a CREC does not imply that the EP has evaluated or confirmed the adequacy, implementation or continued effectiveness of the required control that has been, or is intended to be, implemented. If CREC(s) are identified during the PESA, they will be listed in the Findings section of the report and as a REC in the Conclusions Section.

HREC (historic recognized environmental condition) – “A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g. property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a HREC, the EP must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g. if there has been a change in the regulatory criteria). If the EP considers the past release to be a REC at the time the PESA is conducted, the condition shall be included in the conclusions section of the report as a REC.”

De minimis condition – “A condition that generally does not represent a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. *De minimis* conditions are not RECs nor CRECs”.

Business environmental risk – “A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice”. Client-imposed limitations and site condition limitations, if encountered, are detailed in **Section 6.1**, Methodology and Limiting Conditions.

User – “The party seeking to use Standard Practice E1527 [the standard] to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager”. The user has specific obligations for completing a successful application of the standard including: 1) completion and return of the User



Questionnaire, preferably prior to the EP visiting the site; 2) Review Title and Judicial Records for Environmental Liens and Activity and Use Limitations (AULs); 3) communicate to the EP prior to the site visit any specialized knowledge or experience pertinent to the identification of RECs in connection with the property and/or actual knowledge of any environmental liens or AULs encumbering the property; 4) communicate to the EP if a significantly lower purchase price (with regard to fair market value) is being offered on the property due to perceived or known environmental contamination (the purchase price need not be disclosed); 5) inform the EP prior to the site visit about commonly known or reasonably ascertainable information within the local community about the property that could pertain to the identification of RECs, and, 6) the user must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the property and the ability to detect releases or threatened releases by appropriate investigation. In regard to environmental liens and AULs (number "2" above), the standard does not impose on the EP the responsibility to undertake a review of recorded land title records and judicial records for environmental liens and AULs. It is the user's responsibility to either (1) engage a title company, real estate attorney, or title professional to undertake a review of reasonably ascertainable recorded land title records and lien records for environmental liens and AULs currently recorded against or relating to the property, or (2) negotiate such an engagement of a title company, real estate attorney, or title professional as an addition to the scope of work of the EP.

## **2.4 Limitations and Exceptions**

As contracted, the scope of work of this PESA did not include a detailed review of agency files on specific, environmentally-related incidents (unless mentioned in the report) which may have occurred near the subject site. It also did not include other issues that may be addressed, depending on site-specific circumstances, during commercial real estate transactions. These include, but are not limited to, asbestos containing materials, lead-based paint, radon, lead in drinking water, wetlands, cultural or natural resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, mold, radiological compounds, etc.

Our professional services have been performed using the degree of care and skill ordinarily exercised, under similar conditions, by reputable environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional information included in this report. Although this study has been a reasonably thorough attempt to identify conditions that are indicative of releases and threatened releases of hazardous substances, as well as pollutants, contaminants, petroleum and petroleum products and controlled substances on and/or off-site, there is always the possibility that potential sources of contamination have escaped detection due to the limitations of this study, the availability of historical records, the inaccuracy of governmental records and/or the presence of undetected and unreported environmental accidents. It should be noted that no environmental site assessment can completely eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a site. Mid-Atlantic reserves the right to alter our findings based on our review of any information obtained and reviewed after the date of this report.



Observations, conclusions and/or recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and or materials reviewed at the time this study was undertaken. It was not the purpose of this study to determine the actual presence, degree or extent of contamination, if any, at this site. This could require additional exploratory work, including sampling and laboratory analysis. In addition, the findings of this PESA are not intended to serve as an audit for health and safety compliance issues pertaining to improvements or activities at the site. Mid-Atlantic is not liable for the discovery or elimination of hazards that may potentially cause damage, accidents or injury. No warranty, expressed or implied, is made with regard to the conclusions and/or recommendations presented within this report.

## 2.5 Special Terms and Conditions

This PESA was conducted in accordance with the terms and conditions of Mid-Atlantic's contract with the client. It is the responsibility of the User (typically the client) to provide known site information, environmental lien and AULs, if there is a lower purchase price than the Fair Market Value due to known or perceived contamination, and the other information noted in **Section 2.3** under the "User" sub-section.

## 2.6 User Reliance

The User may rely on the contents of this PESA subject to the limitations placed on the scope, nature and type of Mid-Atlantic's services as stated in the PESA and subject to those Terms and Conditions as stated in Mid-Atlantic's contract with the client. The User and any additional parties specifically granted reliance, are the only parties to whom Mid-Atlantic grants the right to rely upon the PESA. No other third party may rely on the PESA unless the express written consent of Mid-Atlantic is first obtained. Any such reliance will be granted in accordance with the terms of the original contract between Mid-Atlantic Associates and the client.

This report is assumed "valid" under *the standard* (ASTM E1527-13) if it was completed less than 180 days prior to the date of property acquisition or the date intended for a property transaction (if the property is not being acquired). If a party other than whom the report was prepared, wishes to use the report during the 180 day period, the new user(s) must satisfy the user responsibilities noted in **Section 2.3** under the "User" sub-section.

The standard states that a PESA completed on a property within 12 months of property acquisition or the date intended for a property transaction (if the property is not being acquired), may be used provided that the following PESA components are completed or updated within 180 days of the acquisition date or date intended for a property transaction: (i) interviews with owners, operators and occupants; (ii) a search for recorded environmental cleanup liens; (iii) review of federal, tribal, state and local government records (i.e. an environmental database search); (iv) visual inspection of the property and adjacent properties; and, (v) the declaration by the EP responsible for the assessment or update.

For using PESA reports greater than 12 months old prior to the intended acquisition or transaction date, the standard outlines procedures that users should follow in Section 4.7 and 4.8 of ASTM E1527-13.



## 3.0 Site Description

### 3.1 Site Location and Legal Description

The subject site consists of a 66.48-acre undeveloped and wooded parcel recorded as Wake County Parcel ID Number 0750-54-5646 and currently assigned an address of 8550 Stephenson Road in Apex, Wake County, North Carolina. The subject site is occupied by wooded land.

### 3.2 Site and Vicinity General Characteristics

The subject site is located in a predominantly rural residential area in Apex, Wake County, North Carolina and is bounded by heavily wooded rural residential and undeveloped properties to the north, east, south, and west, and a construction debris/yard waste landfill adjacent to the southwest corner of the property.

### 3.3 Current Use of the Property

At the time of the site inspection, the subject site was undeveloped and wooded.

### 3.4 Description of Structures, Roads, Utilities & Other Site Improvements

The subject site comprises one parcel that totals 66.48 acres of land according to the Wake County Tax Administration Office and recorded as Parcel ID Number 0750-54-5646. The subject site is currently zoned Medium Density – Conditional Zoning (MD-CZ) by the Town of Apex Planning Department and is located in the Neuse River watershed. The subject site was undeveloped and wooded. An undeveloped single-lane dirt access path/road was present on the property and extended from the termination point of Thriftwood Drive to the west across approximately 700 feet, before turning north and extending to the approximate center of the parcel. No utility services are provided to the site, as it is undeveloped. Electric service to the surrounding properties is provided by the Town of Apex and natural gas will be available from Public Service of North Carolina in the future. Water and sewer service is provided to the adjoining properties by Aqua America.

### 3.5 Current Use of the Adjoining Properties

The subject site is bounded to the north, east, south, and west by rural residential lands (some of which are wooded and some partially cleared) and undeveloped properties. A construction debris and yard waste landfill is adjacent to the southwest of the property.

## 4.0 User Provided Information

Pursuant to ASTM E 1527-13, Mid-Atlantic requested the following site information from the User. The User and contact for this project was Ms. Margaret Sutter, Senior Administrator for the Wake County Public School System, who completed the User Questionnaire. A copy of the User questionnaire is included in **Appendix 15.6** and User-provided information is summarized in the following sections.



#### 4.1 Title Records

No title records were provided to Mid-Atlantic by the User. However, the User provided a copy of the deed. Refer to **Section 5.5.5** for a discussion of deed research performed by Mid-Atlantic personnel.

#### 4.2 Environmental Liens or Activity and Use Limitations

The User indicated that she did not have knowledge regarding environmental liens or activity and use limitations (AULs) for the subject site, as reported to Mid-Atlantic in the completed User Questionnaire. The standard (ASTM E1527-13) lists specific user responsibilities for the project, as listed in **Section 2.3** of this report.

#### 4.3 Specialized Knowledge

The User did not indicate on the User Questionnaire that they had specialized knowledge about the site.

#### 4.4 Commonly Known or Reasonably Ascertainable Information

The User did not provide knowledge of commonly known environmental issues at the subject site or in the vicinity of the subject site (see **Section 5.2** for more information).

#### 4.5 Valuation Reduction for Environmental Issues

The User indicated that the purchase price for the subject site reasonably reflects fair market value.

#### 4.6 Owner, Property Manager, and Occupant Information

The Wake County Tax Assessor's Office has the current owner of the subject site listed as Merion Investment Properties, LLC. The point-of-contact for the subject site was the owner, Mr. Mike Whitehead, who completed a pre-survey questionnaire for Mid-Atlantic prior to the site visit and provided Mid-Atlantic with access to the subject site. Additionally, the owner provided a copy of the real estate ownership data summarized on Wake County GIS. Refer to **Section 5.5.5** for more detailed owner information.

#### 4.7 Reason for Performing Phase I ESA

Mid-Atlantic understands that the findings of this PESA will be used to evaluate the subject site with respect to a property transaction. The purpose of a PESA is to identify existing or potential RECs (as defined by ASTM Standard E1527-13) in connection with the subject site. This PESA was also performed to permit a User to satisfy one of the requirements to qualify for the *innocent landowner*, *contiguous property owner*, or *bonafide prospective purchaser* limitations within the scope of CERCLA 42 U.S.C 9601 liability.



## 5.0 Records Review

### 5.1 Environmental Regulatory Records

Mid-Atlantic contracted Environmental Data Resources (EDR) to conduct a regulatory database search in accordance with ASTM E1527-13 standards. The purpose of the search is to identify certain properties and facilities in the vicinity of the subject site (including the subject site, as applicable) which are regulated by the U.S. Environmental Protection Agency (EPA), North Carolina Department of Environmental Quality (NCDEQ) and other state and local environmental regulatory agencies. Detailed information pertaining to each database researched is presented in the EDR report, a copy of which is attached as **Appendix 15.5**.

The EDR review of regulatory database lists did not reveal environmental concerns associated with the subject site. The Currin Brothers (Currin Bros.) Landfill on the southwest adjacent property (4525 Sunset Lake Road) was listed on the registered solid waste facility list under permit number 92N-LCID-1986 as an “open” facility. Further information was not included in the EDR report. Mid-Atlantic interviewed Mr. Allen Currin, an owner of the Currin Bros. facility, on April 25, 2016. Mr. Currin provided further information about the facility (**Section 7.4**). After obtaining approval by the client, Mid-Atlantic also reviewed publicly available files about the facility from the North Carolina Division of Waste Management (NC DWM) (**Section 5.3**).

The EDR report identified several off-site properties within one mile of the subject site; however, these sites are not anticipated to present an environmental threat to the subject site based on such factors as distance from the subject site, field verified location, current regulatory status and estimated groundwater flow direction. In addition, the sites listed in the EDR report's Orphan Summary were not identified within one mile of the subject site and/or are not anticipated to pose an environmental threat to the subject site.

### 5.2 Additional Environmental Record Sources

Mid-Atlantic was not provided with additional environmental records by the User. Refer to **Section 5.3** for further information pertaining to regulatory records reviewed for adjacent and surrounding properties.

### 5.3 File Review Pertaining to Listings on the Subject Property and Adjacent Properties

Regulatory file information was reviewed for the adjoining Currin Brothers Landfill facility on the southwest adjacent property. The landfill is a permitted Land Clearing and Inert Debris (LCID) facility (92N-LCID-1986) that is approved to accept land clearing waste, yard trash, untreated and unpainted wood, uncontaminated soil, and inert debris (bricks, concrete, etc.). The permit was granted by the North Carolina Department of Environmental Quality (NCDEQ - formerly the NC Department of Environment and Natural Resources) on March 4, 1986.

Mid-Atlantic reviewed the available NC DWM files (dating from March 3, 2010 to the present). Per information obtained, the landfill has undergone periodic Facility Compliance Audit Reports (dated April and December 2010, January 2012, April 2013, and March 2014) and no violations or deficiencies are noted in these reports. Additionally, the available Facility Annual Reports do not show violations or deficiencies, and no corrective measures are noted.



In July of 2012, the NCDEQ requested that Currin Bros. submit a Landfill Gas Monitoring Plan. Currin Brothers engaged Smith Gardner, Inc. to perform an evaluation at the site. The site activities included test pits, push probe samples within the waste areas, soil vapor probe samples outside the waste limits, ambient gas sampling, and a visual evaluation of surface and buffer conditions. None of the samples collected had methane concentrations that were in excess of the 5% Lower Explosive Limit (LEL) for methane. Portions of this report are included in **Appendix 15.9**.

## **5.4 Physical Setting Sources**

The geologic and hydrogeologic settings of a site are considered of interest since they may provide information related to the direction and physical mechanisms of contaminant migration, if present, from on-site and off-site sources.

### **5.4.1 Geologic Setting**

According to the map titled *Geology of North Carolina (1985)*, prepared by the North Carolina Geological Survey Section of the North Carolina Department of Natural Resources and Community Development, the subject site is comprised of Metavolcanic-Epiclastic Rock (metamorphosed argillite, mudstone, volcanic sandstone, and conglomerate, and volcanic rock) as well as the Middendorf Formation (sand, sandstone, and mudstone, gray to pale gray with an orange cast, mottled; clay balls and iron-cemented concretions common, beds laterally discontinuous, cross-bedding common).

### **5.4.2 Topography and Surface Drainage**

According to the USGS Topographic Quadrangle Map of Apex, North Carolina (**Appendix 15.1**), maximum site elevations occur along the north and east property boundaries, while the minimum elevations occur in the southwest portion of the site. Three valleys, generally oriented west to east, provide undulations in the topography; however, overall the land decreases in slope to the west or southwest. In the absence of any other obvious significant structural or geomorphic drainage features, surface drainage is suspected to be influenced primarily by the surrounding topography. There are three unnamed intermittent/perennial streams present on the property that flow generally to the southwest. The topographic map shows one perennial stream adjacent to the western property boundary in the northern one-half of the property.

### **5.4.3 Groundwater**

Groundwater levels and flow directions are typically site specific. Site-specific groundwater flow can be influenced by impermeable surfaces, the proximity of nearby drainage features, sinkholes, creeks, swamps, and pumped groundwater wells. Fractures, joints, bedding planes and other discontinuities in the underlying rock can affect the groundwater conditions. Based upon the pattern of topographic contour lines shown on the topographic map (**Appendix 15.1**), groundwater flow below the subject site should flow to the west/southwest in the direction of decreasing topography toward the unnamed tributary of Middle Creek, which is located on the western adjacent property.



## **5.5 Historical Use Information on the Subject Site**

Mid-Atlantic reviewed historical aerial photographs, topographic maps, Sanborn® Maps, city directories, and tax/deed records to evaluate past uses of the subject site. Copies of documents corresponding to the historical sources are attached as **Appendix 15.4**.

### **5.5.1 Aerial Photographs**

Mid Atlantic reviewed historical aerial photographs for the subject site. Refer to **Section 5.6.1** where the aerial photographs are interpreted for the subject site and adjacent properties.

### **5.5.2 Topographic Maps**

Mid Atlantic reviewed historical topographic maps from 1974, 1981, 1987, 1988, 1993, 2002, and 2013. The historical topographic maps are of medium scale (1:24,000 or 1 inch equals 2,000 feet), and indicate if the land surface is wooded (in green) or open (in white). The topographic maps show the subject site as wooded except for a cleared area in the southern part of the property in the maps from 1987, 1988 and 1993. Environmentally suspect features were not identified on the subject property during Mid-Atlantic's review of historical topographic maps.

### **5.5.3 Sanborn® Maps**

Historical Sanborn® fire insurance map coverage was not available for the subject site.

### **5.5.4 City Directories**

City directory information was not available for the subject site, as it has been historically undeveloped.

### **5.5.5 Tax and Deed Information**

Property record information obtained from the Wake County Tax Office identified the current owner of Parcel ID Number 1750-54-5646 as follows:

Merion Investment Properties, LLC  
114 Birklands Drive  
Cary, Wake County, North Carolina 27518

Mid-Atlantic reviewed deed information for Parcel ID Number 0750-54-5646 obtained from the Wake County Register of Deeds. Mid-Atlantic obtained the current deed for the subject site from the Wake County Register of Deeds and recorded in Book 011544 Pages 01156-011568 dated May 19, 2005, which lists the Grantor as Campbell University, Incorporated and the Grantee as Merion Investment Properties, LLC. This deed is attached in **Appendix 15.4**.

### **5.5.6 Data Failure**

Data failure occurs when reasonably ascertainable, standard historical sources have been reviewed and the objectives (use of the subject site back to its first developed use or 1940, whichever is earlier) have not been met. Mid-Atlantic traced the wooded land use of the site



back to 1949. Since the land use was not traced back to 1940, we experienced data failure. In our opinion, this data failure does not constitute a data gap as it did not impact our ability to identify RECs at the subject site.

## 5.6 Historical Use Information on Adjoining Properties

Mid-Atlantic reviewed historical aerial photographs, topographic maps, Sanborn Maps, and city directories to evaluate past uses of adjoining properties.

### 5.6.1 Aerial Photographs

Three different sources were used to review both historical and present aerial photographs of the subject site and adjacent properties including Google Earth, EDR, and Wake County's internet mapping application iMAPS. From all sources listed, aerial photographs were reviewed for the years 1949, 1959, 1965, 1971, 1981, 1983, 1993, 1998, 2005, 2006, 2008, 2009, 2010, 2012, and 2015. The aerial photographs are attached in **Appendix 15.4**. Further information on the landfill is presented in **Section 5.3**.

1949, 1959, 1965	
Subject Site:	Wooded land except for some apparent agricultural land in the southeastern part (1949 & 1959) and grassland (1965).
Adjacent North, East, South, West:	Adjacent properties are occupied by wooded land; the subject site is bounded to the east by agricultural fields. Stephenson Road is visible to the East.
Identified Environmental Concerns	None identified.

1971, 1981, 1983	
Subject Site:	Wooded land.
Adjacent North, East, South, West:	Adjacent properties are occupied by wooded land. A square-shaped cleared area is shown on the southwest adjacent property in the 1981 & 1983 photos and appears to represent an early phase of the current LCID landfill. One to two elliptical shaped features are shown – water is shown in the 1983 photograph suggesting a pit. The cleared area is accessible from Stephenson Road. Stephenson Road is visible to the East along with small structures (apparent residences) near the road.
Identified Environmental Concerns	Potential landfilling within cleared area at current location of LCID facility.

1993	
Subject Site:	Wooded land with road leading onto the property from the east.
Adjacent West, North:	The adjacent properties are occupied by wooded land.



Adjacent East, South:	Residential housing is present on the adjoining properties. The landfill is visible to the Southwest. Stephenson Road is visible to the East.
Identified Environmental Concerns	Potential landfilling within cleared area at current location of LCID facility.

<b>1998, 2005, 2006, 2008, 2009, 2010</b>	
Subject Site:	Wooded land.
Adjacent West, North:	The adjacent properties are occupied by wooded land.
Adjacent East, South:	Residential housing has increased on the adjoining properties. The landfill is visible to the Southwest and is increased in size. Stephenson Road is visible to the East.
Identified Environmental Concerns	Landfilling activity on southwest adjacent property.

<b>2012</b>	
Subject Site:	Wooded land. The subject site appears as it is at the present date.
Adjacent West, North:	The adjacent properties are occupied by mainly wooded land, with a house on a large-acreage lot.
Adjacent East, South:	Residential housing has increased on the adjoining properties. The landfill is visible to the Southwest. Stephenson Road is visible to the East.
Identified Environmental Concerns	Landfilling activity on southwest adjacent property.

### 5.6.2 Topographic Maps

Mid Atlantic reviewed historical topographic maps from 1974, 1981, 1987, 1988, 1993, 2002, and 2013. The historical topographic maps are of medium scale (1:24,000 or 1 inch equals 2,000 feet), and indicate if the land surface is wooded (in green), open (in white) disturbed (irregular brown pattern) or within a built up “urban” area (pink). The topographic map from 1974 shows the subject site bounded to the north, east, south, and west by undeveloped and wooded lands. A small pond is located the northwest corner. Stephenson Road (S.R. 1302) is shown further to the east. The 1981, 1987, and 1988 topographic maps show sparse but slowly increasing numbers of residential homes to the east, south, and west of the subject site. Property to the north of the site is mainly wooded and undeveloped. The 1993 topographic map shows a large increase in the number of residential homes to the east and southeast of the subject property. Additionally, the road for the landfill on the southwest adjacent property (Sunset Lake Road) is now visible to the south. The 2002 topographic map shows a large increase in the number of residential homes to the east and southeast of the subject property. Additionally, the landfill itself is now visible to the south. The topographic map from 2013 shows no structures present on the adjacent properties due to a change in map-making policies at the



USGS. The landfill on the southwestern adjacent property is considered environmentally significant based on Mid-Atlantic's review of the historical topographic maps. The topographic maps are attached in **Appendix 15.4**.

### **5.6.3 Sanborn® Maps**

Historical Sanborn® fire insurance map coverage was not available for the adjacent properties.

### **5.6.4 City Directories**

City directories for adjacent properties were not reviewed due to their apparent residential land use (based on review of aerial photographs) and our vicinity reconnaissance.

## **6.0 Site Reconnaissance**

### **6.1 Methodology and Limiting Conditions**

On April 18, 2016, Mid-Atlantic personnel conducted a physical/visual reconnaissance of the subject site and the surrounding areas. We were accompanied by the owner, Mr. Mike Whitehead. Our reconnaissance included both a visual inspection and a guided truck tour of the subject site located at 8550 Stephenson Road in Apex, North Carolina. No structures were on site. Photographs taken during Mid-Atlantic's site reconnaissance are included in **Appendix 15.3**.

### **6.2 General Site Setting, Structures, and Utilities**

The subject site comprises one parcel that totals 66.48 acres of land according to the Wake County Tax Office and recorded as Parcel ID Number 0750-54-5646. The subject site is currently zoned Medium Density – Conditional Zoning (MD-CZ) by the Town of Apex Planning Department. At the time of site inspection, the subject site was wooded and undeveloped, and did not have structures or remains of structures visibly present. Vehicular access is provided to the site from the northeast by Derry Down Lane and from the southeast by Thriftwood Drive. A single-lane dirt access road extends west approximately 700 feet from the end of Thriftwood Drive to the middle of the site, before turning north and terminating at the approximate center of the parcel. No utility services are provided to the site, as it is undeveloped. Electric service to the surrounding properties is provided by the Town of Apex and natural gas will be available from Public Service of North Carolina in the future. Water and sewer service is provided to the adjoining properties by Aqua America.

### **6.3 Exterior Observations**

#### **6.3.1 Pits, Ponds, or Lagoons**

Mid-Atlantic personnel observed no on-site ponds. A lagoon associated with a Waste Water Treatment Plant (WWTP) operated by Aqua America is located on an eastern adjacent property near the Derry Down Lane access point. This WWTP serves the adjacent residential trailer park development. Per Mr. Whitehead, "nominal pockets of wetlands may exist on the site". Additionally, there are intermittent/perennial streams present on the property.



### **6.3.2 Stained Soil or Pavement/Stressed Vegetation**

Mid-Atlantic personnel observed no evidence of stained soil or stressed vegetation either within the property boundaries or on the exterior portions of the subject site.

### **6.3.3 Solid Waste**

Mid-Atlantic personnel observed assorted household trash, debris, tires, and household items that had been dumped along the dirt access road and also along the eastern perimeter of the subject site. The subject site is currently undeveloped and does not generate waste to take off-site.

### **6.3.4 Wastewater**

The subject site is undeveloped and is not currently connected to any sewer system. The WWTP located adjacent to the site handles the waste water for the neighboring properties.

### **6.3.5 Wells**

The subject site is undeveloped and is not currently connected to water wells. Mr. Whitehead mentioned that at least two test wells had been drilled to determine the viability of using the groundwater for projected development. These wells did not produce sufficient yield to be viable, and were consequently abandoned. Mr. Whitehead indicated that future water needs for the proposed development would be supplied by the municipal water services when they are installed. The surrounding properties are provided with water services from a series of three groundwater wells owned and maintained by Aqua America. Mid-Atlantic personnel observed two well houses and one storage tank with an approximate capacity of 10,000 gallons adjacent to the southeast corner of the subject site. Mr. Whitehead also offered that the wells do not produce very well and experience water shortages during periods of decreased precipitation. According to information received from Mr. Steve Adams of the Town of Apex (**Section 7.5**), extension of municipal water and sewer lines are planned in the foreseeable future.

Mr. Whitehead identified one groundwater monitoring well on the subject property. It is located near the southwestern corner of the subject property. Mr. Whitehead had no knowledge of when or for what purpose the well was installed. Mid-Atlantic conducted an email inquiry with Mr. Mark Powers of the NCDEQ Division of Waste Management (DWM) and a telephone interview with Mr. Rick Bolich of the NCDEQ Division of Water Resources (DWR) in an attempt to locate information on this well (**Section 7.5**). Neither gentleman was able to locate a record of this well in the databases that they searched. A cursory search was also performed in the State Record on-line database, with no mention of any groundwater monitoring wells.

### **6.3.6 Septic Systems**

The subject site is undeveloped and is not currently connected to a septic system. The WWTP located adjacent to the site handles the waste water for the neighboring properties.



### **6.3.7 Storage Tanks/Vessels**

Mid-Atlantic personnel did not observe storage tanks or vessels on the subject property. Mid-Atlantic observed the large water storage tank associated with the Aqua America water wells and pump house which was located on an eastern adjacent property.

### **6.3.8 PCBs**

Older transformers and other electrical equipment could contain polychlorinated biphenyls (PCBs) at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Mid-Atlantic personnel did not observe equipment likely to contain PCBs at the subject site.

### **6.3.9 Surrounding Land Use**

The subject site is bounded by heavily wooded, rural residential and undeveloped properties to the north, east, south, and west. A Land Clearing and Inert Debris (LCID) construction debris landfill (Currin Brothers Landfill) is located to the southwest of the site, and is currently operated by Mr. Allen Currin and Mr. Glenn Currin.

### **6.3.10 Other Evidence of Environmental Impacts**

Mid-Atlantic did not observe additional evidence of past, current or future activities on the exterior portions of the site that could potentially have an adverse environmental impact on the subject site.

## **6.4 Interior Observations**

At the time of the site visit, no structures were present on site. Therefore the following sections are not applicable.

### **6.4.1 Heating and Cooling Systems**

Not Applicable

### **6.4.2 Staining and Chemical Storage/Use**

Not Applicable

### **6.4.3 Drains and Sumps**

Not Applicable

### **6.4.4 Other Evidence of Environmental Impacts**

Mid-Atlantic personnel did not observe other evidence of past, current or future activities that could potentially have an adverse environmental impact on the subject site.



## 7.0 Interviews

### 7.1 Interview with Owner

Property data for the subject site lists the current owner as Merion Investment Properties, LLC according to the Wake County Tax Assessor's Office. Mid-Atlantic conducted an on-site interview and follow-up telephone interviews with Mr. Mike Whitehead, owner of the 66.48-acre parcel. Mr. Whitehead stated that he has been involved with this property for approximately 3.5 years as an investment and has been managing the care and maintenance of the property during that time. According to Mr. Whitehead, the subject site has not been developed and the timber growth is mature hardwoods and pines. Mr. Whitehead did not have knowledge of spills, releases, or buried solid waste at the subject site. Additional information from Mr. Whitehead related to the subject property has been discussed in previous sections of this report.

### 7.2 Interview with Site Manager

Mr. Whitehead is also the Site Manager, see **Section 7.1** for more information.

### 7.3 Interview with Occupants

The subject site is not occupied. Refer to **Section 7.1** for further information.

### 7.4 Interview with Others

Mr. Allen Currin, co-owner and operator of the Currin Brothers LCID facility on the southwest adjacent property, was interviewed regarding the presence of the monitoring well on the subject site and the nature of activities that are conducted at the facility. According to Mr. Currin, he had no knowledge of any groundwater wells on the subject property. He mentioned that his company only accepted "organic" materials (yard wastes, trees, branches, etc.) and that methane production from activities on his property were not an issue. He further stated that he had contracted an engineering company to conduct methane testing on his property at the request of the NCDEQ and that the test results had not shown the methane levels to be above the established lower explosive limit (LEL) for methane.

Mid-Atlantic attempted to contact Mr. Glenn Currin (one of the owners of the Currin Brothers facility) but the telephone call was not returned up to the time this report was issued. Additionally, a call placed to a former owner (Mr. Charles Manning III) was not returned up to the time this report was issued.

### 7.5 Interviews with Local Government Officials

Mid-Atlantic personnel contacted Mr. Zane Franks of the Fairview Volunteer Fire Department in the Apex/Holly Springs area to inquire if the department has responded to environmental incidents at the site or has information regarding potential ASTs/USTs at the site or adjacent properties. Mr. Franks indicated that there were no records regarding the subject site or surrounding properties. Fire responses were recorded for properties in the area, but not on the subject or adjacent properties.



Mid-Atlantic personnel contacted Mr. Chris Bronczyk, with the Apex Planning and Zoning Department. He stated that the change to the current zoning designation was completed in February of 2013 and that further changes are not anticipated.

Mid-Atlantic personnel contacted Mr. Steve Adams of the Apex Utilities Division, who stated that Apex did not currently provide either water or sewer services to the subject site or the surrounding area, but installation of these structures and lines are planned for a future date.

Mid-Atlantic conducted an email inquiry with Mr. Mark Powers of the NCDEQ DWM and a telephone interview with Mr. Rick Bolich of the NCDEQ DWR in an attempt to locate information on the groundwater monitoring well observed on site. Neither gentleman was able to locate any record of this well in the databases that they searched. A cursory search was also performed in the State Record on-line database with no mention of groundwater monitoring wells.

If information pertinent to identifying RECs is identified upon completion of these interviews, Mid-Atlantic will issue an addendum to this report.

## 8.0 Findings

The following known/potential RECs, historical RECs, controlled RECs, and/or *de minimis* conditions were identified on the subject site during the performance of this PESA:

- No known/potential RECs, historical RECs, controlled RECs, and/or *de minimis* conditions were identified on the subject site.

Mid-Atlantic identified the following during our investigation that could be considered business environmental risks:

- The presence of one groundwater monitoring well of unknown depth, origin, and use.
- Organic yard waste material buried at the adjacent LCID landfill, located on the southwest adjacent property, could generate methane gas or leachate containing constituents that could adversely impact groundwater.

## 9.0 Opinion

### 9.1 Environmental Concerns and Opinions.

A groundwater monitoring well of unknown origin, purpose, and depth was noted on the subject site. Wells such as this are typically used to monitor the depth to groundwater, groundwater flow direction, contaminant concentration/migration from a known source, or as a permanent requirement for facilities such as the adjacent landfill. Although we have no evidence of a release at or in the vicinity of the subject site, the presence of the well is considered a business environmental risk. One alternative to potentially address this risk is to sample and test the groundwater in this well.



The site is bounded by undeveloped and heavily wooded rural residential land uses, with the exception of the Currin Brothers LCID Landfill adjacent to the southwest. In an interview with one of the owners (Mr. Allen Currin), he stated that only “organic” yard waste had been accepted and that testing on his property has not yielded methane sampling results above the established LEL for methane. A file review of available documents revealed that the landfill was permitted on March 4, 1996 to receive the types of waste noted by Mr. Currin. Facility Compliance Inspection Reports contained in the DWM regulatory file have not noted violations or deficiencies and the Landfill Gas Monitoring Evaluation (a portion of this report is attached in **Appendix 15.9**) did not detect evidence of methane gas in excess of the established 5% LEL threshold. Although this assessment has revealed no evidence that historical activities have resulted in an adverse environmental impact to the landfill or to the subject site, Mid-Atlantic considers the current and future operation of this adjacent landfill to have an adverse environmental impact on the site and development in the southwest corner should be carefully considered.

## 9.2 Data Gaps

A data gap is a lack of or inability to obtain information despite good faith efforts. A PESA report should identify and comment on significant data gaps when they affect the Environmental Professional's ability to identify RECs. The Environmental Professional must also identify the sources of information that were consulted to address these significant data gaps. Mid-Atlantic did not identify any data gaps.

# 10.0 Conclusions and Recommendations

## 10.1 Conclusions

Mid-Atlantic has performed this PESA in general conformance with the scope and limitations of ASTM Practice E 1527-13 and 40 CFR Part 312. Any exceptions to, or deletions from, these practices are described in **Section 2.4** and **Section 11.0** of this report. This assessment has revealed no evidence of RECs in connection with the subject site.

Mid-Atlantic considers the monitoring well located on the southwest portion of the subject site and the operating LCID landfill adjacent to the southwest corner as business environmental risks. Sampling of the monitoring well may provide information to further address this environmental risk. If the well is not going to be used, we recommend that it be properly abandoned by a NC-licensed well driller. Although we have no indications that the adjacent landfill has or will adversely impact the subject site, we recommend that parties take this site and its current and future operations into account when making decisions about development alternatives.

# 11.0 Deviations

This PESA substantially complies with the scope of services and ASTM E 1527-13, as amended, except for exceptions and /or limiting conditions as discussed in **Section 2.4**.



## 12.0 Additional Services

Mid-Atlantic did not conduct additional services during the performance of this assessment.

## 13.0 References

The following sources were used during performance of this PESA:

- USGS Topographic Quadrangle Map of Apex, North Carolina, published in 2013 (**Appendix 15.1**);
- *Geologic Map of North Carolina*, North Carolina Geologic Survey, 1985;
- The *EDR Radius Map Report with Geocheck*, Environmental Data Resources, Inc. (**Appendix 15.5**);
- EDR Historical Topographic Maps Report (**Appendix 15.4**);
- EDR Sanborn® Map Report (**Appendix 15.4**);
- EDR Aerial Photo Decade Package (**Appendix 15.4**);
- Current property deed for the subject site obtained from the Wake County Register of Deeds Office (**Appendix 15.4**)

## 14.0 Qualifications of Environmental Professionals

All phases of this PESA were conducted, completed and reviewed by qualified Mid-Atlantic personnel experienced in conducting PESAs on similar sites. Summaries of the experience of those conducting this PESA are included in **Appendix 15.8**.

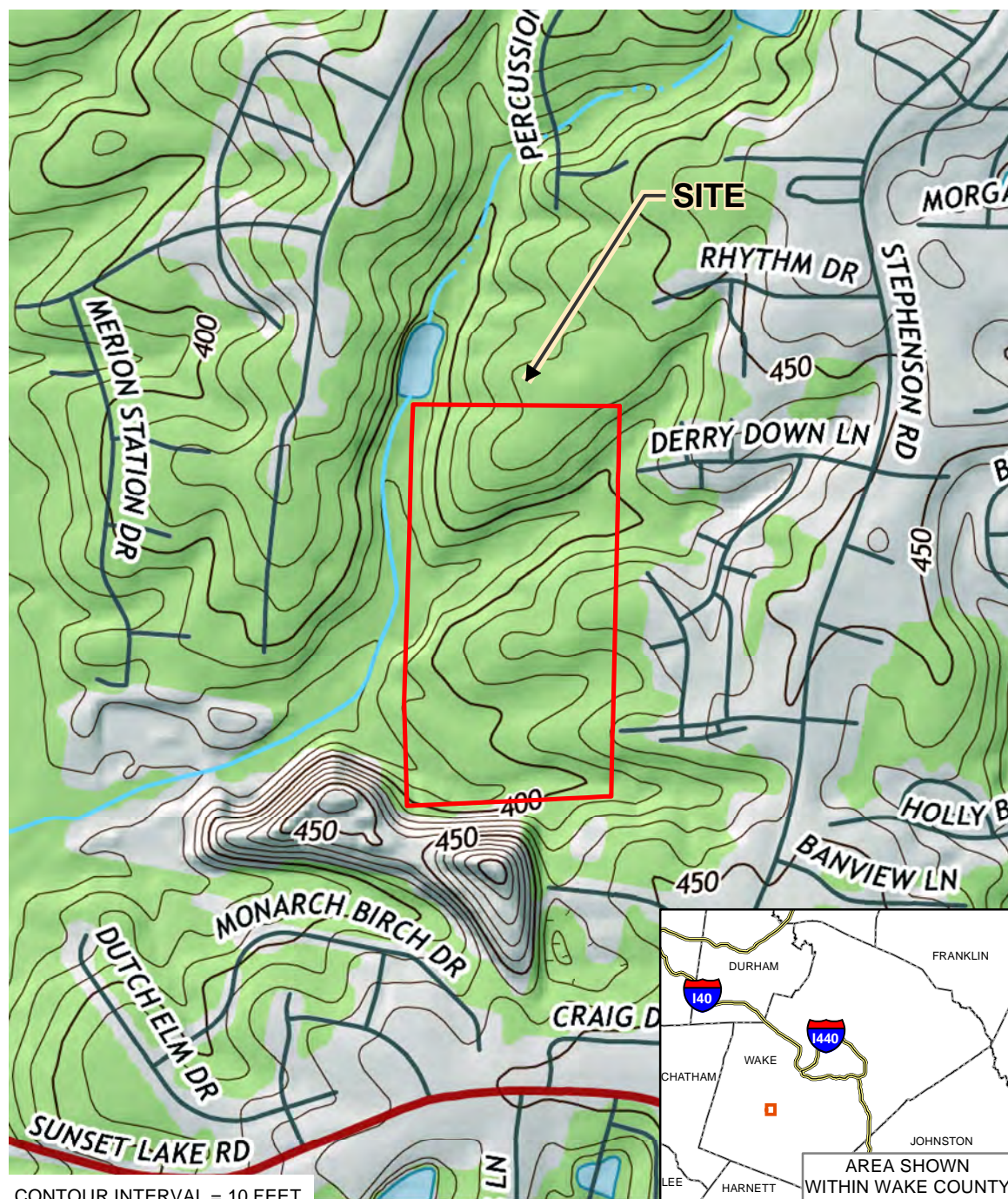
## 15.0 Appendices



## **Appendix 15.1**

### **Topographic Site Map**



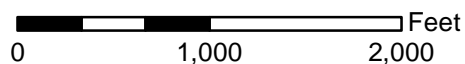


CONTOUR INTERVAL = 10 FEET

REFERENCES:

1. APEX, NC DIGITAL RASTER GRAPHIC, USGS. SCANNED FROM 1:24,000-SCALE APEX, NC TOPOGRAPHIC MAP, PUBLISHED 2013, USGS.
2. INSET MAP DIGITAL DATA FROM 2002 NATIONAL TRANSPORTATION ATLAS, BUREAU OF TRANSPORTATION STATISTICS, WASHINGTON, D.C.
3. PROPERTY BOUNDARY DATA FROM WAKE COUNTY GIS.

SCALE: 1:12,000



TOPOGRAPHIC SITE MAP  
WCPSS H-12/E-46 SITE  
8550 STEPHENSON ROAD  
APEX, NORTH CAROLINA

DRAWN BY: <i>GH</i>	DATE: APRIL 2016
DRAFT CHECK: <i>SKM</i>	JOB NO: 000R2781.00
ENG. CHECK: <i>DMM</i>	GIS NO: 04G-R2781.00-1
APPROVAL: <i>EBA</i>	DWG NO: 15.1



## **Appendix 15.2**

### **Site Map**

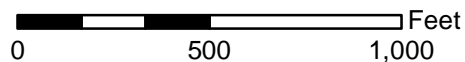




REFERENCES:

1. PROPERTY BOUNDARY AND ROAD DATA FROM WAKE COUNTY GIS.
2. 2013 AERIAL IMAGERY FROM NC ONEMAP
3. MID-ATLANTIC FIELD NOTES.

SCALE: 1:6,000



SITE MAP  
WCPSS H-12/E-46 SITE  
8550 STEPHENSON ROAD  
APEX, NORTH CAROLINA

DRAWN BY: <i>GH</i>	DATE: APRIL 2016
DRAFT CHECK: <i>SKM</i>	JOB NO: 000R2781.00
ENG. CHECK: <i>DMM</i>	GIS NO: 04G-R2781.00-2
APPROVAL: <i>EBA</i>	DWG NO: 15.2



## **Appendix 15.3**

### **Site Photographs**





Photo 1 – Mobile homes on an eastern adjacent property.



Photo 2 – Northern adjacent property from NE corner of site.



Photo 3 – Northwest view from NW corner of site.



Photo 4 – Western adjacent property from western perimeter of site.



Photo 5 – Southern adjacent property from SW corner of site.



Photo 6 – Southeast from SE corner of site.





Photo 7 – Mobile homes on southern adjacent property, looking north.



Photo 8 – Typical view of the interior of the site.



Photo 9 – Single land dirt road through interior of the site.



Photo 10 – Typical view of tires and trash on interior/eastern perimeter of site.



Photo 11 – Typical household debris and trash on interior of the site.



Photo 12 – Waste water treatment plant on northeast adjacent property.





Photo 13 – WWTP lagoon, adjacent to the WWTP itself.



Photo 14 – Pump house and water storage tank on eastern adjacent property.



Photo 15 – Second pump house (no visible water storage) on eastern adjacent property.



Photo 16 – Currin Brothers Landfill checkpoint, southwestern adjacent property.



Photo 17 – View of Currin Bros. Landfill facing northwest across the western landfill property.



Photo 18 – View looking to the northeast onto the southwest portion of the subject site.





Photo 19 – Groundwater monitoring well located northeast of the northwest corner of the site. The well tag was illegible.




Photo 20 – Additional view of the groundwater monitoring well.



## **Appendix 15.4**

### **Historical Research Documentation**





WCPSS H-12/E-46 Site

8550 Stephenson Road

Apex, NC 27539

Inquiry Number: 4590391.5

April 13, 2016

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



## EDR Aerial Photo Decade Package

04/13/16

**Site Name:**

WCPSS H-12/E-46 Site  
8550 Stephenson Road  
Apex, NC 27539  
EDR Inquiry # 4590391.5

**Client Name:**

Mid-Atlantic Associates  
409 Rogers View Ct  
Raleigh, NC 27610  
Contact: Sandy Miller



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

**Search Results:**

<b><i>Year</i></b>	<b><i>Scale</i></b>	<b><i>Details</i></b>	<b><i>Source</i></b>
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=750'	Flight Date: March, 29 1998	USGS
1993	1"=500'	Acquisition Date: March, 15 1993	USGS/DOQQ
1983	1"=500'	Flight Date: April, 12 1983	USGS
1981	1"=500'	Flight Date: April, 27 1981	USDA
1971	1"=500'	Flight Date: February, 24 1971	USGS
1965	1"=500'	Flight Date: March, 15 1965	USDA
1959	1"=500'	Flight Date: March, 25 1959	USDA
1949	1"=500'	Flight Date: March, 16 1949	USGS

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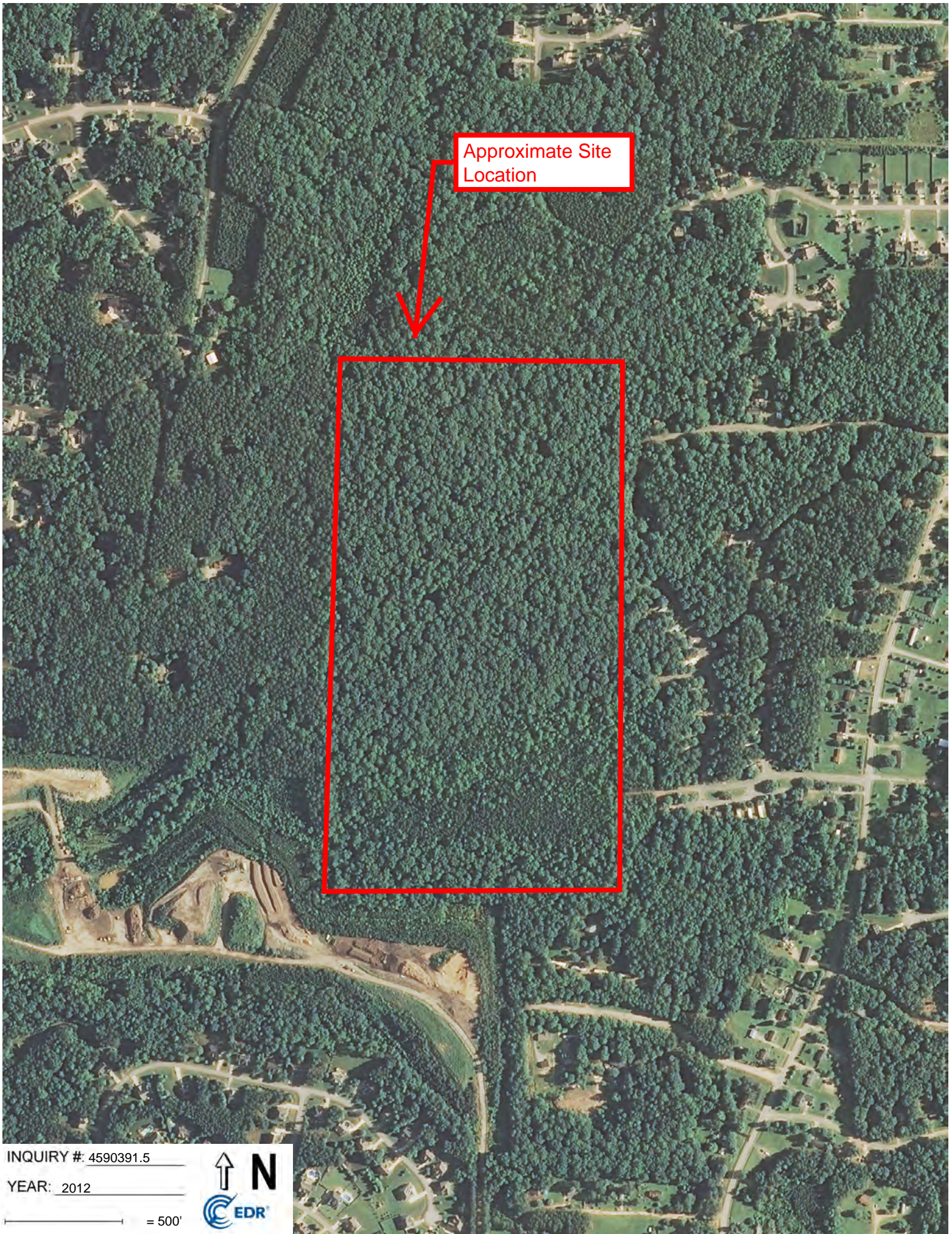
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Approximate Site  
Location

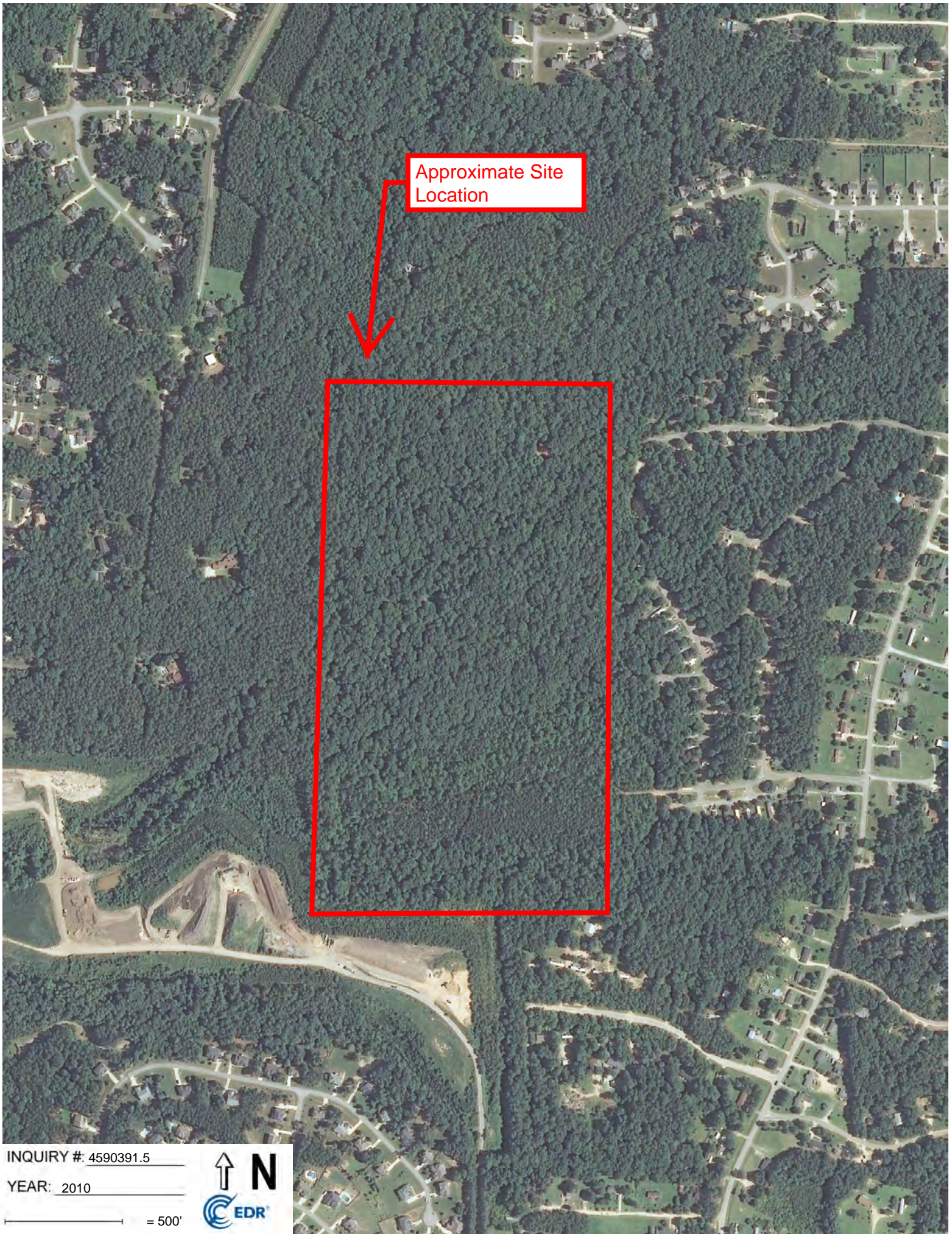
INQUIRY #: 4590391.5

YEAR: 2012

— = 500'







Approximate Site  
Location

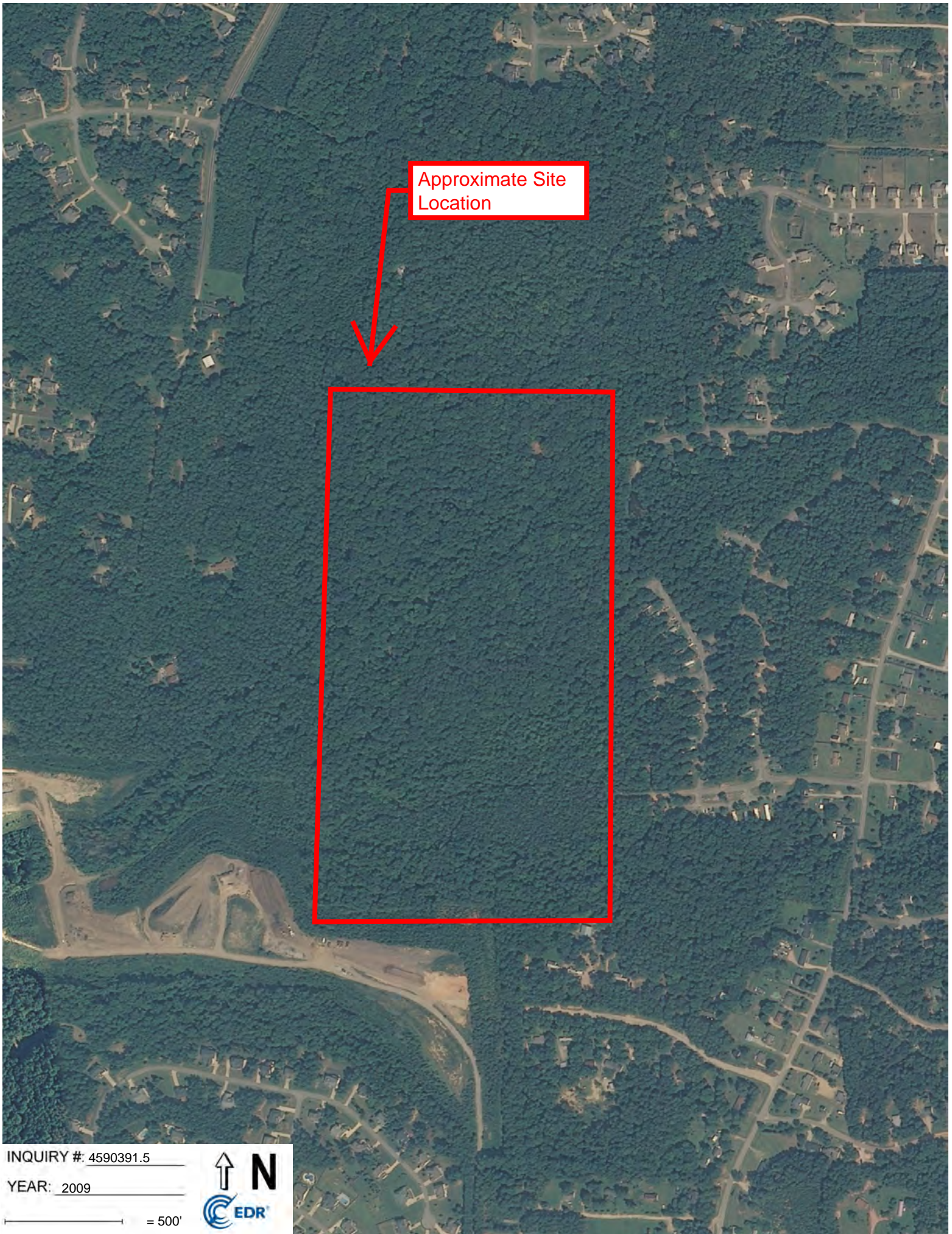
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YEAR: 2010

— = 500'







Approximate Site  
Location

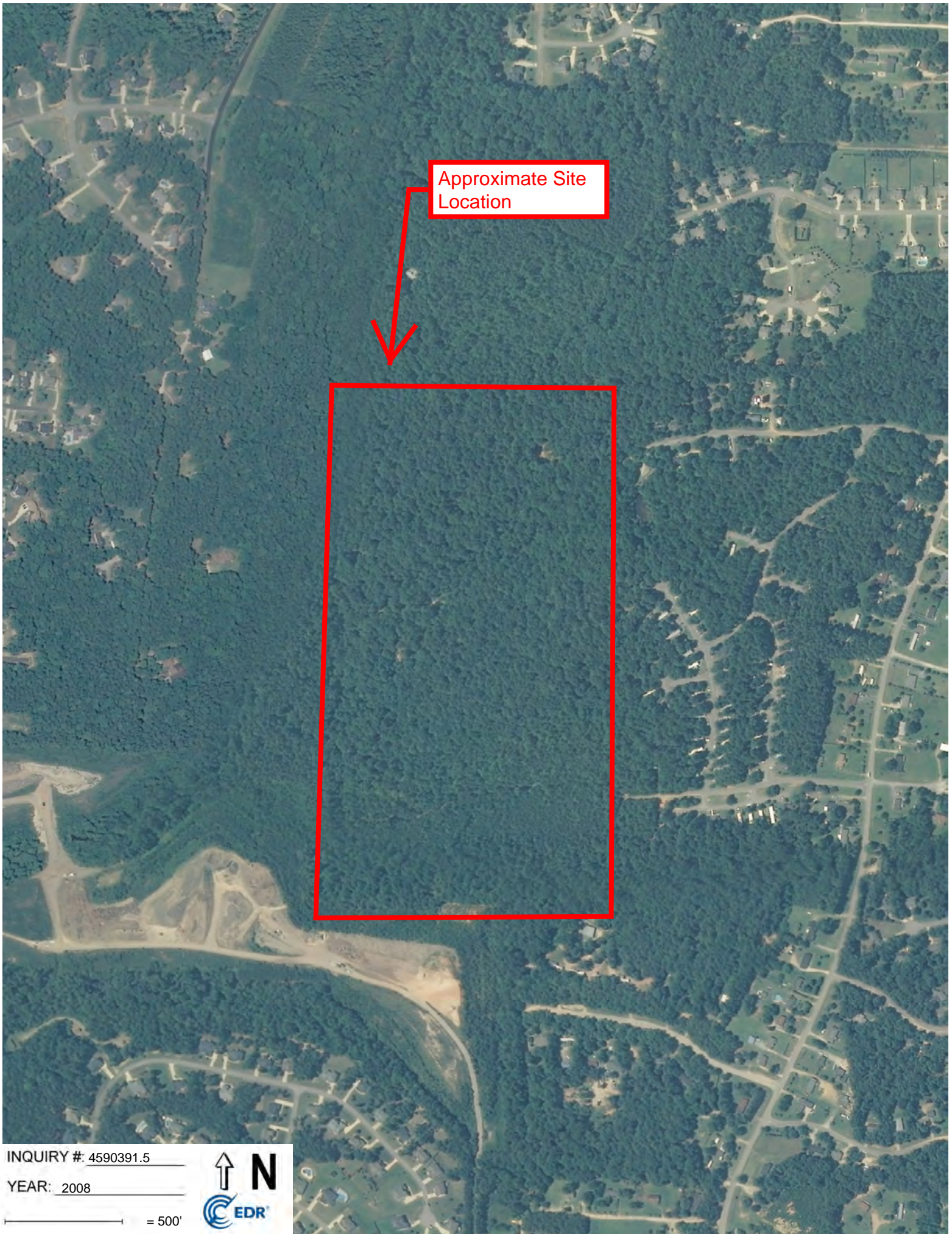
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YEAR: 2009

— = 500'







Approximate Site  
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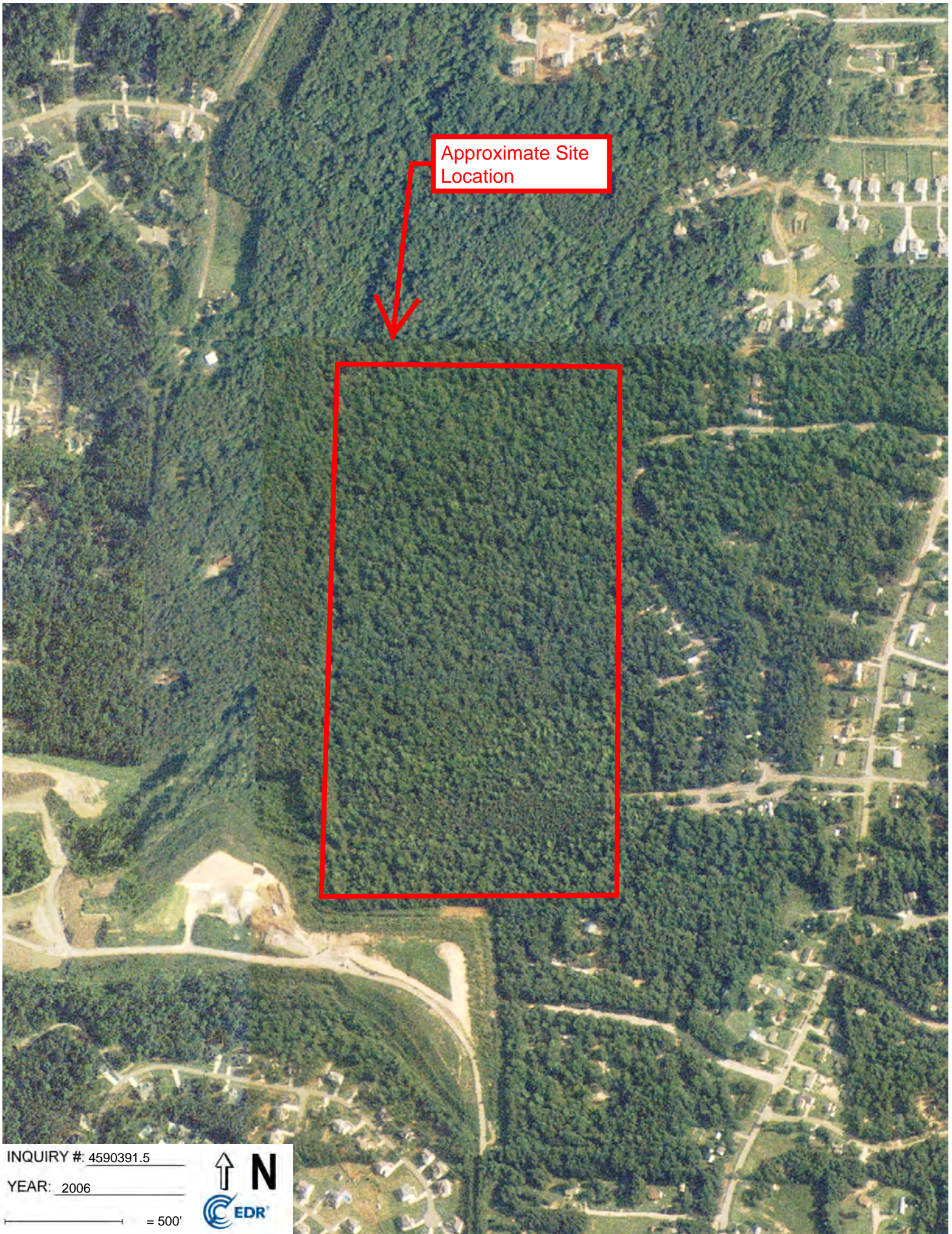
INQUIRY #: 4590391.5

YEAR: 2008

— = 500'







Approximate Site  
Location

INQUIRY #: 4590391.5

YEAR: 2006

— = 500'







Approximate Site  
Location

INQUIRY #: 4590391.5

YEAR: 2005

— = 500'







Approximate Site  
Location

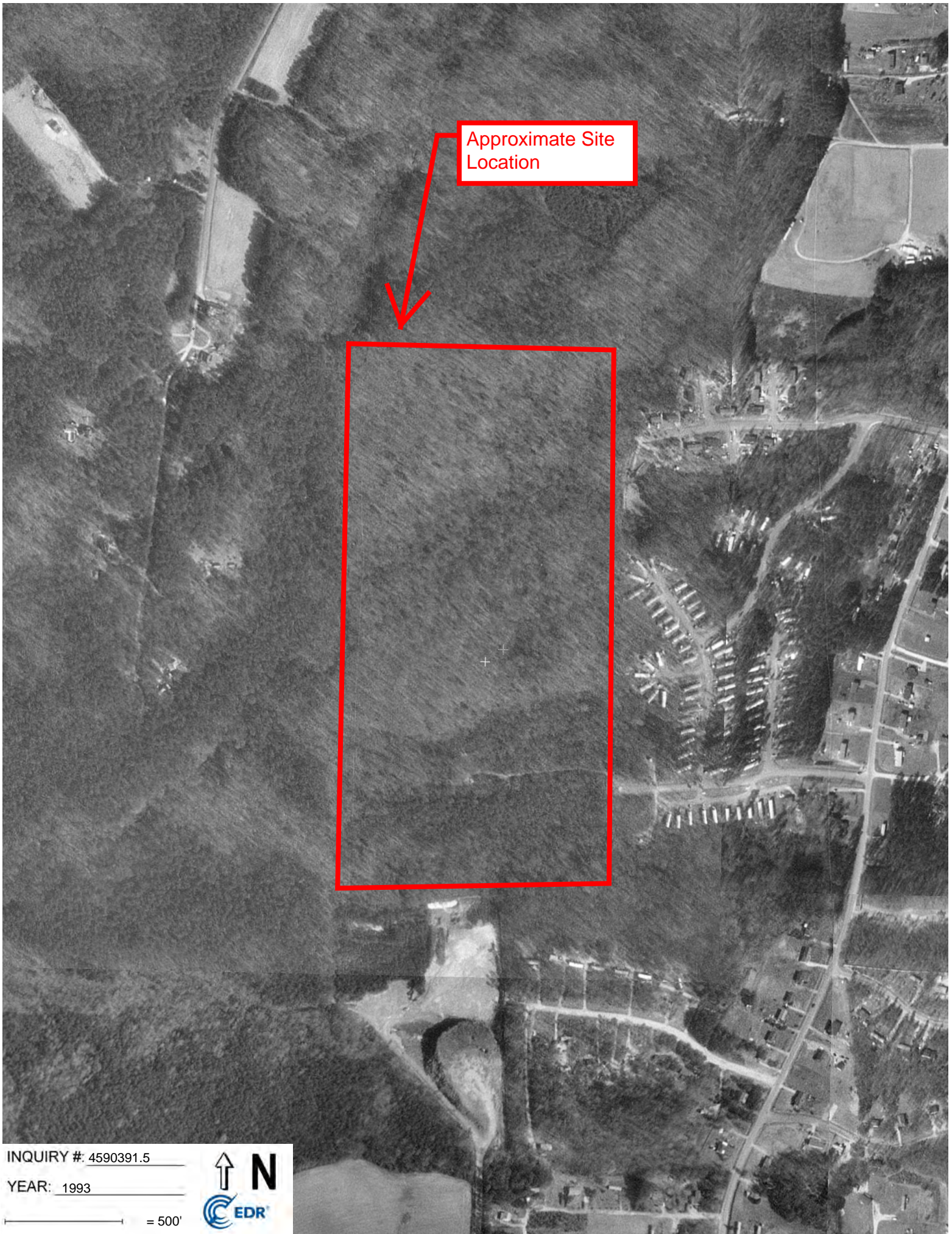
INQUIRY #: 4590391.5

YEAR: 1998

— = 750'







Approximate Site  
Location





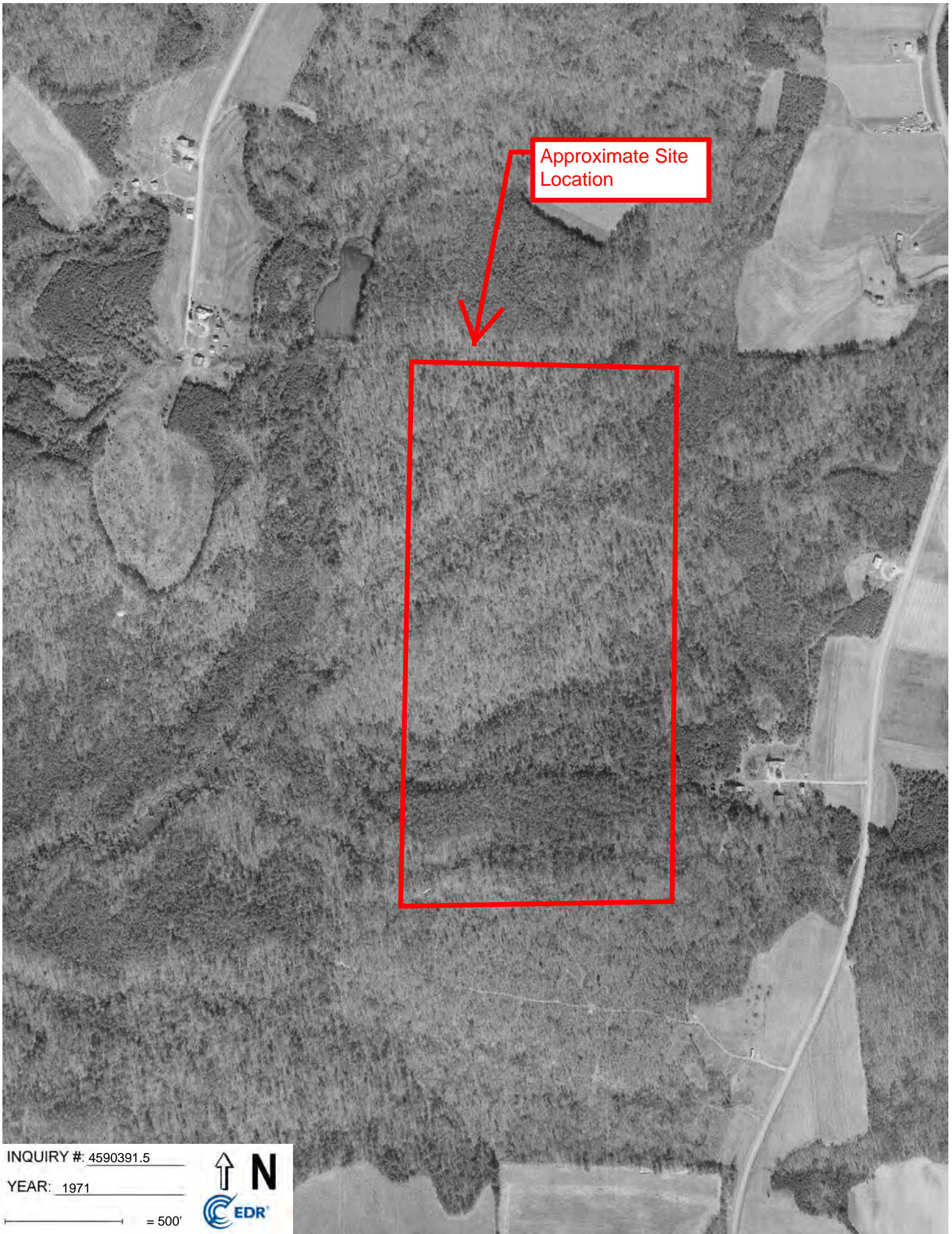
Approximate Site  
Location





Approximate Site  
Location





Approximate Site  
Location





Approximate Site  
Location





Approximate Site  
Location

INQUIRY #: 4590391.5

YEAR: 1959

— = 500'







Approximate Site  
Location

INQUIRY #: 4590391.5

YEAR: 1949

— = 500'





WCPSS H-12/E-46 Site

8550 Stephenson Road

Apex, NC 27539

Inquiry Number: 4590391.8

April 13, 2016

# EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# EDR Historical Topo Map Report

04/13/16

**Site Name:**

WCPSS H-12/E-46 Site  
8550 Stephenson Road  
Apex, NC 27539  
EDR Inquiry # 4590391.8

**Client Name:**

Mid-Atlantic Associates  
409 Rogers View Ct  
Raleigh, NC 27610  
Contact: Sandy Miller



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Mid-Atlantic Associates were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:****Coordinates:**

<b>P.O.#</b>	000R2781.00	<b>Latitude:</b>	35.688024 35° 41' 17" North
<b>Project:</b>	Proposed WCPSS H12/E46 Site	<b>Longitude:</b>	-78.812672 -78° 48' 46" West
		<b>UTM Zone:</b>	Zone 17 North
		<b>UTM X Meters:</b>	697927.69
		<b>UTM Y Meters:</b>	3951551.29
		<b>Elevation:</b>	0.00' above sea level

**Maps Provided:**

2013  
2002  
1993  
1988  
1987  
1981  
1974

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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## ***Topo Sheet Key***

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **2013 Source Sheets**



Apex  
2013  
7.5-minute, 24000

### **2002 Source Sheets**



Apex  
2002  
7.5-minute, 24000  
Aerial Photo Revised 2002

### **1993 Source Sheets**



Apex  
1993  
7.5-minute, 24000  
Aerial Photo Revised 1993

### **1988 Source Sheets**



Apex  
1988  
7.5-minute, 24000  
Photo Inspected 1988  
Photo Revised 1987



## ***Topo Sheet Key***

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1987 Source Sheets**



Apex  
1987  
7.5-minute, 24000  
Photo Revised 1987  
Aerial Photo Revised 1984

### **1981 Source Sheets**



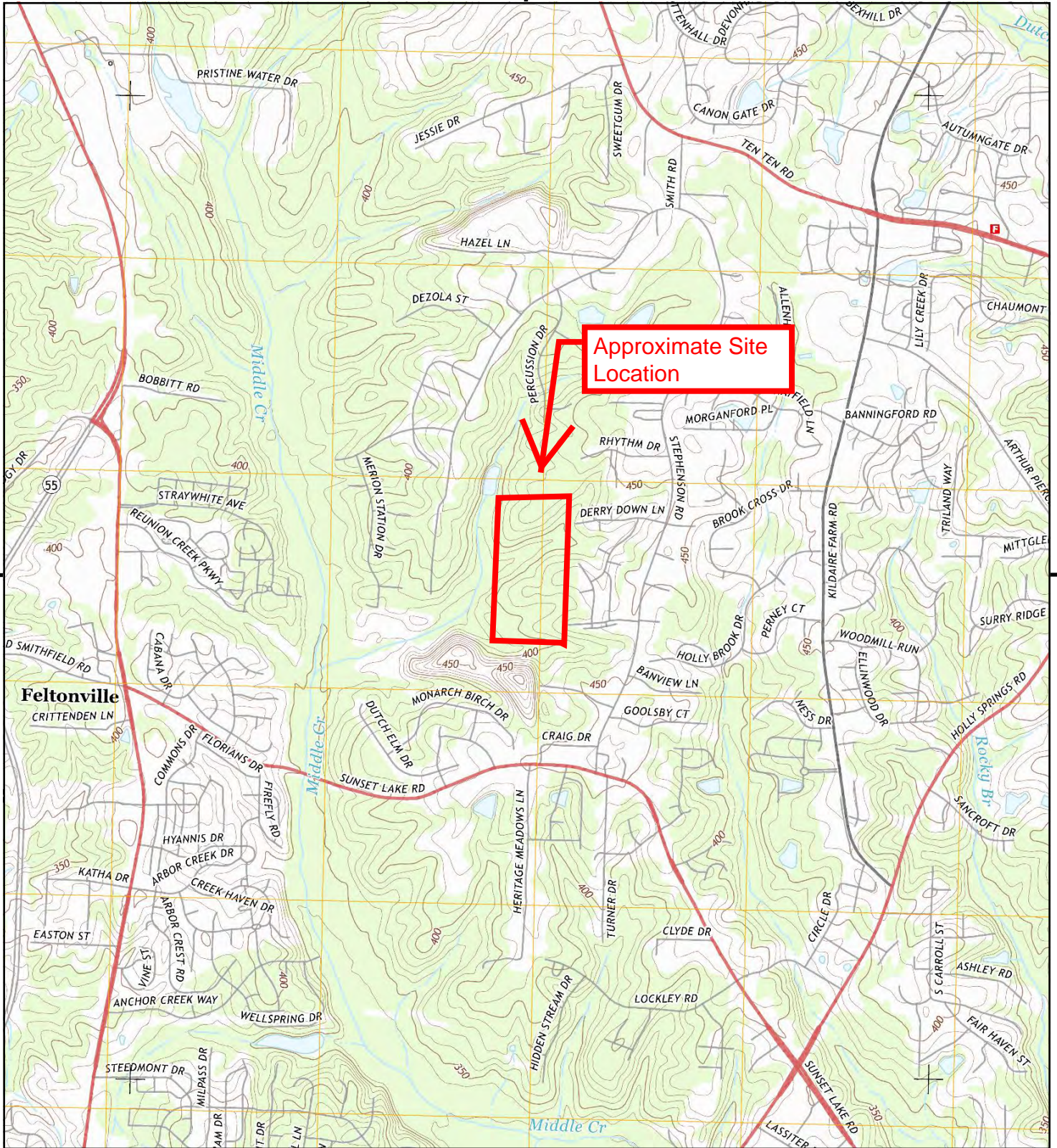
Apex  
1981  
7.5-minute, 24000  
Photo Revised 1981  
Aerial Photo Revised 1980

### **1974 Source Sheets**

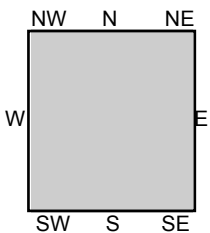
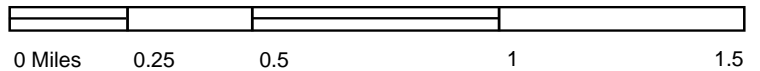


Apex  
1974  
7.5-minute, 24000  
Aerial Photo Revised 1973





This report includes information from the following map sheet(s).

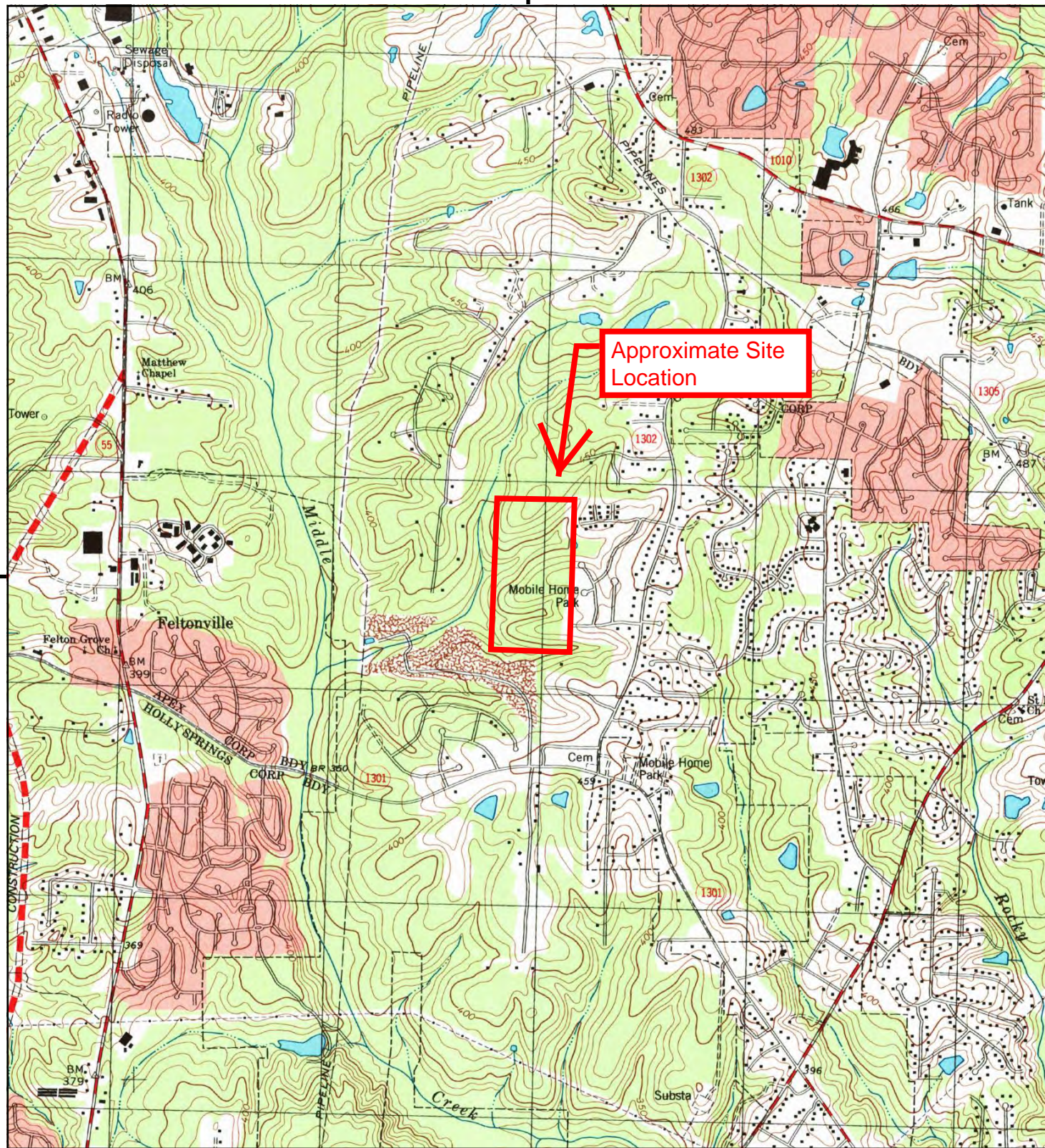


TP, Apex, 2013, 7.5-minute

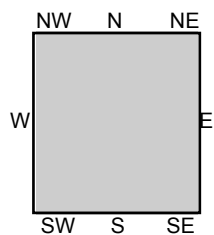
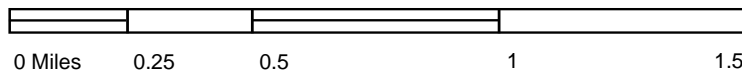
SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex, NC 27539  
 CLIENT: Mid-Atlantic Associates







This report includes information from the following map sheet(s).

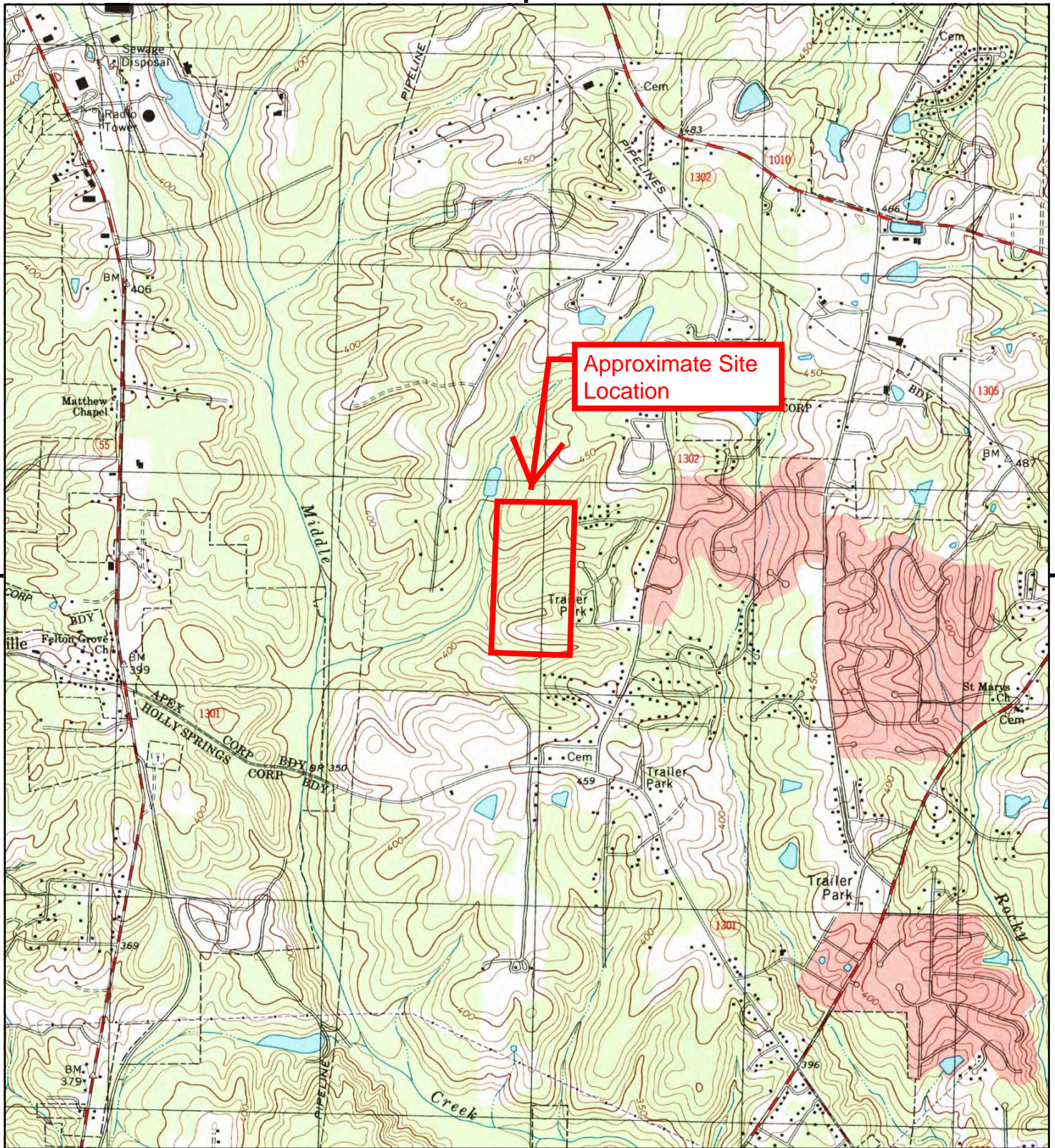


TP, Apex, 2002, 7.5-minute

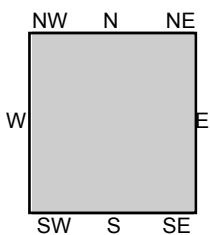
SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex, NC 27539  
 CLIENT: Mid-Atlantic Associates







This report includes information from the following map sheet(s).

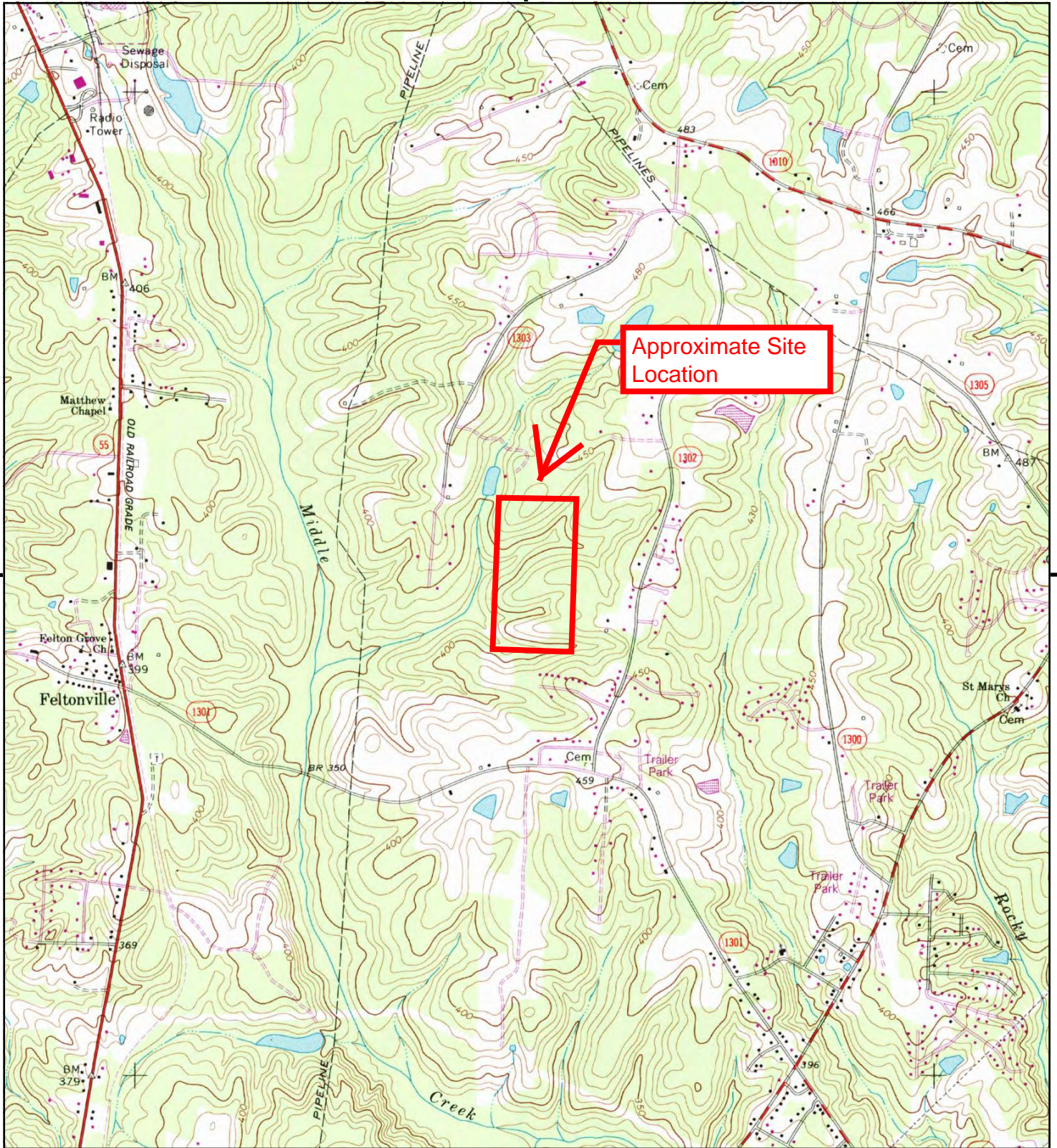


TP, Apex, 1993, 7.5-minute

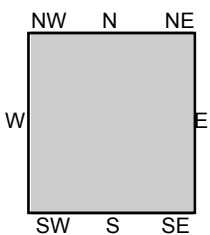
SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex, NC 27539  
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This report includes information from the following map sheet(s).

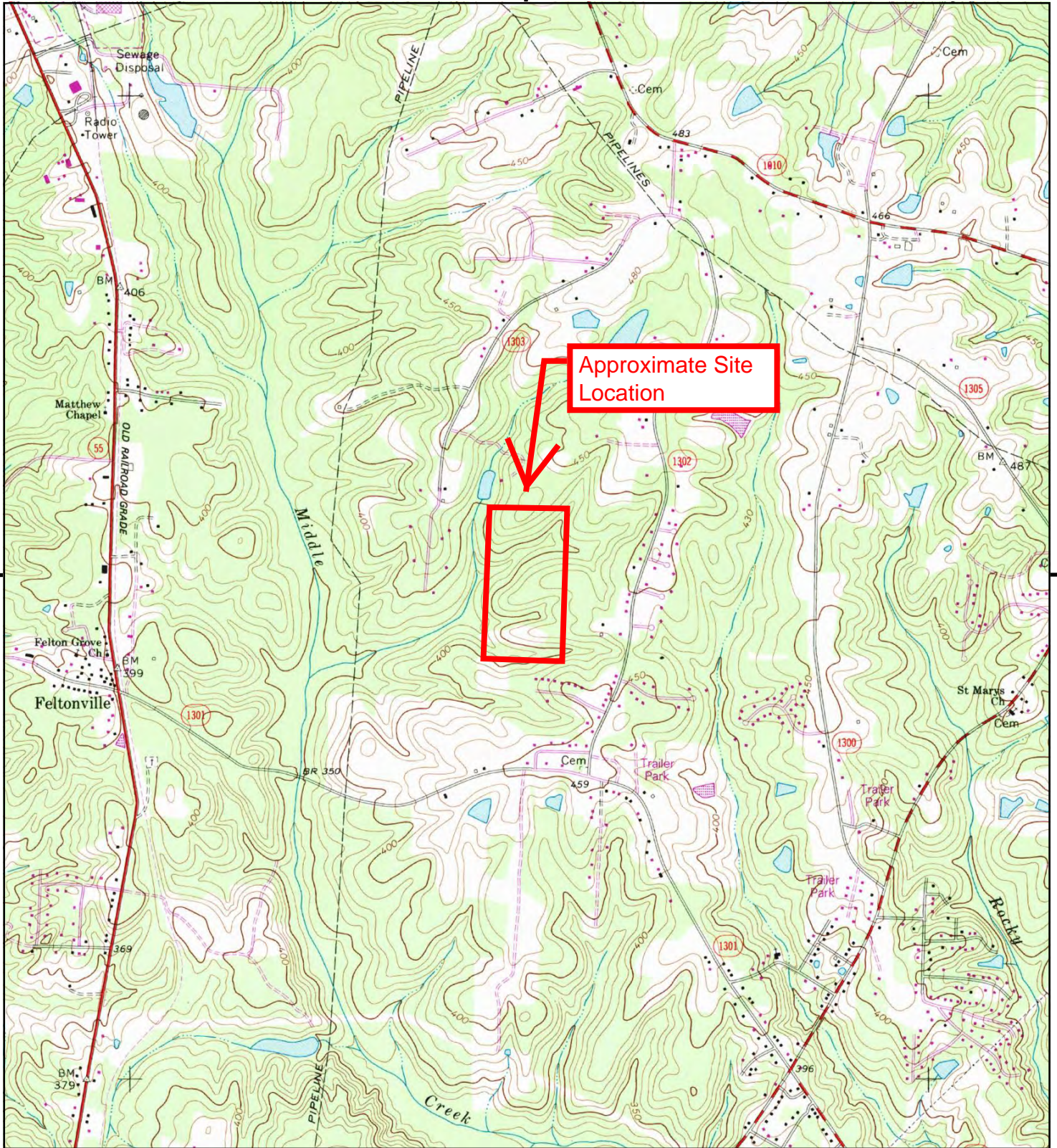


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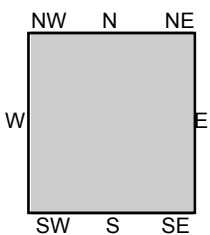
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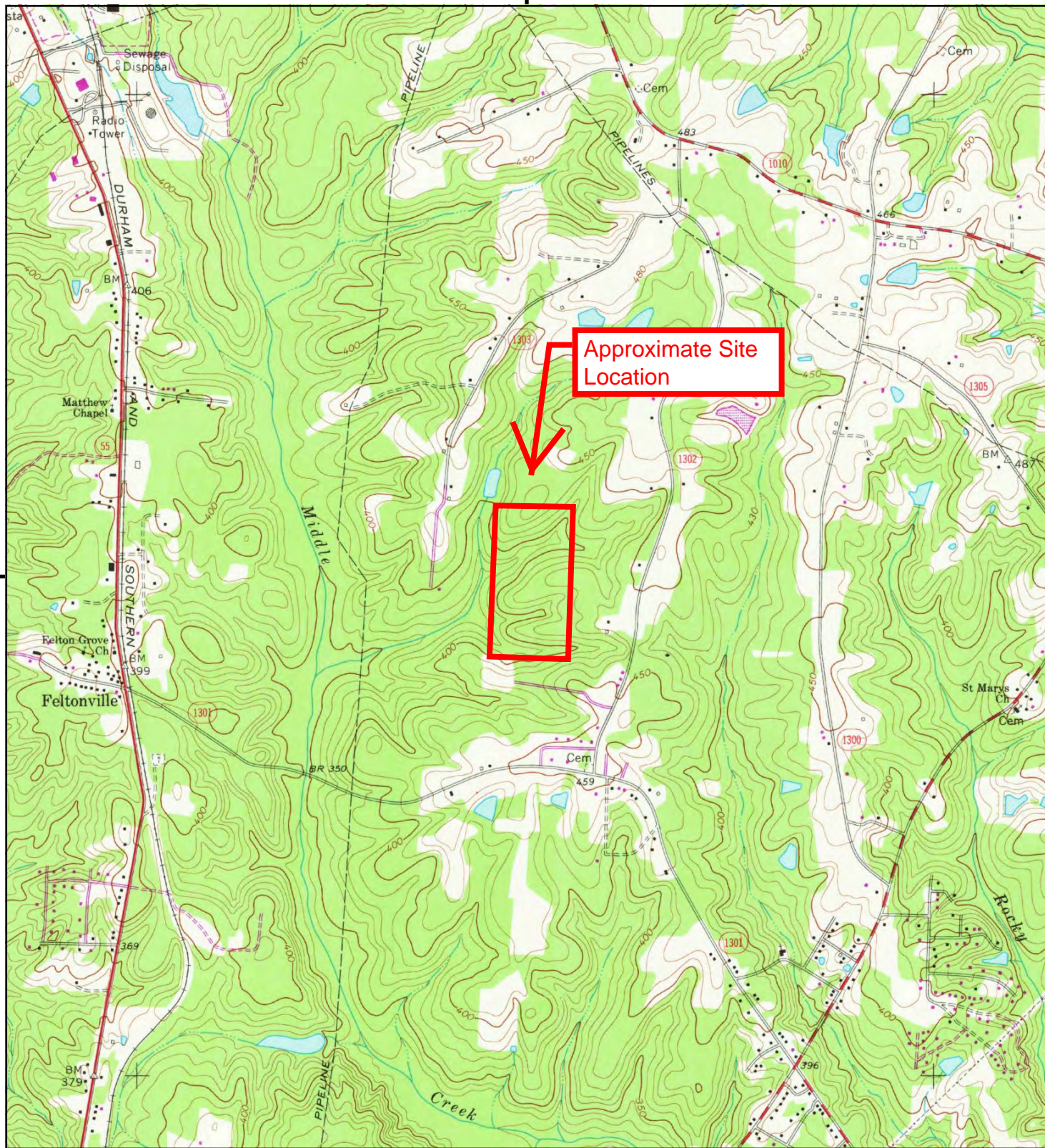


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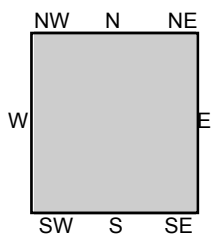
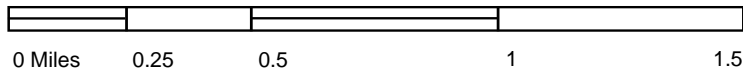
SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex, NC 27539  
 CLIENT: Mid-Atlantic Associates







This report includes information from the following map sheet(s).

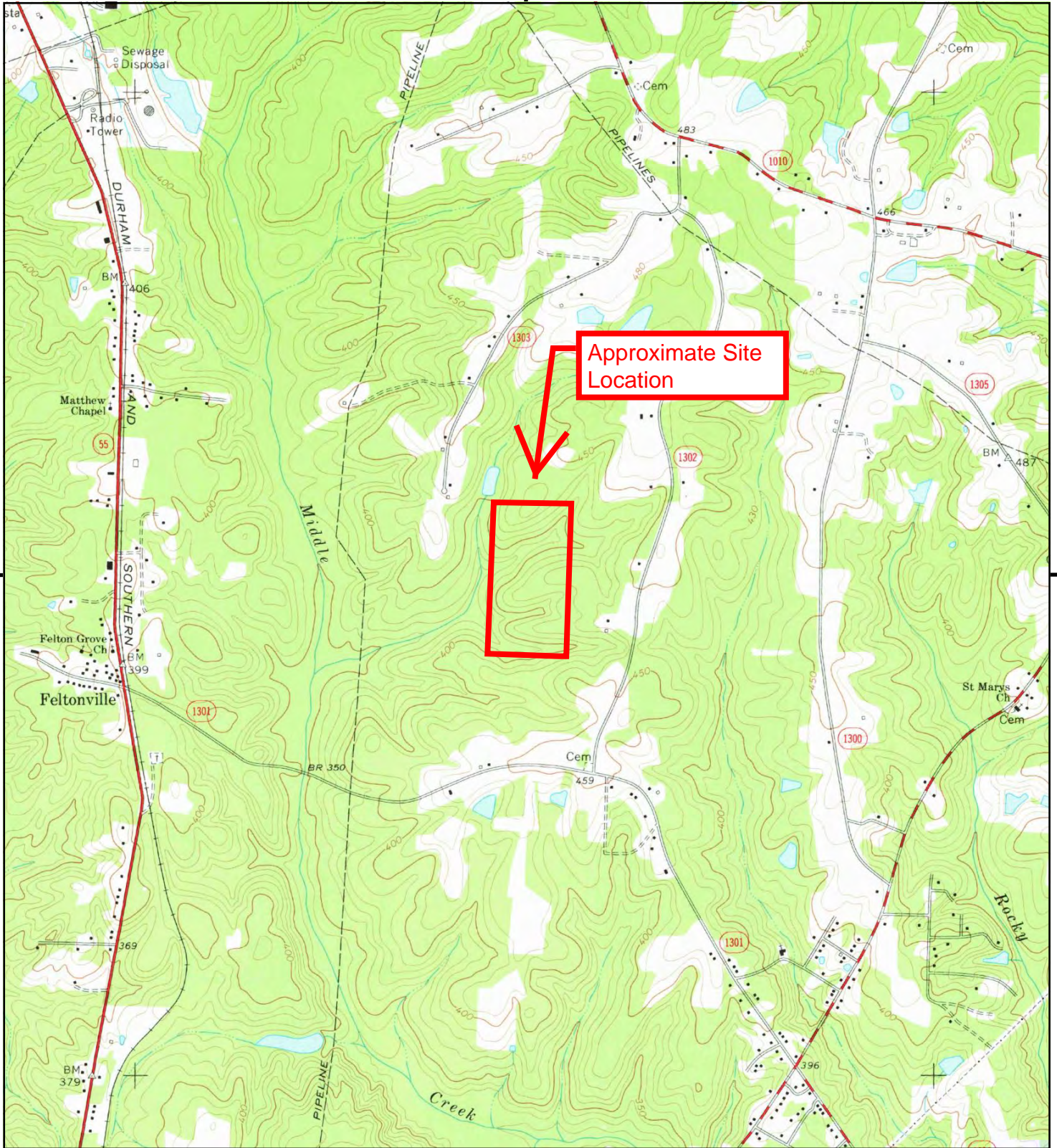


TP, Apex, 1981, 7.5-minute

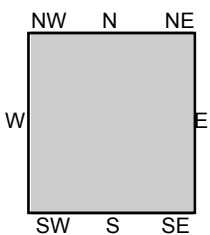
SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex, NC 27539  
 CLIENT: Mid-Atlantic Associates







This report includes information from the following map sheet(s).



TP, Apex, 1974, 7.5-minute

SITE NAME: WCPSS H-12/E-46 Site  
ADDRESS: 8550 Stephenson Road  
Apex, NC 27539  
CLIENT: Mid-Atlantic Associates






[Home](#)

## Wake County Real Estate Data Account Summary

[iMaps](#)
[Tax Bills](#)
Real Estate ID **0018131** PIN # **0750545646**Account  
Search

Location Address      Property Description

**8550 STEPHENSON RD RODGERS LD**
[Pin/Parcel History](#)   [New Search](#)

[NORTH CAROLINA](#) | [Account](#) | [Buildings](#) | [Land](#) | [Deeds](#) | [Notes](#) | [Sales](#) | [Photos](#) | [Tax Bill](#) | [Map](#)

Property Owner <b>MERION INVESTMENT PROPERTIES LLC</b> (Use the <a href="#">Deeds</a> link to view any additional owners)		Owner's Mailing Address <b>114 BIRKLANDS DR</b> <b>CARY NC 27518-8203</b>	Property Location Address <b>8550 STEPHENSON RD</b> <b>APEX NC 27539-9381</b>
<b>Administrative Data</b> Old Map # <b>718--</b> Map/Scale <b>0750 04</b> VCS <b>20AP901</b> City Fire District <b>23</b> Township <b>WHITE OAK</b> Land Class <b>VACANT</b> ETJ <b>AP</b> Spec Dist(s) Zoning <b>MD-CZ</b> History ID 1 History ID 2 Acreage <b>66.48</b> Permit Date Permit #		<b>Transfer Information</b> Deed Date <b>8/25/2005</b> Book & Page <b>11544 1156</b> Revenue Stamps Pkg Sale Date Pkg Sale Price Land Sale Date <b>8/25/2005</b> Land Sale Price <b>\$660,000</b> <b>Improvement Summary</b> Total Units <b>0</b> Recycle Units <b>0</b> Apt/SC Sqft Heated Area	<b>Assessed Value</b> Land Value Assessed <b>\$2,823,090</b> Bldg. Value Assessed Tax Relief Land Use Value Use Value Deferment Historic Deferment Total Deferred Value Use/Hist/Tax Relief Assessed Total Value <b>\$2,823,090</b> Assessed*

\*Wake County assessed building and land values reflect the market value as of January 1, 2016, which is the date of the last county-wide revaluation. Any inflation, deflation or other economic changes occurring after this date does not affect the assessed value of the property and cannot be lawfully considered when reviewing the value for adjustment.

The January 1, 2016 values will remain in effect until the next county-wide revaluation. Until that time, any real estate accounts created or new construction built is assessed according to the 2016 Schedule of Values.

For questions regarding the information displayed on this site, please contact the Revenue Department at [RevHelp@wakegov.com](mailto:RevHelp@wakegov.com) or call 919-856-5400.




[Home](#)

## Wake County Real Estate Data Ownership History

[iMaps](#)
[Tax Bills](#)
Real Estate ID **0018131** PIN # **0750545646**Account  
SearchLocation Address      Property Description  
**8550 STEPHENSON RD RODGERS LD**
[Pin/Parcel History](#)    [New Search](#)

[NORTH CAROLINA](#)   [Account](#) | [Buildings](#) | [Land](#) | [Deeds](#) | [Notes](#) | [Sales](#) | [Photos](#) | [Tax Bill](#) | [Map](#)

	Owner Name	Type	% Own	Stamps	Book	Page	Date
Current	<b>MERION INVESTMENT PROPERTIES LLC</b>		<b>ALL</b>		<b>11544</b>	<b>1156</b>	<b>08-25-2005</b>
1 Back	<b>MERION INVESTMENT PROPERTIES LLC</b>		<b>1/2</b>	<b>1320.00</b>	<b>11544</b>	<b>1153</b>	<b>08-25-2005</b>
	<b>CAMPBELL UNIVERSITY INCORPORATED</b>		<b>1/2</b>				
2 Back	<b>LANE, DON G &amp; PHYLLIS B</b>		<b>1/2</b>		<b>11544</b>	<b>1150</b>	<b>08-25-2005</b>
	<b>CAMPBELL UNIVERSITY INC</b>		<b>1/2</b>				
3 Back	<b>BARKER, ROBERT J SR &amp; PATRICIA M</b>		<b>1/2</b>		<b>11544</b>	<b>1146</b>	<b>08-25-2005</b>
	<b>LANE, DON G &amp; PHYLLIS B</b>		<b>1/2</b>				
4 Back	<b>BARLANE DEVELOPMENT LLC</b>		<b>ALL</b>		<b>11353</b>	<b>2715</b>	<b>05-10-2005</b>
5 Back	<b>BARLANE DEVELOPMENT LLC</b>		<b>50%</b>		<b>08955</b>	<b>2413</b>	<b>06-11-2001</b>
	<b>BARKER, ROBERT J SR &amp; PATRICIA M</b>		<b>50</b>				
6 Back	<b>LANE, DON G</b>		<b>50%</b>		<b>08860</b>	<b>0609</b>	<b>03-30-2001</b>
	<b>BARKER, ROBERT J SR &amp; PATRICIA M</b>		<b>50</b>				
7 Back	<b>LANE, DON G</b>		<b>50%</b>		<b>08532</b>	<b>1419</b>	<b>03-02-2000</b>
	<b>BARKER PROPERTY MANAGEMENT LLC</b>		<b>50%</b>				
8 Back	<b>LANE, DON G</b>		<b>ALL</b>	<b>898.00</b>	<b>07714</b>	<b>0853</b>	<b>10-23-1997</b>
9 Back	<b>DICKENS, HAZEL P</b>	<b>WILL</b>	<b>ALL</b>		<b>90-E-</b>		<b>05-01-1990</b>
10 Back	<b>DICKENS, FRED LEE &amp; HAZEL P</b>		<b>ALL</b>		<b>01734</b>	<b>0511</b>	<b>10-04-1966</b>

\*Wake County assessed building and land values reflect the market value as of January 1, 2016, which is the date of the last county-wide revaluation. Any inflation, deflation or other economic changes occurring after this date does not affect the assessed value of the property and cannot be lawfully considered when reviewing the value for adjustment.

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estate accounts created or new construction built is assessed according to the 2016 Schedule of Values.

**For questions regarding the information displayed on this site, please contact the Revenue Department at [RevHelp@wakegov.com](mailto:RevHelp@wakegov.com) or call 919-856-5400.**



WAKE COUNTY, NC 95  
 LAURA M RIDDICK  
 REGISTER OF DEEDS  
 PRESENTED & RECORDED ON  
 08/25/2005 AT 10:31:29  
 STATE OF NORTH CAROLINA  
 REAL ESTATE EXCISE TAX: \$1320  
 BOOK:011544 PAGE:01156 - 01158

Prepared by: The Law Offices of Akins, Hunt & Fearon, PC, Without the benefit of a Title Examination

After recording, return to: HOLD - BOX 10

Tax ID #: 0018131

Excise Tax: \$ 1,320.00

THIS GENERAL WARRANTY DEED, made this 19<sup>th</sup> day of May, 2005, by and between

CAMPBELL UNIVERSITY, INCORPORATED..... hereinafter called Grantor(s):

P.O. Box 97

Buies Creek, NC 27506

AND

MERION INVESTMENT PROPERTIES, LLC..... hereinafter called Grantee(s):

~~12620 Port Chester Court~~ 5801 Lease Ln.  
~~Raleigh, NC 27614~~ Raleigh, NC 27617  
 WITNESSETH:

The designation Grantor and Grantee used herein shall include parties, their heirs, successors and assigns and shall include singular, plural masculine, feminine or neuter as required by context.

The Grantor, for a valuable consideration paid by Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the grantee, in fee simple, its one-half (1/2) interest in that certain lot or parcel of land situated in Wake County, North Carolina, and more particularly described as follows:

SEE EXHIBIT A.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee, in fee simple.

And the Grantor covenants with the Grantee that Grantor is seized in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all adverse encumbrances, and that the Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for exceptions hereinafter stated.

IN WITNESS WHEREOF, the Grantor has hereunto set his/her hand and seal, or if corporate, has caused this instrument to be executed by duly authorized officers and its seal affixed by authority of its Board of Directors, the day and year first appearing above.

CAMPBELL UNIVERSITY, INCORPORATED

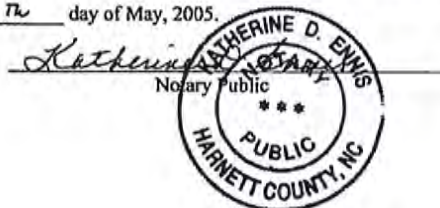
By: James H. Ellerbe (SEAL)  
 Name: Dr. James H. Ellerbe  
 Title: Vice President for Business and Treasurer

STATE OF NORTH CAROLINA )  
 COUNTY OF Harnett )

I, Katherine D. Ennis, the undersigned notary public, do hereby certify that Dr. James H. Ellerbe, of Campbell University, Incorporated, a North Carolina corporation, personally appeared before me this day and acknowledged the due execution of the foregoing instrument on behalf of the company.

Witness my hand and official seal, this 19<sup>th</sup> day of May, 2005.

My Commission Expires: June 26, 2008





BK011544PG01157

**EXHIBIT A**

BEGINNING at an existing iron pipe in the southern line of the 60 foot right-of-way of Derrydown Lane, said point being the northwestern corner of now or formerly Heater Utilities property (PIN: 0756663067); running thence along the western line of the now or formerly Tonya Currin property (Pin: 0750657552), South 04° 11' 13" West 1905.91 feet to an existing iron pipe, said point being in the western line of now or formerly Briarwood property (PIN: 0750642452); running thence along the northern line of now or formerly Johnnie Dew property the following four (4) bearings and distances to existing iron pipes: (1) South 89° 45' 24" West 41.10 feet; (2) North 89° 45' 13" West 102.50 feet; (3) North 89° 49' 20" West 149.96 feet; (4) North 89° 44' 59" West 119.16 feet to an existing iron pipe; running thence along the northern line of now or formerly Currin Bros. Inc. property (PIN: 0750534767), North 89° 50' 01" West 812.11 feet to an existing iron pipe; running thence along the eastern property line of now or formerly Currin Bros. Inc. property (Pin: 0750442256), North 01° 20' 28" East 635.48 feet to an existing iron pipe; running thence along the eastern line of now or formerly Randy Garren property (PIN: 0750956175) and the now or formerly William Hales property (PIN: 0750456507), North 04° 41' 43" East 987.40 feet to an existing iron pipe; running thence along the eastern line of now or formerly Ronald D. & Melody Scott property (PIN: 075096610), North 04° 34' 36" East 553.01 feet to an existing iron pipe; running thence more or less North 04° 34' 36" East approximately 231.85 feet to an existing iron pipe; running thence with the southern line of now or formerly Joseph Dean property (PIN: 0750576147), South 85° 37' 49" East 1239.44 feet to an existing iron pipe; running thence along the western line of Heater Utilities property, South 04° 13' 01" West 431.40 feet to the point and place of BEGINNING, containing approximately 66.48 acres and as further described on deed recorded in Book 7714, Page 858, Wake County Registry.





BOOK:011544 PAGE:01156 - 01158

Yellow probate sheet is a vital part of your recorded document.  
Please retain with original document and submit for rerecording.



Wake County Register of Deeds  
Laura M. Riddick  
Register of Deeds

North Carolina – Wake County

The foregoing certificate \_\_\_ of Katherine D Ennis

\_\_\_\_ Notary(ies) Public is (are) certified to be correct. This instrument and this certificate are duly registered at the date and time and in the book and page shown on the first page hereof.

Laura M. Riddick, Register of Deeds

By: George W. Davison  
Assistant/Deputy Register of Deeds

This Customer Group  
\_\_\_\_\_ # of Time Stamps Needed

This Document  
\_\_\_\_\_ New Time Stamp  
\_\_\_\_\_ # of Pages



## **Appendix 15.5**

### **Regulatory Records Documentation**



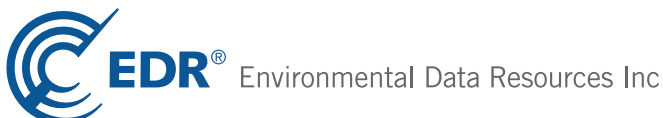
**WCPSS H-12/E-46 Site**

8550 Stephenson Road  
Apex, NC 27539

Inquiry Number: 4590391.2s  
April 19, 2016

# The EDR Radius Map™ Report with GeoCheck®

Prepared using the EDR FieldCheck® System



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). MID-ATLANTIC ASSOCIATES used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by MID-ATLANTIC ASSOCIATES. The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### **TARGET PROPERTY INFORMATION**

#### **ADDRESS**

8550 STEPHENSON ROAD  
APEX, NC 27539

#### **COORDINATES**

Latitude (North):	35.6880240 - 35° 41' 16.88"
Longitude (West):	78.8126720 - 78° 48' 45.61"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	697932.4
UTM Y (Meters):	3951351.8
Elevation:	410 ft. above sea level

### **USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY**

Target Property Map:	5947392 APEX, NC
Version Date:	2013

### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from:	20120531
Source:	USDA



MAPPED SITES SUMMARY

Target Property Address:  
8550 STEPHENSON ROAD  
APEX, NC 27539

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">Reg</a>	SORRELL LDFL		NC HSDS	Same	3740, 0.708, North
<a href="#">1</a>	CURRIN BROTHERS LAND	4525 SUNSET LAKE ROA	SWF/LF	Higher	2249, 0.426, SSW
<a href="#">2</a>	WOODCREEK TRACT A BA	SUNSET LAKE ROAD	LAST	Higher	2306, 0.437, SSW



## EXECUTIVE SUMMARY

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

#### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

#### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

#### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

#### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

#### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

#### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

#### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

#### ***Federal ERNS list***

ERNS..... Emergency Response Notification System



## EXECUTIVE SUMMARY

### ***State- and tribal - equivalent CERCLIS***

SHWS..... Inactive Hazardous Sites Inventory

### ***State and tribal landfill and/or solid waste disposal site lists***

OLI..... Old Landfill Inventory

### ***State and tribal leaking storage tank lists***

LUST..... Regional UST Database  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land  
LUST TRUST..... State Trust Fund Database

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
UST..... Petroleum Underground Storage Tank Database  
AST..... AST Database  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal institutional control / engineering control registries***

INST CONTROL..... No Further Action Sites With Land Use Restrictions Monitoring

### ***State and tribal voluntary cleanup sites***

VCP..... Responsible Party Voluntary Action Sites  
INDIAN VCP..... Voluntary Cleanup Priority Listing

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Brownfields Projects Inventory

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

HIST LF..... Solid Waste Facility Listing  
SWRCY..... Recycling Center Listing  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory

### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register  
US CDL..... National Clandestine Laboratory Register

### ***Local Land Records***

LIENS 2..... CERCLA Lien Information



## EXECUTIVE SUMMARY

### ***Records of Emergency Release Reports***

HMIRS.....	Hazardous Materials Information Reporting System
SPILLS.....	Spills Incident Listing
IMD.....	Incident Management Database
SPILLS 90.....	SPILLS 90 data from FirstSearch
SPILLS 80.....	SPILLS 80 data from FirstSearch

### ***Other Ascertainable Records***

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
FINDS.....	Facility Index System/Facility Registry System
COAL ASH.....	Coal Ash Disposal Sites
DRYCLEANERS.....	Drycleaning Sites
Financial Assurance.....	Financial Assurance Information Listing
NPDES.....	NPDES Facility Location Listing
UIC.....	Underground Injection Wells Listing
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
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## EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historic Gas Stations  
EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List  
RGA LF..... Recovered Government Archive Solid Waste Facilities List  
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***State- and tribal - equivalent NPL***

NC HSDS: The Hazardous Substance Disposal Sites list contains locations of uncontrolled and unregulated hazardous waste sites. The file contains sites on the national priority list as well as the state priority list. The data source is the North Carolina Center for Geographic Information and Analysis.

An online review and analysis by MID-ATLANTIC ASSOCIATES of the NC HSDS list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 NC HSDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SORRELL LDFL		N 1/2 - 1 (0.708 mi.)	0	8

#### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environment & Natural Resources' List of Solid Waste Facility Contacts in Alpha Order.

An online review and analysis by MID-ATLANTIC ASSOCIATES of the SWF/LF list, as provided by EDR, and dated 12/28/2015 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.



## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CURRIN BROTHERS LAND Facility Status: Open Permit Num: 92N-LCID-1986	4525 SUNSET LAKE ROA	SSW 1/4 - 1/2 (0.426 mi.)	1	8

### ***State and tribal leaking storage tank lists***

LAST: A listing of leaking aboveground storage tank site locations.

An online review and analysis by MID-ATLANTIC ASSOCIATES of the LAST list, as provided by EDR, and dated 02/05/2016 has revealed that there is 1 LAST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WOODCREEK TRACT A BA Close Out: 10/23/2007 Incident Number: 92019 Current Status: C	SUNSET LAKE ROAD	SSW 1/4 - 1/2 (0.437 mi.)	2	8



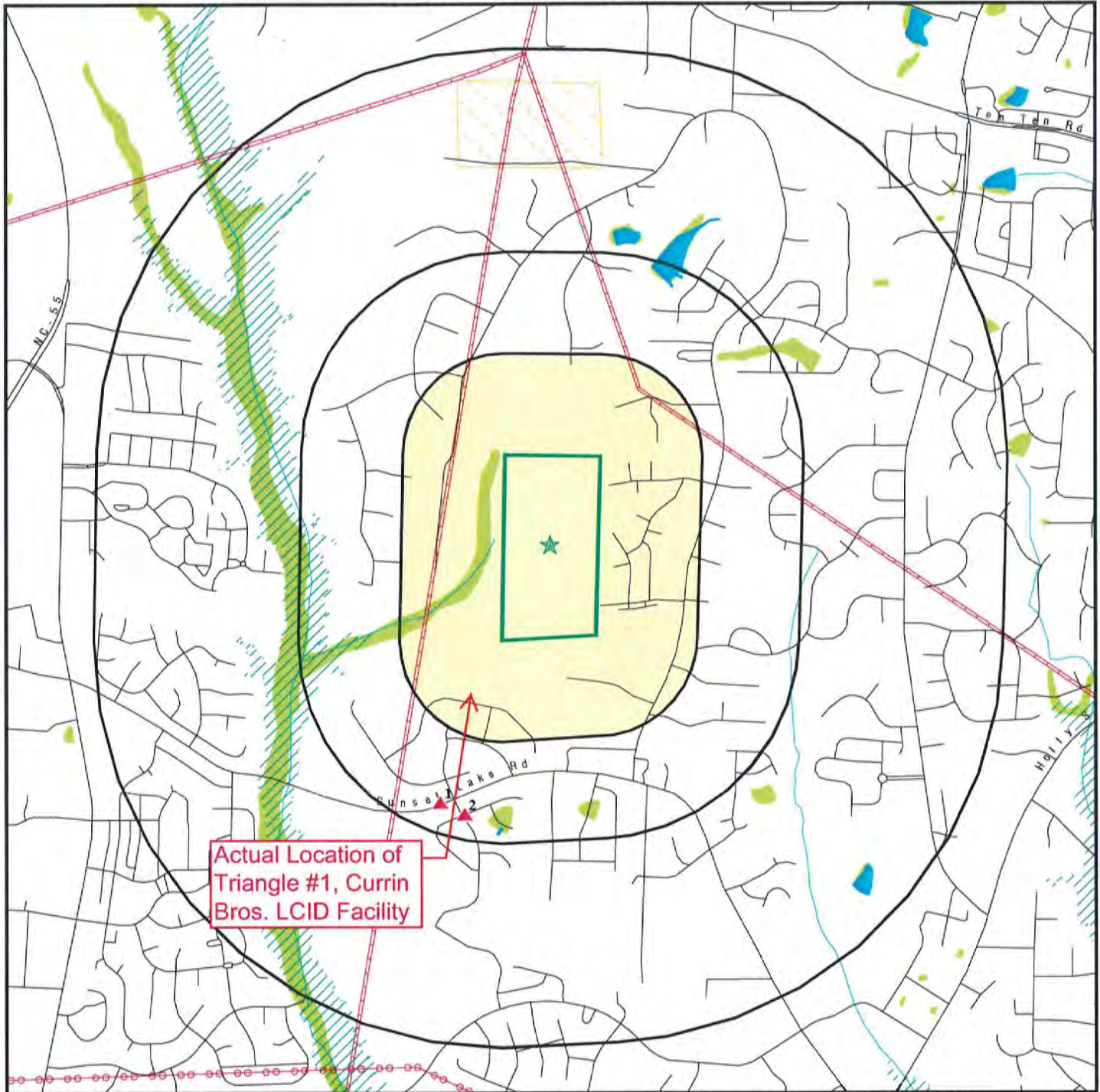
## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 12 records.

<u>Site Name</u>	<u>Database(s)</u>
SORRELLS	SWF/LF, Financial Assurance
EVANS ROAD RECYCLING FIRE	SEMS
WAKE CO LDFL	SEMS-ARCHIVE
SORRELL LDFL	SEMS-ARCHIVE
PIERCE (LYNN) PROPERTY	SEMS-ARCHIVE
APEX SANITARY LDFL	SEMS-ARCHIVE
64 WEST CONVENIENT	UST
DONNA C. PEGGS	UST
PLUNKETT-WEBSTER INC NC	RCRA NonGen / NLR
RYDER TRUCK RENTAL INC	RCRA NonGen / NLR
TUNSTALL 76	IMD
APEX SANITARY LF	OLI



# OVERVIEW MAP - 4590391.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Hazardous Substance Disposal Sites

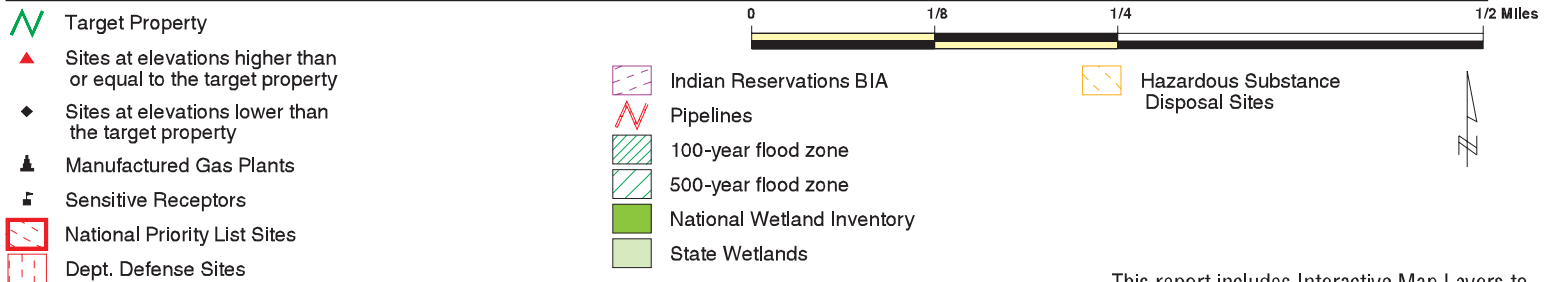
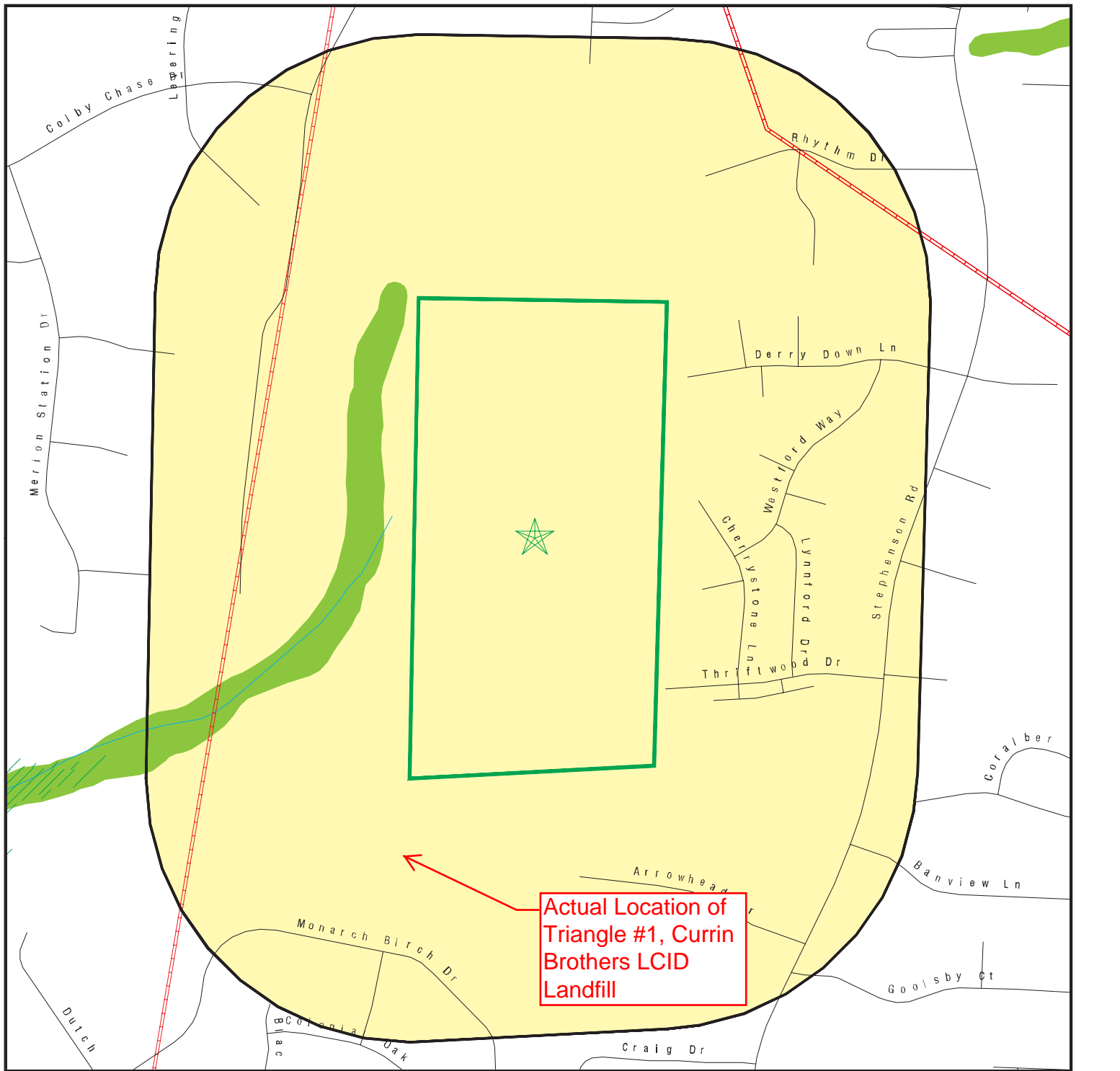
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex NC 27539  
 LAT/LONG: 35.688024 / 78.812672

CLIENT: Mid-Atlantic Associates  
 CONTACT: Sandy Miller  
 INQUIRY #: 4590391.2s  
 DATE: April 19, 2016 6:12 pm



# DETAIL MAP - 4590391.2S



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex NC 27539  
 LAT/LONG: 35.688024 / 78.812672

CLIENT: Mid-Atlantic Associates  
 CONTACT: Sandy Miller  
 INQUIRY #: 4590391.2s  
 DATE: April 19, 2016 6:14 pm



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
NC HSDS	1.000		0	0	0	1	NR	1
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	1	NR	NR	1
OLI	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LAST	0.500		0	0	1	NR	NR	1



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
IMD	0.500		0	0	0	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
SPILLS 80	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS	TP		NR	NR	NR	NR	NR	0
---------	----	--	----	----	----	----	----	---



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	0	0	2	1	0	3

### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

EDR ID Number  
EPA ID Number

**HSDS**  
**Region**  
**North**  
**1/2-1**  
**3740 ft.**

**SORRELL LDFL**  
**, NC**

**NC HSDS**   **S102442473**  
**N/A**

**HSDS:**

Site Type: Federal  
Superfund ID: 980 503 122  
Lat/Long: 35 42 11.320565 78 48 49.665731  
Total area in coverage units: 192438.03125  
Total perimeter in coverage units: 1813.18176269  
X-value coordinate in feet: 2055282.5  
Y-value coordinate in feet: 710874.3125  
Sites designated as superfund cleanup sites: 379  
Length of feature in internal units: 1813.18183855  
Area of feature in internal units squared: 192438.03725

**1**  
**SSW**  
**1/4-1/2**  
**0.426 mi.**  
**2249 ft.**

**CURRIN BROTHERS LANDFILL**  
**4525 SUNSET LAKE ROAD**  
**HOLLY SPRINGS, NC**

**SWF/LF**   **S111241092**  
**N/A**

**Relative:**  
**Higher**

**LF:**

Permit Num: 92N-LCID-1986  
Waste: LCID  
Activity: LF  
Contact Name: Allen Currin  
Contact Telephone: 919-876-1138  
Facility Status: Open

**Actual:**  
**428 ft.**

**2**  
**SSW**  
**1/4-1/2**  
**0.437 mi.**  
**2306 ft.**

**WOODCREEK TRACT A BARN**  
**SUNSET LAKE ROAD**  
**HOLLY SPRINGS, NC 27540**

**LAST**   **S110629339**  
**N/A**

**Relative:**  
**Higher**

**LAST:**

Facility ID: N/A  
UST Number: RA-92019  
Incident Number: 92019  
Contamination Type: SL  
Source Type: 19  
Product Type: P  
Date Reported: 10/11/2007  
Date Occur: 08/31/2007  
Cleanup: 08/31/2007  
Closure Request: Not reported  
Close Out: 10/23/2007  
Level Of Soil Cleanup Achieved: S3  
Tank Regulated Status: R  
# Of Supply Wells: 0  
Commercial/NonCommercial UST Site: N  
Risk Classification: L  
Risk Class Based On Review: L  
Corrective Action Plan Type: Not reported  
NOV Issue Date: Not reported

**Actual:**  
**439 ft.**



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WOODCREEK TRACT A BARN (Continued)**

**S110629339**

NORR Issue Date: Not reported  
Site Priority: Not reported  
Phase Of LSA Req: Not reported  
Site Risk Reason: Not reported  
Land Use: Not reported  
MTBE: No  
MTBE1: No  
Flag: No  
Flag1: No  
LUR Filed: Not reported  
Release Detection: 0  
Current Status: C  
RBCA GW: Not reported  
PETOPT: 3  
RPL: False  
CD Num: 0  
Reel Num: 0  
RPOW: False  
RPOP: False  
Error Flag: 0  
Error Code: N  
Valid: False  
Lat/Long: 35 40 42.6 78 48 59.04  
Lat/Long Decimal: 35.67850 -78.81640  
Testlat: Not reported  
Regional Officer Project Mgr: JFM  
Region: RAL  
Company: Holly Springs Residential  
Contact Person: Karl Blackley  
Telephone: Not reported  
RP Address: 100 Weston Estates Way  
RP City,St,Zip: Cary, NC 27513  
RP County: Not reported  
Comments: Contamination at the standing tobacco barn location removed with  
samples < BDL. 10/23/2007, JFM///  
5 Min Quad: Not reported

**PIRF:**

Facility Id: 92019  
Date Occurred: 8/31/2007  
Date Reported: 10/11/2007  
Description Of Incident: Contamination at the standing tobacco barn location removed with  
samples < BDL  
Owner/Operator: Not reported  
Ownership: 4  
Operation Type: 8  
Type: 3  
Location: 8  
Site Priority: Not reported  
Priority Update: Not reported  
Wells Affected Y/N: N  
Wells Affected Number: Not reported  
Samples Taken By: Y  
Samples Include: Not reported  
7#5 Min Quad: Not reported  
5 Min Quad: Not reported  
Pirf/Min Soil: Not reported  
Release Code: 9



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WOODCREEK TRACT A BARN (Continued)**

**S110629339**

Cause:	Not reported
Source:	Not reported
Source Type:	C
Last Modified:	10/23/2007
<b>Incident Phase:</b>	<b>CO</b>
NOV Issued:	Not reported
NORR Issued:	Not reported
45 Day Report:	Not reported
Public Meeting Held:	Not reported
Corrective Action Planned:	Not reported
SOC Signed:	Not reported
Reclassification Report:	Not reported
RS Designation:	Not reported
Closure Request Date:	Not reported
Close-out Report:	Not reported



Count: 12 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
APEX	1004745396	PLUNKETT-WEBSTER INC NC	SR 1010	27502	RCRA NonGen / NLR
APEX	1003868318	WAKE CO LDFL	SR 1172	27502	SEMS-ARCHIVE
APEX	S109611291	SORRELLS	S.R. 1303		SWF/LF, Financial Assurance
APEX	1003868316	SORRELL LDFL	SR 1303	27502	SEMS-ARCHIVE
APEX	U001435144	64 WEST CONVENIENT	ROUTE 2, BOX 110-A	27502	UST
APEX	U001435565	DONNA C. PEGGS	ROUTE 3, BOX 164-A	27502	UST
APEX	1003869135	PIERCE (LYNN) PROPERTY	ROUTE 5, BOX 143-A	27502	SEMS-ARCHIVE
APEX	1003868293	APEX SANITARY LDFL	HWY 55	27502	SEMS-ARCHIVE
APEX	S109136341	APEX SANITARY LF	HWY 55 , 451 W WILLIAMS ON WES		OLI
APEX	1004746407	RYDER TRUCK RENTAL INC	HWY 55	27502	RCRA NonGen / NLR
APEX	1016139744	EVANS ROAD RECYCLING FIRE	EVANS ROAD		SEMS
APEX	S106196011	TUNSTALL 76	OLD US HIGHWAY #1		IMD



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ***Federal Delisted NPL site list***

#### Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

### ***Federal CERCLIS list***

#### FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 04/08/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

#### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 06/06/2016
	Data Release Frequency: Quarterly

### ***Federal CERCLIS NFRAP site list***

#### SEMS-ARCHIVE: Superfund Enterprise Management System Archive



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 04/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 06/06/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015	Source: EPA
Date Data Arrived at EDR: 03/02/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: (404) 562-8651
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: (404) 562-8651
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: (404) 562-8651
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Quarterly

### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/02/2016	Telephone: (404) 562-8651
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 03/30/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Varies

### ***Federal institutional controls / engineering controls registries***

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 02/16/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 05/30/2016
	Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 02/29/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 06/13/2016
	Data Release Frequency: Varies

#### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 02/29/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 06/13/2016
	Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 03/30/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Annually

## ***State- and tribal - equivalent NPL***

HSDS: Hazardous Substance Disposal Site

Locations of uncontrolled and unregulated hazardous waste sites. The file includes sites on the National Priority List as well as those on the state priority list.

Date of Government Version: 08/09/2011  
Date Data Arrived at EDR: 11/08/2011  
Date Made Active in Reports: 12/05/2011  
Number of Days to Update: 27

Source: North Carolina Center for Geographic Information and Analysis  
Telephone: 919-754-6580  
Last EDR Contact: 02/01/2016  
Next Scheduled EDR Contact: 05/16/2016  
Data Release Frequency: Biennially

## ***State- and tribal - equivalent CERCLIS***

SHWS: Inactive Hazardous Sites Inventory

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 02/15/2016  
Date Data Arrived at EDR: 03/17/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 25

Source: Department of Environment, Health and Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 03/17/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF: List of Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/28/2015  
Date Data Arrived at EDR: 12/30/2015  
Date Made Active in Reports: 02/08/2016  
Number of Days to Update: 40

Source: Department of Environment and Natural Resources  
Telephone: 919-733-0692  
Last EDR Contact: 03/31/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Semi-Annually

OLI: Old Landfill Inventory

Old landfill inventory location information. (Does not include no further action sites and other agency lead sites).

Date of Government Version: 03/27/2015  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 04/30/2015  
Number of Days to Update: 13

Source: Department of Environment & Natural Resources  
Telephone: 919-733-4996  
Last EDR Contact: 04/15/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal leaking storage tank lists***

### **LAST: Leaking Aboveground Storage Tanks**

A listing of leaking aboveground storage tank site locations.

Date of Government Version: 02/05/2016

Date Data Arrived at EDR: 02/11/2016

Date Made Active in Reports: 04/11/2016

Number of Days to Update: 60

Source: Department of Environment & Natural Resources

Telephone: 877-623-6748

Last EDR Contact: 02/11/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Quarterly

### **LUST: Regional UST Database**

This database contains information obtained from the Regional Offices. It provides a more detailed explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered LUSTs.

Date of Government Version: 02/05/2016

Date Data Arrived at EDR: 02/11/2016

Date Made Active in Reports: 04/11/2016

Number of Days to Update: 60

Source: Department of Environment and Natural Resources

Telephone: 919-733-1308

Last EDR Contact: 02/11/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Quarterly

### **INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land**

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015

Date Data Arrived at EDR: 11/13/2015

Date Made Active in Reports: 01/04/2016

Number of Days to Update: 52

Source: EPA, Region 5

Telephone: 312-886-7439

Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016

Data Release Frequency: Varies

### **INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land**

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015

Date Data Arrived at EDR: 12/01/2015

Date Made Active in Reports: 01/04/2016

Number of Days to Update: 34

Source: EPA Region 4

Telephone: 404-562-8677

Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016

Data Release Frequency: Semi-Annually

### **INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land**

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/20/2015

Date Data Arrived at EDR: 10/30/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 111

Source: EPA Region 6

Telephone: 214-665-6597

Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016

Data Release Frequency: Varies

### **INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land**

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016

Date Data Arrived at EDR: 01/08/2016

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 41

Source: EPA Region 10

Telephone: 206-553-2857

Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016

Data Release Frequency: Quarterly

### **INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land**

LUSTs on Indian land in Arizona, California, New Mexico and Nevada



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/08/2015  
Date Data Arrived at EDR: 01/08/2015  
Date Made Active in Reports: 02/09/2015  
Number of Days to Update: 32

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 01/27/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Quarterly

### INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015  
Date Data Arrived at EDR: 10/23/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 118

Source: EPA Region 8  
Telephone: 303-312-6271  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Quarterly

### INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015  
Date Data Arrived at EDR: 04/28/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 55

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015  
Date Data Arrived at EDR: 10/29/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 67

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 02/22/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### LUST TRUST: State Trust Fund Database

This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

Date of Government Version: 01/08/2016  
Date Data Arrived at EDR: 01/13/2016  
Date Made Active in Reports: 02/08/2016  
Number of Days to Update: 26

Source: Department of Environment and Natural Resources  
Telephone: 919-733-1315  
Last EDR Contact: 04/13/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Semi-Annually

### **State and tribal registered storage tank lists**

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010  
Date Data Arrived at EDR: 02/16/2010  
Date Made Active in Reports: 04/12/2010  
Number of Days to Update: 55

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 04/11/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Varies

#### UST: Petroleum Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/05/2016  
Date Data Arrived at EDR: 02/11/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 60

Source: Department of Environment and Natural Resources  
Telephone: 919-733-1308  
Last EDR Contact: 02/11/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Quarterly

### AST: AST Database

Facilities with aboveground storage tanks that have a capacity greater than 21,000 gallons.

Date of Government Version: 04/14/2015  
Date Data Arrived at EDR: 06/23/2015  
Date Made Active in Reports: 07/17/2015  
Number of Days to Update: 24

Source: Department of Environment and Natural Resources  
Telephone: 919-715-6183  
Last EDR Contact: 03/21/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Semi-Annually

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015  
Date Data Arrived at EDR: 11/13/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 52

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/20/2015  
Date Data Arrived at EDR: 10/30/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 111

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Semi-Annually

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014  
Date Data Arrived at EDR: 11/25/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 65

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/13/2015  
Date Data Arrived at EDR: 10/23/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 118

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Quarterly

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/29/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 67

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 02/22/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016  
Date Data Arrived at EDR: 01/08/2016  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 41

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Quarterly

### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015  
Date Data Arrived at EDR: 12/01/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 34

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Semi-Annually

### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014  
Date Data Arrived at EDR: 02/13/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 28

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 01/27/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Quarterly

### **State and tribal institutional control / engineering control registries**

#### INST CONTROL: No Further Action Sites With Land Use Restrictions Monitoring

A land use restricted site is a property where there are limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site.

Date of Government Version: 02/15/2016  
Date Data Arrived at EDR: 03/17/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 25

Source: Department of Environment, Health and Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 03/17/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Quarterly

### **State and tribal voluntary cleanup sites**

#### VCP: Responsible Party Voluntary Action Sites

Responsible Party Voluntary Action site locations.

Date of Government Version: 02/15/2016  
Date Data Arrived at EDR: 03/17/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 25

Source: Department of Environment and Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 03/17/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Semi-Annually



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 04/01/2016
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

### **State and tribal Brownfields sites**

#### BROWNFIELDS: Brownfields Projects Inventory

A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liability control.

Date of Government Version: 01/04/2016	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 01/07/2016	Telephone: 919-733-4996
Date Made Active in Reports: 02/08/2016	Last EDR Contact: 04/07/2016
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Varies

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/23/2015	Telephone: 202-566-2777
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/22/2016
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/04/2016
	Data Release Frequency: Semi-Annually

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### SWRCY: Recycling Center Listing

A listing of recycling center locations.

Date of Government Version: 02/23/2016	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 02/25/2016	Telephone: 919-707-8137
Date Made Active in Reports: 04/11/2016	Last EDR Contact: 02/02/2016
Number of Days to Update: 46	Next Scheduled EDR Contact: 05/16/2016
	Data Release Frequency: Varies



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### HIST LF: Solid Waste Facility Listing

A listing of solid waste facilities.

Date of Government Version: 11/06/2006  
Date Data Arrived at EDR: 02/13/2007  
Date Made Active in Reports: 03/02/2007  
Number of Days to Update: 17

Source: Department of Environment & Natural Resources  
Telephone: 919-733-0692  
Last EDR Contact: 01/19/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 02/01/2016  
Next Scheduled EDR Contact: 05/16/2016  
Data Release Frequency: Varies

### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: No Update Planned

### **Local Lists of Hazardous waste / Contaminated Sites**

#### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/17/2015  
Date Data Arrived at EDR: 12/04/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 76

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/01/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: No Update Planned

#### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/17/2015  
Date Data Arrived at EDR: 12/04/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 76

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/01/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Land Records**

### **LIENS 2: CERCLA Lien Information**

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 03/11/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Varies

## **Records of Emergency Release Reports**

### **HMIRS: Hazardous Materials Information Reporting System**

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-366-4555
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 03/30/2016
Number of Days to Update: 68	Next Scheduled EDR Contact: 07/11/2016
	Data Release Frequency: Annually

### **SPILLS: Spills Incident Listing**

A listing spills, hazardous material releases, sanitary sewer overflows, wastewater treatment plant bypasses and upsets, citizen complaints, and any other environmental emergency calls reported to the agency.

Date of Government Version: 03/15/2016	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 03/18/2016	Telephone: 919-807-6308
Date Made Active in Reports: 04/11/2016	Last EDR Contact: 03/14/2016
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/27/2016
	Data Release Frequency: Varies

### **IMD: Incident Management Database**

Groundwater and/or soil contamination incidents

Date of Government Version: 07/21/2006	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 08/01/2006	Telephone: 919-733-3221
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 07/01/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

### **SPILLS 90: SPILLS90 data from FirstSearch**

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/27/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/06/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### **SPILLS 80: SPILLS80 data from FirstSearch**

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/14/2001  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 03/06/2013  
Number of Days to Update: 62

Source: FirstSearch  
Telephone: N/A  
Last EDR Contact: 01/03/2013  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### ***Other Ascertainable Records***

#### **RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015  
Date Data Arrived at EDR: 03/02/2016  
Date Made Active in Reports: 04/05/2016  
Number of Days to Update: 34

Source: Environmental Protection Agency  
Telephone: (404) 562-8651  
Last EDR Contact: 03/30/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Varies

#### **FUDS: Formerly Used Defense Sites**

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015  
Date Data Arrived at EDR: 07/08/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 03/11/2016  
Next Scheduled EDR Contact: 06/20/2016  
Data Release Frequency: Varies

#### **DOD: Department of Defense Sites**

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 04/15/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Semi-Annually

#### **FEDLAND: Federal and Indian Lands**

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 02/06/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 339

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 04/15/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: N/A

#### **SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing**

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/07/2011  
Date Data Arrived at EDR: 03/09/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 02/19/2016  
Next Scheduled EDR Contact: 05/30/2016  
Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015  
Date Data Arrived at EDR: 09/03/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 61

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 02/16/2016  
Next Scheduled EDR Contact: 05/30/2016  
Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 02/09/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Quarterly

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/09/2015  
Number of Days to Update: 6

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 02/12/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 01/15/2015  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 14

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 04/05/2016  
Number of Days to Update: 133

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 02/24/2016  
Next Scheduled EDR Contact: 06/06/2016  
Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 12/10/2010  
Date Made Active in Reports: 02/25/2011  
Number of Days to Update: 77

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Annually

### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013  
Date Data Arrived at EDR: 12/12/2013  
Date Made Active in Reports: 02/24/2014  
Number of Days to Update: 74

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 03/08/2016  
Next Scheduled EDR Contact: 06/20/2016  
Data Release Frequency: Annually

### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015  
Date Data Arrived at EDR: 08/26/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 69

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 01/25/2016  
Next Scheduled EDR Contact: 05/09/2016  
Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 02/12/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 05/23/2016
	Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 04/12/2016
Number of Days to Update: 33	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 04/08/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Quarterly

### FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 02/22/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 06/06/2016
	Data Release Frequency: Quarterly

### FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 02/22/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 06/06/2016
	Data Release Frequency: Quarterly

### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/18/2016	Telephone: 301-415-7169
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 02/08/2016
Number of Days to Update: 28	Next Scheduled EDR Contact: 05/23/2016
	Data Release Frequency: Quarterly



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 04/15/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 03/11/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/20/2016
	Data Release Frequency: Varies

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 01/29/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Varies

### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: 202-343-9775
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 04/08/2016
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/18/2016
	Data Release Frequency: Quarterly

### HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 02/03/2016  
Next Scheduled EDR Contact: 05/16/2016  
Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/02/2015  
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Varies

### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 02/26/2016  
Next Scheduled EDR Contact: 06/06/2016  
Data Release Frequency: Biennially

### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 04/15/2016  
Next Scheduled EDR Contact: 07/25/2016  
Data Release Frequency: Semi-Annually

### FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 86

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 02/08/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Varies

### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 03/28/2016  
Next Scheduled EDR Contact: 06/06/2016  
Data Release Frequency: Varies

### LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014  
Date Data Arrived at EDR: 11/26/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 64

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 04/07/2016  
Next Scheduled EDR Contact: 07/18/2016  
Data Release Frequency: Varies

### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/27/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 69

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Annually

### US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015  
Date Data Arrived at EDR: 10/27/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 69

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 03/24/2016  
Next Scheduled EDR Contact: 07/11/2016  
Data Release Frequency: Annually

### US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016  
Date Data Arrived at EDR: 03/02/2016  
Date Made Active in Reports: 04/15/2016  
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 03/02/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Semi-Annually

### US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/04/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Varies

### US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/04/2016  
Next Scheduled EDR Contact: 06/13/2016  
Data Release Frequency: Varies

### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015  
Date Data Arrived at EDR: 09/09/2015  
Date Made Active in Reports: 11/03/2015  
Number of Days to Update: 55

Source: EPA  
Telephone: (404) 562-9900  
Last EDR Contact: 03/08/2016  
Next Scheduled EDR Contact: 06/20/2016  
Data Release Frequency: Quarterly

### COAL ASH: Coal Ash Disposal Sites

A listing of coal combustion products distribution permits issued by the Division for the treatment, storage, transportation, use and disposal of coal combustion products.

Date of Government Version: 04/22/2015  
Date Data Arrived at EDR: 08/04/2015  
Date Made Active in Reports: 09/15/2015  
Number of Days to Update: 42

Source: Department of Environment & Natural Resources  
Telephone: 919-807-6359  
Last EDR Contact: 02/17/2016  
Next Scheduled EDR Contact: 05/16/2016  
Data Release Frequency: Varies

### DRYCLEANERS: Drycleaning Sites

Potential and known drycleaning sites, active and abandoned, that the Drycleaning Solvent Cleanup Program has knowledge of and entered into this database.

Date of Government Version: 03/02/2015  
Date Data Arrived at EDR: 06/25/2015  
Date Made Active in Reports: 09/08/2015  
Number of Days to Update: 75

Source: Department of Environment & Natural Resources  
Telephone: 919-508-8400  
Last EDR Contact: 03/23/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Varies

### Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/10/2016  
Date Data Arrived at EDR: 02/12/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 59

Source: Department of Environment & Natural Resources  
Telephone: 919-733-1322  
Last EDR Contact: 02/08/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Quarterly



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Financial Assurance 2: Financial Assurance Information Listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/02/2012  
Date Data Arrived at EDR: 10/03/2012  
Date Made Active in Reports: 10/26/2012  
Number of Days to Update: 23

Source: Department of Environmental & Natural Resources  
Telephone: 919-508-8496  
Last EDR Contact: 04/11/2016  
Next Scheduled EDR Contact: 04/11/2016  
Data Release Frequency: Varies

### Financial Assurance 3: Financial Assurance Information

Hazardous waste financial assurance information.

Date of Government Version: 09/14/2015  
Date Data Arrived at EDR: 09/15/2015  
Date Made Active in Reports: 10/22/2015  
Number of Days to Update: 37

Source: Department of Environment & Natural Resources  
Telephone: 919-707-8222  
Last EDR Contact: 03/14/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Varies

### NPDES: NPDES Facility Location Listing

General information regarding NPDES(National Pollutant Discharge Elimination System) permits.

Date of Government Version: 12/02/2015  
Date Data Arrived at EDR: 12/17/2015  
Date Made Active in Reports: 02/08/2016  
Number of Days to Update: 53

Source: Department of Environment & Natural Resources  
Telephone: 919-733-7015  
Last EDR Contact: 02/16/2016  
Next Scheduled EDR Contact: 05/16/2016  
Data Release Frequency: Varies

### UIC: Underground Injection Wells Listing

A listing of underground injection wells locations.

Date of Government Version: 02/12/2016  
Date Data Arrived at EDR: 02/16/2016  
Date Made Active in Reports: 04/11/2016  
Number of Days to Update: 55

Source: Department of Environment & Natural Resources  
Telephone: 919-807-6412  
Last EDR Contact: 02/03/2016  
Next Scheduled EDR Contact: 05/23/2016  
Data Release Frequency: Varies

### FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/23/2015  
Date Data Arrived at EDR: 11/24/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 86

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 02/24/2016  
Next Scheduled EDR Contact: 06/06/2016  
Data Release Frequency: Quarterly

### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015  
Date Data Arrived at EDR: 09/23/2015  
Date Made Active in Reports: 01/04/2016  
Number of Days to Update: 103

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 03/23/2016  
Next Scheduled EDR Contact: 07/04/2016  
Data Release Frequency: Quarterly

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/24/2013  
Number of Days to Update: 176

Source: Department of Environment, Health and Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A

Date Data Arrived at EDR: 07/01/2013

Date Made Active in Reports: 01/13/2014

Number of Days to Update: 196

Source: Department of Environment, Health and Natural Resources

Telephone: N/A

Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A

Date Data Arrived at EDR: 07/01/2013

Date Made Active in Reports: 12/20/2013

Number of Days to Update: 172

Source: Department of Environment, Health and Natural Resources

Telephone: N/A

Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013

Date Data Arrived at EDR: 08/19/2013

Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375

Last EDR Contact: 02/18/2016

Next Scheduled EDR Contact: 05/30/2016

Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013

Date Data Arrived at EDR: 07/17/2015

Date Made Active in Reports: 08/12/2015

Number of Days to Update: 26

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 04/12/2016

Next Scheduled EDR Contact: 07/25/2016

Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2016

Date Data Arrived at EDR: 02/03/2016

Date Made Active in Reports: 03/22/2016

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-8651

Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016

Data Release Frequency: Annually



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/18/2015  
Number of Days to Update: 25

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 04/18/2016  
Next Scheduled EDR Contact: 08/01/2016  
Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 06/19/2015  
Date Made Active in Reports: 07/15/2015  
Number of Days to Update: 26

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 03/21/2016  
Next Scheduled EDR Contact: 06/06/2016  
Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 03/19/2015  
Date Made Active in Reports: 04/07/2015  
Number of Days to Update: 19

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 03/14/2016  
Next Scheduled EDR Contact: 06/27/2016  
Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

### Electric Power Transmission Line Data

Source: PennWell Corporation

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Child Care Facility List

Source: Department of Health & Human Services

Telephone: 919-662-4499

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: US Fish & Wildlife Service

Telephone: 703-358-2171

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

WCPSS H-12/E-46 SITE  
8550 STEPHENSON ROAD  
APEX, NC 27539

### **TARGET PROPERTY COORDINATES**

Latitude (North):	35.688024 - 35° 41' 16.89"
Longitude (West):	78.812672 - 78° 48' 45.62"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	697932.4
UTM Y (Meters):	3951351.8
Elevation:	410 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5947392 APEX, NC
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

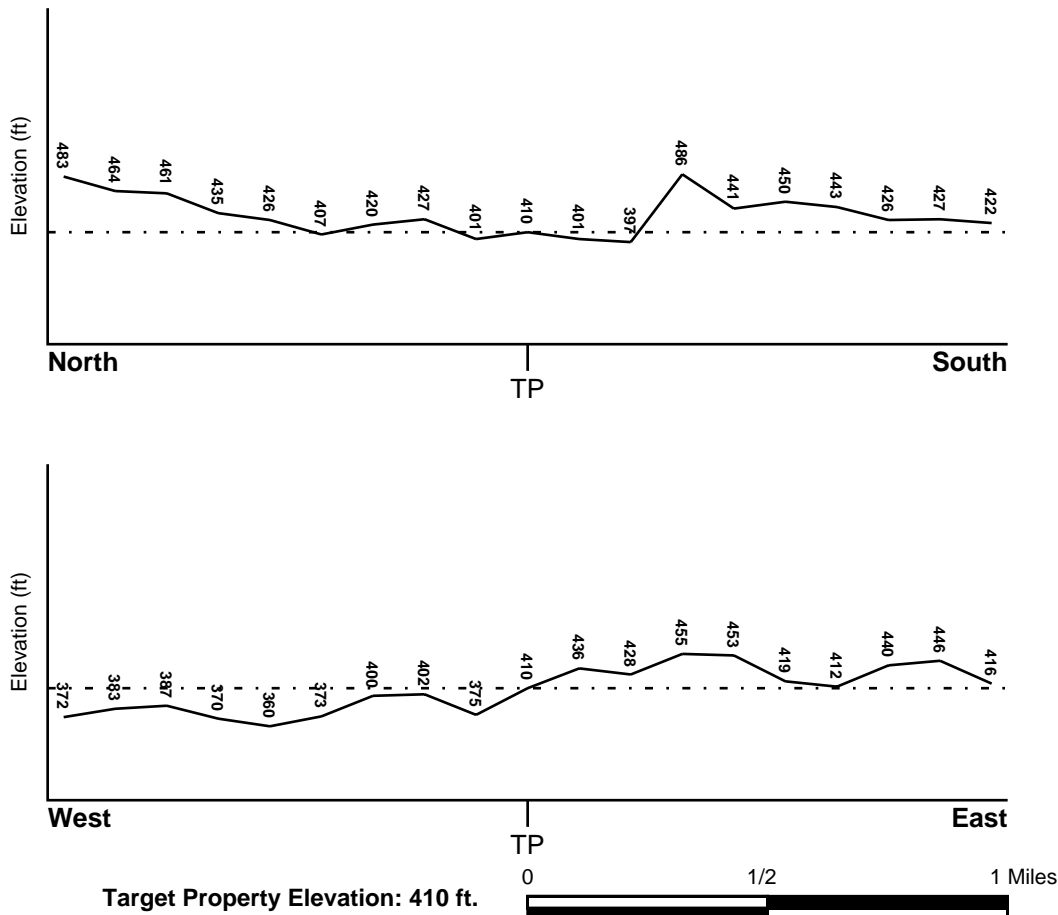
### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

Target Property County  
WAKE, NC

FEMA Flood  
Electronic Data  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

37183C - FEMA DFIRM Flood data

Additional Panels in search area:

Not Reported

### NATIONAL WETLAND INVENTORY

NWI Quad at Target Property  
APEX

NWI Electronic  
Data Coverage  
YES - refer to the Overview Map and Detail Map

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u> <u>FROM TP</u>	<u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u>
Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Paleozoic  
System: Pennsylvanian  
Series: Felsic paragneiss and schist  
Code: mm1 (decoded above as Era, System & Series)

#### GEOLOGIC AGE IDENTIFICATION

Category: Metamorphic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: CECIL

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 6.50 Min: 4.50
2	7 inches	11 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
3	11 inches	50 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
4	50 inches	75 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinator soil types may appear within the general area of target property.

Soil Surface Textures: sandy loam  
loam  
clay loam  
silt loam  
very channery - silt loam  
gravelly - sandy loam

Surficial Soil Types: sandy loam  
loam  
clay loam  
silt loam  
very channery - silt loam  
gravelly - sandy loam

Shallow Soil Types: sandy clay  
silt loam  
silty clay loam  
clay  
very channery - silt loam  
loam

Deeper Soil Types: silty clay loam  
weathered bedrock  
fine sandy loam  
unweathered bedrock  
sandy clay loam



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	NC0392383	1/8 - 1/4 Mile SE

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	NC2000000005454	1/8 - 1/4 Mile SE
A3	NC2000000005444	1/8 - 1/4 Mile SE
4	NC2000000005514	1/4 - 1/2 Mile ENE
5	NC2000000005529	1/4 - 1/2 Mile NE
B6	NC2000000005416	1/4 - 1/2 Mile SW
B7	NC2000000005418	1/4 - 1/2 Mile SW
8	NC2000000005415	1/2 - 1 Mile SW
9	NC2000000005394	1/2 - 1 Mile SSE
10	NC2000000005433	1/2 - 1 Mile ESE
C11	NC2000000005549	1/2 - 1 Mile NNW
C12	NC2000000005550	1/2 - 1 Mile NNW
13	NC2000000005505	1/2 - 1 Mile ENE
14	NC2000000005427	1/2 - 1 Mile ESE
15	NC2000000005408	1/2 - 1 Mile ESE
16	NC2000000005534	1/2 - 1 Mile ENE



## GEOCHECK - PHYSICAL SETTING SOURCE SUMMARY

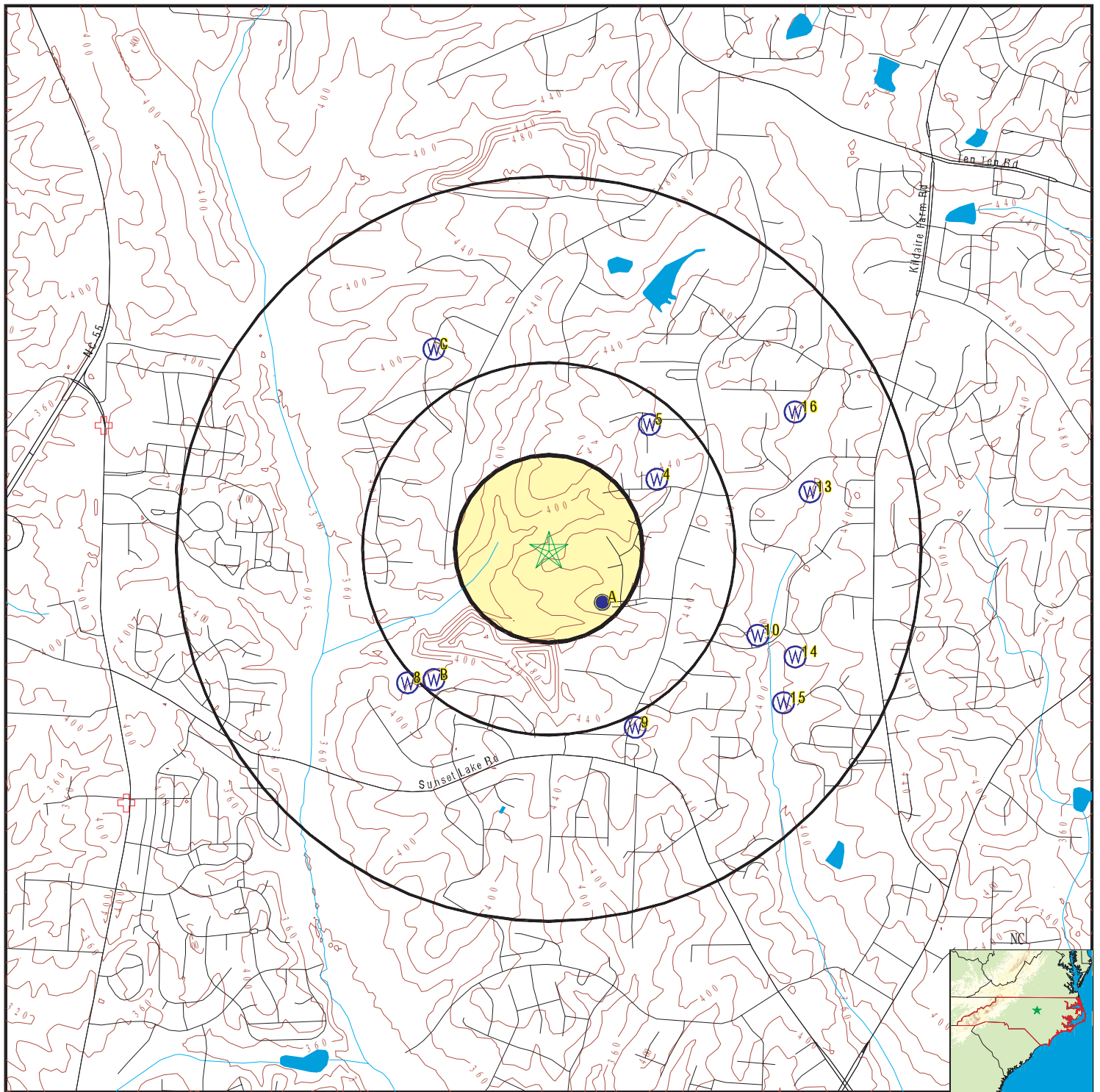
### OTHER STATE DATABASE INFORMATION

#### NORTH CAROLINA NATURAL HERITAGE ELEMENT OCCURRENCES

ID	Class
NC50000835	Plants
NC50015571	Plants



# PHYSICAL SETTING SOURCE MAP - 4590391.2s



- |                            |  |                                     |  |               |                           |                           |
|----------------------------|--|-------------------------------------|--|---------------|---------------------------|---------------------------|
| County Boundary            | Major Roads                                | Contour Lines                       | Earthquake epicenter, Richter 5 or greater | Water Wells   | Public Water Supply Wells | Cluster of Multiple Icons |
| Groundwater Flow Direction | Indeterminate Groundwater Flow at Location | Groundwater Flow Varies at Location | Wildlife Areas                             | Natural Areas | Rare & Endangered Species |                           |

SITE NAME: WCPSS H-12/E-46 Site  
 ADDRESS: 8550 Stephenson Road  
 Apex NC 27539  
 LAT/LONG: 35.688024 / 78.812672

CLIENT: Mid-Atlantic Associates  
 CONTACT: Sandy Miller  
 INQUIRY #: 4590391.2s  
 DATE: April 19, 2016 6:15 pm



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**A1**  
**SE**  
**1/8 - 1/4 Mile**  
**Higher**

**NC WELLS NC2000000005454**

Pwsidentif: NC0392383  
System nam: BRIARWOOD/KILDAIRE  
Pws type: C  
County: WAKE  
City: RALEIGH  
Primary so: GW  
Water type: GW  
Facility n: BRIARWOOD #3  
Facility a: BR3  
Latitude m: 35.686214  
Longitude : -78.810069  
Availavili: A  
Well depth: 505  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005454

**A2**  
**SE**  
**1/8 - 1/4 Mile**  
**Higher**

**FRDS PWS NC0392383**

Epa region:	04	State:	NC
Pwsid:	NC0392383		
Pwsname:	BRIARWOOD/KILDAIRE		
City served:	Not Reported	State served:	NC
Zip served:	Not Reported	Fips county:	37183
Status:	Active	Pop srvd:	350
Pwssvconn:	138	Source:	Groundwater
Pws type:	CWS	Owner:	Private
Contact:	RENDELL, TROY		
Contact gname:	RENDELL, TROY	Contact address1:	202 MACKENAN CT
Contact phone:	919-653-6982	Contact city:	CARY
Contact address2:	Not Reported	Contact zip:	27511
Contact state:	NC		
Activity code:	A		

Facid:	5096		
Facname:	TREATMENT_PLT_PLANT #1		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	disinfection	Treatment process:	hypochlorination, post

Facid:	5097		
Facname:	TREATMENT_PLT_PLANT #3		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	corrosion control	Treatment process:	ph adjustment



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Treatment obj:	disinfection	Treatment process:	hypochlorination, post
Facid:	5098		
Facname:	TREATMENT_PLT_PLANT #4		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	corrosion control	Treatment process:	ph adjustment
Treatment obj:	disinfection	Treatment process:	hypochlorination, post
Treatment obj:	iron removal	Treatment process:	sequestration
Treatment obj:	manganese removal	Treatment process:	sequestration
Facid:	5099		
Facname:	TREATMENT_PLT_PLANT #5		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	corrosion control	Treatment process:	ph adjustment
Treatment obj:	disinfection	Treatment process:	hypochlorination, post
Facid:	5100		
Facname:	TREATMENT_PLT_PLANT #2		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	corrosion control	Treatment process:	ph adjustment
Treatment obj:	disinfection	Treatment process:	hypochlorination, post
Location Information:			
Name:	BRIARWOOD/KILDAIRE		
Pwstypcd:	CWS	Prmsrccd:	GW
Popservcd:	350		
Add1:	202 MACKENAN CT		
Add2:	Not Reported		
City:	CARY	State:	NC
Zip:	27511	Phone:	919-653-6982
Cityserv:	RALEIGH	Cntysew:	Wake
Stateserv:	NC	Zipsew:	Not Reported
Enforcement Information:			
Violation id:	303	Orig cd:	S
Enf fy:	2003	Enf act date:	10/18/2002
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal
Enforcement Information:			
Violation id:	303	Orig cd:	S
Enf fy:	2006	Enf act date:	08/01/2006
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving
Enforcement Information:			
Violation id:	303	Orig cd:	S
Enf fy:	2003	Enf act date:	10/18/2002
Enf act detail:	St Public Notif requested	Enf act cat:	Informal
Enforcement Information:			
Violation id:	201	Orig cd:	S
Enf fy:	2001	Enf act date:	12/29/2000
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal
Enforcement Information:			
Violation id:	201	Orig cd:	S
Enf fy:	2001	Enf act date:	12/29/2000
Enf act detail:	St Public Notif requested	Enf act cat:	Informal



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**Enforcement Information:**

Violation id:	201	Orig cd:	S
Enf fy:	2008	Enf act date:	05/21/2008
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving

**Enforcement Information:**

Violation id:	101	Orig cd:	S
Enf fy:	2008	Enf act date:	05/21/2008
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving

**Enforcement Information:**

Violation id:	101	Orig cd:	S
Enf fy:	2001	Enf act date:	12/29/2000
Enf act detail:	St Formal NOV issued	Enf act cat:	Informal

**Enforcement Information:**

Violation id:	101	Orig cd:	S
Enf fy:	2001	Enf act date:	12/29/2000
Enf act detail:	St Public Notif requested	Enf act cat:	Informal

**Violations Information:**

Violation id:	303	Orig cd:	S
State:	NC	Viol fy:	2002
Contamcd:	7000		
Contamnm:	Consumer Confidence Rule		
Viol code:	71		
Viol name:	CCR Complete Failure to Report		
Rule code:	420		
Rule name:	CCR		
Violmeasur:	Not Reported	Unitmeasur:	Not Reported
State mcl:	Not Reported	Cmpbdt:	07/01/2002
Cmpedt:	Not Reported		

PWS ID: NC0392383  
 Date Initiated: Not Reported      Date Deactivated: Not Reported  
 PWS Name: BRIARWOOD/KILDARE  
 RALEIGH, NC 27606

Addressee / Facility: System Owner/Responsible Party  
 KEN STRICKLAND OR MANAGER NOW  
 PO DRAWER 4889  
 CARY, NC 27519

Addressee / Facility: System Owner/Responsible Party  
 HEATER UTILITIES INC  
 PO DRAWER 4889  
 CARY, NC 27519

Facility Latitude:	35 41 25.0000	Facility Longitude:	78 48 0.0000
Facility Latitude:	35 41 7.0000	Facility Longitude:	78 48 36.0000
Facility Latitude:	35 41 10.0000	Facility Longitude:	78 48 37.0000
Facility Latitude:	35 41 27.0000	Facility Longitude:	78 48 24.0000
Facility Latitude:	35 41 36.0000	Facility Longitude:	78 48 2.0000
City Served:	APEX		
Treatment Class:	Treated	Population:	419

Violations information not reported.



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	NC0392383
Pwsname:	BRIARWOOD/KILDAIRE		
Retpopsrvd:	419	Pwstypecod:	C
Void:	303	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2002 0:00:00		
Complperen:	8/1/2006 0:00:00	Enfdate:	10/18/2002 0:00:00
Enf action:	State Formal NOV Issued		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	NC0392383
Pwsname:	BRIARWOOD/KILDAIRE		
Retpopsrvd:	419	Pwstypecod:	C
Void:	303	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2002 0:00:00		
Complperen:	8/1/2006 0:00:00	Enfdate:	8/1/2006 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	NC0392383
Pwsname:	BRIARWOOD/KILDAIRE		
Retpopsrvd:	419	Pwstypecod:	C
Void:	303	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2002 0:00:00		
Complperen:	8/1/2006 0:00:00	Enfdate:	10/18/2002 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

System Name:	BRIARWOOD/KILDAIRE		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 8/1/2006 0:00:00		
Violation ID:	303		
Enforcement Date:	10/18/2002 0:00:00	Enf. Action:	State Formal NOV Issued

System Name:	BRIARWOOD/KILDAIRE		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 8/1/2006 0:00:00		
Violation ID:	303		
Enforcement Date:	10/18/2002 0:00:00	Enf. Action:	State Public Notif Requested

System Name:	BRIARWOOD/KILDAIRE		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	303		
Enforcement Date:	10/18/2002 0:00:00	Enf. Action:	State Public Notif Requested

System Name:	BRIARWOOD/KILDAIRE		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	303		
Enforcement Date:	10/18/2002 0:00:00	Enf. Action:	State Formal NOV Issued



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

System Name:	BRIARWOOD/KILDAIRE		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2002 0:00:00 - 8/1/2006 0:00:00		
Violation ID:	303		
Enforcement Date:	8/1/2006 0:00:00	Enf. Action:	State Compliance Achieved

### CONTACT INFORMATION:

Name:	BRIARWOOD/KILDAIRE	Population:	419
Contact:	PARKER, TRENT	Phone:	Not Reported
Address:	202 MACKENAN CT		
Address 2:	CARY		
	NC, 27 919-4		

**A3**  
**SE**  
**1/8 - 1/4 Mile**  
**Higher**

**NC WELLS NC2000000005444**

Pwsidentif:	NC0392383
System nam:	BRIARWOOD/KILDAIRE
Pws type:	C
County:	WAKE
City:	RALEIGH
Primary so:	GW
Water type:	GW
Facility n:	BRIARWOOD #2
Facility a:	BR2
Latitude m:	35.685356
Longitude :	-78.810269
Availavili:	A
Well depth:	505
Well dep 1:	FT
Owner name:	AQUA NORTH CAROLINA INC
Site id:	NC2000000005444

**4**  
**ENE**  
**1/4 - 1/2 Mile**  
**Higher**

**NC WELLS NC2000000005514**

Pwsidentif:	NC0392383
System nam:	BRIARWOOD/KILDAIRE
Pws type:	C
County:	WAKE
City:	RALEIGH
Primary so:	GW
Water type:	GW
Facility n:	BRIARWOOD #4
Facility a:	BR4
Latitude m:	35.69073



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Longitude : -78.807508  
Availavili: A  
Well depth: 360  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005514

**5**  
**NE**  
**1/4 - 1/2 Mile**  
**Higher**

**NC WELLS NC2000000005529**

Pwsidentif: NC4392229  
System nam: HARMONY GLEN S/D  
Pws type: C  
County: WAKE  
City: CARY  
Primary so: GW  
Water type: GW  
Facility n: WELL #1  
Facility a: HG1  
Latitude m: 35.692864  
Longitude : -78.807863  
Availavili: A  
Well depth: 125  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005529

**B6**  
**SW**  
**1/4 - 1/2 Mile**  
**Lower**

**NC WELLS NC2000000005416**

Pwsidentif: NC4092001  
System nam: FAIR OAKS S/D  
Pws type: C  
County: WAKE  
City: HOLLY SPRINGS  
Primary so: GW  
Water type: GW  
Facility n: WELL #3  
Facility a: CH3  
Latitude m: 35.682869  
Longitude : -78.817856  
Availavili: A  
Well depth: 805  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005416

**B7**  
**SW**  
**1/4 - 1/2 Mile**  
**Lower**

**NC WELLS NC2000000005418**



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pwsidentif: NC4092001  
System nam: FAIR OAKS S/D  
Pws type: C  
County: WAKE  
City: HOLLY SPRINGS  
Primary so: GW  
Water type: GW  
Facility n: WELL #2  
Facility a: CH2  
Latitude m: 35.682995  
Longitude : -78.818458  
Availavili: A  
Well depth: 705  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005418

**8**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

**NC WELLS NC2000000005415**

Pwsidentif: NC4092001  
System nam: FAIR OAKS S/D  
Pws type: C  
County: WAKE  
City: HOLLY SPRINGS  
Primary so: GW  
Water type: GW  
Facility n: WELL #1  
Facility a: CH1  
Latitude m: 35.682806  
Longitude : -78.819409  
Availavili: A  
Well depth: 705  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005415

**9**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS NC2000000005394**

Pwsidentif: NC0392330  
System nam: BRIARWOOD FARMS I  
Pws type: C  
County: WAKE  
City: APEX  
Primary so: GW  
Water type: GW  
Facility n: WELL #1  
Facility a: 001  
Latitude m: 35.68107



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Longitude : -78.808544  
Availavili: A  
Well depth: 225  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005394

**10  
ESE  
1/2 - 1 Mile  
Higher**

**NC WELLS NC2000000005433**

Pwsidentif: NC0392361  
System nam: SWIFT CREEK MASTER SYSTEM  
Pws type: C  
County: WAKE  
City: CARY  
Primary so: GW  
Water type: GW  
Facility n: HOLLYBROOK #4  
Facility a: HO4  
Latitude m: 35.684655  
Longitude : -78.802695  
Availavili: A  
Well depth: 500  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005433

**C11  
NNW  
1/2 - 1 Mile  
Higher**

**NC WELLS NC2000000005549**

Pwsidentif: NC4092005  
System nam: MERION S/D  
Pws type: C  
County: WAKE  
City: APEX  
Primary so: GW  
Water type: GW  
Facility n: WELL #5  
Facility a: ME5  
Latitude m: 35.695797  
Longitude : -78.817872  
Availavili: A  
Well depth: 305  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005549

**C12  
NNW  
1/2 - 1 Mile  
Higher**

**NC WELLS NC2000000005550**



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pwsidentif: NC4092005  
System nam: MERION S/D  
Pws type: C  
County: WAKE  
City: APEX  
Primary so: GW  
Water type: GW  
Facility n: WELL #2  
Facility a: ME2  
Latitude m: 35.695806  
Longitude : -78.818433  
Availavili: A  
Well depth: 805  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005550

**13**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

NC WELLS

NC2000000005505

Pwsidentif: NC0392383  
System nam: BRIARWOOD/KILDARE  
Pws type: C  
County: WAKE  
City: RALEIGH  
Primary so: GW  
Water type: GW  
Facility n: KILDARE #1  
Facility a: KI1  
Latitude m: 35.690242  
Longitude : -78.800203  
Availavili: A  
Well depth: 498  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005505

**14**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

NC WELLS

NC2000000005427

Pwsidentif: NC0392361  
System nam: SWIFT CREEK MASTER SYSTEM  
Pws type: C  
County: WAKE  
City: CARY  
Primary so: GW  
Water type: GW  
Facility n: HOLLYBROOK #3  
Facility a: HO3  
Latitude m: 35.683816



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Longitude : -78.800907  
Availavili: A  
Well depth: 386  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005427

**15**  
**ESE**  
**1/2 - 1 Mile**  
**Lower**

**NC WELLS NC2000000005408**

Pwsidentif: NC0392322  
System nam: KILT VALLEY ESTATES  
Pws type: C  
County: WAKE  
City: HOLLY SPRINGS  
Primary so: GW  
Water type: GW  
Facility n: WELL #1  
Facility a: 001  
Latitude m: 35.68203  
Longitude : -78.801468  
Availavili: A  
Well depth: 88  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005408

**16**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**NC WELLS NC2000000005534**

Pwsidentif: NC0392383  
System nam: BRIARWOOD/KILDAIRE  
Pws type: C  
County: WAKE  
City: RALEIGH  
Primary so: GW  
Water type: GW  
Facility n: KILDAIRE #2  
Facility a: KI2  
Latitude m: 35.693353  
Longitude : -78.800912  
Availavili: A  
Well depth: 500  
Well dep 1: FT  
Owner name: AQUA NORTH CAROLINA INC  
Site id: NC2000000005534



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

GIS ID: 11300  
Classification by Type: Plants  
Occurrence Status: Historic, no evidence of destruction

NC\_NHEO NC50000835

GIS ID: 21300  
Classification by Type: Plants  
Occurrence Status: Historic, no evidence of destruction

NC\_NHEO NC50015571



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NC Radon

### Radon Test Results

Num Results	Avg pCi/L	Min pCi/L	Max pCi/L
8	1.80	0.6	6.3
2	0.65	0.6	0.7

Federal EPA Radon Zone for WAKE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

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### Federal Area Radon Information for WAKE COUNTY, NC

Number of sites tested: 41

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.007 pCi/L	95%	5%	0%
Living Area - 2nd Floor	0.600 pCi/L	100%	0%	0%
Basement	4.400 pCi/L	62%	38%	0%



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: US Fish & Wildlife Service

Telephone: 703-358-2171

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.



# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### North Carolina Public Water Supply Wells

Source: Department of Environmental Health

Telephone: 919-715-3243

## OTHER STATE DATABASE INFORMATION

#### NC Natural Areas: Significant Natural Heritage Areas

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

A polygon coverage identifying sites (terrestrial or aquatic) that have particular biodiversity significance.

A site's significance may be due to the presence of rare species, rare or high quality natural communities, or other important ecological features.

#### NC Game Lands: Wildlife Resources Commission Game Lands

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

All publicly owned game lands managed by the North Carolina Wildlife Resources Commission and as listed in Hunting and Fishing Maps.

#### NC Natural Heritage Sites: Natural Heritage Element Occurrence Sites

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

A point coverage identifying locations of rare and endangered species, occurrences of exemplary or unique natural ecosystems (terrestrial or aquatic), and special animal habitats (e.g., colonial waterbird nesting sites).

### RADON

#### State Database: NC Radon

Source: Department of Environment & Natural Resources

Telephone: 919-733-4984

Radon Statistical and Non Statistical Data

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.



## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### **STREET AND ADDRESS INFORMATION**

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## **Appendix 15.6**

### **Interview Documentation**



## USER QUESTIONNAIRE (Page 1 of 2)

Site Name Potential H-12/E-46 Site, 8550 Stephenson Road, Apex, NC Proposal # R2781.00P

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the Brownfields Amendments), **the user (buyer) of the Phase I Environmental Site Assessment (PESA)** must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that the PESA is not complete. Use this form and/or additional sheets as necessary to provide the requested information.

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
2. Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
3. As the user of this PESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and/or processes used by current or former businesses at this site or nearby sites?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,
  - a. Do you know the past uses of the property?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
  - b. Do you know of specific chemicals that are present or once were present at the property?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
  - c. Do you know of spills or other chemical releases that have taken place at the property?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_
  - d. Do you know of any environmental cleanups that have taken place at the property?  
Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_



## USER QUESTIONNAIRE (Page 2 of 2)

Site Name Potential H-12/E-46 Site, 8550 Stephenson Road, Apex, NC Proposal # R2781.00P

6. As the user of this PESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_

7. Are any of the following documents available for the property and if so can they be provided to Mid-Atlantic within reasonable time and cost constraints?

- Previous site assessment reports
- Environmental compliance audit reports
- Environmental permits (solid waste, hazardous waste, wastewater, NPDES, underground injection)
- UST or AST registrations or permits
- Underground injection system registrations
- Material safety data sheets (MSDS)
- Community right-to-know plans
- Safety plans
- Spill Prevention Control and Countermeasure Plans
- Hydrogeologic reports on property or surrounding properties
- Correspondence from governmental agencies regarding past or current violations of environmental laws with respect to the property or relating to environmental liens
- Hazardous waste generator notices or reports
- Geotechnical reports
- Risk assessments
- Recorded legal or physical restrictions or limitations on the use of or access to the property

Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_

8. Do you know of any a) pending, threatened or past litigation relevant to hazardous substances or petroleum products in, on or from the property; b) pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and c) notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

Yes \_\_\_\_\_ No ☒ Comment \_\_\_\_\_

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

Name and Title: MARGARET SUTTER Date: 4/8/16

Company Name: WCPSS/REAL ESTATE



**Appendix 15.7**

**Special Contractual Conditions**

**None**



## **Appendix 15.8**

### **Qualifications of the Environmental Professional(s)**



### **Eric Aufderhaar, P.G.**

Mr. Aufderhaar has approximately 23 years of experience performing environmental site assessments with varying degrees of complexity. He has performed over 200 Phase I environmental site assessments following the American Society of Testing and Materials (ASTM) guidelines. Several projects have involved historical industrial or office building sites located in central business district areas of Charlotte, Durham, Rocky Mount, Roanoke Rapids and Raleigh in North Carolina and Atlanta, Georgia. In addition to environmental assessments, Mr. Aufderhaar prepares Spill Pollution Control and Countermeasures (SPCC) Plans, is a technical resource for hydrogeology projects, and provides Geographic Information System (GIS) services to clients and Mid-Atlantic professionals. Mr. Aufderhaar is a licensed Professional Geologist in North Carolina, South Carolina and Pennsylvania. He received a B.A. in Geology from the University of Vermont, an M.S. in Hydrogeology from Clemson University and a Graduate Certificate in GIS from North Carolina State University. Mr. Aufderhaar is considered an Environmental Professional as defined in 40 CFR Part 312 and ASTM E 1527-13.

### **Darin M. McClure. P.E.**

Darin McClure, a Principal and founder of Mid-Atlantic, has over 20 years of experience with a broad range of environmental-related projects. Mr. McClure has successfully managed a diverse mix of projects for a diverse group of clients. Mr. McClure specializes in soil/groundwater assessment and remediation, Brownfields redevelopment, and assisting facilities with compliance under a variety of regulatory programs (NPDES, Oil Spill Prevention, etc.). Mr. McClure is a licensed Professional Engineer in the states of North Carolina, Virginia, South Carolina, and Pennsylvania. Mr. McClure is considered an Environmental Professional as defined in 40 CFR Part 312 and ASTM E 1527-13.



## **Appendix 15.9**

### **Additional Environmental Record Sources**



September 4, 2012

Mr. Brian Wootton  
*Hydrogeologist*  
**NCDENR Division of Waste Management**  
217 West Jones Street  
Raleigh, North Carolina 27603

**RE: Landfill Gas Monitoring Evaluation**  
**Currin Brothers LCID Landfill**  
**NC Solid Waste Permit No. 92N (Wake County Permit No. 86-001 & NC Solid Waste Permit No. 92S)**

Dear Brian:

Smith Gardner, Inc. (S+G) is pleased to submit this evaluation and summary response regarding the potential of landfill gas at the above referenced facility. As you are aware, the Currin Brothers facility (landfill) was one of many facilities whereby Wake County released jurisdiction to NCDENR. Based on our review of the available records, the most recent solid waste permit (**attached**) executed by the County appears to be dated November 10, 2004 with subsequent expiration on November 10, 2009.

## **Background**

The Currin Brothers received Notice<sup>1</sup> on March 3, 2010 that the facility permit had expired and that application shall be made for permit renewal. Subsequent application was made on or about June 2, 2010 by Mr. John A. K. Tucker, P.E., on behalf of the Currin Brothers. To date, correspondence between NCDENR and Mr. Tucker leads to one (1) remaining issue surrounding the potential of landfill gas at the facility. The most recent request was made on July 2, 2012 to comply with a request to submit a Landfill Gas Monitoring Plan. Since that request, S+G has been engaged by the Currin Brothers to review this concern by the Division.

## **Waste Composition**

The landfill began operation in 1986 as a Demolition Landscape Landfill under the jurisdiction of Wake County. A copy of the original permit is **attached**. The "Demolition Landscape" landfill designation specified the disposal of demolition and land clearing debris specifically noting that no paper or garbage may be disposed in the facility. Throughout all the records reviewed by S+G including the special use approval<sup>2</sup> by Wake County, the only materials approved were: "*land clearing waste, inert debris, untreated wood, and yard trash*". The Currin Brothers have attested that only land clearing and inert debris have been placed in this facility. Additionally, Mr. Johnny Beal of Wake County, through both historical inspection reports and an interview by S+G, attested that this facility was limited to these types of materials.

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<sup>1</sup> Letter from Mr. Zinith Barbee, NCDENR to Mr. Allen Currin, Currin Brothers, Inc. regarding expired permit (92-N) dated March 3, 2010.

<sup>2</sup> Wake County Resolution R-95-75.



## Site Development

The landfill has been proposed<sup>3</sup> in three (3) phases depicted in **Figure 1** (attached) as follows:

Phase 1 – Oldest and original landfill area located on southeast portion of the property bordered by stream features to the North and South and a residential area to the east (Arrowhead Drive);

Phase 2a – (Areas 1 – 3) located centrally on the site between and bordered by stream features to the North and South;

Phase 2b – (Area 4) located on the northern portion of the site which has been mined and processed. Currently, this area only includes inert debris (concrete, brick and block) and process topsoil materials, from previous mining efforts. This area is bordered to the south by stream features and the north by residential areas (Merion Station Drive);

Phase 3 – (Area 5) located on the northwest corner of the site just across the Colonial Pipeline easement and bordered to the north, south, and west by stream features and to the east by Colonial Pipeline. This area has also been mined and processed and currently includes processed topsoil materials.

The site was originally developed in 1986 in the Phase 1 area proceeding to the Phase 2a, Area 1 on or about 1995. In the Phase 1 area, the proposed base grades included excavations up to approximately 15 feet in some areas. However, the Currin Brothers have stated that through these areas, only topsoil was stripped ; during this time period, the site was used for Currin Brothers' projects exclusively. Although excavation was not performed, a 48" diameter concrete culvert was installed below this area to bridge over a stream feature at the time. The concrete culvert still exists and is functional today and is shown on **Figure 1**.

Furthermore, due to the age of the site, the solid waste buffers vary from the original 50 foot under the 1986 development, in the Phase 1 area, and increasing to 100 feet under the January 1, 1998 solid waste rule amendments over the remainder of the property development (Phases 2 and 3)

## Site Geology

The original surficial site soils consisted of NRCS (SCS) Appling and Cecil series soils. The soils under the original Phase 1 area were predominantly the Appling series and the soils under the Phase 2a area were predominantly the Cecil series. Both of these soil types are considered under the loam category and are considered as moderately permeable. The soil type changes along the stream feature to Worsham series categorized as alluvial and poorly draining, consistent with low lying areas and streams in the area.

Based on the 1985 Geologic Map of NC from the USGS, the underlying rock type is Metavolcanic-Epiclastic Rock (Cambrian/Late Proterozoic). The site is located in the Raleigh Belt immediately east of the Triassic Basin. The bedrock beneath the site consists of metamorphosed argillite, mudstone, volcanic sandstone, conglomerate, and volcanic rock. This formation covers a small area of this portion of the County with the Jonesboro Fault and Triassic Basin located west of the site and the Middendorf Formation consisting of sandstone and mudstone located further to the east.

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<sup>3</sup> LCID Permit Renewal for Currin Brothers, Inc., Sunset Road LCID Landfill prepared by John A.K. Tucker, P.E. dated June 1, 2010.



In 1996, Geotechnologies, Inc. performed drilling on the site to establish temporary piezometers for the purpose of seasonal groundwater level characterization. However, no specific deeper soil descriptions were logged at the time.

## Site Topography

The original topography<sup>4</sup> for the site area consisted of a central ridge sloping to the north and south from a central elevation, dropping approximately 25 feet to stream tributaries of Middle Creek along the western end of the property. The original topography (prior to development in 1986) slopes from the east to the west from about elevation 430 to an elevation of approximately 360 near the floodplains of Middle Creek.

## Areas of Concern

In the design of a landfill gas management plan, factors such as topography, geology, and waste characteristics are key in identifying areas of concern. As described above, the landfill site is predominantly surrounded by wet features that essentially create a barrier for any potential gas migration. In the case of Phase 2b and Phase 3, the areas have been mined, processed, and include only inert materials. Therefore, the remainder of this study focuses on Phase 1 and more particularly along the western boundary of this area nearest Arrowhead Drive.

## Regulations

As you are aware, 15A NCAC 13B .0566 (13) states that a facility operation must comply with the following:

*"The concentration of explosive gases generated by the facility shall not exceed:*

- (a) Twenty-five percent of the lower explosive limit for the gases in the facility structures,*
- (b) The lower explosive limit for the gases at the property boundary."*

Furthermore, the Division has issued guidance<sup>5</sup> for landfill gas monitoring for all solid waste disposal facilities. In basis, each operator must establish a plan to manage or monitor the potential for explosive gas at a landfill facility.

## Landfill Gas Generation

As mentioned in the guidance document and widely known, waste composition is a significant variable in the generation of gas from landfills. The particular gas of concern is methane (CH<sub>4</sub>), which is explosive in air between a concentration of 5% (the Lower Explosive Limit) and 15% (the Upper Explosive Limit). A first order decay model<sup>6</sup> is typically used to determine the potential for gas over time. Recent work by Barlaz and De La Cruz<sup>7</sup> has provided waste composition and characteristic data to be used in the analysis of a more limited subset of materials such as the LCID encountered at the

---

<sup>4</sup> Drawings entitled "Curran Landfill", Curran Brothers, Inc. dated November 4, 1995 and "Expansion of Existing LCID Landfill Facility" dated June 23, 1995 prepared by Little and Little

<sup>5</sup> North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance dated November 2010.

<sup>6</sup> EPA Landfill Gas Emissions Model (LandGEM) v. 3.02 dated May 2005.

<sup>7</sup> Landfill Gas Modeling: Estimation of Landfill Gas Decay Rate Constants and Yields for Individual Waste Components, Morton A. Barlaz and Florentino De La Cruz, North Carolina State University, 2010.



Currin Brothers facility. Within LCID, the only materials that have the potential for generating gas are the woody and leafy materials in comparison to the soils, brick, block, and concrete which remain inert. Furthermore, woody materials have been shown to possess the potential to release gas during decay, although very slowly in comparison to that of municipal waste. S+G assumed a greater percentage of branches and woody materials (typical of LCID) over other leaves and grasses (typical of yardwaste facilities), as well as, approximately 50% soil in the model based on our review of historical documents and site reconnaissance. S+G utilized the LandGEM model and characteristic data for both LCID waste materials and compared it with that of typical municipal solid waste to project approximately 10 CFM of methane in 2012 from the Phase 1 area (approximately 20% of that typical of municipal solid waste landfills). The supporting landfill gas generation calculations are provided as **Attachment A**.

## Site Evaluation

S+G performed a site evaluation of the Currin Brothers site on August 9, 2012. The site evaluation included a variety of landfill gas sampling and monitoring techniques as follows:

- Excavated Test Pits;
- Push Probe Samples within the Waste;
- Soil Vapor Probes Outside the Waste Limits;
- Ambient Gas Sampling; and
- Visual Evaluation of Surface and Buffer Conditions.

Each of these techniques are described below.

### Excavated Test Pits

Two (2) pits were advanced in the Phase 1 area and identified as TP-1 and TP-2 on **Figure 1** to randomly review and document materials within the facility. Photographs of both locations are provided in **Attachment B** which show soil and large fraction woody debris materials with some inert materials. The landfill gas generation estimate above was based on this cross-section of waste. Test pits were only advanced in the Phase 1 area it is the only area of concern at this time. At each location, an ambient air sample was obtained using the Landtec GEM2000 landfill gas analyzer. The GEM-2000 monitors for the following constituents:

- Methane (CH<sub>4</sub>) in units of %
- Oxygen (O<sub>2</sub>) in units of %
- Carbon Dioxide (CO<sub>2</sub>) in units of %
- Balance Gas in units of %

The GEM-2000 unit was calibrated by the manufacturer on June 15, 2012. Additionally, a field calibration was performed on the unit prior to the day's sampling using 15% CH<sub>4</sub>, 15% CO<sub>2</sub>, and 4% O<sub>2</sub>. **Results of the ambient air using a long sample tube within the excavation revealed no methane present.** This monitoring technique is consistent with that of typical worker safety monitoring.

### Push Probe Samples within the Waste

Seven (7) push probes were installed through the landfill cover at various locations across Phases 1 and 2a. The push probes were constructed of Schedule 80 stainless steel 1 ½ inches in diameter, with an overall length of seven (7) feet. Perforations were located in the bottom third of the probe. A



threaded sample port is located near the top of the probe, and a 6-inch crossbar is welded at the top to facilitate probe installation and removal. Probes were installed using a pilot probe procedure by driving a rod with a smaller diameter than the sample probe into the sample location. The rod was then removed, and the sample probe installed. A trackhoe was used as the driver to install and remove the pilot and sample probes. The GEM-2000 was used to conduct field monitoring, and to purge probes prior to sampling at each location as shown in **Figure 1**. Photographs demonstrating this technique are provided as **Attachment B**. Results of the sampling revealed the following:

Location	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Balance (%)	Notes
P-1	2.4	2.3	18.3	76.3	
P-2	0.7	7.9	12.0	78.4	
P-3	0	13.5	5.3	81.1	
P-4	0	12.8	5.9	81.1	
P-5	0	4.6	14.2	80.8	
P-6	0	11.6	7.4	80.8	
P-7	0	17.0	2.2	80.0	

The focus of this portion of the study was to determine actual gas concentration within the waste mass. As demonstrated above, the gas concentration over a cross-section of the entire landfill exhibited conditions well below the Lower Explosive Limit actually within the waste. This method is commonly used in Air Quality permitting under CAA NSPS Tier 2 protocols to assess the concentration of NMOC's on an area basis. S+G has found this method very consistent in projecting actual emissions from various size municipal solid waste facilities. **In this case, methane was only determined present in two locations with concentrations well below any action thresholds.** No permanent monitoring probes were installed during this investigation.

#### Soil Vapor Probes Outside the Waste Limits

Three (3) soil vapor probes were advanced along the eastern buffer of Phase 1 of the facility as shown in **Figure 1**. This system utilizes 1/2-inch diameter metal rods that are driven into the subsurface either by a slide hammer, or by electric hammer drill. In all instances, approximately 6 to 9 feet of probe rod were driven into the subsurface prior to measuring methane concentrations. At the end of the probe there is a retractable tip that allows for LFG testing through a tube that is placed in the probe rod. A GEM 2000 was utilized to measure methane concentrations at each location. Photographs demonstrating this technique are provided as **Attachment B**. Results of the sampling revealed the following:

Location	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Balance (%)	Notes
VP-1	0	18.9	1.3	77.3	
VP-2	0	18.5	2.1	79.4	
VP-3	0	15.2	4.7	77.6	

The focus of this portion of the study was to determine if any gas migration was occurring. Typically we find, that with older facilities, the projected landfill generation maybe low, but over time, the migration of gas can occur and be trapped within the soil voids. The gas is considered a relic gas and is very indicative of any historical problems or potential future gas migration potential. As you are aware, gas



may migrate through pressure gradients or concentration gradients. As shown above, no gas was determined to be present and with the results of the push probes within the landfill, the concentrations were minimal to none which dismisses any concerns of concentration gradients to the perimeter of the site. **Therefore, the results of these samples concluded that explosive gases are not present.** No permanent monitoring probes were installed during this investigation.

#### Ambient Gas Sampling

A GEM-2000 was utilized to measure methane concentrations at each end of the 48" culvert that passes directly underneath Phase 1 of the facility as identified on **Figure 1**. Each sample was taken with a sample tube inserted inside each pipe end. Results of this sample was as follows:

Location	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Balance (%)	Notes
GS-1 (West End)	0	20.1	0.0	79.9	
GS-2 (East End)	0	20.0	0.0	80.0	

In each case, no methane was present as this area would be very indicative of any downward or lateral movement of landfill gas just above this saturated surface (placed in old stream/drainage feature).

#### Visual Evaluation of Surface and Buffer Conditions

One of the last overall landfill gas evaluation method is through the simple observation of the general site and buffer conditions. As you are aware, the facility has been operated as more of a processing operation, wherein very little disposal has occurred. In some areas, mining of the site has occurred to generate additional woody materials for grinding. Throughout the site investigation, S+G reviewed the condition of the intermediate cover system and vegetation across the site. In general, the site has very healthy and established vegetation. **The buffer areas also appeared to remain healthy in tree population without presence of cracking, seeps, and/or other indicators regarding methane emissions.** The monitoring of the site, cover system, and operations should continue to be monitored on a routine basis.

#### **Summary and Conclusions**

The regulations cited above focus on structures and compliance at the property line. No permanent structures are present on the site; the guard house is temporary and placed on skids. Therefore, the compliance point is considered the property line and the only area of concern remains along the eastern boundary of Phase 1. The remainder of the site is separated by wet features which prevent any downward or lateral migration of landfill gas. Based on all of the information presented above the following conclusions are offered:

1. The landfill gas generation potential of the waste material is minimal.
2. The presence of landfill gas within the waste mass is minimal.
3. The waste materials have remained consistent through its development.
4. The presence of landfill gas along the compliance boundary does not exist.



Mr. Brian Wootton  
September 4, 2012  
Page 7 of 7

As a final recommendation, S+G proposes that monitoring for the presence of landfill gas remain on a visual basis, focusing on the secondary sign of distressed vegetation and maintenance of cover system integrity to prevent the potential to add additional moisture to the facility.

We appreciate the opportunity to provide this evaluation and to address concerns regarding this issue. Please feel free to contact us with any questions or concerns at (919) 828-0577 or by email below.

Sincerely,  
**SMITH GARDNER, INC.**

  
Stacey A. Smith, P.E.  
Project Manager, ext. 127  
[stacey@smithgardnerinc.com](mailto:stacey@smithgardnerinc.com)



  
Don M. Misenheimer  
Project Scientist, ext. 224  
[don@smithgardnerinc.com](mailto:don@smithgardnerinc.com)

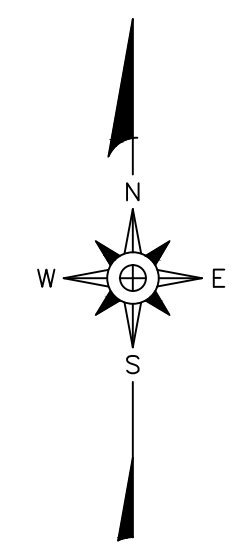
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Att.

Cc: Mr. Ed Mussler III, P.E., NCDENR  
Mr. Mark Poindexter, NCDENR  
Mr. Allen Currin, Currin Brothers, Inc.  
Mr. Glenn Currin, Currin Brothers, Inc.  
Ms. Shawn McKee, NCDENR  
File



PERMIT ISSUE  
NOT FOR CONSTRUCTION



PREPARED FOR:  
**CURRIN BROTHERS, INC.**  
P.O. BOX 547  
FUQUAY-VARINA, NC 27526

PREPARED BY:  
NC LIC. NO. C-6828 (ENGINEERING)  
**SMITH+  
GARDNER**  
ENGINEERS  
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

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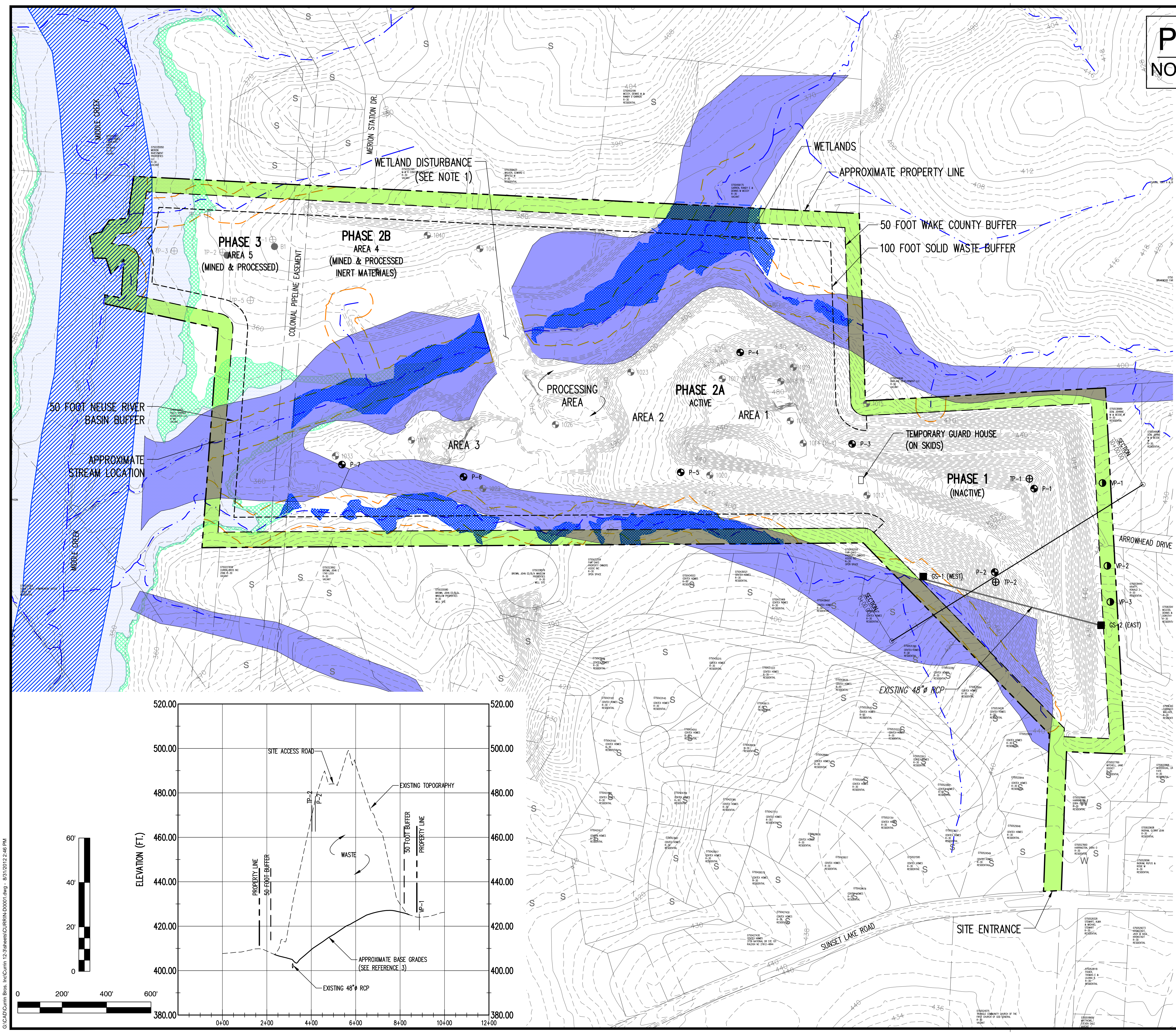
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PROJECT TITLE:  
**CURRIN BROTHERS LANDFILL  
SUNSET LAKE ROAD  
LCID LANDFILL &  
RECYCLING FACILITY**

DRAWING TITLE:  
**EXISTING CONDITIONS**

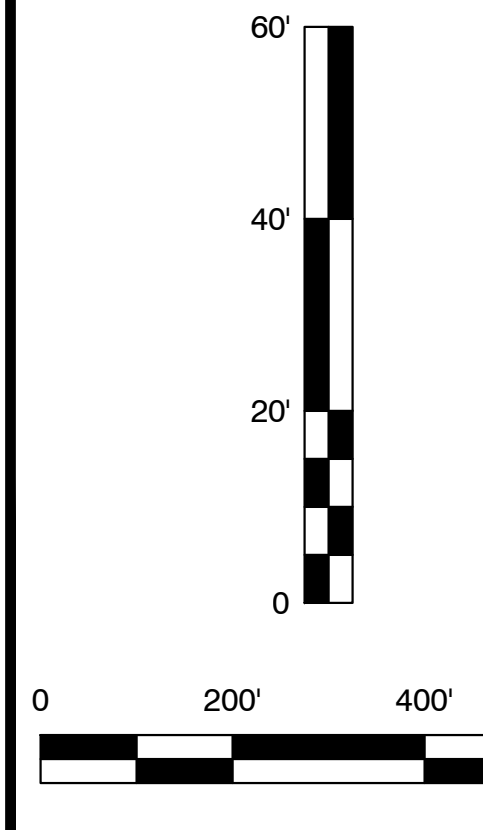
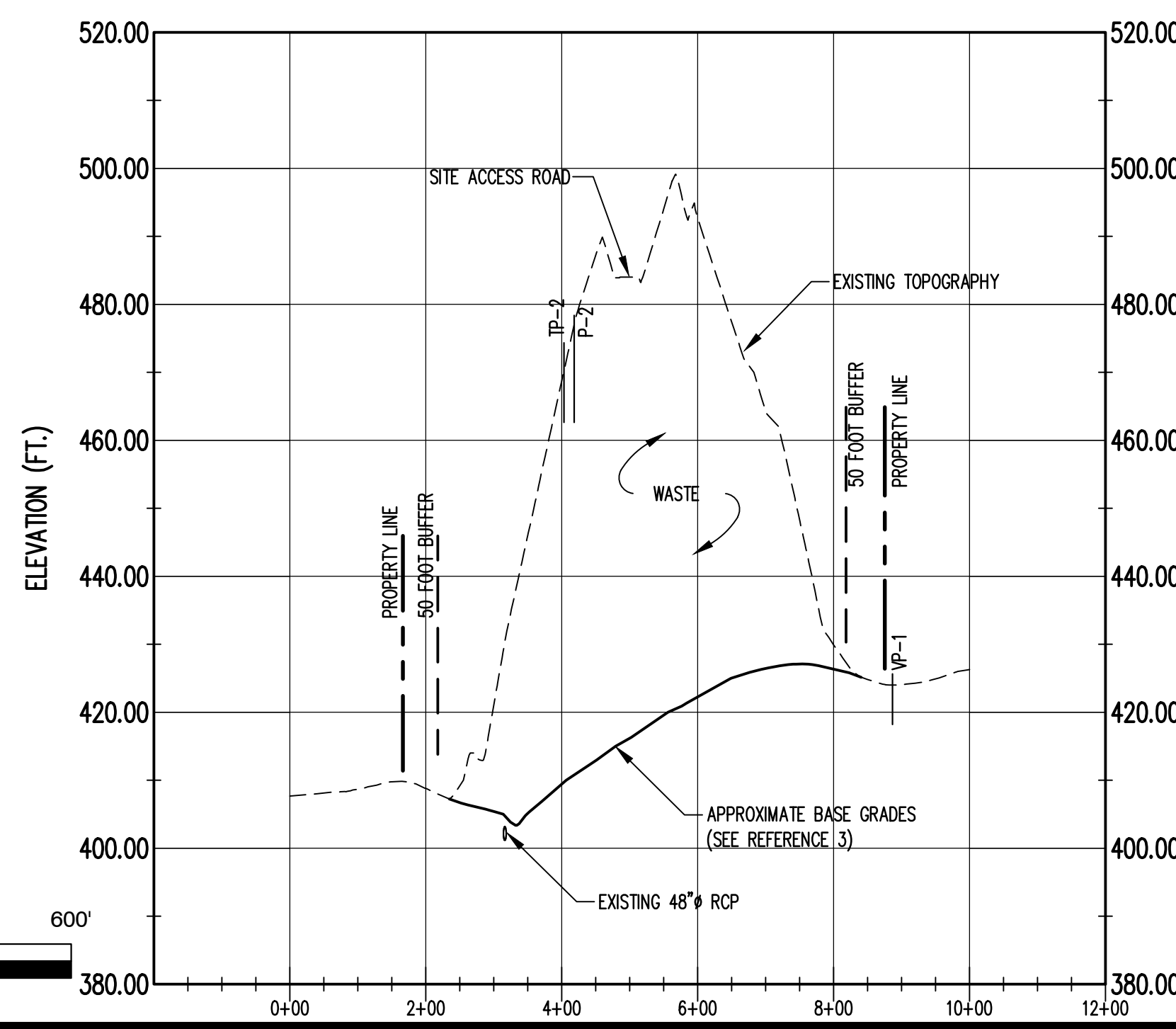
DESIGNED: SAS	PROJECT NO: CURRIN 12-3
DRAWN: JAL	SCALE: AS SHOWN
APPROVED:	DATE: AUGUST 2012
FILENAME: CURRIN-D0001	
SHEET NUMBER:	DRAWING NUMBER:

**FIG. 1**



- LEGEND**
- PROPERTY LINE
  - 50 FOOT PROPERTY UNDISTURBED BUFFER
  - WAKE COUNTY UNDISTURBED BUFFER
  - 100 FOOT PROPERTY BUFFER
  - COLONIAL PIPELINE EASEMENT (DEED BOOK 1568 PG 340)
  - STREAM/WETLAND (SEE REFERENCE 4)
  - WETLAND (SEE REFERENCE 4)
  - STREAM BUFFER (SEE REFERENCE 4)
  - EXISTING WELL
  - EXISTING BORING
  - EXISTING TEST PIT
  - PROPOSED TEST PIT
  - PROPOSED PUSH PROBE
  - PROPOSED SOIL VAPOR PROBE
  - PROPOSED AMBIENT GAS SAMPLE
  - EXISTING WELL ON PROPERTY (SEE REFERENCE 4)
  - EXISTING SEWER OR SEPTIC ON PROPERTY (SEE REFERENCE 4)
  - FLOOD PRONE SOILS (SEE REFERENCE 4)
  - FEMA FLOOD BOUNDARY (0.2% OR 1% (FUTURE))
  - FEMA FLOOD BOUNDARY (1% CHANCE ANNUAL FLOOD)
  - FEMA FLOOD BOUNDARY (FLOODWAY-NO ENCROACHMENT)

- NOTES**
- NATIONWIDE PERMITS #14 AND #26 HAVE BEEN OBTAINED FROM ARMY CORPS OF ENGINEERS FOR DISTURBANCE OF 0.79 ACRES DATED JULY 14, 1995 UNDER ACTION ID 199404122.
- REFERENCES**
- TOPOGRAPHY OBTAINED FROM WAKE COUNTY GIS DEPARTMENT, DATED 1999.
  - SITE FEATURES INCLUDING PROPERTY LINE, WETLANDS, STREAMS, CELL AREAS AND PIPING FROM DIGITAL DRAWING FILES PROVIDED BY JOHN TUCKER.
  - EXISTING 48 INCH RCP PIPE LOCATION AND BASE GRADES FROM DRAWING "LANDFILL RECLAMATION" BY LITTLE AND LITTLE, DATED OCTOBER 14, 1985
  - WETLAND, STREAM, SEWER AND POTABLE WELL LOCATIONS FROM WAKE COUNTY GIS DEPARTMENT, IMAPS.
  - FEMA FLOOD BOUNDARIES FROM FEMA FIRM DATA, PANEL NUMBER 0750.



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Hold: George  
Harvey

PRESENTED  
FOR  
REGISTRATION

MAR 4 3 28 PM '86

KENNETH C. WILKINS  
REGISTER OF DEEDS  
WAKE COUNTY, NC

Permit No. 86-001  
Date Issued March 4, 1986

Wake County  
Community Development Services  
Engineering Division  
P. O. Box 550 Raleigh, N.C. 27602

#### SOLID WASTE DISPOSAL PERMIT

Curran Brothers, Inc. is hereby issued a permit to operate a demolition landscape landfill located on S.R. 1301, in accordance with Article 13B of the General Statutes of North Carolina and all rules promulgated thereunder. The facility is located on the below described property.

Being 18.68 acres lying in White Oak Township as described by a map entitled "Recombination Map Property Survey for Glenn Curran" recorded in Book of Maps 1986, Page 368 in the Wake County Registry.

This permit is issued subject to the attached conditions and is not valid until the conditions set forth in items 1 and 2 are satisfied.

Robert E. Tucker  
Robert E. Tucker, P.E., Sanitary Engineer  
Wake County Community Development Services



BOOK 3670 PAGE 826

Permit No. 86-001  
Date Issued March 4, 1986

Solid Waste Management Permit

Conditions:

1. That this permit be recorded in the Office of the Register of Deeds of Wake County and a certified copy of the recorded permit be returned to the office of the Sanitary Engineer prior to initiating activity on the site.
2. That the site preparation be performed in accordance with the approved plans prepared by Little and Little dated November 4, 1985 and site inspection be performed by the Sanitary Engineer of Community Development Services for compliance prior to disposal of wastes.
3. That the landfill be open for the exclusive use of Currin Bros., Inc.
4. That access to the site be barricaded or manned when not in use.
5. That the operation be performed in compliance with the approved plan and all applicable rules set forth by the Solid Waste Management rules of the State of North Carolina and the Wake County Code of Ordinances.
6. That materials to be disposed of in the landfill be limited to demolition and land clearing debris (i.e. no paper or other garbage).





BOOK 3670 PAGE 827

COUNTY OF WAKE  
RALEIGH, NORTH CAROLINA  
COMMUNITY DEVELOPMENT SERVICES  
TELEPHONE (919) 755-6838  
March 4, 1986

Certified Copy of Solid Waste Management Permit

I do hereby certify the attached Permit is an exact and true copy of Permit  
NO. 86-001.

*Robert E. Tucker*

Robert E. Tucker, P.E. Sanitary Engineer  
Wake County Community Development Services

Sworn and subscribed before me this 4<sup>th</sup> day of March, 1986.

*J. M. Hall*  
Notary Public

My Commission Expires: 7-24-90 (SEAL)





BK011102PG01045

WAKE COUNTY, NC 650  
LAURA M RIDDICK  
REGISTER OF DEEDS  
PRESENTED & RECORDED ON  
11/15/2004 AT 15:48:13

Mail: Currin Bros. Inc.  
P.O. Box 547  
Fuquay Varina NC 27526

BOOK:011102 PAGE:01045 - 01047

DEHNR Permit # 92-S  
Wake County Permit # 86-001  
Date Issued: November 10, 2004

## **SOLID WASTE PERMIT**

Currin Brothers Land Clearing and Inert Debris Landfill

Is hereby issued a

### **PERMIT TO OPERATE**

### **LAND CLEARING AND INERT DEBRIS LANDFILL**

Wake County, North Carolina in accordance with Article 9, Chapter 130A of  
the General Statutes of North Carolina and all rules promulgated thereunder and subject  
to the conditions set forth in this permit. The facility is located and described by the legal  
description in the permit application and the site drawings.

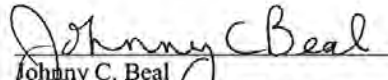
  
Johnny C. Beal  
Solid Waste Facilities Manager  
Wake County Solid Waste Management Division



BK011102PG01046

**CERTIFIED COPY OF SOLID WASTE PERMIT**

I so hereby certify that the attached permit is an exact and true copy of DEHNR Permit # 92-S, Wake County Permit Number #86-001.

  
Johnny C. Beal  
Solid Waste Facilities Manager  
Wake County Solid Waste  
Management Division

North Carolina

Wake County

I, Mary M. Mangum, a Notary Public for said County and State, do hereby certify that Johnny Beal, Solid Waste Facilities Manager, Solid Waste Management Division, appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and seal, this the 10<sup>th</sup> day of November, 2004



Mary M. Mangum Notary Public

My commission expires April 22, 2007.





BOOK:011102 PAGE:01045 - 01047

**Yellow probate sheet is a vital part of your recorded document.  
Please retain with original document and submit for rerecording.**



**Wake County Register of Deeds**  
**Laura M. Riddick**  
**Register of Deeds**

### North Carolina – Wake County

The foregoing certificate of Mary M. Mangum

\_\_\_\_ Notary(ies) Public is (are) certified to be correct. This instrument and this certificate are duly registered at the date and time and in the book and page shown on the first page hereof.

Laura M. Riddick, Register of Deeds

By: P. Anne Redd  
Assistant/Deputy Register of Deeds

### This Customer Group

# of Time Stamps Needed


## This Document

3 New Time Stamp  
# of Pages



## **Attachment A**



	ADDRESS 14 N. Boylan Avenue, Raleigh, NC 27603	TEL 919.828.0577	WEB <a href="http://www.smithgardnerinc.com">www.smithgardnerinc.com</a>
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PROJECT <u>Currin Bros. LCID Landfill</u>	SHEET <u>1</u> OF <u>      </u>	DATE <u>8/23/2012</u>	COMPUTED BY <u>M. Lamb</u>
SUBJECT <u>Methane Generation from LCID Waste</u>	JOB # <u>CURRIN-12-1</u>	CHECKED BY <u>S. Smith</u>	

**OBJECTIVE:** To estimate methane generation from a land clearing/inert debris (LCID) landfill in Phase 1 of the landfill

**REFERENCES:**

1. Landfill Gas Modeling: Estimation of Landfill Gas Decay Rate Constants and Yields for Individual Waste Components  
Morton A. Barlaz and Florentino dela Cruz, North Carolina State University, 2010
2. EPA Landfill Gas Emissions Model (LandGEM), v. 3.02, May 2005

**ASSUMPTIONS:**

Phase 1 landfill waste volume estimated from historic and current topographic information (**Attached**)  
 Waste density is assumed to equal 0.4 tons per cubic yard)  
 Landfill operational dates are estimated to be from 1986 to 2000  
 Waste acceptance rates are assumed to be equal during each year operation, until Phase 1 is full  
 Waste composition and characteristics (**Ref. 1**) is estimated to be composed of the following:  
 50% dirt (inert)  
 45% branches/wood (k=0.015, Lo=62.6)  
 2.5% Grass (k=0.3, Lo=144.4)  
 2.5% leaves (k=0.17, Lo=30.6)

**ANALYSIS:**

Composite waste characteristics are determined by multiplying k and Lo values separately by the percentage of each waste type, and summing the results to obtain composite k and Lo values. These values were then entered into LandGEM (**Ref. 2**), along with annual waste acceptance rate data. Inputs are given below:

987,307 = Phase 1 total volume (cubic yards)  
 394,923 = Phase 1 total volume (tons)  
 26,328 = Annual waste acceptance rate  
 0.019 = k value  
 32.545 = Lo value

Total methane generation rates (cfm) as calculated by LandGEM are given below for the Phase 1 LCID landfill for the peak and current year of methane production.

12.97 cfm in 2001  
 10.53 cfm in 2012

Methane generation from a conventional municipal solid waste landfill using AP-42 emission factors for k and Lo are as follows:

72.7 cfm in 2001  
 46.82 in 2012



N

AREA 5

AREA 4

AREA 1 - 442,632 cy

