NCDENR

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

May 11, 2004

Mr. William A. White
Moore & VanAllen PLLC
100 North Tryon Street, Suite 4700
Charlotte, NC 30189

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

Re: Full Circle Solution, Inc. Highway 301 Swift Creek Coal
Combustion by-Product Structural Fill Site (Formerly Owned by ReUse Technology Inc.).
Assessment Monitoring Well Installation.

Dear Mssr. White and Carroll:

The letter submitted by Mr. White on behalf of ReUse Technology, Inc. dated February 11, 2004, does not adequately address the concerns of Solid Waste Section (Section). First of all, the premise of the letter appears to be that the site has already impacted ground water but it doesn't pose a present risk to public health and environment. If Reuse Technology or its consultants have sampled groundwater at the site, please submit analytical results and sampling information to the Section. Coal ash structural fills are not expected to have a chemical or physical impact on ground water, surface water or wetlands. Additionally, assessments or water impacts for structural fills are not evaluated based on risk to human health and the environment.

It is necessary to install ground water monitoring wells because the operating plans submitted by ReUse Technology were not followed as proposed and approved. To determine if there has been an impact to ground water, Rule 15A NCAC .1705(f) states the coal combustion by-product structural fill facility shall be effectively maintained and operated to ensure no violations of ground water standards, 15A NCAC 2L.

Because this is a structural fill and not a disposal system, the 2L compliance boundary does not apply. The regulated industry asserted that coal ash fill would not cause an impact on the waters of the State. For this reason 15A NCAC 13B .1700 rules reflect less restrictive requirements.

Based upon information included in the ReUse May 2003 submittal, it became evident that two wells are needed to determine if ground water has been affected. The two monitoring wells, one shallow

and one deep, shall be installed on the south side of the concrete pipe within the fifty-foot buffer in an area free of fill material and not subject to flooding. Installing these wells in the fifty-foot buffer is consistent with the approved plan submitted by ReUse Technology, Inc., dated November 11, 1991. Information gained from these wells will be used to determine whether a discharge of pollutants from coal ash has impacted groundwater. Because there is variability in groundwater flow the deeper well will test probable zones of potential contaminant transport from structural fill placed further upgradient of the proposed monitoring location.

It is important that a registered geologist be on site to determine the precise placement of the monitoring wells and assure construction according to 15A NCAC 2C standards. The shallow type II well using a ten-foot screen shall be placed in the first eight feet of the water table. A second deeper type III well using a ten-foot screen shall be placed with the top of the screen ten feet below the base of the shallow well screen.

The on site geologist shall keep field notes for reporting. Boring logs shall include sampling at five-foot intervals using standard penetration test, and detailed soil descriptions that also include the unified soil classification system.

Within one week of the monitoring well installations, sample the developed wells for total concentrations of RCRA metals and sulfates.

Submit a report to the Section for review that includes well construction records, boring logs, geologist field notes and sampling results. Failure to complete the well installation within 30 days and submit the subsequent sampling report within 30 days after well installation shall result in enforcement action.

If you have any questions please contact me at 919 733-0692, extension 252.

Sincerely,

Mark Poindexter
Field Operations Branch
Solid Waste Section
Division of Waste Management

cc: Jim Coffey, Solid Waste Section
Jim Barber, Solid Waste Section
Ben Barnes, Raleigh Regional Office
Mark Fry, Fayetteville Regional Office
Cogentrix
Bob Waldrop
Central File