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file



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary

September 8, 2005

William A. White  
Moore & Van Allen, PLLC  
100 North Tryon Street, Suite 4700  
Charlotte, NC 28202-4003

Re: Addendum to Plan to Assess Groundwater Impact  
Swift Creek Coal Ash Site  
Hwy 301, Nash County, NC

58

Dear Mr. White,

The Solid Waste Section has reviewed the above referenced work plan. The plan appears adequate to provide information about groundwater quality surrounding the facility. All monitoring wells must be installed in accordance with 15A NCAC 2C Well Construction Standards.

If you have any questions or need additional information please contact me at (919) 508-8501.

Sincerely,

  
James M. Gamble, P.G.  
Compliance Hydrogeologist

Cc: John F. Sherrill  
Robert J. Waldrop  
Wilbur M. Carroll, Jr.  
Ben Barnes

26 10  
D 1059



**Moore & Van Allen**

August 29, 2005

James M. Gamble, P.G.  
Hydrogeologist  
Solid Waste Section—Compliance Branch  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

**William A. White**  
Attorney at Law  
  
T 704 331 1098  
F 704 378 2098  
billwhite@mvalaw.com

Moore & Van Allen PLLC  
  
Suite 4700  
100 North Tryon Street  
Charlotte, NC 28202-4003

57

**Re: Addendum to Plan to Assess Groundwater Impact**

Highway 301 Swift Creek Coal Combustion By-Product Structural Fill Site

Dear Mr. Gamble:

On behalf of my clients, ReUse Technology, Inc. and Full Circle Solutions, Inc., please accept the attached addendum to their plan to assess groundwater impact at the above property, prepared by Sherrill Environmental, Inc.

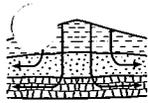
We look forward to discussing these assessment plans with you at your convenience. Please let me know if you wish to discuss them with Mr. Sherrill or with me.

Very truly yours,

Moore & Van Allen PLLC

William A. White

cc: Wilbur M. Carroll, Jr.  
Robert J. Waldrop  
Mark A. Casper



**Sherrill Environmental, Inc.**  
Environmental and Geologic Services

August 29, 2005

William A. White  
Moore & Van Allen, PLLC  
100 N. Tryon St., Floor 47  
Charlotte, NC 28209

Subject: Addendum to Groundwater Investigation Plan  
Swift Creek Project - US Highway 301, North Carolina

Dear Mr. White:

On August 23, 2005 I had a phone conversation with Mr. James Matt Gamble, PG of the Solid Waste Section – Compliance Branch. Mr. Gamble said that they had reviewed the Groundwater Investigation Plan that we submitted on behalf of ReUse Technology, Inc., and Full Circle Solutions, Inc., on December 4, 2004, and found it not to be complete. I have prepared this addendum to the plan in an attempt to provide the Solid Waste Section with a completed plan that they can approve.

A map showing the existing monitoring wells and the approximate locations of the planned monitoring wells is presented as Figure A. The existing monitoring wells are two pairs of monitoring wells, MW-1S and MW-1D (shallow and deep) in downgradient direction to the east and MW-2S and MW-2D located downgradient and in the adjacent swamp. The general geology in the area of the project consists of a sandy alluvial material that overlies a fine-grained greenish gray marine sediment. Shallow monitoring wells at the site target the alluvial material (generally less than 20 feet in total depth) and the deep wells target the marine sediments (generally less than 40 feet total depth). The planned monitoring wells will be installed with hollow-stem augers and constructed similar to the existing wells (Attached).

This addendum adds two additional monitoring wells to the plan to help identify “potential radial groundwater flow away from the project”. Shallow monitoring wells MW-3, MW-4, MW-6 and MW-7 are planned for the SE, SW, NW and NE corners of the CCB structural fill project. Monitoring wells MW-5S and MW-5D are paired monitoring

wells that are planned to be installed on the west side of US Highway 301 on DOT property. This will require a request for Right of Way Encroachment Contract with the NCDOT. The actual locations of the monitoring wells will be determined in the field to adjust for drilling accessibility and for the utilities that are present. Upon completion the locations and elevations will be recorded by a licensed surveyor. As stated in the plan, all monitoring wells will be sampled and analyzed by a NC Certified laboratory for the parameters of sulfate and the 8 RCRA metals.

We believe that the information obtained by the planned Groundwater Investigation as modified by this addendum will allow for the assessment of the full horizontal and vertical extent of potential impact from the CCB structural fill project in accordance with T15 A NCAC 2L .0106 (c). The information will be prepared in a report suitable for submittal to the Solid Waste Section.

We appreciate the opportunity to provide you with consultation and environmental services. Thank you for your consideration. If you have any additional questions, or need additional information, please contact us at (919) 493-6555.

Sincerely,

**SHERRILL ENVIRONMENTAL, INC.**



John (Jack) F. Sherrill, L.G.

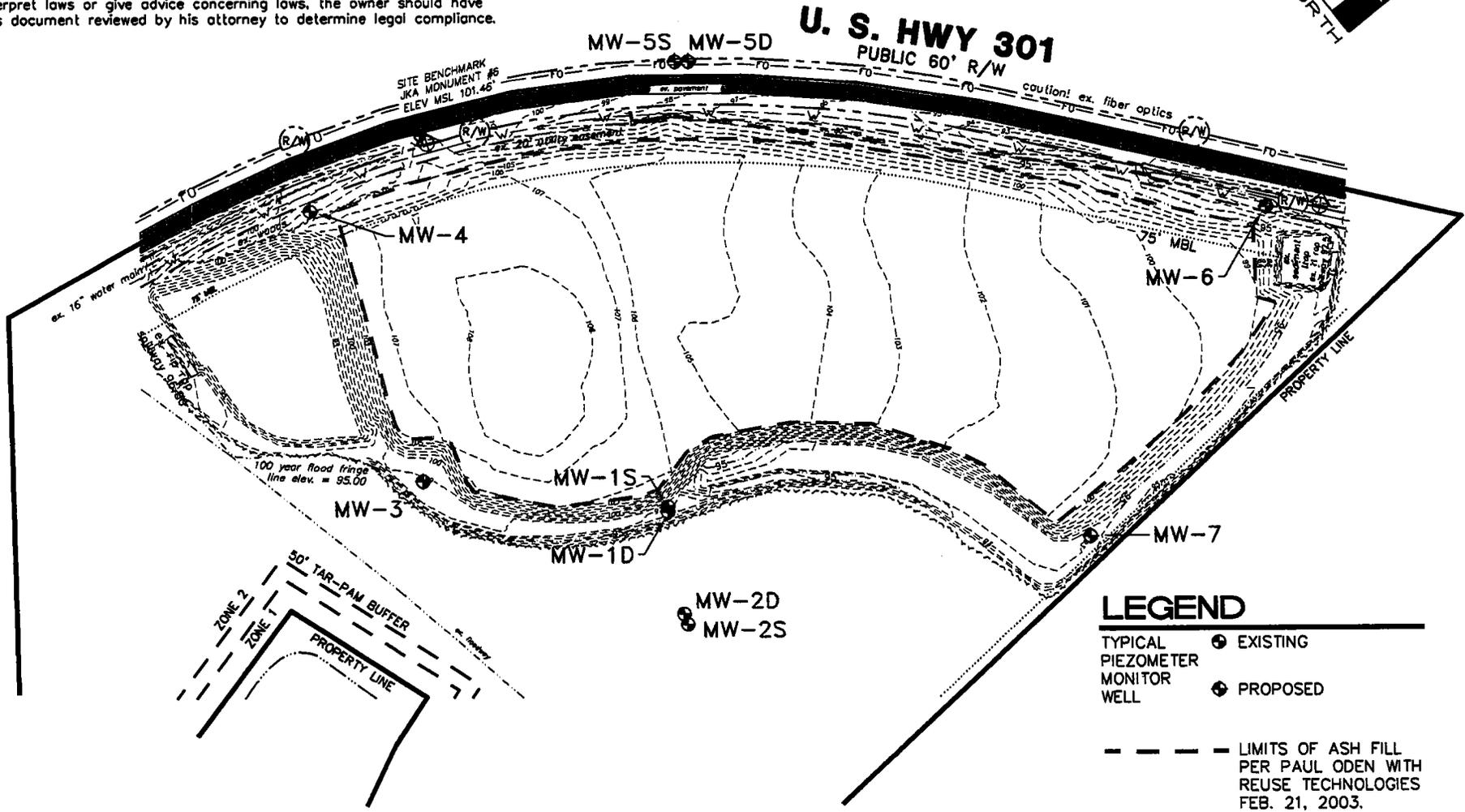
cc: Robert J. Waldrop  
Mark A. Casper

Attachments

BOUNDARY DESCRIPTION SHOWN  
IS NOT FOR RECORDATION.

**ADA AND LEGAL DISCLAIMER**

This document is not represented to comply with all requirements contained in the ADA or other laws. Engineers are not licensed to interpret laws or give advice concerning laws, the owner should have this document reviewed by his attorney to determine legal compliance.



**LEGEND**

- TYPICAL PIEZOMETER MONITOR WELL
- EXISTING
- PROPOSED
- LIMITS OF ASH FILL PER PAUL ODEN WITH REUSE TECHNOLOGIES FEB. 21, 2003.



3326 Rugby Rd.  
Durham N.C. 27707  
Phone (919) 493-6555  
Fax (919) 493-6554  
sherrill@nc.rr.com

DATE: REV. 8-29-05
SHEET #: FIG A
SCALE: 1"=200'
J.N. 01-060

P.O. Box 7966  
Rocky Mount, N.C. 27804  
Phone: (252) 972-7703  
Fax: (252) 972-7638



CONSULTING ENGINEERS, P.A.  
CIVIL, MUNICIPAL & STRUCTURAL ENGINEERS  
COMPREHENSIVE ENVIRONMENTAL SERVICES  
www.appianengineers.com

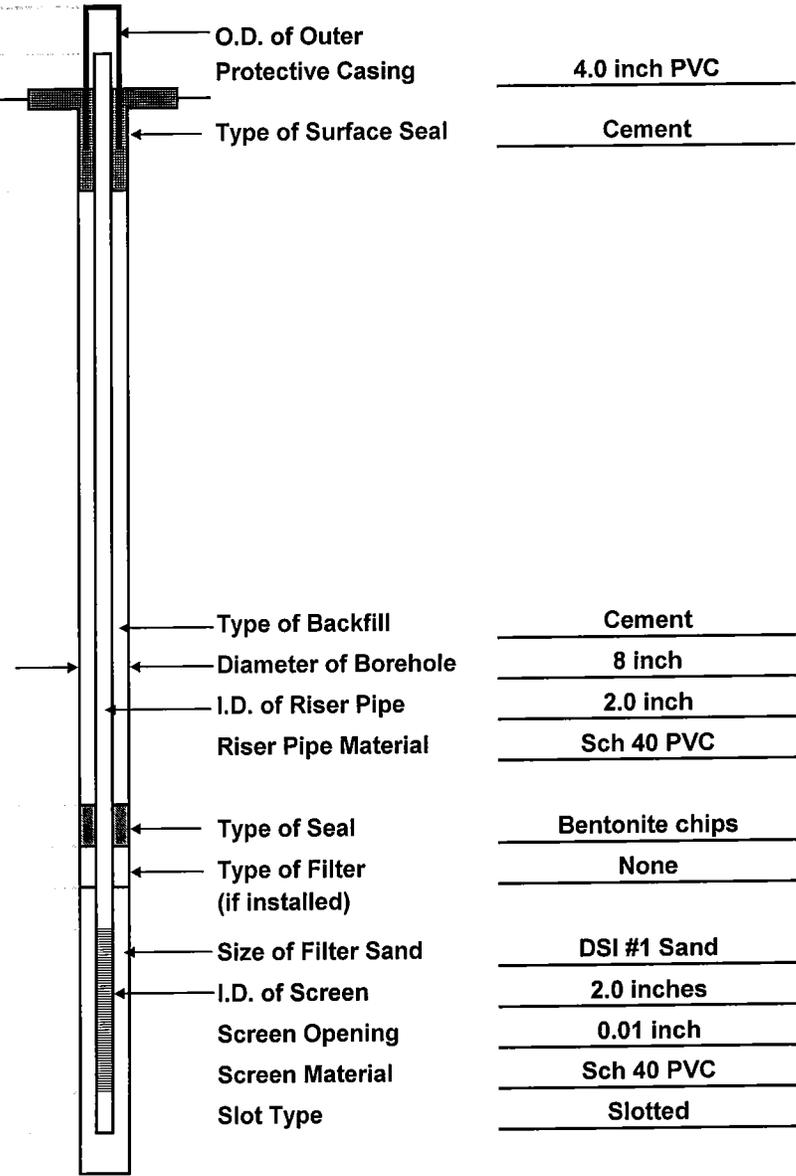
**FIGURE "A"**  
**Existing and Planned Monitoring Wells**



# MONITORING WELL INSTALLATION SKETCH

**Project:** SWIFT CREEK                      **Monitoring Well Number:** MW-1S  
**Drilling Firm:** J & L Drilling, Inc.                      **Date of Well Installation:** 6/2/2004  
**Elevation of Top of Open Riser Pipe (Reference El. for Water Level Measurements,ft):** 99.54  
**Depth to Bottom of Well from Top of Open Riser Pipe (ft):** -15.70  
**Horizontal Location (ft):**    **Northing:** \_\_\_\_\_                      **Easting:** \_\_\_\_\_

Elevation (ft, M.S.L.)	Distance (ft) from:	
	Top of Open Riser	Ground Surface
-	-	-
<u>99.5</u>	<u>0.0</u>	<u>2.7</u>
<u>96.8</u>	<u>-2.7</u>	<u>0.0</u>
-	-	-



			Type of Backfill	<u>Cement</u>
			Diameter of Borehole	<u>8 inch</u>
			I.D. of Riser Pipe	<u>2.0 inch</u>
			Riser Pipe Material	<u>Sch 40 PVC</u>
<u>94.8</u>	<u>-4.7</u>	<u>-2.0</u>	Type of Seal	<u>Bentonite chips</u>
<u>94.3</u>	<u>-5.2</u>	<u>-2.5</u>	Type of Filter (if installed)	<u>None</u>
<u>94.3</u>	<u>-5.2</u>	<u>-2.5</u>	Size of Filter Sand	<u>DSI #1 Sand</u>
<u>93.8</u>	<u>-5.7</u>	<u>-3.0</u>	I.D. of Screen	<u>2.0 inches</u>
			Screen Opening	<u>0.01 inch</u>
<u>83.8</u>	<u>-15.7</u>	<u>-13.0</u>	Screen Material	<u>Sch 40 PVC</u>
<u>83.8</u>	<u>-15.7</u>	<u>-13.0</u>	Slot Type	<u>Slotted</u>
<u>83.8</u>	<u>-15.7</u>	<u>-13.0</u>		

*Diagram Not to Scale*

**NOTES:**

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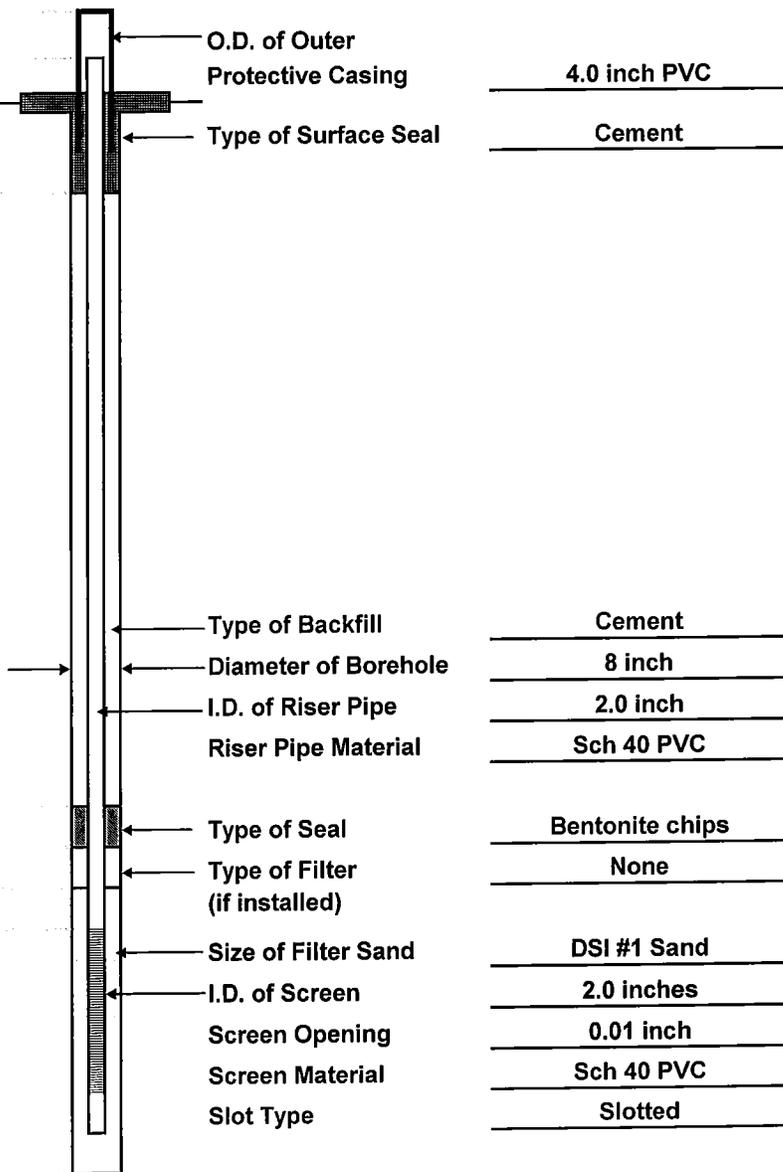


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# MONITORING WELL INSTALLATION SKETCH

**Project:** SWIFT CREEK                      **Monitoring Well Number:** MW-1D  
**Drilling Firm:** J & L Drilling, Inc.                      **Date of Well Installation:** 6/2/2004  
**Elevation of Top of Open Riser Pipe (Reference El. for Water Level Measurements,ft):** 99.90  
**Depth to Bottom of Well from Top of Open Riser Pipe (ft):** -35.70  
**Horizontal Location (ft):**    **Northing:** \_\_\_\_\_                      **Easting:** \_\_\_\_\_

Elevation (ft, M.S.L.)	Distance (ft) from:	
	Top of Open Riser	Ground Surface
-	-	-
99.5	0.0	2.7
96.8	-2.7	0.0
-	-	-
78.2	-21.7	-19.0
76.2	-23.7	-21.0
76.2	-23.7	-21.0
74.2	-25.7	-23.0
64.2	-35.7	-33.0
64.2	-35.7	-33.0
64.2	-35.7	-33.0



*Diagram Not to Scale*

**NOTES:**

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D 952

6400  
not permitted  
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Ind  
ASH

**Moore & Van Allen**

June 30, 2004<sup>15</sup>

**William A. White**  
Attorney at Law

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F 704 378 2098  
billwhite@mvalaw.com

Moore & Van Allen PLLC

Suite 4700  
100 North Tryon Street  
Charlotte, NC 28202-4003

James M. Gamble, P.G.  
Hydrogeologist  
Solid Waste Section—Compliance Branch  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

55

**Re: Status of Review of Plan to Assess Groundwater Impact**

Highway 301 Swift Creek Coal Combustion By-Product Structural Fill Site

Dear Mr. Gamble:

My clients, ReUse Technology, Inc. and Full Circle Solutions, Inc. have asked me to inquire concerning the status of the Solid Waste Section's review of their December, 2004 proposed plan (prepared by Sherrill Environmental, Inc.) to assess additional horizontal and vertical groundwater impacts of the fill.

As you will recall, Mr. Sherrill has proposed installation of a total of five additional monitoring wells. Shallow monitoring wells will be placed on the subject property on the north, south and the west. A shallow and deep pair will be placed off-site on the property or right-of-way on the west side of US Highway 301. The data obtained from these wells should help to answer the questions in your October 4 letter.

We look forward to discussing these plans with you. In addition, we wish to discuss the Section's review with a company that has expressed an interest in purchasing the property for a warehouse. I look forward to hearing from you.

Very truly yours,

Moore & Van Allen PLLC

*Bill White*  
William A. White

cc: Wilbur M. Carroll, Jr.  
Robert J. Waldrop  
Mark A. Casper  
I. Clark Wright, Esq.



## Moore & Van Allen

December 1, 2004

James M. Gamble, P.G.  
Hydrogeologist  
Solid Waste Section—Compliance Branch  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

54

**William A. White**  
Attorney at Law

T 704 331 1098  
F 704 378 2098  
billwhite@mvalaw.com

Moore & Van Allen PLLC

Suite 4700  
100 North Tryon Street  
Charlotte, NC 28202-4003

**Re: Plan to Assess Groundwater Impact**

Highway 301 Swift Creek Coal Combustion By-Product Structural Fill Site

Dear Mr. Gamble:

My clients, ReUse Technology, Inc. and Full Circle Solutions, Inc. have asked me to reply to your October 4, 2004 correspondence regarding groundwater data they submitted on August 4, 2004. Attached for your review and approval is a letter from Sherrill Environmental, Inc. setting forth my clients' proposed plan to assess additional horizontal and vertical groundwater impacts of the fill.

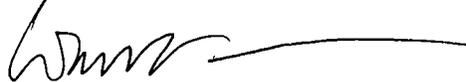
Mr. Sherrill has proposed installation of a total of five additional monitoring wells. Shallow monitoring wells will be placed on the subject property on the north, south and the west. A shallow and deep pair will be placed off-site on the property or right-of-way on the west side of US Highway 301. The data obtained from these wells should help to answer the questions in your October 4 letter.

As we have discussed, my clients also believe it would also be useful to create drainage pathways through which rainwater now being retained in the fill by the berms at the East and North edges of the fill will be enabled to flow to the retention basin. It would be useful to obtain the Section's views on this idea for relieving the water trapped within the ash fill before we submit a plan.

We look forward to discussing these plans with you at your convenience. Please let me know if you wish to discuss them with Mr. Sherrill and me.

Very truly yours,

Moore & Van Allen PLLC



William A. White

cc: Wilbur M. Carroll, Jr.  
Robert J. Waldrop  
Mark A. Casper



**SHERRILL ENVIRONMENTAL, INC.**  
Environmental and Geologic Services

December 1, 2004

William White  
Moore & Van Allen, PLLC  
100 N. Tryon St., Floor 47  
Charlotte, NC 28209

Subject: Response to October 4, 2004 - Letter from Solid Waste Section  
Swift Creek Project - US Highway 301, North Carolina

Dear Mr. White:

At your request, Sherrill Environmental, Inc. (Sherrill) reviewed the October 4, 2004 letter from Solid Waste Section (Section) concerning the Swift Creek Project in Nash County, North Carolina. In summary, the letter requests additional information concerning possible impacts to groundwater quality. The site already has two pairs of monitoring wells, MW-1S and MW-1D (shallow and deep) in downgradient direction to the east and MW-2S and MW-2D located downgradient and in the adjacent swamp. The Section is requesting that we also provide groundwater quality data to document conditions to the north, south and west of the site. The Section requests data to show that groundwater from the site is not migrating westward across US Highway 301 and impacting property that could some day be developed as residential.

To address these concerns, Sherrill proposes to install a total of five additional monitoring wells. Three shallow monitoring wells will be installed on the north, south and west sides of the site. The wells will be constructed similar to the existing monitoring well MW-1S. These shallow monitoring wells will be used to determine if the potential impact may be migrating in a "radial" direction from the site. Sherrill also proposes to install a pair of monitoring wells, similar to MW-1S and MW-1D, on the west side of US Highway 301. This pair of wells will be used to demonstrate that groundwater contamination is not migrating onto other properties and that the regional direction of groundwater flow is eastward towards the swamp. The monitoring wells proposed on the west side may be located in easements or on property owned by others and may require obtaining permits and permissions.

3326 Rugby Rd. Durham, NC 27707 (919) 493-6555 sherrill@nc.rr.com  
~~7309 Still Pond Ct. • Raleigh, NC • 27613~~

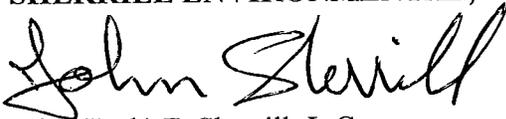
~~Tel. (919) 490-7822 • Fax (919) 571-0757 • Mobile (919) 418-3894 • E-Mail Roxchem@aol.com~~

After installing and developing the monitoring wells, groundwater samples will be collected from the new wells and the four existing wells. The groundwater samples will be analyzed by a NC Certified laboratory for the parameters of sulfate and the 8 RCRA metals. The information will be prepared in a report suitable for submittal to the Section.

We appreciate the opportunity to provide you with consultation and environmental services. Thank you for your consideration. If you have any additional questions, or need additional information, please contact us at (919) 493-6555.

Sincerely,

**SHERRILL ENVIRONMENTAL, INC.**

A handwritten signature in black ink that reads "John Sherrill". The signature is written in a cursive, flowing style.

John (Jack) F. Sherrill, L.G.

cc: Robert J. Waldrop  
Mark A. Casper

Attachments

Facsimile Fax Note	7671	Date	11/17/04	# pages	6
To	Nancy Scott	From	M. Poindexter		
Co./Dept.	NC AGO-ENVIR.	Co.			
Phone #		Phone #	733-0692		
Fax #	716-6939	Fax #			

**Moore & Van Allen**

**William A. White**  
Attorney at Law

T 704 331 1098  
F 704 378 2098  
billwhite@mvalaw.com

Moore & Van Allen PLLC

Suite 4700  
100 North Tryon Street  
Charlotte, NC 28202-4003

November 4, 2004

Mr. Mark Poindexter  
Field Operations Branch  
Solid Waste Section  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

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**Re: Full Circle Solutions, Inc. Highway 301 Swift Creek Coal Combustion  
By-product Structural Fill**

Site (Formerly Owned by ReUse Technology, Inc.)

Dear Mr. Poindexter

Attached for your file in this matter is the original Closure Notice recorded in Book 2094, Page 704 of the Nash County Public Registry.

I am sending this to you because I understand that your colleague Mark Fry has retired. Please forward this Closure Notice to the proper office for retention.

Very truly yours,

Moore & Van Allen PLLC

*Bill White*  
William A. White *slw*

cc: Robert Waldrop /enc.





PAGE 1 OF 5 )

COVER SHEET FOR RECORDED CLOSURE NOTICE,  
N.C. DIVISION OF WASTE MANAGEMENT

Type of Document: Notice of Closed Coal Ash Fill Site

Grantor: Full Circle Solutions, Inc., a Georgia Corporation  
665 Molly Lane, Suite 100  
Woodstock, Georgia 30189

Grantee: None/ Not applicable

Tax Parcel No: 387500004570

Location of Land: Approximately 33 acres on U.S. Highway 301 in North Whitakers  
Township, Nash County, North Carolina

Associated plat map recorded in Map Book 31, Pages 203 and 204, Nash County Registry

After recording, return original instrument to:

Solid Waste Section  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
225 Green Street, Suite 714  
Fayetteville, North Carolina 28301

Date Closure Notice Prepared: May 17, 2004

Authority: N.C. Gen. Stat. §130A-301; 15A N.C. Administrative Code 13B §§.1707 and .0502



**CLOSURE NOTICE**

STATE OF NORTH CAROLINA  
COUNTY OF NASH

BEFORE THE DIVISION OF WASTE  
MANAGEMENT, DEPARTMENT OF ENVIRONMENT  
AND NATURAL RESOURCES

IN RE:	)	
	)	NOTICE OF CLOSED
PROPERTY OF FULL CIRCLE SOLUTIONS, INC.	)	COAL ASH
	)	FILL SITE
LOCATED ON U.S. HIGHWAY 301	)	
IN NORTH WHITAKERS TOWNSHIP	)	

NOTICE IS HEREBY GIVEN THAT COAL ASH HAS BEEN FILLED ON THE  
HEREINAFTER DESCRIBED PROPERTY OF:

FULL CIRCLE SOLUTIONS, INC.  
665 MOLLY LANE, SUITE 100  
WOODSTOCK, GEORGIA 30189

AT THE LOCATION DEPICTED ON THE MAP PREPARED BY TIMOTHY L. KEENY,  
REGISTERED LAND SURVEYOR, #L-2715, AND RECORDED ON OCTOBER 13, 2003, IN  
MAP BOOK 31, PAGES 203 AND 204,

AND at the location described in Exhibit of the Quitclaim Deed between ReUse  
Technology, Inc., Grantor, and Full Circle Solutions, Inc., Grantee, recorded on  
January 8, 2004, in Book 2026, Pages 708 - 714.

Tax Parcel Number 387500004570

The three tracts comprising the coal ash fill site were combined in a Quitclaim Deed filed by  
ReUse Technology on October 15, 2003, recorded in Book 2008, pages 586-590. The coal ash  
fill covers approximately 25 acres of the approximately 33 acre site (see recorded map).

When the property, or any part of this property on which coal ash has been buried, is conveyed, grantor shall place the following language upon the deed, in no smaller type than that used in the body of the deed:

"This is notification that coal ash has been filled on the property. See Closure Notice Recorded at Book \_\_\_\_\_, Page \_\_\_\_\_. Questions concerning this matter may be directed to the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646." (N.C. Gen. Stat. 130A-301; 15A N.C. Admin. Code 13B .1707 and .0502)

Mr. Robert J. Waldrop, Vice-President of both ReUse Technology, Inc. and Full Circle Solutions, Inc., has stated that ReUse Technology, Inc., filled 62,065 tons of coal fly ash at this site between February, 1992, and October, 2001. The ash was generated by Cogentrix plants located in Battleboro, Elizabethtown, and Lumberton, North Carolina, and in Richmond, Virginia. ReUse Technology, Inc., owned the site during the period of time that the site was operated as a coal ash fill site. (See recorded map.)

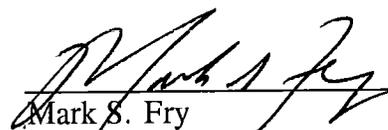
This Closure Notice is not a permit for a coal ash fill facility or a solid waste disposal facility, and is not to be construed as a permit. ReUse Technology, Inc., did not follow plans approved by the Solid Waste Section for coal ash fill at this site.

The sole purpose of recording this closure notice is to give actual and constructive notice to subsequent purchasers of the property described herein, in order to reduce any risk to public health or the environment from the improper disturbance of the coal ash fill.

After recording, this original instrument, affixed with the seal of the Register of Deeds, together with the date, book and page number of recording, shall be returned to:

Solid Waste Section  
Division of Waste Management  
North Carolina Department of Environment and Natural Resources  
225 Green Street, Suite 714  
Fayetteville, North Carolina 28301



  
Mark S. Fry  
Eastern District Supervisor  
Solid Waste Section

NORTH CAROLINA

Cumberland COUNTY

I, Karen Beames Wallace, a Notary Public for said County and State,  
do hereby certify that Mark S. Fry personally appeared before  
(Eastern District Supervisor, Solid Waste Section, N.C. Department of Environment & Natural Resources)  
me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17<sup>th</sup> day of May,  
2004



Karen Beames Wallace  
Notary Public

My commission expires: June 21, 2007.





FULL CIRCLE SOLUTIONS, INC.,  
a Georgia corporation

By: [Signature]  
Wilbur J. Carroll, Jr., President

(Corporate Seal)

STATE OF GEORGIA

Paulding COUNTY

I, Teresa Milwood, a Notary Public for said County and State, do hereby certify that Wilbur J. Carroll, Jr. personally came before me this day and acknowledged that he is the President of FULL CIRCLE SOLUTIONS, INC., a Georgia corporation, and that he, as President of the corporation, being authorized to do so, executed the foregoing CLOSURE NOTICE on behalf of the corporation.

Witness my hand and official seal, this the 20th day of October, 2004.

Teresa Milwood  
Notary Public  
Paulding County Georgia  
My Commission Expires September 3 2006

Teresa Milwood  
Notary Public

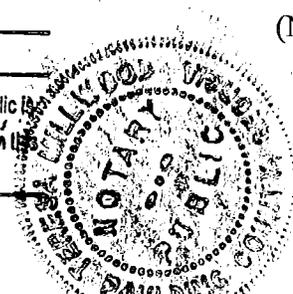
NORTH CAROLINA NASH COUNTY  
The foregoing certificate expires: \_\_\_\_\_ of \_\_\_\_\_

Teresa Milwood  
Baren Reaves Wallace

(Notary Seal)

Notar(y) (ies) Public is/are certified to be correct. This instrument was presented for registration and recorded in the office on Oct. 27, 2004

BA A W. SASSER, REGISTER OF DEEDS  
[Signature]  
Deputy Register of Deeds



*Handwritten notes:*  
Newer PLT  
4700  
Sister N. Imp. NC 28202  
100  
Chapel Hill



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary

October 4, 2004

Mr. Wilbur M. Carroll, Jr.  
President, ReUse Technology, Inc. and  
Chief Executive Officer, Full Circle Solutions, Inc.  
664 Molly Lane  
Woodstock, Georgia 30189

Re: Review of Groundwater Analysis  
Full Circle Solutions, Inc  
Highway 301 Swift Creek Coal Combustion By-Product Structural Fill Site  
(Formerly Owned by ReUse Technology, Inc.)

Dear Mr. Carroll:

The Solid Waste Section (Section) has reviewed the "Groundwater Analysis Swift Creek Project Highway 301" report dated July 2004 prepared for ReUse Technology, Inc. (ReUse) by Sherrill Environmental, Inc. as well as the letter dated August 4, 2004 from Mr. William A. White which accompanied the report.

Laboratory analytical results supplied by ReUse with the 1991 request to place the coal combustion by-products (CCB) showed both arsenic and lead potentially leaching from the CCB. CCB from Cogentrix's plants in Lumberton and Kenansville yielded arsenic at concentrations of 0.39 mg/L and 0.11 mg/L respectively. CCB from Cogentrix's plants in Hopewell, Portsmouth, and Lumberton yielded lead at concentrations of 0.7 mg/L, 0.2 mg/L, and 0.28 mg/L respectively. The current investigation shows both arsenic and lead in the groundwater sample from MW-1S at concentrations of 0.028 mg/L and 0.068 mg/L respectively. The maximum concentration of arsenic and lead allowed in groundwater is 0.010 mg/L and 0.015 mg/L respectively. Sulfate is also present in the groundwater sample from MW-1S at a concentration of 490 mg/L. The maximum concentration of sulfate allowed in groundwater is 250 mg/L.

Groundwater contamination is evident from the current investigation. The detection of arsenic, lead, and sulfate at concentrations greater than the applicable standard in MW-1S shows that pollutants from the CCB have degraded groundwater quality at the site. Pursuant to T15A NCAC 2L .0106(b) you must take immediate action to terminate and control the discharge. Because this CCB project is not a permitted disposal facility you must follow T15A NCAC 2L .0106(c) to assess the full horizontal and vertical extent of impact in preparation for developing a remedial strategy. **Within 60 days from the date of this correspondence submit to the Section for approval a plan to assess the full horizontal and vertical extent of groundwater impact resulting from the placement of CCB at this site.**

T15A NCAC 2L does allow the Section some flexibility to consider risks to human health and the health of the environment when evaluating corrective action. That flexibility is only available during the corrective action stage of the project. The horizontal and vertical extent of impact must be demonstrated through groundwater sampling on all sides of the facility before any risks to human health and the environment can be evaluated.

When developing your assessment plan please consider the following:

- Many questions remain about potential receptors. What is the potential for radial groundwater flow away from the project? It is higher than the surrounding land. Radial groundwater flow from the site would mean that receptors in the apparent hydraulic down gradient direction are not limited to the swamp. Potential receptors across Highway 301 are much closer to CCB than the swamp.

Development pressure is building in that area as indicated by the pending sale of the subject property. The property immediately across Highway 301 from the facility may be developed. Municipal water is available in the area. Is there any requirement that new developments in the area connect to that service? Absent such a requirement, is there a mechanism to guarantee that future groundwater users would be aware of groundwater impact at the subject site to inform their decision about a water supply?

- ReUse asserts that although it deviated from its approved plan the project as built does not pose a threat to human health or the environment. How much, if any, has filling a natural drainage, an activity not in its approved plan, increased water levels in the CCB? The presence of groundwater within the CCB fill has the potential to significantly influence groundwater quality. The detection of contamination beyond the boundary of the fill shows that constituents from the CCB are migrating. What will be the fate of these constituents around the facility? Where will they discharge? What is the potential for vertical migration of constituents beneath the fill to deeper groundwater?

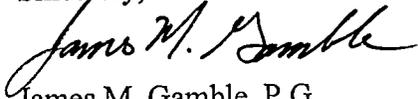
Other comments:

- Regarding the repeated references to a sentence in the Federal Register V65 No 99. As you are aware that entry in the register explained EPA's decision to continue an exemption for CCB from regulation under RCRA subtitle C (hazardous waste regulation) and develop rules for CCB disposal under subtitle D. The reference to a "proven damage case" and which sample locations should constitute such a case was not intended as a regulatory classification. No damage, Proven Damage, and Potential Damage were merely categories the EPA used to classify the limited number of cases considered during the decision process. The Section finds no suggestion in that entry in the Federal Register that the classification carries over to the regulations now being developed under subtitle D.
- The report refers to groundwater contamination being shallow and limited to the buffer zone. Buffer zones around structural fills are intended to shield neighbors and sensitive environments from daily operations and maintenance by remaining relatively undisturbed.

Buffers around structural fills are surface considerations only and thus do not extend beneath the ground surface.

If you have any questions regarding this project or would like to set up a meeting to discuss the pending assessment, please feel free to contact me at (919) 733-0692 extension 342.

Sincerely,



James M. Gamble, P.G.

Hydrogeologist

Solid Waste Section – Compliance Branch

Cc: William A. White, Moore Van-Allen

Mark Poindexter, SWS

James C. Coffey, SWS

Nancy Scott, SWS

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~~Central file~~



**Moore & Van Allen**

August 4, 2004

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**Re: ReUse Technology, Inc. Highway 301 Swift Creek Coal Combustion By-product Structural Fill Site (Now Owned by Full Circle Solutions, Inc.)**

Dear Mr. Poindexter:

I am writing on behalf of my clients, ReUse Technology, Inc. ("ReUse") and Full Circle Solutions, Inc. ("Full Circle") in response to two letters from the Solid Waste Section ("Section"): a letter dated May 11, 2004 from you, and one dated May 17, 2004 from Mark Fry. Your letter instructed Full Circle to install two groundwater wells at Full Circle's Swift Creek Property on the south side of the concrete pipe within the fifty-foot buffer. Mr. Fry's letters instructed Full Circle to record and return a "Notice of Closed Coal Ash Fill Site," and Full Circle has now done so.

As Jack Sherrill and I informed you in May, ReUse, acting on behalf of Full Circle, has followed the Section's instructions to install the groundwater wells at the specified location in the buffer zone. ReUse submits the enclosed report from Sherrill Environmental, Inc., which provides the groundwater analysis that was requested by the Division. The report also provides the Division with an additional analysis of downgradient groundwater samples, and an analysis of surface water samples.

ReUse decided to obtain and supply the "buffer zone" groundwater data requested by the Section in light of the Section's explanation that such data were relevant because coal ash structural fills are not expected to have any groundwater impact. ReUse understands from the Section that the "buffer zone" data are "not evaluated based on risk to human health and the environment." Nonetheless, ReUse decided to obtain and submit downgradient groundwater and surface water data to provide a more complete picture to the Section.

As you know from my prior correspondence, Full Circle and ReUse Technology, Inc. ("ReUse") do not believe that groundwater data collected at the buffer zone location in accordance with the Section's instructions will be probative of any risk to human health or the environment resulting from placement of the coal ash.

My clients believe that there is no potential for environmental or human health impacts resulting from the current conditions at this site. This conclusion is based on the surface water data already collected and submitted to the Section, and on the data submitted today (which show limited shallow buffer zone contamination, but no deeper, downgradient or surface water contamination). This conclusion is also based

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on the availability of a public water pipeline adjacent to the site, and the location of the site more than one mile away (across a swamp) from potential downgradient groundwater receptors.

Full Circle and ReUse agree with the Section that (as set forth in the closure notice) ReUse did not follow the plans approved by the Solid Waste Section for coal ash fill at this site. As is also set forth in my prior correspondence, however, Full Circle and ReUse believe that the fill was properly constructed using good engineering practices in all respects. Moreover, ReUse believes it fully responded to the Section's expressed concerns about its minor deviations from the approved plans by (a) diverting the surface water drainage flow from the under-fill pipe and sealing it; (b) by filing and recording a deed and a plat to remove the internal property boundary and to show the location of the CCB structural fill, and (c) by submitting the May, 2003 site investigation of the Swift Creek Project to show the relationship of the under-fill pipe, the ash fill and the water levels.

ReUse agrees with the observations in your letter and in the closure notice that it placed the ash as a structural fill and not as a disposal system. It accepts the Section's decision that it needs to obtain data to determine if the fill has had an impact on groundwater. However, Full Circle and ReUse do not agree that any impacts on groundwater adjacent to this fill would have any relevance under the 15A NCAC 13B.1700 Rules (which do not apply to a fill on which construction commenced in 1991). The limited impact on groundwater shown by the enclosed report is the result of water retention in the coal ash and rising water level of the adjacent swamp caused by an active beaver population. ReUse's having enclosed the existing drainage in a pipe and filling over the ditched area with ash should have no impact on groundwater quality.

As I mentioned to you on the telephone, Full Circle is in discussions with a purchaser for the property. Full Circle would like to reach an agreement with the Section that providing the recorded closure notice and supplying the requested groundwater data is a sufficient basis to close the Section's file on this matter and permit the sale of the property for future industrial use. The purpose of this agreement will be to provide comfort to the purchaser that it will be able to construct its building and parking lot on the property without any requirement to remove the coal ash structural fill.

I look forward to discussing this with you further after you have had an opportunity to review the enclosed report. I will supply you with a proposed agreement after discussing the matter with buyer's counsel.

Very truly yours,

Moore & Van Allen PLLC



William A. White