

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Aberdeen Florist and Associated Aberdeen sites

ID # NONCD0002857

500 S. Sandhills Rd, Aberdeen, Moore County, NC

Proposed Date of Investigation 8/7/12 to 12/31/12

Date of Briefing 8/2/12

Date of Debriefing 1/4/13

Nature of Visit (check one): On-Site Reconnaissance X
Off-Site Reconnaissance
Sampling
Sampling Overview
Remediation Overview

Health Department Official Contacted James Shackelton's voice mail

Date of Contact 8/1/12

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

<u>Personnel</u>	<u>Responsibilities</u>	<u>Signature</u>
Team 1 <u>Sue Robbins</u>	<u>team leader, sampling</u>	
Team 1 <u>Bruce Lefler</u>	<u>sampling</u>	

Plan Preparation:

Prepared By: David Lilley, Industrial Hygiene Consultant



Reviewed By: Jack Butler, Superfund Section Chief



B. SITE/WASTE CHARACTERISTICS

Waste Type(s) X Liquid Solid Sludge Gas X Vapor
Characteristics Corrosive Ignitable Radioactive
 X Volatile X Toxic Reactive Other

List Known or Suspected Hazards (physical, chemical biological or radioactive) on Site and their toxicological effects. Also, if known, list chemical amounts

HAZARD	WARNING PROPERTIES	EXPOSURE LIMIT
<u>Tetrachloroethene</u>	<u>Odor Threshold (OT) = 1 ppm</u>	<u>25 ppm</u>
<u>PAHs</u>	<u>vary according to compound, many are carcinogenic-indicators listed below</u>	<u>varies</u>
<u>Pyrene (noncarcinogenic)</u>	<u>OT = no data</u>	<u>no data</u>
<u>Benzo[a]pyrene (carcinogenic)</u>	<u>OT = no data</u>	<u>PEL= 0.2mg/m³</u>
<u>Carbon Tetrachloride</u>	<u>Odor Threshold (OT) = 10 ppm</u>	<u>5 ppm</u>

UNDERGROUND UTILITIES CHECKLIST

<u>Utility</u>	<u>Locator/Contact Person</u>	<u>Phone #</u>	<u>Date of Location</u>
Power			
Telephone			
Gas			
Water			
Sewer			

Call made by:

2

ID # NONCD0002857

Facility Description: Size unknown Buildings unknown

Disposal Methods Being Investigated Unknown

Unusual Features on Site (dike integrity, power lines, terrain, etc.):

None known

History of the Site: Chlorinated solvents were discovered in an irrigation well on the Aberdeen Florist site during investigation for the US 1 - 15/501 site which is across the street. The florist well is still in use and a recent sampling indicated a concentration of 6.3 ug/L tetrachloroethene and 0.99 ug/L carbon tetrachloride. The Aberdeen Dump is also in the area and under investigation by the Landfill Unit.

The source of chlorinated solvents has not been determined.

C. HAZARD EVALUATION

The site can be toured in level D protection. Chemically resistant, steel toed work boots will be worn if the potential for surface soil contamination exists.

D. WORK PLAN INSTRUCTION

Map or Sketch Attached? yes

Perimeter Identified? no

Command Post Identified? no

Zones of Contamination Identified? no

Personal Protective Equipment/Level of Protection: C X D

Modifications

3

ID # NONCD0002857

Surveillance Equipment:

 HNU

 OVA

 Explosimeter

 Detector Tubes and Pumps

 O2 Meter

 Radiation Monitor

Decontamination Procedures

 Level C Respirator wash, respirator removal, suit wash (if needed),
 suit removal, boot wash, boot removal and glove removal.

 X Level D Boot wash and rinse and boot removal, suit removal, glove
 and goggle removal.

Modifications Dispose of trash properly, on-site if possible.

Work Schedule/Visit Objectives The purpose of this visit is to determine if the site poses a threat to the public health or environment because of releases of contaminants to soil, surface water, groundwater, or air. No sampling will be conducted by Superfund personnel at this time.

EMERGENCY PRECAUTIONS

<u>Route of Exposure</u>	<u>First Aid</u>
<u>Eyes</u>	<u>irrigate immediately</u>
<u>Skin</u>	<u>soap and water wash</u>
<u>Inhalation</u>	<u>fresh air and artificial respiration</u>
<u>Ingestion</u>	<u>get medical attention immediately</u>

ID # NONCD0002857

Location of Nearest Phone: nearby residences

Hospital (Address and Phone Number):

Moore Regional Hospital, P.O. Box 3000, Pinehurst, NC (919) 295-7944

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital see next page

PREVAILING WEATHER CONDITIONS AND FORECAST

EQUIPMENT CHECKLIST

- | | |
|---|--|
| <input type="checkbox"/> Air purifying respirator | <input checked="" type="checkbox"/> First Aid Kit |
| <input type="checkbox"/> Cartridges for respirator | <input checked="" type="checkbox"/> 3 gal. Deionized H2O |
| <input checked="" type="checkbox"/> Eye Wash Unit | <input checked="" type="checkbox"/> Rain suit |
| <input type="checkbox"/> HNU | <input checked="" type="checkbox"/> Gloves (<u>PE/PVC/nitrile/cloth</u>) |
| <input type="checkbox"/> OVA | <input checked="" type="checkbox"/> Boots/Boot Covers |
| <input type="checkbox"/> Explosimeter | <input checked="" type="checkbox"/> Coveralls (<u>tyvek/saranex</u>) |
| <input type="checkbox"/> Radiation Monitor | <input checked="" type="checkbox"/> Eye Protection (<u>goggles/shield</u>) |
| <input checked="" type="checkbox"/> Decontamination Materials | <input checked="" type="checkbox"/> Hard Hat |

STATE POISON CONTROL CENTER
1-800-848-6946

North Carolina OSHA
1-800-LABOR-NC

safeform.doc

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Please submit the Air Monitoring and Injury Report Form.



HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Carbon Tetrachloride

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>CCl4</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>2</u>
Vapor Pressure <u>91.3</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>-9</u> °F/°C Boiling Point <u>170</u> °F/°C	<u>3</u>
Flash Point (open or closed cup) <u>none</u> °C/°F	<u>3</u>
Solubility - H ₂ O <u>1 ml dissolves in 2000 ml water</u>	<u>1</u>
Other <u>miscible with alcohol, benzene, chloroform, ether, carbon disulfide, petroleum ether, oils</u>	<u>1</u>
Physical Features: (odor, color, etc.) <u>Colorless, clear heavy liquid with an ether-like odor (1,3) IP = 11.47 eV, HNU sensitivity with 11.7 eV probe = 9.0.</u>	

II. TOXICOLOGICAL DATA

potential human

Standards: 5 ppm-skin (4) TLV 10 ppm (5) PEL carcinogen (3) IDLH

Routes of Exposure: Inhalation, skin absorption, ingestion, eye contact

Acute/Chronic Symptoms: Central nervous system depression, nausea, vomiting, liver and kidney damage, skin irritation, potential human carcinogen (3)

First Aid: Inhalation: artificial respiration; Skin contact: soap and water wash immediately; Eye contact: water flush immediately and get medical attention.

Chemical Name: Carbon Tetrachloride

III. HAZARDOUS CHARACTERISTICS

Reference

- A. Combustibility Yes No 3
Toxic by-products _____
- B. Flammability LEL _____ UEL _____
- C. Reactivity Hazard Incompatible with chemically active 3
metals, such as sodium, potassium, and magnesium; fluorine; aluminum
Note: forms highly toxic phosgene gas when exposed to flames or
welding arcs.
- D. Corrosivity Hazard yes/no pH: _____
- Neutralizing agent: _____
- E. Radioactive Hazard Exposure Rate
- | | | | |
|-----------------|--------|-------|-------|
| Background | yes/no | _____ | _____ |
| Alpha particles | yes/no | _____ | _____ |
| Beta particles | yes/no | _____ | _____ |
| Gamma radiation | yes/no | _____ | _____ |

IV. REFERENCES

- (1) The Merck Index, 11th Edition.
- (2) The Condensed Chemical Dictionary, Hawley, 11th Edition.
- (3) NIOSH Pocket Guide to Chemical Hazards, 1990.
- (4) Threshold Limit Values and Biological Exposure Indices for 2007
ACGIH.
- (5) 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Benzo[a]pyrene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C₂₀ H₁₂</u>	<u>1,2</u>
Natural Physical State at 25EC <u>solid</u>	<u>1,2</u>
Vapor Pressure <u>1</u> mm Hg at 20EC	<u>3</u>
Melting Point <u>179</u> EF/EC Boiling Point <u>310-312</u> EF/EC	<u>1,2,3</u>
Flash Point (open or closed cup) <u>nonflammable</u> EC/EF	<u>3</u>
Solubility - H ₂ O <u>insoluble in water</u>	<u>1,2,3</u>
Other <u>Slightly soluble in alcohol and methanol, slightly soluble in benzene, toluene, xylene.</u>	<u>1,2</u>
Physical Features: (odor, color, etc.) <u>Yellowish crystals with a faint aromatic odor (1,2,3)</u>	

II. TOXICOLOGICAL DATA

Standards: 0.2 mg/m³ (4)TLV 0.2 mg/m³ (5) PEL
suspected human carcinogen (4) no data IDLH

Routes of Exposure: Ingestion, Inhalation, Skin/Eye contact

Acute/Chronic Symptoms: Irritation of lungs and skin, bronchitis, coughing, breathing difficulty. Long-term exposure may affect lungs, kidneys, skin, urinary tract, reproductive system.

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: Benzo[a]pyrene

III. HAZARDOUS CHARACTERISTICS

	Reference
A. Combustibility Yes ___ No <u>X</u>	<u>3</u>
Toxic by-products <u>this is a product</u>	<u>2</u>

of incomplete combustion _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard Incompatible with strong oxidizers 3

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard		Exposure Rate
Background	yes/no	_____
Alpha particles	yes/no	_____
Beta particles	yes/no	_____
Gamma radiation	yes/no	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
3. Chemical Safety Data Guide, The Bureau of National Affairs, 1985.
4. Threshold Limit Values and Biological Exposure Indices for 2007 ACGIH
5. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Pyrene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C₁₆H₁₀</u>	<u>1,2</u>
Natural Physical State at 25EC <u>solid</u>	<u>1,2</u>
Vapor Pressure _____ mm Hg at 20EC	
Melting Point <u>156EF/EC</u> Boiling Point <u>404EF/EC</u>	<u>1,2</u>
Flash Point (open or closed cup) _____ EC/EF	
Solubility - H ₂ O <u>insoluble</u>	<u>1,2</u>
Other <u>partially soluble in organic solvents</u>	<u>1,2</u>
Physical Features: (odor, color, etc.) <u>Colorless solid (impurities give a yellow color) (1,2)</u>	

II. TOXICOLOGICAL DATA (as coal tar pitch volatiles)

Standards: 0.2 mg/m³ (3) TLV 0.2 mg/m³ (4) PEL no data IDLH

Routes of Exposure: Inhalation, Ingestion, Skin absorption, Eye contact

Acute/Chronic Symptoms: Pyrene is carcinogenic, absorbed through the skin, and a skin irritant (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: Pyrene

III. HAZARDOUS CHARACTERISTICS

Reference

- A. Combustibility Yes ___ No ___
Toxic by-products When heated to combustion, pyrene emits acrid smoke and fumes ___ 3
- B. Flammability LEL _____ UEL _____
- C. Reactivity Hazard _____
- D. Corrosivity Hazard yes/no pH: _____
Neutralizing agent: _____
- E. Radioactive Hazard

		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th Edition, 1987.
3. CAMEO computer data base developed by EPA and NOAA, 1986.
4. Threshold Limit Values and Biological Exposure Indices for 2007, ACGIH
5. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Perchloroethylene

I. PHYSICAL/CHEMICAL PROPERTIES

Reference

Chemical Formula C2 Cl4 1
Natural Physical State at 25oC liquid 2
Vapor Pressure 14 mm Hg at 20oC 2
Melting Point -2 oF/oC Boiling Point 250 oF/oC 2
Flash Point (open or closed cup) N/A oC/oF 2
Solubility - H₂O 0.015% 2
Other misc with alcohol, ether, chloroform, benzene
1

Physical Features: (odor, color, etc.) colorless liquid with an odor like ether or chloroform IP=9.32 eV (2) OVA Relative Response = 70%

II. TOXICOLOGICAL DATA

Standards: 25 ppm(3)TLV 100 ppm(4)PEL carcinogen (2)IDLH suspect human

Routes of Exposure: Inhalation, Ingestion, Skin and/or Eye Contact (2)

Acute/Chronic Symptoms: Irritation of eyes, nose, and throat, nausea, flushed face and neck, vertigo, dizziness, incoordination, headache, carcinogen (2)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: Perchloroethylene

III. HAZARDOUS
Reference

CHARACTERISTICS

A. Combustibility Yes No 2
Toxic by-products

B. Flammability LEL none UEL none 2

C. Reactivity Hazard Incompatible with strong oxidizers, chemically active metals, such as barium, lithium, and beryllium & barium; caustic soda; sodium hydroxide, potash (2)

D. Corrosivity Hazard yes/no pH:

Neutralizing agent:

E. Radioactive Hazard Exposure Rate
Background yes/no
Alpha particles yes/no
Beta particles yes/no
Gamma radiation yes/no

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989
2. NIOSH Pocket Guide to Chemical Hazards, 1990
3. Threshold Limit Values and Biological Exposure Indices for 2007 ACGIH.
4. 29 CFR 1910.1000, NC PEL

EMPLOYER: Please complete the top section and give to the injured employee to take with them to their authorized treating physician. If you already have transitional duty job descriptions available, please attach a copy for the treating physician's review.

Name of Employee: Last:	First:
Date of Injury:	
Name of Employer:	
Employer Signature:	Treating Physician:

EMPLOYEE: Please take this form with you to an authorized treating physician. Please have the physician complete the middle section and return this immediately to your employer. The bottom section is for you to show the pharmacist should you need to have any prescriptions filled as prescribed by your authorized treating physician for this work related injury.

AUTHORIZED PHYSICIAN, PLEASE COMPLETE

Diagnosis: _____

A post accident drug test (check one) has been completed has not been completed

In accordance with this patient's physical capability, check all that apply:

- May resume work immediately, no restriction.
- May resume work immediately with the following restrictions:
 - Sedentary work (sitting, occasional walking, standing, lifting less than 10 pounds)
 - Light work (lifting less than 20 pounds)
 - Medium work (lifting less than 50 pounds)
 - Heavy work (lifting less than 100 pounds)
 - Normal shift
 - Limited hours: ____ hrs, ____ hrs, ____ hrs per day
 - Other: _____

Repetitive Motion Restrictions (specific to hand/arm injuries):

Frequency	Left	Right
No Use		
Occasional <33% of time		
Frequent 34-66% of time		
Regular 67-100% of time		

- Patient may return to work at full duty on (date) _____
- Patient has a return appointment on (date) _____ at (time) _____

Please indicate any referrals that are required: _____

Physician's Signature

Date

Physician's Name (type or print)

Physician Offices – Be sure to contact CorVel's Claim Department at 800-365-5998 for authorization for the referral.

PHARMACIST: Please use the Injured Worker's SSN and Date of Injury (SSN+MMDDYYYY) as their 17 digit Identification Number when entering information to process an online claim to CorVel on behalf of Department of Environmental and Natural Resources injured employees. Pharmacies can contact the CorVel Customer Service at 800-563-8438 or CVS/Caremark Pharmacy Help Desk at 877-876-7216, for assistance with claims processing.

DO NOT CHARGE THE PATIENT FOR THE PRESCRIPTION.

CHAIN NAME	CHAIN NAME	CHAIN NAME	CHAIN NAME
Bi-Lo Pharmacy	Horizon Pharmacy	Revco drugs	VIX Pharmacy
Bi-Mart	HyVee Drugtown	Rite-Aid drugs	Walgreen's
Brooks Drugs	J & J Pharmacy	RX Discount Pharmacy	Wal-Mart Pharmacy
Brookshire Brothers	Joel & Jerry's	Sack-n-Save	Wegman Pharmacy
Cub Pharmacy	Kash N Karry	Sav-A-Lot	Winn-Dixie
CVS Drugs	Kerr Drugs	Sams Club Pharmacy	
Drug Emporium	K-mart phcy	Save Mart	
Eckerd's(all others)	Long's Phcy	Stop N Shop	
Franck's Pharmacy	Medicine Shoppe	Super D	
Fred Meyer	Medistat Phcy	Super Valu	
Fred's Pharmacy	Milner-Rushing Drugs	Super X (HSI)	
Giant Pharmacy	Pathmark Pharmacy	Tom Thumb Phcy	
Goodings	Perry Drg Str	Tops Pharmacy	
Hannaford Food &	Phar-Mor	Tri Daly Drugs	

Group Number: RXFFWC311
CCRx BIN: 004336
PCN: ADV Rev. 6/10
Dept. of Environ. & Natural Res.





500 S Sandhills Blvd, Aberdeen, NC

Roseland Rd

Pointe de St

Pinnacle

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Google

Pointer 35°07'36.93" N 79°25'57.48" W

Streaming 100%

Eye all 1861 ft



Directions to Moore Regional Hospital, 155 Memorial Drive, Pinehurst, NC 28374
7.5 mi – about 15 mins

 500 S Sandhills Blvd, Aberdeen, NC 28315

-  1. Head **southwest** on **U.S. 1 S/S Sandhills Blvd** toward **Roseland Rd** go 436 ft
total 436 ft
-  2. Take the 1st right onto **Roseland Rd** go 0.2 mi
total 0.3 mi
-  3. Take the 1st right onto **S Pinehurst St**
About 2 mins go 0.5 mi
total 0.8 mi
-  4. Turn right onto **W South St** go 486 ft
total 0.8 mi
-  5. Turn left onto **S Sandhills Blvd**
About 3 mins go 1.7 mi
total 2.5 mi
-  6. Turn left onto **N Carolina 211 N/US-15 N/US-501 N**
About 6 mins go 3.9 mi
total 6.4 mi
-  7. At the traffic circle, take the **3rd** exit onto **Yadkin Rd**
About 2 mins go 0.9 mi
total 7.3 mi
-  8. Turn right onto **Memorial Dr**
Destination will be on the right go 0.2 mi
total 7.5 mi

 Moore Regional Hospital, 155 Memorial Drive, Pinehurst, NC 28374

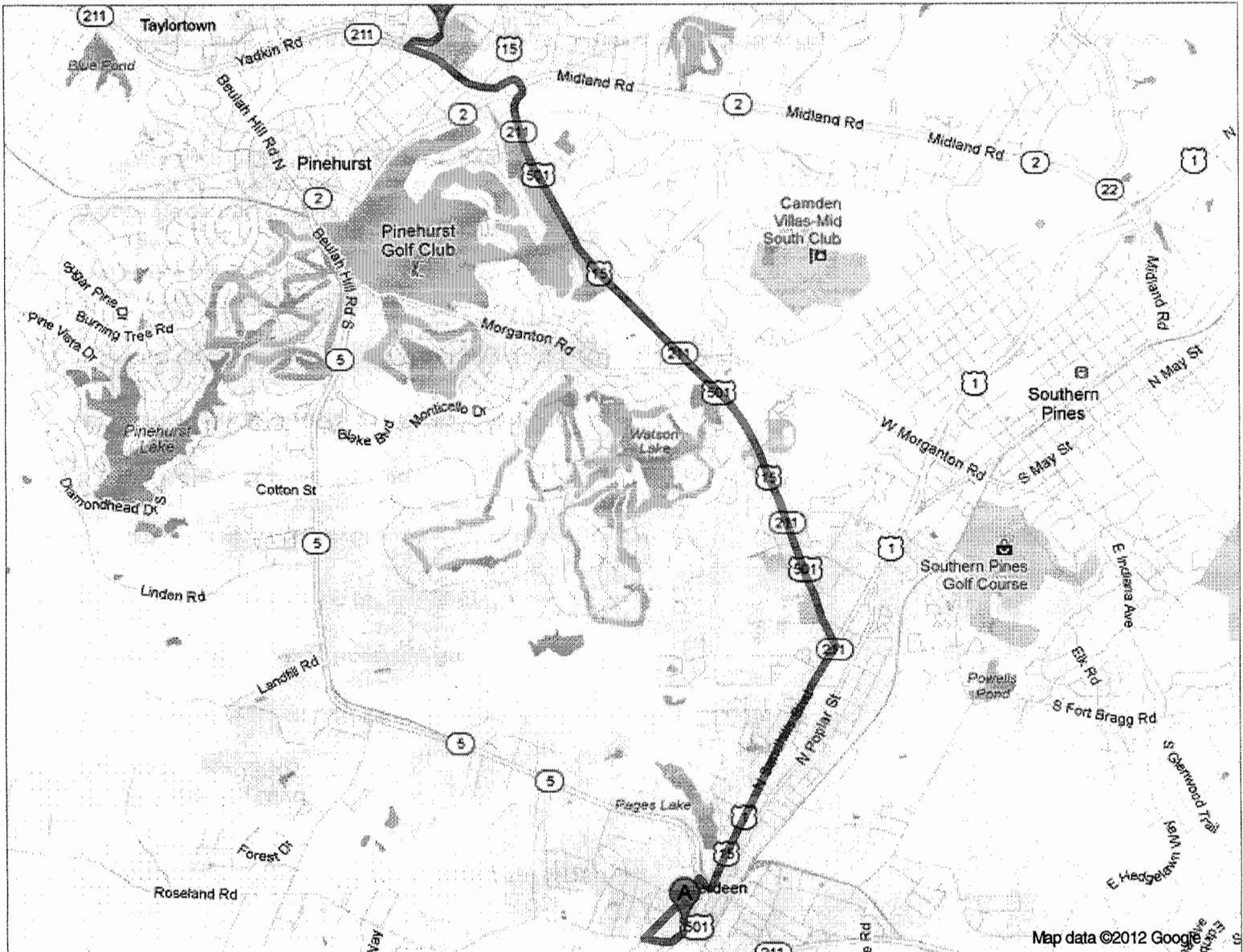
These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

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Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.



To see all the details that are visible on the screen, use the "Print" link next to the map.



Driving directions to Moore Regional Hospital

(910) 715-1000



500 S Sandhills Blvd

Aberdeen, NC 28315

-
1. Head **southwest** on **U.S. 1 S/S Sandhills Blvd** toward **Roseland Rd**
436 ft
 2. Take the 1st right onto **Roseland Rd**
0.2 mi
 3. Take the 1st right onto **S Pinehurst St**
0.5 mi
 4. Turn right onto **W South St**
486 ft
 5. Turn left onto **S Sandhills Blvd**
1.7 mi
 6. Turn left onto **N Carolina 211 N/US-15 N/US-501 N**
3.9 mi
 7. At the traffic circle, take the **3rd** exit onto **Yadkin Rd**
0.9 mi
 8. Turn right onto **Memorial Dr**
Destination will be on the right
0.2 mi



Moore Regional Hospital

Moore Regional Hospital
155 Memorial Drive, Pinehurst, NC 28374
(910) 715-1000

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

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