NCDENR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

MOORESVILLE REGIONAL OFFICE

JAMES B. HUNT JR.
GOVERNOR

BILL HOLMAN
SECRETARY

DIVISION OF LAND RESOURCES
LAND QUALITY SECTION

January 4, 2001

Mr. James B. Mallory, III, President
Race Park USA, Inc.
Post Office Box 1595
Statesville, North Carolina 28687

RE: LETTER OF APPROVAL WITH MODIFICATIONS
(For Sites with Disturbed Area Exceeding Five (5) Acres)
Project Name: Race Park USA
Project ID: IREDE-2001-050
Location: Doolie Road - Iredell County
Submitted By: Race Park USA, Inc.
Date Received: December 20, 2000
New Submittal __X__ Revision _____
River Basin: Catawba

Dear Mr. Mallory:

This office has reviewed the subject erosion and sedimentation control plan. We find the plan to be acceptable with modifications and hereby issue this Letter of Approval with Modifications. The Certificate of Approval must be posted at the job site. The Modifications Required for Approval are listed on the attached page. This plan approval shall expire three (3) years following the date of approval, if no land-disturbing activity has been undertaken, as is required by Title 15A NCAC 4B .0029.

Title 15 NCAC 4B .0018(a) requires that a copy of the approved erosion control plan be on file at the job site. Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to insure compliance with the approved plan.

North Carolina's Sedimentation Pollution Control Act is performance-oriented, requiring protection of existing natural resources and adjoining properties. If, following the commencement of this project, the erosion and sedimentation control plan is inadequate to meet the requirements of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statute 113A-51 thru 66), this office may require revisions to the plan and implementation of the revisions to insure compliance with the Act.

NC SCHOOLS FIRST IN AMERICA 2010

919 NORTH MAIN STREET, MOORESVILLE, NORTH CAROLINA 28115
PHONE 704-663-1699 FAX 704-663-6040
AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED/10% POST-CONSUMER PAPER

Acceptance and approval of this plan is conditioned upon your compliance with federal and state water quality laws, regulations, and rules. In addition, local city or county ordinance or rules may also apply to this land-disturbing activity. This approval does not supersede any other permit or approval.

Please be aware that if five acres are to be disturbed by this project, you will be covered by the enclosed general stormwater permit NCGO1000 (Construction Activities). You should first become familiar with all of the requirements for compliance with the enclosed general permit.

Please note that this approval is based in part on the accuracy of the information provided in the Financial Responsibility Form which you have provided. You are requested to file an amended form if there is any change in the information included on the form. In addition, it would be helpful if you notify this office of the proposed starting date for this project.

Your cooperation is appreciated.

Sincerely,

Zahid S. Khan

Zahid S. Khan
Asst. Regional Engineer

cc: Ash Basics Company
Inspections Dept.

MODIFICATIONS

1. Please make sure that detention basin will be used as a sediment basin and after site stabilization, convert it into detention basin.

ZSK/ae

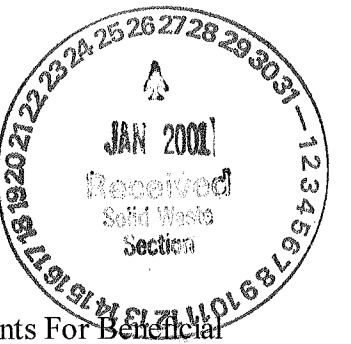
only modification Read Zahid Khan called me back. [illegible]

ASH BASICS COMPANY

"UTILIZATION ALTERNATIVES FOR THE FUTURE"

128 EAST PLAZA DRIVE
MOORESVILLE, N.C. 28115
(O. 704-799-2944) (M. 704-906-3735)
E-MAIL - GO4DEAN@AOL.COM

1-23-2001



WILLIAM R. HOCUTT
ENVIRONMENTAL CHEMIST
NCDEHNR SOLID WASTE SECTION
401 OBERLIN ROAD, SUITE 150
RALEIGH , N. C. 27605

Dear Mr. Hocutt,

Per the requirements of Solid Waste Management, Section .1700, Requirements For Beneficial Use Of Coal Combustion By-Products find the enclosed submittal for notification.

I am enclosing a drawing for your review for the use of fly ash produced at the Duke Energy's Plant Marshall in Terrell N.C..

Enclosed are the following documents:

1) Drawing of proposed site and approved erosion control plan
2) Ground Technology Services, Inc. Groundwater Assessment
3) Owners Acknowledge and Consent
4) TCLP Analysis
5) 8.5 X 11 copy of USGS location map, 7.5 Minute Series , Mooresville NC

A) The property is located off NC Hwy 150 E. on Doolie Road. (See Map) The end use is intended for Race Park USA, Inc. entertainment facility. Deed Book # 1208 / Plat # 1053 as indicated on drawing. Property size 13.72 acres, fill area approximately 6 acres.

B) The estimated start date is 1-24-2001. Site clearing and prep and erosion control measures will be installed prior to ash placement. Ash placement estimated to begin by 2-15-2001.

C) Estimated fill volume is 45,000 cu. yd. / 54,000 tons.

D) The generator of the product is Duke Energy.

E) The location of the generator is 8320 East Hwy 150 Terrell, NC 28682. Catawba County NC

F) The name of contact for the generator is Larry Harper @ 704-382-7982

G) Notes for the use and handling of the by-products are on Drawing labeled 2 of 2 Job # 00072. Find also a cross section of ash fill and cover requirement. Also find on page 1 of 2 outlined area of ash placement with required set backs.

I am submitting this notification on behalf of the owner.
Owner: RACE PARK USA, INC. P.O. BOX 1595 STATESVILLE, NC 28687

Ash Basics Company, Inc has been contracted by the owner to provide these services for development of this property using the Coal Combustion By-Products under the current NCDEHNR state regulations.

Ash Basics Company, Inc. has performed these services in surrounding areas since 1989 and are familiar with the standards required by the guidelines. Ash Basics Company, Inc. is also under contract with Duke Energy to oversee these projects.

I would appreciate a response to this matter as soon as possible due to time restraints.

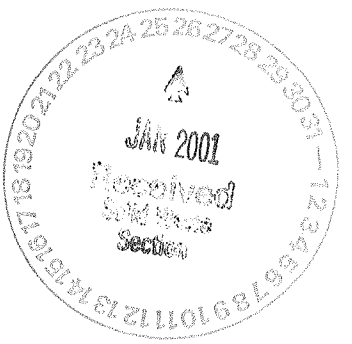
Please feel free to contact me any time at (704) 799-2944 O. or (704) 906-3735 M.
I look forward to hearing from you. Thanks!

Sincerely,

Dean Johnston - President
Ash Basics Company, Inc.

Attached: Drawings / RPUSA
TCLP
USGS Survey
GTSI Groundwater Assessment
Owners Acknowledge and Consent

GROUND
TECHNOLOGICAL
SERVICES
INC.



January 25, 2001

Mr. Dean Johnson
Ash Basics
128 East Plaza Drive
Mooresville, North Carolina 28115

RE: Race Park USA
Doolie Road
Mooresville, North Carolina
GTSI-10123

Dear Mr. Johnson:

Ground Technological Services, Inc. (GTSI) has conducted six hand auger probes in the low lying areas of the planned project. These borings were extended to an average depth of 2.5 feet to determine the presence of ground water prior to structural fly ash being installed. Based on the six boring locations no groundwater was encountered.

Sincerely,

Ground Technological Services, Inc.

Gary L. Gechter, P.G.
President

JOYCE
ENGINEERING, INC.

CONSULTANTS SERVING THE
ENVIRONMENTAL INDUSTRY

VA 804-355-4520
NC 336-323-0092

2/4/01
Zahid Khan - Mooresville Regional office -
He said only modification was the one on page two in his Major Letter - "Detention basin to initially be used as a sediment basin until the site is stabilized, then convert it to detention basin."

B Scott

North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
William L. Meyer, Director

February 13, 2001

Mr. Dean Johnston
Ash Basics Company
128 East Plaza Drive
Mooresville, NC 28115

Subject: Notification of a proposed Coal Combustion By-Products (CCBs) Structural Fill project in Iredell County near Mooresville, NC. This site is intended to be used for an entertainment facility to be known as Race Park USA. The estimated start and completion dates are yet to be determined due to required supplementary information and changes outlined in this letter.

Dear Mr. Johnston:

This is to acknowledge our January 26, 2001 receipt of your notification letter dated January 23, 2001 on the subject proposed structural fill project. Your letter states an estimated first ash placement date for this project of February 24, 2001. This is inappropriate since Rule .1703(a) states that "a minimum of 30 days before using coal combustion by-products in structural fill projects, the person proposing the use shall submit a written notice to the Division".
Since we received your Notification letter on January 26, the Division has until at least February 25 to acknowledge your letter and inform you if your proposal satisfactorily meets the requirements set forth in the 15A NCAC 13B Section .1700 Rules. However, if all details contained in your initial letter plus any inclosures are not acceptable as received (such as is the case in your January 23 letter), the 30 day period clock starts again when the Division receives whatever additions and amendments are specified in the Division's initial response letter. The rules questions that are sited in the following paragraphs in this current letter are typical of the type of clarifications, changes or additions that require a follow-up letter from the person proposing this CCBs usage. Therefore, please understand that **no CCBs should be placed on this proposed site until you have received an acknowledgment letter from the Division stating that the information supplied by you meet the requirements of the .1700 rules.**

The previous paragraph demonstrates how the timing of a project is delayed when there are changes, additions or explanations required after the notification letter is received. In this case, a revised estimated date of starting will be required and also it will be necessary to provide an estimated date of completion as specified in Rule .1703(a)(2). These dates will be dependent on the following items being satisfactorily answered or provided.

1. Referring to the submitted Dowell & Co. Drawing identified as **Cross-Section "A" - Profile**, the .1704 Siting Rules are quoted and it is stated that those specified requirements will be satisfactorily met. Rule .1704(a)(1) specifies that no CCBs shall be placed "within 50 horizontal feet of a jurisdictional wetland unless after consideration of the chemical and physical impact on the wetland, the U. S. Corps of Engineers issues a permit or waiver for the fill". A review of the "Lake Norman North, NC: National Wetlands Inventory-U. S. Dept. Of The Interior" map, indicates that a possible wetland feature may exist on the property. In your next Notification letter, please respond to the following question. Has a wetlands survey been performed at the site to determine the presence of a wetland feature or if wetland conditions exist at the site?

2. Please refer to Rule .1704(a)(3). We would like for you to state to us in your next notification letter that you are satisfied that no CCBs are to be placed **within two feet of the seasonal high groundwater table on the site.** This, we assume, will be **based at minimum** on: (a) the contents of the January 25, 2001 letter from Ground Technological Services Inc., a copy of which was submitted, (b) based on your knowledge as to where on the site their six 2.5 foot deep, hand augered probes were made, and (c) based on your knowledge as to the time of year they did those probes.

3. Siting Rule .1704(a)(4) specifies that no CCBs used as a structural fill shall be placed within 100 horizontal feet of any source of drinking water, such as a well, spring or other groundwater source of drinking water. The 8.5 X 11 inch LAKE NORMAN NORTH QUADRANGLE North Carolina, 7.5 Minute Series (Topographic) map submitted shows a dwelling or house just to the northeast of the site. Is there a well or drinking water source associated with that house or building?

4. The same Dowell & Co. Drawing **(Cross Section "A" Profile)** continues and attempts to quote the .1706 rules for Closure. However, the (a) and (b) rules given for Closure on the drawing are actually repeats of the Siting rules rather than the Closure rules (a) and (b). This needs to be corrected on the drawing.

5. Please refer to .1705(l). This states that "coal combustion by-products utilized on an exterior slope of a structural fill shall not be placed with a slope greater than 3.0 horizontal to 1.0 vertical. Again referring to the same drawing, cross section "A" indicates that earthen cover with 2.0 horizontal to 1.0 vertical slope will be placed over ash fill. The drawing should indicate that the coal ash be constructed with 3:1 slopes to avoid non-compliance with the rules.

6. Enclosed please find a Drawing by Jim Barber showing two additional cross sections of the site identified as Sections B-B and C-C. These show that the existing grade of the project site has 80 linear feet and 287 linear feet respectively of the site that does not require ash fill to bring those areas approximately up to the desired grade.

However the **Ash Fill Plan** drawing shows those areas to be included in the planned ash fill area. Please explain this discrepancy in your next Notification Letter.

If you have any questions about this letter, please telephone Bill Hocutt at 919-733-0692, extension 260.

Sincerely,

James C Coffey

James C. Coffey, Permitting Supervisor
Solid Waste Section

cc: Jim Barber
Brent Rockett
Anthony Foster
Bill Hocutt

c:/wp6docs/letters/dukepwr 02-13

Prepared By and Return to:
Thomas & Godley, PLLC.
514 Williamson Road
Suite 421
Mooresville, NC 28117

Doc ID: 012849470002 Type: CRP
Recorded: 02/26/2010 at 11:49:33 AM
Fee Amt: $17.00 Page 1 of 2
Iredell County, NC
Brenda D. Bell Register of Deeds
BK 2051 PG 1816-1817

NORTH CAROLINA

IREDELL COUNTY

RECORDATION OF STRUCTURAL FILL FACILITIES

2

Top Properties, LLC, Owner of the property described on Exhibit A attached hereto and incorporated herein by reference, hereby acknowledges the use of coal combustion by products as structural fill on the property described in exhibit A The volume of ash placed on the below property is approximately **60,000** cubic yards.

Top Properties, LLC

BY: _____

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

I, Ben S. Thomas, a Notary Public of the County and State aforesaid, certify that CARL A. PEARS, as a Member/Manager of Top Properties, LLC, a North Carolina limited liability company personally appeared before me this day and acknowledged the execution of the foregoing instrument on behalf of the company.

Witness my hand and official stamp or seal this the 24 day of Feb, 2010.

_____
Notary Public

My Commission Expires: _____

BEN S. THOMAS
Notary Public
Iredell County, NC
My Commission Expires 3-2-2012

EXHIBIT "A"

BEGINNING at a point in the centerline of the right-of-way of Doolie Road and a common corner with Harold K. Childers (See Deed Book 757 at Page 87, Iredell County Registry); and running thence with the line of Childers, North 85 deg. 54 min. 13 sec. West (passing through an existing axle at 33.26 feet) 950.61 feet to an existing #4 rebar in the common corner with Basom V. Belk, Jr. (see Deed Book 766, at Page 247, and Deed Book 39, at Page 34, Iredell County Registry); running thence with the line of Belk, North 03 deg. 17 min. 28 sec. West 600.64 feet to an existing #4 Rebar in the common corner with Berea Baptist Church (see Deed Book 832, Page 18, Iredell County Registry); running thence with the line of Berea Baptist Church South 85 deg. 38 min. 21 sec. East 292.97 feet to an existing #4 Rebar and running thence with the line of Berea Baptist Church (see Deed Book 708 at Page 386, Iredell County Registry), South 60 deg. 10 min. 15 sec. East 329.94 feet to an existing #4 Rebar and North 29 deg. 40 min. 20 sec. East 396.01 feet to an existing axle in the common corner with Piedmont Marine Sales, Ltd (see Deed Book 1136 at Page 156, Iredell County Registry); running thence with the line of Piedmont Marine Sales, Ltd., South 13 deg. 20 min. 30 sec. East 329.32 feet to a point and South 71 deg. 26 min. 02 sec. East 271.70 feet to a point in the centerline of the right-of-way of Doolie Road; running thence with the centerline of the right-of-way of Doolie Road, South 17 deg. 57 min. 02 sec. West 425.96 feet to the point and place of Beginning, containing 13.72 acres, more or less, all according to a survey prepared by Douglas L. Dowell, Jr., RLS, L-3508, dated June 10, 1999.

Duke Power
A Duke Energy Company

Hazardous Waste Analysis Results

Environmental Center - McGuire Nuclear Complex - Building 7405

North Carolina Department of Environmental Health & Natural Resources (DENR) Certification # 248
South Carolina Department of Health & Environmental Control (DHEC) Laboratory Certification # 99005

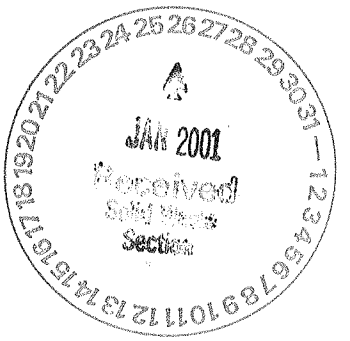
Field I.D.	MARSHALL ASH
Station / Contact	MARSHALL — LARRY EVANS
Collection Date	03/01/99
Analysis Date	03/13/99
Laboratory I.D.	99-MAR-0005 (99005031)
Matrix Type	SOLID — NA % Volume, NA Weight (g)
Laboratory Contact	Penny Franklin — (704) 875-5209

JAN 2001 Received Solid Waste Section

Analyte	T.C.L.P. Conc.		T.C.L.P. Regulatory Limit	Waste Code	Analytical Method
Silver (Ag)	< 0.005	mg/L	5 mg/l	D011	7760
Barium (Ba)	0.24	mg/L	100 mg/l	D005	6010
Cadmium (Cd)	< 0.03	mg/L	1 mg/l	D006	6010
Chromium (Cr)	0.15	mg/L	5 mg/l	D007	6010
Lead (Pb)	< 0.09	mg/L	5 mg/l	D008	6010
Arsenic (As)	< 0.1	mg/L	5 mg/l	D004	6010
Selenium (Se)	0.38	mg/L	1 mg/l	D010	6010
Mercury (Hg)	< 0.001	mg/L	0.2 mg/l	D009	7471
Nickel (Ni)			134 mg/l	---	6010
Thallium (Tl)			130 mg/l	---	6010
% Ash @ 550° C			N/A	---	ASTM D297/D817 E830 @ 550° C
B.T.U.			N/A	---	ASTM D3286-91
Total Sulfur			N/A	---	ASTM D4239-85
Total Chlorine			N/A	---	EPA 9076
Ignitibility			(Y/N)	---	EPA 1010
pH			< 2.0 or > 12.5	---	EPA 9040
% Water			N/A	---	ASTM D3792

U.S.E.P.A. SW-846 : METHODS

EXHIBIT 'E'



STATE OF NORTH CAROLINA
COUNTY OF IREDELL

OWNER'S ACKNOWLEDGMENT AND CONSENT

RACE PARK USA, INC. ("Owners") hereby execute this Owner's Acknowledgment and Consent as of the 18 day of JANUARY 2001.

1. We are the Owners of the Property located in IREDELL County, North Carolina and described in more detail below (See Property Description).

2. We consent and acknowledge the use of coal ash as structural fill on the Property. Said Property is estimated to require approximately 42,000 cubic yards of coal ash. We also authorize Duke Energy Corporation and it employees, contractors and agents to enter the Property to review the placement of coal ash as required.

OWNER'S AGREEMENT TO RECORD

3. We the Owners of the Property further agree to record a statement of the volume and location of coal ash utilized on the property with the Register of Deeds in the county or counties where the Property is located. This recordation shall be in accordance with 15A NCAC 13B.1707.

Property Description (Court Records and Project Drawings):
DEED BOOK 1208, PLAT # 1053
DOWELL & Co. Job # 00072 REV. 1 ON 1/19/2001

RACE PARK USA, Inc
Owner
By: James B. Mallory, President
Owner

Date: 1-22-01

I EDITH J. MILLS, a Notary Public in the County of IREDELL and State of NORTH CAROLINA certify that JAMES B. MALLORY III, PRESIDENT, RACE PARK USA, INC., appeared before me this day and acknowledged the due execution of the foregoing instrument.
Witness my hand and Notarial seal, this 22nd day of JAN., 2001.

Edith J. Mills
Notary Public
My Commission Expires: 12/11/01

OFFICIAL SEAL
Notary Public - North Carolina
IREDELL COUNTY
EDITH J MILLS
My Commission Expires 12-11-2001

MEMORANDUM

April 19, 2001

To: Tim Jewett

From: Bill Hocutt

Subject: Proposed Coal Combustion By-Products Structural Fill to be Located Near Mooresville in Iredell County

Please find attached a copy of Jim Coffey's response letter to Dean Johnston in reference to his proposed subject structural fill. Also attached is a copy of the submitted 7.5 minute series Topographic map of the Lake Norman North Quadrangle. The proposed structural fill site is indicated on this map. Could you please drop by this site and confirm that no ash has been placed there to date? Thanks!

cc: Jim Barber

c:/wp6docs/memos/dukepwr 02-13

6/22/01 4:00 PM Tom Jewitt called Re Mooresville "Race Park USA" Coal Ash Struct. Fill—

Raleigh Central Office Div. of Water Quality told Tim that A 401 certification was issued on May 4th, A few weeks after they rec'd. the request.

The Wetlands certification was issued by the Corps. of Engineers. The 404 check mark on the Corps. of Engineers cert. means that the 401 Water Quality Certification has issued—

6/20/01 Notes @ Site

#2 Drawing with Latest borings Show elevation for B-4, B-8 show soil Fill to be used

estimate seasonal variation.

Corps. of Eng.
Soil Conservation Service

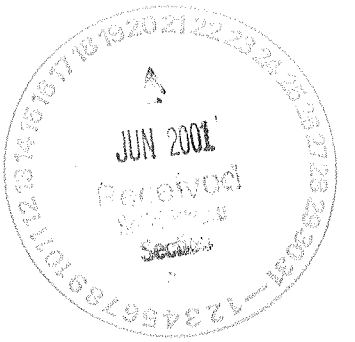
#3 — Another dated to match other dwg. showing coal ash sil not Vertical

Tims FAX 336 771 4631

A-547 461 389 6

GROUND
TECHNOLOGICAL
SERVICES
INC

May 29, 2001



Mr. Dean Johnson
Ash Basics
128 East Plaza Drive
Mooresville, North Carolina 28115

RE: "Race Park USA"
Conditioned Ash structural fill site: trash removal and groundwater measurements
Dooley Road
Mooresville, North Carolina
GTSI-10123

Dear Mr. Hocut,

Ground Technological Services Inc. (GTSI) has performed undercut observations and hand auger borings on the referenced site. In accordance with the NCDENR 15A-13B.17. - "Conditioned Ash Restrictions", ash fill requires.

The 13.72 acre proposed construction consists of a series of small commercial structures, a go-cart race track and impervious driveway and parking areas. Future work includes controlled (tested) structural ash fill installed in accordance with the NCDENR 15A-13B.17. - "Conditioned Ash Restrictions". The guidelines include a minimum vertical separation distance of 2.0 feet from groundwater in addition to horizontal setback requirements. The coal combustion by-product will be provided from the nearby Marshall Steam Station located approximately to the west along Highway 150.

It is our understanding the site included wet hillside seeps in the central, lower elevation portion of the site, with impact mitigation associated with a US Army Corps of Engineers Nationwide Permit and a DENR 401 Water Quality Certification currently under the standard review period by the regulatory agencies. The permitting work was performed by Len Rinder and submitted to Steve Chapin with the USACE Asheville Office and Pete Caldwell with the DENR Mooresville Regional Office.

In conjunction with the project Engineer, Lee Dowell and Len Rindner, wetland scientist, silt fencing, rock dams, a stormwater/wetpond and a sediment forebay was installed prior to our arrival to separate the work area from a down gradient drainage features including an off-site pond.

Following "stripping and grubbing" of surficial top soils and plant materials to firm bearing soils, GTSI visually verified the removal of domestic trash and organic debris placed within a steep gully in the southeastern quadrant of the site. Clean, firm bearing residual soils were noted, with no staining or odors noted at the base of the undercut.

JUN 2001

A series of nine (9) hand auger borings were advanced to a depth of 3.0 feet below existing grade for groundwater measurement purposes. Groundwater was noted in borings B-4 (14" below existing grade) and B-8 at 36".

GTSI recommends installing tested, earthen structural fill materials within the lower portion of the site represented by B-4 and B-8 to maintain the required 2.0 feet vertical setback distance from groundwater for the ash materials.

If you should have any questions, please call us at your convenience.

Sincerely,
Ground Technological Services, Inc.

Geoff Underwood
Staff Geologist

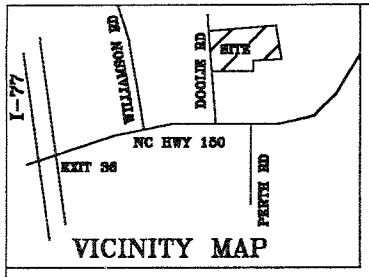
Mark W. Hoidas P.E.
Vice President- Engineering

NORTH CAROLINA PROFESSIONAL SEAL 025256 ENGINEER MARK W. HOIDAS

6/4/01

c.c. Dean Johnson
Ash Basics Company

GTSI GROUND TECHNOLOGICAL SERVICES INC.



VICINITY MAP

MARSH/BASIN

WOODED/UNDEVELOPED AREA

DOOLIE ROAD

B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9

JUN 2001
Received

LEGEND:

B-1 APPROXIMATE LOCATION OF HA/DCP TEST

APPROXIMATE LIMITS OF ASH FILL

APPROXIMATE LIMITS OF FORMER TRASH PILES

PROPOSED BUILDINGS

RACE PARK USA
MOORESVILLE, NC
TEST LOCATION PLAN

SCALE NTS DWG JB

FOR: ASH BASICS

BY: GTSI GROUND TECHNOLOGICAL SERVICES INC.

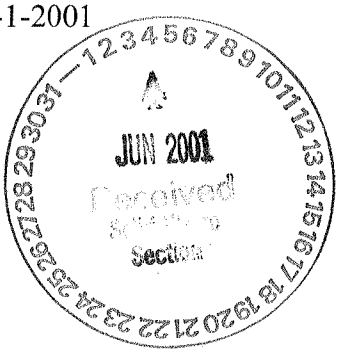
PRO 10123 DATE 5/29/01 FIG 1

ASH BASICS COMPANY

"UTILIZATION ALTERNATIVES FOR THE FUTURE"

P. O. BOX 3573
MOORESVILLE, N.C. 28117
(O. 704-799-2944) (M. 704-906-3735)
E-MAIL - GO4DEAN@AOL.COM

6-1-2001



WILLIAM R. HOCUTT
ENVIRONMENTAL CHEMIST
NCDEHNR SOLID WASTE SECTION
401 OBERLIN ROAD, SUITE 150
RALEIGH , N. C. 27605

Dear Mr. Hocutt,

Subject: Follow up of notification submitted on 1-23-2001 and response from you on 2-13-2001, concerning the proposed use of Coal Combustion By-Products for Structural Fill.

Per the requirements of Solid Waste Management, Section .1700, Requirements For Beneficial Use Of Coal Combustion By-Products find the enclosed submittal for notification.

I am enclosing a **new** drawing for your review for the use of fly ash produced at the Duke Energy's Plant Marshall in Terrell N.C. and development of RACE PARK USA.

The following changes and /or clarifications are as follows:

1) **Revised** Drawing of proposed site and erosion control plan
2) GTSI Groundwater Assessment / **Previously submitted**
3) Owners Acknowledge and Consent / **Previously submitted**
4) TCLP Analysis / **Previously submitted**
5) 8.5 X 11 copy of USGS location map, 7.5 Minute Series , Mooresville NC / **Previously submitted**

A) Proposed Start / Finish date: Due to delays from some of your request and others of the owners, the Start date has been moved to effectively begin when this notification is acknowledged as acceptable by NCDENR. Site preparations have progressed in accordance to the approved erosion control plan and at the guidance of your local office in Mooresville, NC. (7-2-2001) ?

Finish Date: To be approximately 90 days from start date. (10-2-2001) ?

B) Find enclosed a copy of the **U. S. ARMY CORPS OF ENGINEERS,** General permit dated May 29,2001, pertaining to this project as per the revised and submitted drawing.

C) As per your request, I am satisfied the **CCBs** will be placed a minimum of **2'** above the seasonal high groundwater table after additional assessments were made by **GTSI** and myself.

D) The well for the adjoining property owner has been plotted on the drawing and the area within 120' of the well has been maintained as natural earth.

E) The repetition of language in the notes has been corrected on the enclosed drawing.

F) The slope on the drawing has been changed to 3:1 as per the requirements

G) The purpose of the **ASH FILL PLAN** setbacks was for the purpose of showing no **CCBs** would be placed within the setbacks requirements (25' of property line). The drawing has been modified to reflect the only areas affected.

Some of the changes requested had already been in the process and concerns relating to the potential jurisdictional wetlands was raised after the submittal. We work closely with the local state and county offices to insure the success of these projects.

I would appreciate a response to this matter as soon as possible due to time restraints. I will gladly meet with you at your convenience for the review.

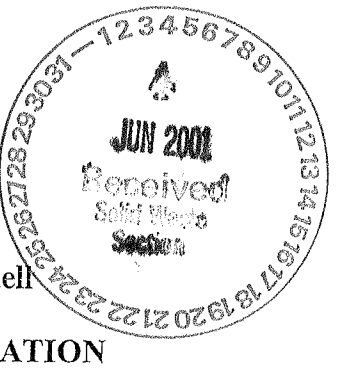
Please feel free to contact me any time at **(704) 799-2944 O. or (704) 906-3735 M.**
I look forward to hearing from you. Thanks! **(704) 363-1314 M.**

PLEASE NOTE A CHANGE OF ADDRESS FOR ASH BASICS COMPANY, INC. FOR YOUR RESPONSES AND / OR FUTURE CORRESPONDENCE.

ASH BASICS COMPANY, INC. P. O. BOX 3573 MOORESVILLE, NC 28117-3573

Sincerely,

Dean Johnston - President
Ash Basics Company, Inc.



U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. **200130276** County **Iredell**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Property owner: **Race Park USA, Inc.**

Address: **P.O. Box 1595**

Statesville, NC 28687

Telephone No.:

Size and Location of project (water body, road name/number, town, etc.):

Race Park USA located on 13.72 acre tract on the south side of NC 150 in the community of Doolie.

Description of Activity:

Impact approx. 250 LF of an intermittent, unnamed tributary to Lake Norman (McCrary Creek) and 0.2 acre of wetlands for the purpose of accommodating the construction of the above referenced project and storm water treatment extended wetlands. This project must be done in accordance with submitted plans.

Applicable Law: (check all that apply)
__X__ Section 404 (Clean Water Act, 33 U.S.C.1344).
_____ Section 10 (River and Harbor Act of 1899).

Authorization:
_____ Regional General Permit Number.
__39__ Nationwide Permit Number.

Your work is authorized by this Regional General (RGP) or Nationwide Permit (NWP) provided it is accomplished in strict accordance with the attached conditions and your submitted plans. If your activitiy is subject to Section 404 (if Section 404 block above is checked), before beginning work you must also receive a Section 401 water quality certification from the N.C. Division of Environmental Management, telephone (919) 733-1786. For any activity within the twenty coastal counties, before beginning work you must contact the N.C. Division of Coastal Management, telephone (919)733-2293.

Please read and carefully comply with the attached conditions of the RGP or NWP. Any violation of the conditions of the RGP or the NWP referenced above may subject the permittee to a stop work order, a restoration order, and/or appropriate legal action.

This Department of the Army RGP or NWP verification does not relieve the permittee of the responsibility to obtain any other required Federal, State, or local approvals/permits. The permittee may need to contact appropriate State and local agencies before beginning work.

If there are any questions regarding this authorization or any of the conditions of the General Permit or Nationwide Permit, please contact the Corps Regulatory Official specified below.

Date **May 29, 2001**

Corps Regulatory Official **Steve Chapin** Telephone No. (828) 271-4014

Expiration Date of Verification **May 29, 2003**

cc: Mr. Leonard S. Rindner; Dowell & Company

J. Coffey

June 20, 2001

MEMORANDUM

Subject: Notes On 6/20/01 Visit to the Proposed Structural fill in Iredell County near Mooresville,NC to be known as "Race Park USA".

References:

(1) January 23, 2001 Notification of a Proposed Coal Ash Structural Fill Near Mooresville in Iredell County. This fill is to be named "Race Park USA". The Notification was from Mr. Dean Johnston of Ash Basics Company (ABC) and was addressed to W.R. Hocutt of NC DENR.
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To: The File
From: Bill Hocutt WRH

Tim Jewitt and Bill Hocutt met Mr. Dean Johnston at the subject site at 11:00 AM on 6/20/01. Mr. Larry Harper, Director of Product Applications, Fuels, Purchasing, and Ash Management for Duke Power (the ash generator for this project), was also present. We had not been told that he would also be there. He had perhaps been invited by Mr. Johnston late on 6/19 or early on 6/20 after we had, on 06/19, canceled and then rescheduled the meeting all within a period of 2-3 hours. This was done when it was learned that Jim Barber could not come to the meeting. Johnston told us that his engineer had scheduled another appointment after we cancelled the visit early in the day of 6/19 and could not change his schedule back and be there. Johnston probably felt that he needed an engineer present and maybe asked Harper to come. Another possibility is that Harper had planned to be there all along. I apologized for the confusion caused by the cancelation, but explained that we were trying to avoid any further delays in the project. Mr. Johnston had voiced displeasure over an additional week delay when we had canceled.

Very early in the 06/20/01 discussions on the information concerning the location of groundwater on the site, Mr. Johnston discovered that information which he received from Ground Technical Services Incorporated (GTSI) right at the time that he was writing Reference (3) was not included in his reply to Reference (2). The only groundwater information that the DWM was aware of as of 06/20/01 was a copy of a 01/25/01 letter from GTSI to Dean Johnston that was included in the 01/23/01 notification. That GTSI letter simply stated that six (6) hand augered probes had been conducted in January in the low lying areas of the planned project.

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Copies of the engineering drawing numbered Sheet 1 of 2 and identified as the "Ash Fill Plan" were submitted with the initial (01/23/01) Notification. Modifications # 2 and #3 were not shown.Those modifications (#2 and #3) are identified as having occurred on 3/9/01 and 5/23/01 respectively on the "Ash Fill Plan " drawing submitted with Mr. Johnston's Reference (3), 06/01/01 letter. The major portion of the elevation contour lines in the second drawing (that copy which contained revisions) appear to be identical to the initial drawing. The changes in the contour elevation contour lines appear to be concentrated in the the lower elevation part of the site. This same general area appears to be where GTSI made the nine , 3.0 foot hand augered borings. Mr. Johnston has agreed to identify the locations of those nine probes on the "Ash Fill Plan " drawing and to also shoot and show the elevations of the B-4 and B-8 probes on the drawing. It is anticipated that these points will show that a significant amount of contour change has occurred.

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c:wp6docs/notes/dukepwr06-20.wpd

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c:wp6docs/notes/dukepwr06-20.wpd

GTSI
GROUND
TECHNOLOGICAL
SERVICES
INC.

July 6, 2001

Mr. William Hocutt
NCDENR Division of Solid Waste Management
Mail Service Center 1646
Raleigh, North Carolina 27699-1646

RE: "Race Park USA"
Proposed Conditioned Ash structural fill site: geoprobe borings
Dooley Road, Iredell County
Mooresville, North Carolina
GTSI-10123

Dear Mr. Hocut,

INTRODUCTION:

Ground Technological Services Inc. (GTSI) in conjunction with SAEDACCO Drilling has performed a subsurface evaluation within geoprobe holes on the referenced site. In accordance with the NCDENR 15A-13B.17. - "Conditioned Ash Restrictions", ash fill setback requirements include a minimum 2.0-foot vertical separation from the ash fill horizon to the top of the seasonal high groundwater level. The work was performed on July 3, 2001 to determine existing groundwater elevation measurements within the Geoprobe holes in addition to the maximum high groundwater fluctuation levels based on soil evaluations within the push holes.

Previous work included nine hand auger borings on May 27, 2001 advanced below *residual* grade to a depth of 3.0 feet below residual grade (reported May 29, 2001). The borings were advanced for groundwater measurement purposes, with groundwater noted in the topographically lower B-4 (-14") and B-8 (36") borings.

According to NRCS, DENR and USGS officials, groundwater elevations within one Mecklenburg County well has fluctuated up to approximately 6.0 feet over ten-year periods. Thus based on drought conditions encountered regionally over the last 3 years, the 6.0 foot fluctuation noted above, and *previous* undetermined on-site groundwater fluctuation levels, DENR officials recommended a minimum of 8.0 feet of earthen fill (inclusive of 2.0-foot vertical setback) prior to structural ash fill placement.

INVESTIGATION:

Subsequent to our prior report, contractors have installed structural fill ranging in depth from 0.0' (higher elevations) to 5.0 feet (lower elevations). GTSI retained SAEDAACO of Charlotte, N. C. for direct push drilling at nine locations depicted in Figure 1. The boring locations were surveyed and staked with elevations recorded at *existing* grade surface elevations recorded prior to our arrival and following the structural fill installation. The borings were terminated at a depth of 8.0 feet below the existing soil subgrade elevations.

Push driven sampling tubes collected soil cores in sealed plastic tubes representing the interval from 0.0 to 8.0 feet below existing grade. A soils evaluation of the core samples interpreted groundwater measurements, textural properties and hydric soil indicators including gleying and mottling.

Surveyed grade elevations at the nine geoprobe holes varied from 817.68' to 837.93'.

RESULTS:

Bright orange mottles indicative of seasonally elevated groundwater were encountered in B-5, B-6, B-7 and B-8 at elevations ranging from 6.0 to 6.8 feet below existing grade. In B-8, low chroma gleyed soils signifying long term reducing, saturated conditions were noted in at 7.1', with saturated soils encountered at 7.8 '. Soils were noted as moist generally below 6.0'. A more complete description of the soil characteristics has been provided in the Appendix.

CONCLUSIONS:

GTSI recommends installing at least 2.0 feet of additional earthen fill in the lower elevation areas represented by B-3, B-4, B-5, B-6, B-7 and B-8 to maintain the required 2.0 feet vertical setback distance from seasonal high groundwater elevations. Borings locations have been plotted on the attached drawing.

If you should have any questions, please call us at your convenience.

Sincerely,
Ground Technological Services, Inc.

Geoff Underwood
Staff Geologist

Gary L. Gechter P.G.
President

Mark W. Hoidas P.E.
Vice President- Engineering

NORTH CAROLINA PROFESSIONAL SEAL 025256 ENGINEER MARK W. HOIDAS

7/16/01

c.c. Tim Jewett DENR Division of Waste Management
Winton-Salem Regional Office: 585 Waughtown Rd. 27107

c.c. Dean Johnson
Ash Basics Company

GEOPROBE LOGS: July 3, 2001

#	CURRENT ELEV. (FEET)	TEXTURE	DEPTH (FEET)	HYDRIC INDICATORS	DEPTH (FT.) BELOW SURFACE
B-1	827.91	Tan sandy silt Red brown clayey sand Red sand Saprolite- Brown sand w/clay	0.0-0.5 0.5-1.8 1.8-3.2 3.2-8.0	Moist at	6.5
B-2	826.72	Brown sand w/red silty clay Saprolite: grey silty sand	0.0-3.2 3.2-8.0	Moist	6.2
B-3	818.73	Light brown silty sand Orange/brown/white sandy silt Saprolite:brown/blacksandy silt	0.0-0.9 0.9-2.9 2.9-8.0	Moist	6.0
B-4	823.45	Brown silty sand Grey sand Orange silty sand Saprolite: white-grey-orange silty sand	0.0-0.4 0.4-3.6 3.6-4.2 4.2-8.0	Moist	6.0
B-5	820.84	Dark brown clayey sand with black organics orange brown sandy clay tan sticky sandy clay	0.0-4.1 4.1-6.8 6.8-8.0	Orange mottles and moist	6.8
B-6	837.93	Dark red silty clay Dark red sandy clay Tan sandy clay	0.0-4.1 4.1-6.1 6.1-8.0	Orange mottles moist	6.1 (moderate) 6.1
B-7	831.27	Dark red sandy silt Black organics Tan sand w/silt	0.0-2.1 2.1-6.0 6.0-8.0	Orange mottles moist	6.0 (moderate) 6.0
B-8	818.78	Red-brown silty sand Red silty sand Brown silty clay w/sand Brown organics Grey silty clay	0.0-2.9 2.9-4.2 4.2-5.5 5.5-6.5 6.5-8.0	Orange mottles Grey gleying Wet	6.5 –8.0 (fient) 7.1-8.0 7.8
B-9	817.68	Dark red sandy silt Brown sandy silt Black organics	0.0-1.9 1.9-3.2 3.2-8.0	Orange mottles saturated	6.1 7.5

FAX COVER SHEET

GROUND TECHNOLOGICAL SERVICES, INC.
18637 Northline Drive Suite G
Cornelius, NC 28031
PHONE (704) 987-8378*
FAX (704) 987-8175

SOLID WASTE DIV.

Company Name: DENR	From: GEOFF UNDERWOOD
Attention: William Hocutt	Date: 7/10/01
Fax Number: (919)733-4810	Phone Number:

Total pages, including cover: 5

COMMENTS:

3 pages - text,
1 " - table
Drawing from his Eng'R is large format - I will FED-EX to W. Hocutt. Dean Johnson from Ash Basics will follow up with phone call in A.M. Thanks, let me know if any questions.
GEOFF

IF YOU RECIEVE THIS FAX IN ERROR PLEASE CALL THE ABOVE PHONE NUMBER

GROUND
TECHNOLOGICAL
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July 6, 2001

Mr. William Hocutt
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Mail Service Center 1646
Raleigh, North Carolina 27699-1646

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Vice President- Engineering

NORTH CAROLINA PROFESSIONAL SEAL 025256 ENGINEER MARK W. HOIDAS

7/10/01

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Ash Basics Company

GEOPROBE LOGS: July 3, 2001

B1	827.91	Tan sandy silt Red brown clayey sand Red sand Saprolite- Brown sand w/clay	0.0-0.5 0.5-1.8 1.8-3.2 3.2-8.0	Moist at	6.5
B2	826.72	Brown sand w/red silty clay Saprolite: grey silty sand	0.0-3.2 3.2-8.0	Moist	6.2
B3	818.73	Light brown silty sand Orange/brown/white sandy silt Saprolite:brown/blacksandy silt	0.0-0.9 0.9-2.9 2.9-8.0	Moist	6.0
B4	823.45	Brown silty sand Grey sand Orange silty sand Saprolite: white-grey-orange silty sand	0.0-0.4 0.4-3.6 3.6-4.2 4.2-8.0	Moist	6.0
B5	820.84	Dark brown clayey sand with black organics orange brown sandy clay tan sticky sandy clay	0.0-4.1 4.1-6.8 6.8-8.0	Orange mottles and moist	6.8
B6	837.93	Dark red silty clay Dark red sandy clay Tan sandy clay	0.0-4.1 4.1-6.1 6.1-8.0	Orange mottles moist	6.1 (moderate) 6.1
B7	831.27	Dark red sandy silt Black organics Tan sand w/silt	0.0-2.1 2.1-6.0 6.0-8.0	Orange mottles moist	6.0 (moderate) 6.0
B8	818.78	Red-brown silty sand Red silty sand Brown silty clay w/sand Brown organics Grey silty clay	0.0-2.9 2.9-4.2 4.2-5.5 5.5-6.5 6.5-8.0	Orange mottles Grey gleying Wet	6.5 –8.0 (fient) 7.1-8.0 7.8
B9	817.68	Dark red sandy silt Brown sandy silt Black organics	0.0-1.9 1.9-3.2 3.2-8.0	Orange mottles saturated	6.1 7.5

North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director

July 11, 2001

Mr. Dean Johnston
Ash Basics Company
P.O. Box 3573
Mooreesville, NC 28117

Subject: Proposed Coal Combustion By-Products (CCBPs) Structural Fill Project in Iredell County Near Mooresville, NC to be named Race Park, USA. Ash placement was originally proposed to begin 2/15/01 and estimated to be completed in 90 days.

References: 1) January 23, 2001 Notification Letter of the proposed subject structural fill from Mr. Dean Johnston of Ash Basics Company (ABC) to William Hocutt of NC DENR .
2) February 13, 2001 letter from Mr. James C. Coffey of NC DENR to Mr. Dean Johnston of ABC listing needed changes, additions and explanations of information in Reference (1).
3) June 1, 2001 supplemental letter from Mr. Dean Johnston of ABC to William Hocutt of NC DENR addressing issues presented in the above Reference (2) letter.
4) July 6, 2001 letter (with attachments) from Ground Technological Services Inc. to William Hocutt of NC DENR. This gives the results of their study to determine the amount of soil fill needed at the Race Park, USA site to insure two feet separation between coal ash fill and the seasonal high groundwater table at the lowest elevation of the site.

Dear Mr. Johnston:

The combination of information presented in Reference Letters (1), (3) and (4) plus additional information obtained from four site visits (April 27, 2001, mid-May 2001, June 20, 2001 and July 11, 2001) by NC DENR personnel allows the Division of Waste Management (DWM) to acknowledge that this project can proceed. Your verbal revision to the planned start and completion dates were received on July 11, 2001. The revised start date is to be the week of July 16, 2001 and the projected completion date is mid-October 2001.

The .1700 Solid Waste Management Rules were written anticipating placement of coal ash structural fills in essentially undisturbed, naturally contoured sites. A major factor in the construction of these sites is the protection of groundwater from contamination. Two feet separation between the seasonal high groundwater level and the CCBPs was chosen as the minimum acceptable separation. Any disturbance to existing and natural contours of the site(s) beyond clearing and grubing was anticipated to cause problems in determining where the

seasonal high groundwater levels were on the site. The problems experienced in this respect on the Race Park, USA project confirm that excavation and grading do make these determinations difficult and that this should not be done on any future projects.

If you have any questions about the contents of this letter, please contact me at (919)-733-0692, extension 256 or Bill Hocutt at extension 260.

Sincerely,

James C Coffey

James C. Coffey, Acting Chief
Solid Waste Section

cc: Brent Rockett
Mark Fry
Tim Jewett
Jim Barber
Anthony Foster
Bill Hocutt

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Dear Mr. Johnston:

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Iredell-18

Iredell County; Race Park, USA, Mooresville, NC ;
Duke Power; Ash Basics Co.; J. B. Mallory III, Pres. Race Park;
July 16, 2001; October 15, 2001;

The Division received the initial Notification of this project on January 26, 2001. The original proposed start date was Jan. 24, 2001 when site clearing and prep and erosion control measures were planned to be installed and the first ash placement to be on Feb. 15, 2001. The start and completion estimated dates had to be revised to July 16, 2001 and October 15, 2001 respectively due to the very long delay experienced in obtaining all of the necessary information, construction drawing revisions, etc. required to allow determination that the project would be according to the .1700 Rules if constructed according to the plans. The estimated amount of ash to be utilized on this project was 45,000 cub. yds.(54,000 tons) using ash generated at Duke Power's Marshall Steam Plant located at Terrell, NC. Representative TCLP data was submitted.

An 8.5 X 11 copy of the Lake Norman North Quadrangle USGS 7.5 minute series map was provided with the site location marked. A signed owner's Acknowledgment and Consent form and a copy of the Jan. 4, 2001 NC DENR Land Quality Section Letter of Approval (with modifications) for the erosion and sedimentation control plan were also submitted. This original Notification did not include a U.S. Army Corps of Engineers General Permit Verification Form. Since more than 10,000 cub. yds. of ash were to be used, construction plans were submitted. A copy of a January 25, 2001 letter from Ground Technological Services Inc. (GTSI) to Ash Basics Co. was furnished by Ash Basics. This stated that GTSI had conducted six hand augered probes to an average depth of 2.5 feet in the low lying area of the project to determine the presence of groundwater. GTSI stated that no groundwater was encountered {at the shallow depth explored}. The purpose of this project was reported to be to furnish a site for an entertainment facility.

On February 13, 2001, a letter addressing contents of the 01/23/01 Notification was issued by the Permitting Section. Six items were listed that required responses or corrections to the construction drawings. When no contact had been made by Ash Basics Company in six weeks following this 2/13 letter, a request was made of the Mooresville office Field Operations Branch to visit the site and determine what activity (if any) was taking place. Rather than visiting the site, Mr. Johnston of Ash Basics was called (approx. April 2) and he stated that the construction drawings were being revised. Mr. Johnston returned a call from the Permitting Branch on April 19 and said he was planning to submit to the Division the necessary information in a few days. The Western Area Engineer visited the site on April 27 and in mid-May and observed two back hoes screening material out of the soil on the first of these visits. It appeared that significant grading had been done.

A second Notification letter dated June 1, 2001 was received on June 4th. This Time a copy of a U.S. Army Corps of Engineers General Permit Verification Form allowing this activity was an enclosure. The (May 29, 2001)Corps Permit states that this activity impacts 150 LF of an unnamed tributary to Lake Norman and mentions 0.2 acre of wetlands. Also, the Corps stipulates that the project must be done in accordance with submitted plans. Enclosed with the 6/1/01 Notification were: (1) a revised construction drawing, (2) a statement that Dean Johnston was satisfied that there will be a minimum of two feet separation between the seasonal high groundwater table and the ash, (3) assurance that the repetition of language in the notes had been corrected, (4) stated the ash slope on the drawing has been changed to 3:1 as per the rules and (5) stated that the adjoining property owner's well had been plotted on the drawing and claimed there was 120 feet separation between the well and the ash. Actually, the drawing scaled to show 100 feet separation, not 120', and this 100' just matches the rule minimum requirement.

A meeting was held at the site on June 20, 2001 primarily due to concerns of the

Permitting Section over possible violation of the 2 foot minimum separation of the groundwater seasonal high level and the ash fill. Present were Tim Jewett and Bill Hocutt of NC DENR Permitting, Dean Johnston of Ash Basics Co. and Larry Harper of Duke Power. Another reason to tour the site was to get some explanation of the purpose of excavation that had occurred. Tim Jewett had visited the site on 04/27/01 and had observed significant earth moving taking place with some trash being screened out of the soil. A large trench had resulted from this excavation.

Very early in the 6/20 discussions it was discovered that Mr. Johnston had not included a copy of a May 29, 2001 GTSI study of groundwater elevations along with his June 1, 2001 (second) Notification. Mr. Johnston stated that he had intended to include a copy. A copy was supplied to DENR on June 20 allowing discussion about it at that time. GTSI revealed in this letter/report to Ash Basics Co. that GTSI had advanced nine hand auger borings to a depth of 3.0 feet below existing grade for groundwater measurement purposes. These borings were made in the lower elevation part of the project site. Groundwater was noted in borings B-4 (14 inches below grade) and in B-8 at 36 inches. The May 29 letter also reported: (1) that GTSI had observed removal of domestic trash and organic debris that had been placed in a steep gully in the southeastern quadrant of the site (this explains the large trench seen by Tim Jewett on April 27th) and (2) that GTSI recommends installing tested, earthen structural fill materials within the lower portion of the site represented by B-4 and B-8 for the purpose of maintaining the required 2.0 feet separation of groundwater from the ash materials. It was recommended by DENR that 8 feet of soil be placed in the low elevation part of the site. This would provide protection for the 6 foot swing between dry and wet seasonal periods which has been recorded in a Mecklinburg County well and would also provide the 2 feet separation between groundwater and ash fill.

A July 6, 2001 letter was received by the Division from GTSI that reported an additional subsurface evaluation within geoprobes had been conducted at the site. Also, prior to this latest testing, soil fill ranging in depth from 0.0' (at higher elevations) to 5.0' (at lower elevations) had been installed on the project site. GTSI retained SAEDAACO of Charlotte for direct push drilling at nine locations in the lower elevation portion. Push driven sampling tubes collected soil cores in sealed plastic tubes representing the intervals from 0.0 to 8.0 feet below existing grade. The borings were terminated at a depth of 8.0 feet below the existing soil subgrade elevations. Bright orange mottles indicative of seasonally elevated groundwater were encountered in B-5, B-6, B-7, B-8 (and also B-9 according to the data supplied, although for some reason GTSI did not include that boring in the group they reported having bright orange mottles). Soils were noted as moist generally below 6.0 feet. GTSI recommended installing at least 2.0 feet of additional earthen fill in the lower areas. Based on the Jan. 23, 2001 and June 1, 2001 notification letters and the July 6,2001 letter/report from GTSI plus information obtained from site visits by DENR representatives on April 27, 2001, mid-May 2001, June 20, 2001 and July 11, 2001, a letter of acknowledgment for the project was issued by the Permitting Branch on July 11, 2001. Verbal revisions to the planned start and completion dates were received fron Ash Basics Co. on July11, 2001.The planned start date was stated to be July 16, 2001 with projected completion by mid-October, 2001. As of December 10, 2001, no Certification of Closure or Notice of Recordation had been received by the Division.

GTSI
GROUND
TECHNOLOGICAL
SERVICES
INC.

September 18, 2001

Mr. William Hocut
NC Division of Environment and Natural Resources (DENR)
Solid Waste Section
401 Oberlin Road
Raleigh, North Carolina 27605

RE: "Race Park USA"
Regulatory requirements
7836 NC Highway 150 East
Mooresville, North Carolina
GTSI-10123

Dear Mr. Hocut,

On behalf of the owners, Race Park U.S.A., Ground Technological Services Inc. (GTSI) has performed field observations and field density quality control services for the referenced site in accordance with the NCDENR 15A-13B.17. - "Conditioned Ash Restrictions".

The 13.72-acre proposed construction consists of several commercial structures, a go-cart track and associated impervious driveway and parking areas. Controlled conditioned ash structural fill was installed within two drainage swales. The coal combustion by-product was provided from the nearby Marshall Steam Station.

Following "stripping and grubbing" of surficial top soils and plant materials to firm bearing soils, GTSI visually verified the removal of domestic trash and organic debris placed within a steep gully in the southeastern quadrant of the site. Proofrolling was performed on June 25, 2001 prior to structural fill installation. The proofroll procedure utilized loaded, heavy equipment for repeated traverses across the final undercut areas, with no pumping or rutting indicative of soft or low bearing soils noted. Clean, firm bearing residual soils were noted, with no staining or odors noted at the base of the undercut.

Prior work on July 3, 2001 included groundwater measurements within Geoprobe push-driven holes summarized in our report dated July 6, 2001. Indicators of seasonally high groundwater fluctuations were noted below 6.0 feet below existing grade. GTSI recommended, and the contractor implemented, the additional installation of 2.0 feet of earthen fill to meet the recently revised DENR 8.0-foot vertical separation from the seasonal high groundwater level. We understand no fly ash was installed within the eight-foot groundwater separation criteria.

GTSI performed field density testing in conjunction with structural fill operations from elevations ranging from –10.0' below subgrade to final design subgrade elevation. A total of thirty-seven (37) field density tests were performed utilizing the Shelby Tube Method, (ASTM D-2937). All tests or final retests indicated densities meeting or exceeding the project design criteria of 95% of Standard Proctor Moisture density relationship (ASTM D-698) at the depths and locations tested.

It is our understanding the site included wet hillside seeps in the central, lower elevation portion of the site, with impact mitigation associated with a US Army Corps of Engineers Nationwide Permit and a DENR 401 Water Quality Certification implemented. The permitting work was performed by Len Rinder and submitted to Steve Chapin with the USACE Asheville Office and Pete Caldwell with the DENR Mooresville Regional Office.

In conjunction with the project Engineer, Lee Dowell, and Len Rindner, wetland scientist, silt fencing, rock dams, a stormwater/wetpond and a sediment fore bay was installed to separate the work area from down gradient drainage features including an off-site pond.

The ash materials were installed in 12" moisture-conditioned structural lifts, with a 12-24" earthen structural fill cap compacted to subgrade elevation. Water trucks were utilized during the structural ash fill installation for dust control measures and to facilitate adequate compaction. A total of approximately 54,000 tons of conditioned ash materials were installed.

All tests or final retests met or exceeded the project design criteria of 95% of the (maximum) Standard Proctor Moisture-Density Relationship, ASTM D-698. Following earthwork, the disturbed areas were seeded with grass.

GTSI noted average slope of side slope areas appeared to comply with the maximum 3:1 slope guidelines, and a well-established growth of grass covering disturbed areas was observed. No ponded areas were noted following inclement weather. Implementation of setback guidelines included 25' from property lines and bedrock outcrops and 50' from jurisdictional Waters of the U.S.

One (1) offsite water supply well was separated from the 100-foot mandated ash fill setback in accordance with DENR regulations.

If you should have any questions, please call us at your convenience.

Sincerely,
Ground Technological Services, Inc.

Geoff Underwood
Staff Geologist

Gary L. Gechter P.G.
President

Karen E. Heater P.E.
Project Engineer

NORTH CAROLINA PROFESSIONAL SEAL 021927 ENGINEER KAREN E. HEATER

c.c. Dean Johnson
Ash Basics Company