



## CONTACTS

Responsible Party:	NCDOT, Geotechnical Unit	
Contact Person:	Gordon Box, L.G.	
Address:	1589 Mail Service Center, Raleigh, NC,27699	Phone: (919)707-6859
Property Owner:	Former Virginia B. Medford Property	
Address:	8 Islander Lane Lake Junaluska, NC,28785	Phone: Not available
Contact Person:	Medfords	
Primary Consultant:	AMEC North Carolina Inc.	
Address:	2801 Yorkmont Road Suite 100 Charlotte, NC 28208	Phone: (704) 357-5516
Soil Removal Contractor:	A&D Environmental Services	
Address:	1915 Brentwood St High Point, NC	Phone: (336) 882-8000
Analytical Laboratory:	Pace Analytical	
Address:	9800 Kinsey Ave, Ste 100 Huntersville, NC 28078	Phone: (704) 875-9092
State Certificate No.:	12	

## PHYSICAL SETTING AND BACKGROUND INFORMATION

The Virginia B. Medford Parcel is located on the southwestern corner of the intersection of NC Corley Road with Islander Lane in Lake Junaluska, Haywood County, North Carolina, as shown in Figure 1. The properties surrounding Parcel #019 are commercial and residential.

The Virginia B. Medford Property is located within the Biotite Gneiss group of the Blue Ridge Belt Physiographic Province of western North Carolina. The Biotite Gneiss group is migmatic, interlayered and gradational with biotite garnet gneiss and amphibolite.

A one story brick house occupies the Site. The proposed road widening will traverse the entire length of Parcel #019. Figure 2 presents the Site Location Map. A photo log for the Site activities is included in the Attachments to this letter. During reconnaissance, representatives from AMEC as well as the subcontractor, A&D Environmental, identified one UST with an estimated capacity of 550 gallons and a deduced product quantity of 400 gallons. The UST was oriented parallel to the back of the house, on its south side and was partially visible from ground surface.

## **UST REMOVAL AND SOIL SAMPLING ACTIVITIES**

Prior to excavation activities, AMEC requested and received a utility walk-through from North Carolina One Call. The local Fire Marshal and NCDENR were also notified prior to field activities.

AMEC retained A&D Environmental Services (A&D) to perform evacuation of residual fluids from the UST, to excavate and properly dispose the UST, and to potentially excavate and properly dispose of potentially affected soils from contaminant release. AMEC provided oversight and direction during excavation and removal activities, which were performed on the 19<sup>th</sup> of July 2013. Native soils, encountered during screening sample activities, predominantly consisted of orange, clayey silt. An excavation log is included in the attachments following this letter.

UST closure commenced with fluids removal from the heating oil UST using a vacuum truck. The UST was then pressure washed and rendered inert. A total of 375 gallons of a mixture of water and heating oil were evacuated from the UST. The lower explosive limit (LEL) within the tank was checked with a Photo Ionization Detector (PID) and safe conditions were verified for removal. Upon removal UST-1 appeared rusted and pitted, but showed no areas of complete deterioration. UST-1 was measured as having a diameter of 3.5 feet, a length of 8 feet with a capacity of 1,000 gallons. The disposal certificates are included in the attachments following this letter.

During the removal of heating oil UST-1 no evidence of total petroleum hydrocarbon release was observed. Table 1 presents the field monitoring results. Soil sampling was; therefore, not necessary for this unregulated tank.

A&D then backfilled the exposed tank bed from UST-1

## **CONCLUSIONS**

The following conclusions are derived from Site conditions and sample screening results from field activities conducted in July 2013.

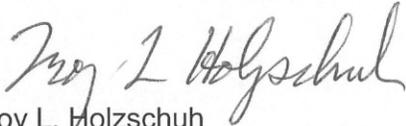
- Heating oil UST-1 was closed by removal on July 19, 2013 from 8 Islander Lane in Lake Junaluska, Haywood County.
- A total of 375 gallons of a mixture of water and oil were evacuated from the UST.
- Photo Ionization Detector readings indicated that the soils below the storage tank did not have any apparent impact from volatile organic compounds from the UST.
- The 1,000 gallon UST was safely removed from the Site and disposed of properly. The excavation area was backfilled to ground surface.

Mr. Gordon Box  
Parcel #19, Lake Junaluska, Haywood County, NC  
August 15, 2013

Should you have any questions or need further information please contact us as (704) 357-8600.

*Best Regards,*

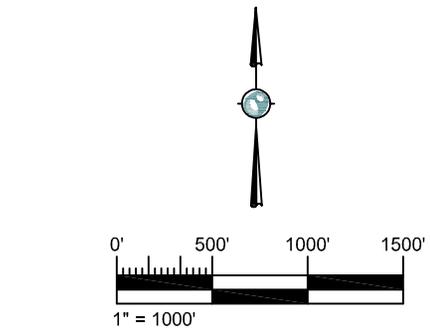
**AMEC Environment & Infrastructure, Inc. of North Carolina**

  
Troy L. Holzschuh  
Engineering Science Professional

  
Helen P. Corley, LG  
NCDOT Program Manager



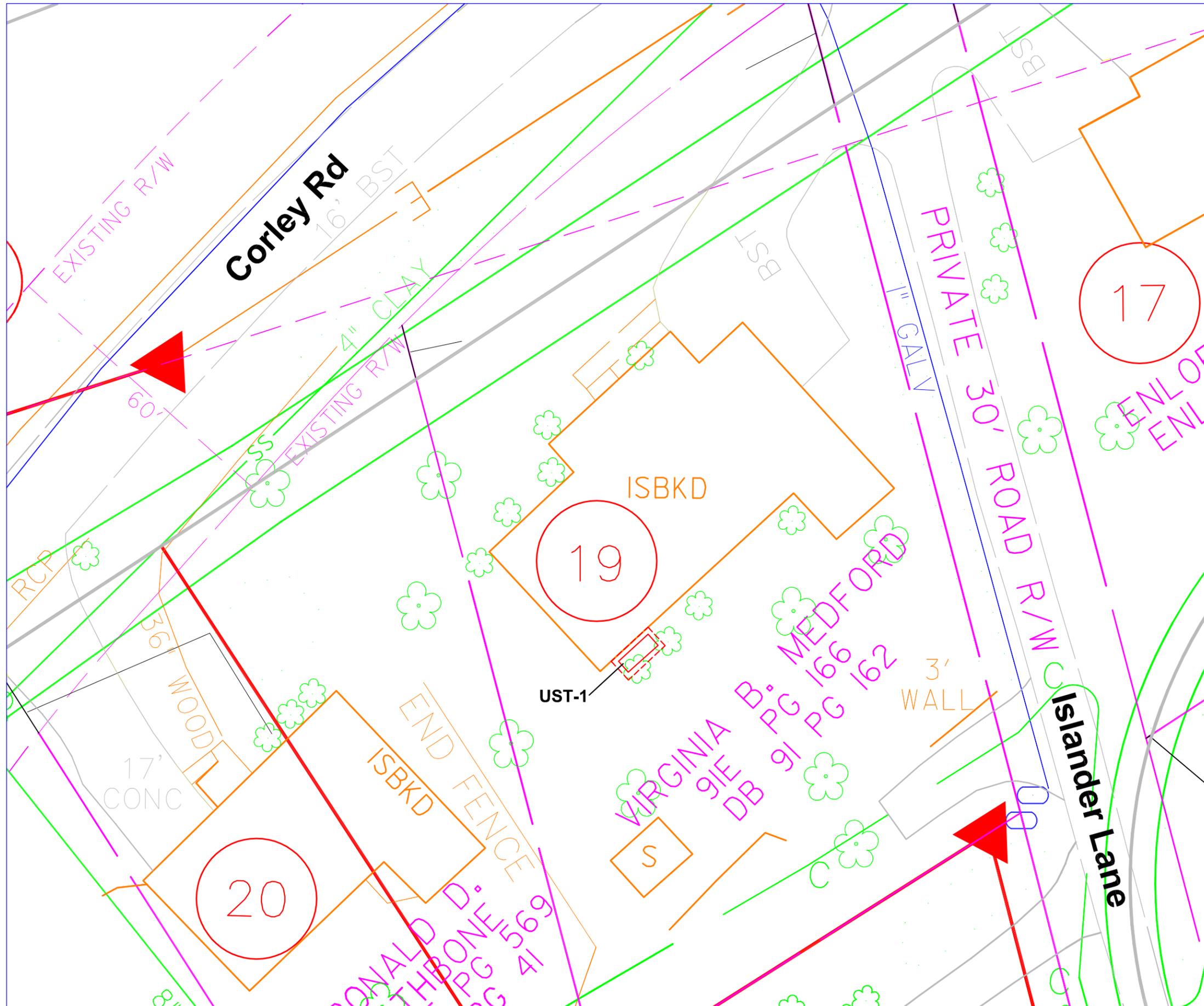




7.5 Minute Quadrangle  
 North Carolina, 1983  
 Photorevised 1993

**Figure 1**  
**Site Vicinity Map**  
**Parcel 019**

DRAWING NAME: J:\NCDOT\Haywood\FIG1		DATE: 8/15/13	
SCALE: 1 INCH = 1,000 FEET	DR	TLH	CHK HPC REV
PREPARED FOR: NC Department of Transportation Geotechnical Unit WBS Element: 34599.1.1 TIP# R-4047			
Prepared By: 	Figure: Figure 1		



**LEGEND**

-  Proposed Right of Way
-  Existing Property Line
-  Existing Right of Way
-  Cut Line
-  Fill Line
-  Excavation
-  Known UST
-  Utility Easement

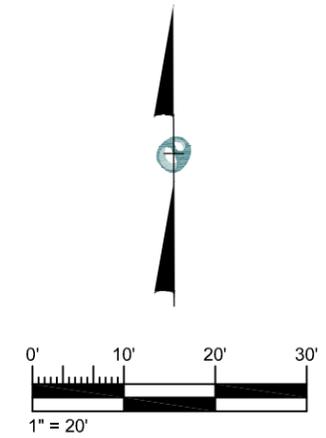


Figure 2  
Parcel # 019 Former Virginia B. Medford Property  
(8 Islander Lane)  
Site Map

NC Department of Transportation  
Geotechnical Unit  
WBS Element: 34599.1.1  
TIP# R-4047



**Table 1**  
**PID Field Screening**  
**Parcel 019**  
**8 Islander Lane, Lake Junaluska, North Carolina**

<b>SAMPLE ID</b>	<b>Sample Date</b>	<b>Comments</b>	<b>Sample Depth (feet bgs)</b>	<b>Field Screening (ppm)</b>
P-1	7/19/2013	Composite Grab North Sidewall	1	0
P-2	7/19/2013	Composite Grab East Sidewall	1	0
P-3	7/19/2013	Composite Grab East Sidewall	2	0
P-4	7/19/2013	Composite Grab East Sidewall	3	0
P-5	7/19/2013	Composite Grab South Sidewall	5	0
P-6	7/19/2013	Composite Grab West Sidewall	5	0
P-7	7/19/2013	Composite Grab East Sidewall	5	0
P-8	7/19/2013	Composite Grab North Sidewall	5	0
P-9	7/19/2013	Composite Grab Floor	5	0.8
P-10	7/19/2013	Composite Grab Floor	5	0.5

Notes: PPM = Parts Per Million





**Photo 1**

Site prior to excavation activities .



**Photo 2**

UST prior to excavation.



2801 Yorkmont Road, Suite 100  
Charlotte, NC 28208

W.O. 566774047  
PROCESSED TLH  
DATE July 2013

PHOTOGRAPHIC LOG

UST Closure Activities  
Parcel 019,8 Islander Lane, Lake Junaluska, NC



**Photo 3**

A&D personnel evacuating the UST.



**Photo 4**

Back hoe unearthing the UST



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UST Closure Activities  
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**Photo 5**

UST after being pulled from the excavation.



**Photo 6**

Backfilling the excavation.



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PHOTOGRAPHIC LOG

UST Closure Activities  
Parcel 019,8 Islander Lane, Lake Junaluska, NC



**Photo 7**

Clean backfill being dumped on site.



**Photo 8**

Excavation upon completion.



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W.O. 566774047  
PROCESSED TLH  
DATE July 2013

PHOTOGRAPHIC LOG

UST Closure Activities  
Parcel 019,8 Islander Lane, Lake Junaluska, NC









# A&D Environmental Services

# Bill of Lading / Material Manifest

A&D Job No. <b>13774</b>	Generator ID Number	Page 1 of	Emergency Response Phone <b>800-434-7750</b>	Tracking Number <b>07199</b>					
Generator's Name and Mailing Address <b>AMEC 28 Carley Rd Waynesville, NC</b>		Generator's site address (if different from mailing address)							
Transporter 1 <input type="checkbox"/> 2 <input type="checkbox"/>	Company Name <b>A&amp;D Environmental Services, Inc.</b>		US EPA ID No: <b>NCD98623222</b>						
Transporter 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>	Company Name <b>A&amp;D Environmental Services (SC), LLC</b>		US EPA ID No: <b>SCD987598331</b>						
Designated Facility <b>A&amp;D Environmental Services, Inc. ● 2718 Uwharrie Road Archdale, NC 27263 336-434-7750 NCD986232221</b>	Designated Facility <b>A&amp;D Environmental Services, Inc. 3149 Lear Drive Burlington, NC 27215 336-229-0058 NCR000138628</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 1915 Brentwood Street High Point, NC 27260 336-882-8000 NCR000002501</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 1741 Calks Ferry Road Lexington, SC 29073 803-957-9175 SCD987598331</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 305-B South Main Street Mauldin, SC 29662 803-967-3500 SCR000765677</b> <i>25 Service Day Rd</i>					
HM	Hazardous Materials Shipping Name and Description (if applicable)		No.	Type	QTY	Wt/Vol	Profile Number		
	<i>non hazardous non regulated liquids PCW</i>		<i>001</i>	<i>TT</i>	<i>395</i>	<i>g</i>			
<b>Petroleum Products for Recycle</b>									
X	NA1993, Diesel fuel, 3, III	ERG# 128							
X	NA1993, Fuel oil (No. 1,2,4,5 or 6), 3, III	ERG# 128							
X	UN1203, Gasoline, 3, II	ERG# 128							
X	NA1270, Petroleum Oil, 3, III	ERG# 128							
<b>Universal Waste Lamps, Batteries, Ballasts, and Electronics for Recycle</b>									
HM	No.	Type	Est. Wt.	Count	Shipping Name and Description (if applicable)		Common Name	Discrepancy	
X					RQ, UN2809, Mercury contained in manufactured articles, 8, III ERG# 172		Mercury Containing Articles		
X					RQ, UN2809, Mercury, 8, III ERG# 172		Mercury		
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II ERG# 171		TSCA Exempt PCB Lamp Ballasts		
X					UN2800, Batteries, wet, nonspillable, 8, III ERG# 154		Sealed Lead Acid Batteries		
X					UN2794, Batteries, wet, filled with acid, 8, III ERG# 154		Lead Acid Batteries		
X					UN2795, Batteries, wet, filled with alkali, 8, III ERG# 154		Wet NiCad Batteries		
X					UN3090, Lithium batteries, 9, II ERG# 138		Lithium Batteries		
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III ERG# 154		Alkaline Batteries		
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III ERG# 154		NiCad Batteries		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Fluorescent lamps 4' or <		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Fluorescent lamps 4' or >		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Circular/U-tube lamps		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Compact Lamps		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Shattershield		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		HID/MV/LV Lamps		
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Incandescent Lamps		
					Non-PCB Light Ballasts for Recycle (Not DOT-Regulated)		Non-PCB Light Ballasts		
					Electronic Equipment for Recycle (Not DOT-Regulated)		Electronics		
Generator's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40CFR Part 261 or any applicable state law, and unless specifically identified above the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.									
Generator's/Officer's Printed/Typed Name <b>Troy L Helzlsouer of AMEC For NCDOT</b>					Signature <i>Troy L Helzlsouer</i>		Month <b>7</b>	Day <b>19</b>	Year <b>13</b>
Transporter 1 Printed/Typed Name <b>Shane P. Florian</b>					Signature <i>Shane P. Florian</i>		Month <b>7</b>	Day <b>19</b>	Year <b>13</b>
Transporter 2 Printed/Typed Name					Signature		Month	Day	Year
Discrepancy Indication / Additional Information:							Month	Day	Year
Designated Facility Certification: I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy indicated above.									
Printed/Typed Name <b>Shane P. Florian</b>					Signature <i>Shane P. Florian</i>		Month <b>7</b>	Day <b>19</b>	Year <b>13</b>

DESIGNATED FACILITY TO GENERATOR



# A&D Environmental Services

# Bill of Lading / Material Manifest

A&D Job No: <i>13974</i>	Generator ID Number	Page 1 of	Emergency Response Phone <b>800-434-7780</b>	Tracking Number <b>04163</b>
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Generator's Name and Mailing Address <i>13974</i>	Generator's site address (if different from mailing address)
--	--

Transporter 1 <input type="checkbox"/> 2 <input type="checkbox"/>	Company Name <b>A&amp;D Environmental Services, Inc.</b>	US EPA ID No: <b>NC000032321</b>
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Transporter 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/>	Company Name <b>A&amp;D Environmental Services (SC), LLC</b>	US EPA ID No: <b>SC000780331</b>
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Designated Facility <b>A&amp;D Environmental Services, Inc. 2718 Unklesville Road Archdale, NC 27263 336-434-7780 NC000032321</b>	Designated Facility <b>A&amp;D Environmental Services, Inc. 3149 Lear Drive Burlington, NC 27315 336-329-9099 NCR000130038</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 1918 Brentwood Street High Point, NC 27280 336-962-9000 NCR000002501</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 1741 Calks Ferry Road Lexington, SC 29073 803-567-8178 SC000780331</b>	Designated Facility <b>A&amp;D Environmental Services (SC), LLC 304 S South Main Street Mauldin, SC 29652 803-567-3300 SC000780331</b>
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HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number
	Fuel oil TANK 1000 G	001	DT	1	1000lb	
	Fuel oil TANK 600G	002	DT	1	600lb	
	<i>13974</i>					

X	Petroleum Products for Recycle	No.	Type	QTY	Wt/Vol	Profile Number
	NA1895, Diesel fuel, 3, III					ERG# 125
	NA1993, Fuel oil (No. 1, 2, 4, 5 or 6), 3, III					ERG# 125
	UN1203, Gasoline, 3, II					ERG# 125
	NA1270, Petroleum Oil, 3, III					ERG# 125

HM	No.	Type	Est. Wt.	Count	Shipping Name and Description (if applicable)	Generation Name	Discrepancy
X					RQ, UN2808, Mercury contained in manufactured articles, 8, III	ERG# 172	Mercury Containing Articles
X					RQ, UN2806, Mercury, 8, III	ERG# 172	Mercury
X					RQ, UNS1432, Polychlorinated biphenyls, solid, 6, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts
X					UN2800, Batteries, wet, nonspillable, 8, III	ERG# 154	Sealed Lead Acid Batteries
X					UN2794, Batteries, wet, filled with acid, 8, III	ERG# 154	Lead Acid Batteries
X					UN2795, Batteries, wet, filled with alkali, 8, III	ERG# 154	Wet NiCad Batteries
X					UN3090, Lithium batteries, 8, II	ERG# 138	Lithium Batteries
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III	ERG# 154	Alkaline Batteries
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III	ERG# 154	NiCad Batteries
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Fluorescent lamps 4' or <
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Fluorescent lamps 4' or >
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Circular/U-tube lamps
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Compact Lamps
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Shatterfield
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		HID/MVUV Lamps
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))		Incandescent Lamps
					Non-PCB Light Ballasts for Recycle (Not DOT-Regulated)		Non-PCB Light Ballasts
					Electronic Equipment for Recycle (Not DOT-Regulated)		Electronics

Generator's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40CFR Part 261 or any applicable state law, and unless specifically identified above the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Generator's/Owner's Printed/Typed Name <i>Ashley Johnson</i>	Signature <i>Ashley Johnson</i>	Month <i>7</i>	Day <i>19</i>	Year <i>13</i>
Transporter 1 Printed/Typed Name <i>Chris Hallman</i>	Signature <i>Chris Hallman</i>	Month <i>7</i>	Day <i>19</i>	Year <i>13</i>
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

Discrepancy Indication / Additional Information:

Designated Facility Certification: I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy indicated above.	Printed/Typed Name <i>Bill Atkins</i>	Signature <i>Bill Atkins</i>	Month <i>7</i>	Day <i>20</i>	Year <i>13</i>
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GENERATOR'S/SHIPPER'S INITIAL COPY