

**Attachment 4 – TDEC ARAP and NPDES Permits**



COPY

ENVIRONMENTAL ASSISTANCE CENTER  
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2700 MIDDLEBROOK PIKE, SUITE 220  
KNOXVILLE, TENNESSEE 37921-5602  
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

April 1, 2004

Mr. Stanley G. Bass, Vice President  
Nolichuckey Sand Company, Inc.  
1980 Greystone Road  
Greeneville, TN 37743

RE: AQUATIC RESOURCE ALTERATION PERMIT #M2003-1  
Dredge Operation on the Nolichuckey River  
Greene County

Dear Mr. Bass:

Enclosed is your Aquatic Resource Alteration Permit # M2003-11, which authorizes Nolichuckey Sand Company, Inc. to operate a sand dredging operation in the Nolichuckey River associated with the Nolichuckey Sand Company in Greene County. This permit has five-year permit duration. Nolichuckey Sand Company, Inc. will be responsible to operate within the limits of this permit.

Please be reminded that the purpose of this permit is to prevent water pollution from occurring as a result of the project. The construction plans, which have been developed and approved as well as the terms of this permit, must be adhered to in order to maintain standards of water quality. In addition, violations of the permit or of The Tennessee Water Quality Control Act of 1977 including the 1994 amendments are subject to a maximum of a \$10,000 per day penalty in accordance with T.C.A. Section 69-3-115.

If you have any questions please contact me at (615) 532-0625 or Dave Turner at (423) 594-5541.

Sincerely,

  
Paul Davis, Director  
Division of Water Pollution Control

DAT:PED

cc: Stan Davis TVA, Knoxville  
Ron Sanders, TWRA Talbott  
Wade Wittinghill, USCAE Nashville  
Bruce Ragon, WPC Mining Section  
Nolichuckey Sand File



ENVIRONMENTAL ASSISTANCE CENTER  
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2700 MIDDLEBROOK PIKE, SUITE 220  
KNOXVILLE, TENNESSEE 37921-5602  
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

**DIVISION OF WATER POLLUTION CONTROL  
MINING SECTION**

**WATER QUALITY PERMIT  
AQUATIC RESOURCE ALTERATION**

**PERMIT NUMBER #M2003-11**

**Permit Application Number:** ARAP-#M2003-1

**Applicant:** Mr. Stanley G. Bass, Vice President  
Nolichuckey Sand Company, Inc.  
1980 Greystone Road  
Greeneville, TN 37743

**Location:** Greene County near Greeneville, Tennessee associated with Nolichuckey Sand Company, Inc. at 36°05'05" latitude and 82°49'50" longitude on the Davy Crockett Lake, Tennessee USGS Quadrangle Nolichuckey River Mile 49 to 51.

**Project Description:** The proposed project includes the dredge removal of sand and gravel bedload deposits using an eight-inch cutterhead suction dredge with a 2,500 gallon per minute pump. This dredge will evacuate bottom deposits. These materials will be transported to shore for product processing. The process includes screening materials into separate stockpiles of +1/4 inch to -2 inch and +2 inch to the on-shore processing facility.

The proposed dredge will operate in the Nolichuckey River between Mile 49.0 and Mile 51. A buffer zone around Bird's Bridge has been established. Nolichuckey Sand Company proposes a no dredge buffer zone. This buffer zone extends five hundred feet upstream and five hundred feet downstream from Bird's Bridge. The applicant proposes to operate the dredge from January 30 through November 15 with a proposed work schedule of Monday through Friday with an occasional Saturday for ten-hour periods. The plan includes that all work will comply with the Tennessee Water Quality Control Act of 1977 including 1994 amendments and associated regulations.

**EFFECTIVE DATE:** April 2, 2004

**EXPIRATION DATE:** April 1, 2009

**Permit Coordinator:** Dave Turner  
Mining Section  
Division of Water Pollution Control  
2700 Middlebrook Pike  
Suite 220  
Knoxville, TN 37921

#### Aquatic Resource Alteration Permit Conditions

1. **The work shall be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of the above application and the limitations, requirements and conditions set forth herein.**
2. TWRA prohibits any public access within the Nolichuckey Refuge during the late waterfowl season. This time frame is proclaimed by TWRC annually in August within framework of USFWS. All activities must be approved by TWRA prior to any access during this time frame.
3. The proposed work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids; bottom deposits or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation and irrigation.
4. All proposed dredging must maintain a minimum distance of thirty feet from both right and left banks and must be restricted to river section. Dredge areas shall exclude all embayments or sloughs. In some areas, the use of the riparian vegetation may extend beyond thirty feet, the use of the tree canopy as a guide may suffice as a dredge buffer zone.
5. No dredge activity within five hundred feet upstream and five hundred feet downstream of Bird's Bridge. The Bird's Bridge buffer zone must be established with visual bank markers.
6. Nolichuckey Sand Company must submit quarterly reports detailing daily operations that include the amount dredged and location of the dredge by river mile.
7. Nolichuckey Sand Company must inspect both right and left riverbanks for any instability i.e. slumps of bank material or trees and report to Division within 24 hours of the event.
8. Nolichuckey Sand Company, prior to operation, must have land base treatment in place and construction specification certified by your engineer. This certification must be forwarded to the Division.

This does not obviate requirements of other federal, state or local laws. In particular, work shall not commence until the applicant has received the federal §404 permit from the U. S. Army, Corps of Engineers.

The State of Tennessee reserves the right to modify or revoke this permit or to seek modification or revocation should the State determine that the activity results in more than an insignificant violation of applicable water quality criteria or violation of the Act. Failure to comply with permit terms may result in penalty in accordance with § 69-3-115 of the Act.

Nolichucky Sand Company

Permit # M2003-11

April 1, 2004

3

An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within thirty (30) days after receipt of the permit action. In such petition, each contention should be stated in numbered paragraphs, which describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" by 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6th Floor L & C Annex, 401 Church Street, Nashville,

Tennessee 37243-1534. Any hearing would be in accordance with T.C.A. §69-3-110 and 4-5-301 et seq. Questions concerning this certification should be addressed to Mr. Dave Turner at 423-594-5541.

  
April 1, 2004  
Paul E. Davis, Director  
Division of Water Pollution Control



ENVIRONMENTAL ASSISTANCE CENTER  
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2700 MIDDLEBROOK PIKE, SUITE 220  
KNOXVILLE, TENNESSEE 37921-5602  
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

April 7, 2004

Mr. Shane Geren, Supervisor of Environmental Services  
Nolichuckey Sand Company, Inc.  
P. O. Box 7  
Knoxville, TN 37901-6001

**RE: NPDES Permit Transmittal and Plans Approval**  
Nolichuckey Sand Company, Inc.  
Birds Bridge Dredge  
NPDES Permit TN0072303 (Renewal)  
Greene County

Dear Mr. Geren:

In accordance with the provisions of *The Tennessee Water Quality Control Act (Tennessee Code Annotated, Sections 69-3-101 et seq.)* and regulations of the Tennessee Division of Water Pollution Control the enclosed permit is hereby issued. The continuance and/or reissuance of this permit are contingent upon your meeting the conditions and requirements as stated therein.

Please be advised that you have the right to appeal any of the provisions established in this permit in accordance with *Tennessee Code Annotated, Section 69-3-105(i)*, and the general regulations of the Tennessee Water Quality Control Board. If you elect to appeal, you should file a petition within thirty (30) days of the receipt of this permit. Such petition must be prepared on 8 1/2-inch by 11-inch paper, addressed to Paul E. Davis, Director, and filed in duplicate at the following address:

Paul E. Davis, Director  
Division of Water Pollution Control  
Department of Environment and Conservation  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Mr. Shane Geren, Supervisor of Environmental Services  
Nolichuckey Sand Company, Inc.

April 7, 2004

Page 2

In such petition, you must state your contention in numbered paragraphs, describing how the action of the Division is inappropriate.

Enclosed is one copy of the supporting plans stamped "APPROVED." This copy of the approved plans must be kept on site during the hours of operation. If changes in the mining plan or procedure which affect wastewater treatment or runoff control are necessary, they must be approved in writing by this Division prior to the initiation of those changes. Failure of your company's strict adherence to these plans could jeopardize the continuation of your permit.

If you have any questions concerning this correspondence, contact Gary Mullins at (865) 594-5536.

Sincerely,



Paul E. Davis, Director  
Division of Water Pollution Control

PED:MPS:GWM:CTH

Enclosure

cc: Bruce T. Ragon, Environmental Specialist  
NPDES Permit File

**TABLE OF CONTENTS**

Page

**PART I**

A. WASTEWATER LIMITATIONS AND MONITORING REQUIREMENTS..

B. STORMWATER REPORTING LEVELS AND MONITORING REQUIREMENTS.... 4

C. SEDIMENT CONTROL STRUCTURES AND/OR TREATMENT FACILITIES  
CONSTRUCTION SCHEDULE..... 5

D. REPORTING

    1. Monitoring Results..... 5

    2. Definition of “Quarter” for Reporting Purposes..... 5

    3. Number of Copies of DMR Forms to Be Submitted..... 6

    4. Signature Requirements for DMR Forms..... 6

    5. Address for Submittal of DMR Forms..... 6

    6. Additional Monitoring by Permittee..... 6

    7. Falsifying Reports..... 6

E. MONITORING PROCEDURES

    1. Representative Sampling..... 7

    2. Test Procedures..... 7

    3. Recording of Results..... 7

    4. Records of Retention..... 7

**PART II**

A. GENERAL PROVISIONS

    1. Duty to Reapply. 8

    2. Right of Entry.... 8

    3. Availability of Reports. 8

    4. Proper Operation and Maintenance..... 8

    5. Property Rights..... 9

    6. Severability.. 9

7. Other Information.....	9
8. Best Management Practices (BMP's).....	9

**B. CHANGES AFFECTING THE PERMIT**

1. Planned Changes.....	10
2. Permit Modification, Revocation, or Termination.....	10
3. Change of Ownership.....	11
4. Change of Mailing Address.....	11

**C. NON-COMPLIANCE**

1. Effects of Non-Compliance.....	11
2. Reporting of Non-Compliance.....	11
3. Bypassing.....	12
4. Upset.....	13
5. Adverse Impact.....	14

**D. LIABILITIES**

1. Civil and Criminal Liability.....	14
2. Liability Under State Law.....	14

**PART III**

A. GENERAL REQUIREMENTS.....	15
B. TERMINATION OF MONITORING.....	15
C. EXAMPLES OF DISCHARGES COVERED BY THIS PERMIT.....	15
D. DURATION AND REISSUANCE OF PERMITS.....	16
E. TOXIC POLLUTANTS.....	16
F. DEFINITIONS.....	17
G. ANTIDEGRADATION.....	20

**RATIONALE**

RATIONALE.....	R-1
----------------	-----

PART I

**A. WASTEWATER LIMITATIONS AND MONITORING REQUIREMENTS  
(Construction Sand and Gravel Mining)**

During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge treated wastewater from all point sources associated with the mining and related facilities indicated on the approved area maps.

Such wastewater shall be limited and monitored by the permittee as specified below until the site has been closed and stabilized according to plans approved by the Division. Additionally, conditions stipulated in Part III B., *Termination of Monitoring*, shall be met.

WASTEWATER LIMITATIONS OUTFALL 001			
<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	Maximum For Any 1 Day	Measurement Frequency	Sample Type
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
pH	6.0 to 9.0 Standard Units	Two per Month	Grab

**Note:** Tennessee water quality standards establish criteria for uses of state waters. To protect and maintain the classified use of the receiving stream for fish and aquatic life, the pH value shall lie within the range of 6.5 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of twenty-four (24) hours. See *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3 (3)(b), General Water Quality Criteria.*

ADDITIONAL MONITORING - UNTREATED PROCESS WASTEWATER			
<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	Maximum For Any 1 Day	Measurement Frequency	Sample Type
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate

**ADDITIONAL MONITORING -  
IMMEDIATELY UPSTREAM OF DREDGE**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u> Maximum For Any 1 Day	<u>Monitoring Requirements</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
Latitude & Longitude	Monitor and Report	Two per Month	GPS*
Time & Date	Monitor and Report	Two per Month	Digital

\* Report as degrees/minutes/seconds. Geographic coordinates shall be obtained at the time of sampling for TSS, Settleable Solids, and Flow measurement.

**ADDITIONAL MONITORING -  
500' DOWNSTREAM OF THE DISCHARGE PIPE FROM PLANT**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u> Maximum For Any 1 Day	<u>Monitoring Requirements</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
Latitude & Longitude	Monitor and Report	Two per Month	GPS*
Time & Date	Monitor and Report	Two per Month	Digital

\* Report as degrees/minutes/seconds. Geographic coordinates shall be obtained at the time of sampling for TSS, Settleable Solids, and Flow measurement.

2. There shall be no distinctly visible floating scum, oil, or other matter contained in the wastewater discharge. The wastewater discharge must not cause an objectionable color contrast in the receiving stream.
3. The wastewater discharge shall result in no other materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.
4. Sludge or any other material removed by any treatment works shall be disposed of in a manner which prevents its entrance into or pollution of any surface or subsurface waters. Additionally, the disposal of such sludge or other material shall be in

compliance with the *Tennessee Solid Waste Disposal Act, TCA 68-31-101, et seq.* and the *Tennessee Hazardous Waste Management Act, TCA 68-46-101, et seq.*

5. Representative samples shall be taken according to the following established sampling frequencies unless otherwise approved by the Division subsequent to a specific written request by the permittee: (see Part I, E. 1. for a definition of representative sampling)

Gravity Discharges from Sediment Control Structures and/or Treatment Facilities

A minimum of two samples shall be collected per month. These samples shall be taken as follows:

- 1) One sample of the first discharge during the first half of the month and
- 2) One sample of the first discharge during the second half of the month.

b. Batch, Siphon, or Pump Discharges

Batch, siphon, or pump discharge(s) of any treated mine wastewater from approved treatment structures shall comply with effluent standards set forth herein and shall be directed to a splashpad or the pond's spillway constructed of non-erosive material. Pumpage or batch discharge of wastewater is a prohibited bypass if the sampling procedures as stated herein (Part I) are not followed.

A minimum of two samples shall be collected per month. These samples shall be taken as follows:

- 1) One sample of the first discharge during the first half of the month and
- 2) One sample of the first discharge during the second half of the month.

c. Duration of the discharge shall be noted on the Discharge Monitoring Report.

d. The permittee must take proper measures to insure that the pump intake does not stir up solids or take in sediment materials from the bottom of the treatment structure during the discharge period.

6. Any change or modification in sampling frequency will be based on the nature and effect of the discharge and its impact on the receiving waters. Impacts on the receiving waters will include any impairment of the stream use classification. These classifications are specified under *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3-.03. Criteria for Water Uses, (3) Fish and Aquatic Life*. This provision applies to applicable discharges of treated wastewater and storm water covered in Part I, A and B.
7. The upstream monitoring point and the untreated process wastewater monitoring point shall be monitored and reported for one year from the effective date of this permit.

**B. Storm Water Reporting Levels and Monitoring Requirements**

Storm water discharges associated with access and haul roads shall be monitored by the permittee as specified below until the site has been closed and stabilized according to plans approved by the Division. Additionally, conditions stipulated in Part III B., Termination of Monitoring, shall be met.

*NOTE: Part I B. entitled, "Storm Water Reporting Levels and Monitoring Requirements," is not applicable if all storm water discharges associated with access and haul roads are routed to and adequately treated by approved wastewater treatment structures. Sufficient documentation (i.e. narrative, drainage maps, etc.) of such treatment shall be provided to the Division before this exemption is valid.*

<b>STORM WATER DISCHARGES</b>			
<u>Parameters</u>	<u>Reporting Levels</u>	<u>Monitoring Requirements</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
pH	5.0 to 9.0 Standard Units at all times	Annually	Grab
Total Suspended Solids	200 mg/L	Annually	Grab
Oil and Grease	15 mg/L	Annually	Grab

**\*NOTE:** Applies only if all access and haulroad drainage is not being routed to approved treatment structures.

**Storm water Discharges Associated with Access and Haul Roads**

- a. Samples shall be collected from discharges resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least seventy-two (72) hours after any previous storm event of 0.1 inch or greater.
- b. Grab samples shall be collected as soon as practicable during a storm event discharge.
- c. Sample test results for Total Suspended Solids and Oil and Grease shall be recorded in milligrams per liter (mg/L). Test results for pH shall be expressed in Standard Units (S.U.).
- d. In addition to the information contained in Part I, Section E (3), the monitoring report form shall include:

- 1) The exact location from which the sample was taken, i.e., culvert, sump, etc.
- 2) The duration (in hours), starting and ending times, and magnitude (in inches) of the storm event sampled.

### **C. Sediment Control Structures and/or Treatment Facilities Construction Schedule**

- 1 Full compliance and operational levels shall be attained from the effective date of this permit.
2. All pollution control equipment required to meet the conditions of this permit shall be installed, be in operational condition, and shall be "started-up" prior to discharge.
- 3 Prior to receiving drainage from disturbance of the permitted mine area, wastewater treatment structures and/or treatment facilities shall be constructed according to approved plans and certified after construction by a Tennessee Registered Professional Engineer or an authorized responsible representative of the company. Such certifications shall be submitted to and approved by the Division.

### **D. Reporting**

#### **1 Monitoring Results**

##### **a. Wastewater Discharges**

- 1) Monitoring results for wastewater discharges shall be reported on Discharge Monitoring Report (DMR) forms. DMR's shall be recorded monthly and submitted quarterly.

The first DMR for wastewater discharges is due: **July 15, 2004**

- 2) Each subsequent DMR shall be due no later than fifteen (15) days after completion of each quarterly reporting period.

##### **b. Storm water Discharges**

Monitoring results for storm water discharges shall be reported on Discharge Monitoring Report (DMR) forms. DMR's shall be recorded and submitted annually. The DMR is due no later than fifteen (15) days after completion of the quarterly reporting period in which the sample was taken.

#### **2. Definition of "Quarter" for Reporting Purposes**

For the purpose of this permit, a "quarter" is defined as any of the following three month periods: January 1 through March 31; April 1 through June 30; July 1 through September 30; and October 1 through December 31.

3. Number of Copies of DMR Forms to Be Submitted

Two (2) copies of each Discharge Monitoring Report (DMR) form are to be submitted to the Division of Water Pollution Control. The permittee should retain a copy for his file.

4. Signature Requirements for DMR Forms

Discharge Monitoring Reports (DMR's) shall be signed and certified by a principal corporate officer of at least the level of vice-president, a general partner or proprietor, or his duly authorized representative. Such authorization shall be submitted in writing, signed by the permittee, and shall explain the duties and responsibilities of the authorized representative.

5. Address for Submittal of DMR Forms

Discharge Monitoring Reports (DMR's) and any communication regarding compliance with the conditions of this permit shall be sent to:

**Tennessee Department of Environment and Conservation  
Division of Water Pollution Control  
2700 Middlebrook Pike, Suite 220  
Knoxville, TN 37921  
ATTENTION: Mining Compliance**

**Telephone (865) 594-6035**

**Fax (865) 594-6105**

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified herein, the results of such monitoring shall be included in the calculation and reporting of the values required on the Discharge Monitoring Report (DMR). Such increased frequency shall also be indicated.

7. Falsifying Reports

Knowingly making any false statement on any report required by this permit may result in the imposition of criminal penalties as provided for in *Section 309 of The Federal Clean Water Act of 1977*, as amended, and in *Section 69-3-115(C) of The Tennessee Water Quality Control Act of 1977*, as amended.

## E. Monitoring Procedures

### 1 Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified above shall be representative of the volume and nature of the monitored discharge and shall be taken at the following location(s): nearest accessible point after final treatment but prior to actual discharge(s) to or mixing with the receiving waters.

#### Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to *Section 304(h)* of *The Federal Clean Water Act of 1977*, as amended, under which such procedures may be required.

- b. Unless otherwise noted in the permit, all pollutant parameters shall be determined according to methods prescribed in *Title 40, CFR, Part 136*, as amended, promulgated pursuant to *Section 304 (h)* of *The Federal Clean Water Act of 1977*, as amended.

### 3 Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

### 4 Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation, shall be retained for a minimum of three (3) years, or longer, if requested by the Division of Water Pollution Control, and be readily available to the Division's representative for review.

PART II

**A. General Provisions**

**1 Duty to Reapply**

Permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Director no later than 180 days prior to the expiration date.

**2. Right of Entry**

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials to:

- a. Enter upon the permittee's premises where an effluent source is located or where records are required to be kept under the terms and conditions of this permit, and copy these records;
- b. Inspect any monitoring equipment or method or any collection, treatment, pollution management, or discharge facilities required under this permit and;
- c. Sample any discharge of pollutants.

**3. Availability of Reports**

Except for data determined to be confidential under *Section 308 of The Federal Clean Water Act of 1977*, as amended, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Division of Water Pollution Control. As required by the Federal Act, effluent data shall not be considered confidential.

**4. Proper Operation and Maintenance**

- a. Proper operation and maintenance shall be implemented at this site to control and minimize pollutants from entering the wastewater treatment structure(s). The permittee shall visually inspect the wastewater treatment structures(s) daily to ensure that no floating scum, oil, or other matter is contained in the wastewater discharge.
- b. The permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment installed or used

by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

c. Dilution water shall not be added to comply with effluent requirements.

#### 5. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal right, nor any infringement of federal, state, or local laws or regulations.

#### 6. Severability

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, then the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

#### 7. Other Information

If the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in a report to the Director, then he shall promptly submit such facts or information.

#### 8. Best Management Practices (BMP's)

The permittee shall utilize Best Management Practices (BMP's) to prevent or minimize erosion and the contribution of suspended solids and sediment to surface waters and/or adjacent properties. Such practice(s) shall be implemented to reduce the impacts caused by disturbances created by the installation of culverts, the construction of haulroads, access roads, spoil storage, and stockpile areas, and other related activities.

BMP's include, but are not limited to, rapid grading, mulching, and revegetation of disturbed areas, straw bales, sediment traps and swells, vegetative buffer zones, erosion control structures, and rock check dams. BMP's are to be utilized as supplemental or auxiliary erosion control measures, not as substitutes for monitoring requirements of point source discharges.

Additional information regarding acceptable practices may be found in the **Tennessee Erosion and Sediment Control Handbook, March 2002**, which is available from the Division.

## **B. Changes Affecting the Permit**

### Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in *40 CFR 122.29(b)*; or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to requirements under *40 CFR 122.42 (a) (1)*.

### 2. Permit Modification, Revocation, or Termination

- a. This permit may be modified, revoked and reissued, or terminated for cause as described in *40 CFR 122.62 and 122.64, Federal Register, Volume 49, No. 188 (Wednesday, September 26, 1984)*.
- b. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- c. If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established for any toxic pollutant under *Section 307(a) of The Federal Clean Water Act of 1977*, as amended, the Director shall modify or revoke and reissue the permit to conform to the prohibition or to the effluent standard, providing that the effluent standard is more stringent than the limitation in the permit on the toxic pollutant. The permittee shall comply with these effluent standards or prohibitions within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified or revoked and reissued to incorporate the requirement.

### 3 Change of Ownership

This permit may be transferred to another person by the permittee if:

- a. The permittee notifies the Director of the proposed transfer at least thirty (30) days in advance of the proposed transfer date;
- b. The notice includes a written agreement between the existing and new permittee containing a specified date for transfer of the permit and liability between them;
- c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of his intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

**NOTE:** To expedite and facilitate the permit transfer process, the Division has prepared a document entitled "Notice of Transfer: National Pollutant Discharge Elimination System Permit." This document may be obtained by contacting the Division at telephone number (865) 594-5619.

### 4. Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice, the original address of the permittee will be assumed to be correct.

## C. Non-Compliance

### 1. Effect of Non-Compliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit non-compliance constitutes a violation of applicable state and federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

### 2. Reporting of Non-Compliance

#### a. 24-Hour Reporting

In the case of any non-compliance which could cause a threat to the public drinking water supplies, or any other discharge which could constitute a threat to human health or the environment, a required notice of non-compliance shall be provided to the Division of Water Pollution Control within twenty-four (24) hours from the time the permittee becomes aware of the circumstances.

Telephone No. (865) 594-5619

Fax No. (865) 594-6105

Additionally, written submission shall be provided within five (5) days of the time the permittee becomes aware of the circumstances unless the Director on a case-by-case basis waives this requirement. The permittee shall provide the Director with the following information:

- (1) A description of the discharge and cause of non-compliance;
- (2) The period of non-compliance, including exact dates and times, or, if not corrected, the anticipated time non-compliance is expected to continue; and
- (3) The steps being taken to monitor, reduce, eliminate, and prevent recurrence of the non-complying discharge.

This written notice shall not be considered as excusing or justifying the failure to comply with the effluent limitations. This non-compliance shall also be reported on the Discharge Monitoring Report (DMR). The details may be incorporated by reference to the written five (5) day notification.

b. Scheduled Reporting

For instances of non-compliance which are not reported under subparagraph 2(a) above, the permittee shall report the non-compliance on the Discharge Monitoring Report (DMR). The report shall contain all information concerning the steps taken, or planned, to monitor, reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

3. Bypassing

- a. "Bypass" means the intentional diversion of wastes from any portion of a treatment facility. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which could cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless the following three (3) conditions are met:
  - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during

normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- (3) The permittee submits notice of an unanticipated bypass to the Division of Water Pollution Control within twenty-four (24) hours of becoming aware of the bypass (if this information is provided orally, a written submission shall be provided within five (5) days). When the need for the bypass is foreseeable, prior notification shall be submitted for approval to the Director, if possible, at least ten (10) days before the date of the bypass.
- c. The Director may prohibit bypass in consideration of the adverse effect of the proposed bypass or if the proposed bypass does not meet the conditions set forth in subparagraphs 3(b)(1) and (2).
  - d. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of subparagraph b. above.
4. Upset
- a. "Upset" means an exceptional incident in which there is unintentional and temporary non-compliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
  - b. Conditions necessary for the demonstration of an upset. An upset shall constitute an affirmative defense to an action brought for non-compliance with such technology-based permit effluent limitations if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
    - (2) At the time the permitted facility was being operated in a prudent and workmanlike manner and in compliance with proper operation and maintenance procedures;
    - (3) The permittee submitted information required under "Reporting of Non-Compliance" within twenty-four (24) hours of becoming aware of the upset (if this information is provided orally, a written submission shall be provided within five (5) days); and

(4) The permittee complied with any remedial measures required under "Adverse Impact."

c. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### 5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from non-compliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge. In an enforcement action it shall not be a defense for the permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### D. Liabilities

#### 1 Civil and Criminal Liability

Except as provided in permit conditions for "Bypassing," nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the state of Tennessee including, but not limited to, fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of wastewater to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

#### 2. Liability under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or *The Federal Clean Water Act of 1977*, as amended.

**PART III**

**A. General Requirements**

Prior to the creation of any disturbed area or point source discharge within the projected area of operation, and prior to changes, corrections, modifications, or adjustments in the location of any point source discharge, an Engineering Plan shall be submitted to and approved by the Division of Water Pollution Control.

2. No mining activity shall be conducted within the projected area of operation unless the detailed Engineering Plan for the specific area of operation or disturbance has been approved in advance. The Engineering Plan shall include those documents, maps, drawings, and other materials as required by the Division.

**B. Termination of Monitoring**

Monitoring of a discharge may be terminated when all of the following have been satisfactorily completed:

1. Sufficient data has been accumulated to show to the satisfaction of the Director of the Division of Water Pollution Control that the untreated discharge from an area where mining is completed shall meet limitations established by the Division as stated herein [Part I, A(1), Page 1]. Other factors such as watershed or background characteristics may be taken into consideration if sufficient data and documentation are provided to the Division by the permittee.
2. The permittee or his duly authorized representative submits proof of final bond release, where applicable, and a letter to the Division of Water Pollution Control requesting permit termination.
3. The site has been closed and stabilized according to approved plans and to the satisfaction of the Division.
4. After a thirty-day (30) public notice, there is no adverse public comment to uphold termination.

**C. Examples of Discharges Covered by This Permit**

Examples of discharges which are covered by *The Federal Clean Water Act of 1977*, as amended, and this permit include, but are not limited to, the following:

- 1 Pumped or gravity drainage from the permitted area including, but not limited to, the mine, overburden storage and stockpile areas; and other adjacent areas which are associated with or incidental to the extraction of a natural resource or related activities.

2. Discharges from sediment control structures and/or treatment facilities.

**D. Duration and Reissuance of Permits (*Rule 1200-4-1-.05 [5] [C]*)**

The Commissioner shall review the permit and other available information to insure:

1. That the permittee is in compliance with or has substantially complied with all terms, conditions, requirements, and schedules of compliance of the expired permit;
2. That the Commissioner has up-to-date information on the permittee's production levels, permittee's waste treatment practices, nature, contents, and frequency of permittee's discharge, either pursuant to monitoring records and reports submitted to the Commissioner by the permittee; and,
3. That the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements including any additions to, or revisions or modifications of such effluent standards and limitations, water quality standards, or other legally applicable requirements during the term of the permit.

**E. Toxic Pollutants**

The permittee shall notify the Division of Water Pollution Control as soon as it knows or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant (listed in *40 CFR, Part 122, Appendix D, Table II and III*) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - a. One hundred micrograms per liter (100 µg/L);
  - b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application; in accordance with *122.21(g)(7)*; or
  - d. The level established by the Director in accordance with *122.44(f)*.
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- a. Five hundred micrograms per liter (500 µg/L);
  - b. One milligram per liter (1 mg/L) for antimony;
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 122.21(g)(7); or
  - d. The level established by the Director in accordance with 122.44(f).
- 3 They have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application under 122.21(g)(9).

#### **F. Definitions**

- 1 "*Access Road/Haul Road*" is any road constructed, maintained, or used by the operator of a mining facility primarily for the purpose of transporting raw materials, equipment, manufactured products, waste material, or by-products, and is located within the affected area.
2. "*Batch Discharge*" for the purpose of this permit means the controlled release through a pipe (valve) of a known quantity and quality of treated wastewater that has been pumped to a treatment structure after such water has undergone physical and/or chemical treatment to meet permit limits.
3. "*Beneficiation*" is all or any part of the process involved in treating a mineral or raw material to improve properties and/or remove impurities. Processing may include any or all of the following activities: sizing, screening, crushing, separating, and washing.
4. "*Best Management Practices (BMP's)*" means a practice or a combination or series of practices designed to prevent or minimize the amount of pollution generated by non- point sources, such as haulroads, access roads, spoil storage and stockpile areas, site preparation, installation of culverts, and other related activities.
5. "*Bypass*" means the intentional diversion of wastes from any portion of a treatment facility.
6. "*Calendar Day*" is defined as any 24-hour period.

"*Clean Water Act*" or "*Act*" means *The Federal Clean Water Act* (formerly referred to as *The Federal Water Pollution Control Act* or *The Federal Water Pollution Control Act Amendments of 1972*), as amended.

8. "*Commissioner*" means the Commissioner of the Tennessee Department of Environment and Conservation.
9. "*Director*" means the Regional Administrator or the State Director, as the context requires or an authorized representative.
10. "*Discharge of a Pollutant*" means: "(a) Any addition of any 'pollutant' or combination of pollutants to 'waters of the United States' from any 'point source,'... This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man ..." (see 40 CFR 122.2)
11. "*Division*" means the Division of Water Pollution Control.
12. "*Grab Sample*" means an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding fifteen (15) minutes.
13. "*Industrial Waste*" means any liquid, solid, gaseous substance, or combination thereof, or form of energy including heat, resulting from any process of industry, manufacture, trade, or business or from the development of any natural resource.
14. "*Maximum for any 1 day*" means a limitation of the total concentration by weight in milligrams per liter (mg/L) of any pollutant in the discharge during any time of a calendar day or (for clay only) during any time of the discharge cycle.
15. "*Mine*" shall mean an area of land, surface or underground, which is used for the development of a natural resource. Such areas include any adjacent land, the uses of which are incidental to any such mining activities including excavations, workings, impoundments, dams, dumps, stockpiles, overburden piles, holes or depressions, repair areas, storage areas, and other areas upon which are sited structures, or other property or materials on the surface, resulting from or incidental to such activities. The term "mine" also includes all lands affected by the construction of new roads or the improvement or use of existing roads, except maintained public roads, to gain access to the site of such activities and for haulage.
16. "*Mine Dewatering*" is any water that is impounded or that collects in the mine or quarry that is pumped, drained, or otherwise removed from the mine through the efforts of the mine operator. The term also includes wet pit overflows caused solely by direct rainfall, groundwater seepage, or surface runoff entering the mine area.
17. "*Monthly Average Concentration*" is a limitation on the discharge concentration in milligrams per liter, as the arithmetic mean of all daily concentrations determined in a one-month period.
18. "*National Pollutant Discharge Elimination System (NPDES)*" means the Federal Environmental Protection Agency's (EPA) national program for issuing, modifying,

revoking and reissuing, terminating, monitoring, and enforcing water quality permits. The term includes an "approved state program."

19. *"Pollutant"* for the purpose of this permit means industrial waste.

*"Process Generated Wastewater"* is any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term also includes any other water which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater.

21. *"Regional Administrator"* means the Administrator for the Environmental Protection Agency or his authorized representative.

22. *"Sediment Control Structure"* means a designed device, constructed or manufactured, used in controlling the subsidence and deposition process of suspended matter, carried by water, wastewater, or other liquids. The structure reduces the velocity of the liquid below the point at which it can transport the suspended materials (sand, silt, gravel, clay, etc.) to allow settling. These structures may be called settling lagoons, silt ponds, detention basins, holding ponds, or settling ponds/basins.

*"Storm Water Application Rule"* is the EPA Regulation promulgated on November 16, 1990, and amended March 21, 1991, November 5, 1991, and April 2, 1992, requiring that application be made for an NPDES permit for storm water discharges associated with industrial activity.

*"Storm Water Discharges Associated with Industrial Activity"* means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at industrial plants. The term includes storm water discharges from immediate access roads and haulroads.

25. *"Tennessee Water Quality Control Act of 1977,"* as amended, *TCA 69-3-101 et seq.*, is the act that sets forth the guidelines and procedures for the abatement and prevention of pollution to the waters of the state. The act enables the state of Tennessee to qualify for full participation in the NPDES permit program.

26. The term *"10 year, 24 hour precipitation event"* means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten (10) years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

27. *"Upset"* means an exceptional incident in which there is unintentional and temporary non-compliance with technology-based effluent limitations because of factors

beyond the reasonable control of the permittee. An upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#### **G. ANTIDegradation**

Pursuant to the *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3-.06*, titled "Tennessee Antidegradation Statement," and in consideration of the Department's directive in attaining the greatest degree of effluent reduction achievable in municipal, industrial, and other wastes, the permittee shall further be required, pursuant to the terms and conditions of this permit, to comply with the effluent limitations and schedules of compliance required to implement applicable water quality standards, to comply with a State Water Quality Plan or other state or federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants.

**RATIONALE**

**Construction Sand and Gravel Mining And  
Processing Facility**

**NOLICHUCKEY SAND COMPANY, INC.  
BIRDS BRIDGE DREDGE  
NPDES PERMIT TN0072303  
GREENEVILLE, GREENE COUNTY, TENNESSEE  
APRIL 7, 2004**

*Permit Writer: Christopher T. Hobgood*

**I. DISCHARGER**

Nolichucky Sand Co., Inc.  
P. O. Box 7  
Knoxville, TN 37901-0007

Contact: Mr. Shane Geren, Supervisor of Environmental Services

Facility Location: 6950 Old Asheville Highway  
Greeneville, TN 37743-0404

Nature of Business: Construction Sand and Gravel Mining and Processing

SIC Code: 1442

Industrial Classification: Secondary, Construction Sand and Gravel Mining  
and Processing

Discharger Rating: Minor

**II. PERMIT STATUS**

NPDES Permit TN0072303 effective on April 7, 2004

NPDES Permit TN0072303 expires on April 6, 2009

Application for NPDES Permit Renewal due on October 8, 2008

### **III. FACILITY DISCHARGES AND RECEIVING WATERS**

This facility discharges treated wastewater and stormwater from Outfall 001 into the Nolichucky River in Greeneville, Tennessee. The classified uses for this stream are domestic water supply, industrial water supply, fish and aquatic life, recreation, irrigation, and livestock watering and wildlife. See *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-4-.10, French Broad River Basin*.

### **IV. APPLICATION TYPE AND BACKGROUND INFORMATION**

The permittee has applied for a modification and renewal of the current NPDES permit. The permittee proposes to reduce the permitted area from eleven (11) acres to 5.25 acres, and to construct a settling basin. The Division issued a construction approval letter to the permittee on February 3, 2004.

### **V. APPLICABLE EFFLUENT LIMITATIONS GUIDELINES AND ADDITIONAL MONITORING REQUIREMENTS**

#### **A. Total Suspended Solids (TSS)**

The United States Environmental Protection Agency (EPA) has adopted effluent limitations guidelines for point source discharges at facilities engaged in mineral mining and processing. These guidelines were adopted in pursuance of the *Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500*. Permits for discharges will contain limitations and standards in accordance with these guidelines, when such are in effect.

Federal effluent guidelines for TSS were promulgated on July 12, 1977, for the construction sand and gravel mining and processing industry. However, federal court action resulted in remanding guidelines for TSS to the EPA for reconsideration.

In the Division's Best Professional Judgment (BPJ), the Division proposes that the permittee shall report TSS concentrations at the following locations:

- at Discharge Monitoring Point 001
- process wastewater flow - influent to settling basin
- directly upstream of the dredge, within the Nolichucky River channel
- 500 feet downstream of the discharge pipe from the plant, within the Nolichucky River channel

B.

Federally promulgated effluent limitations guidelines for pH are in effect for the construction sand and gravel industry (See *40 CFR 436 Subpart C*). The Division has determined that the Federal guidelines for pH adequately protect the classified uses of the receiving stream. The following effluent limitations guidelines are established for pH and are applicable at all times:

Discharge Monitoring Point 001

pH 6.0 - 9.0 Standard Units at all times\*

Tennessee water quality standards establish criteria for uses of state waters. To protect and maintain the classified use of the receiving stream for fish and aquatic life, the pH value shall lie within the range of 6.5 to 9.0 and shall not fluctuate more than 1.0 unit in this range over a period of twenty-four (24) hours. See *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3 (3)(b), General Water Quality Criteria*.

C. Settleable Solids

The Division proposes that the permittee shall report Settleable Solids concentrations, in mL/L, at the following locations:

- at Discharge Monitoring Point 001
- process wastewater flow - influent to settling basin directly upstream of the dredge, within the Nolichucky River channel
- 500 feet downstream of the discharge pipe from the plant, within the Nolichucky River channel

D.

The Division proposes that the permittee shall report flow rates, in gallons per minute (GPM), at the following additional locations:

- at Discharge Monitoring Point 001  
process wastewater flow - influent to settling basin
- directly upstream of the dredge, within the Nolichucky River channel  
500 feet downstream of the discharge pipe from the plant, within the Nolichucky River channel

Flow measurements shall be taken concurrently with the collection of samples for TSS, Settleable Solids, and pH.

The permittee shall also record the latitude and longitude of both instream sampling points, to be determined with a Global Positioning System (GPS) receiver. The time and date of sampling shall also be included when reporting monitoring results at the instream monitoring locations.

E. General Water Quality Criteria

This NPDES permit includes the following provisions:

- 1) There shall be no visible floating scum, oil, or other materials contained in the wastewater discharge. The wastewater discharge must not cause an objectionable color contrast.
- 2) The wastewater discharge shall result in no other materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

These provisions are based on Tennessee water quality standards contained in *Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3, General Water Quality Criteria.*

VI. PREVIOUS PERMIT LIMITS AND MONITORING REQUIREMENTS

Monitoring Point 001

Wastewater Characteristics	Discharge Limitations	Monitoring Requirements	
	Daily Maximum	Measurement Frequency	Sample Type
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
pH	6.0 to 9.0 Standard Units	Two per Month	Grab

**VII. NEW PERMIT LIMITS**

**Monitoring Point 001**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Maximum for any 1 Day</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
pH	6.0 to 9.0 Standard Units	Two per Month	Grab

**Influent to Settling Basin  
(Untreated Process Wastewater)**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Reporting Requirement</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate

**Instream Monitoring Point  
(Directly Upstream from Dredge)**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Maximum for any 1 Day</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
Location	Monitor and Report	Two per Month	GPS*
Time and Date	Monitor and Report	Two per Month	Digital

\* Report as degrees/minutes/seconds. Geographic coordinates shall be obtained at the time of sampling for TSS, Settleable Solids, and Flow measurement.

**Instream Monitoring Point  
(500' Downstream of the Discharge Pipe from the Plant)**

<u>Wastewater Characteristics</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Maximum for any 1 Day</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Suspended Solids	Monitor and Report	Two per Month	Grab
Settleable Solids	Monitor and Report	Two per Month	Grab
Flow (GPM)	Monitor and Report	Two per Month	Estimate
Location	Monitor and Report	Two per Month	GPS*
Time and Date	Monitor and Report	Two per Month	Digital

\* Report as degrees/minutes/seconds. Geographic coordinates shall be obtained at the time of sampling for TSS, Settleable Solids, and Flow measurement.

**VIII. MONITORING, INSPECTION, AND COMPLIANCE INFORMATION**

**A. Monitoring and Inspection by Division Personnel**

The Division has conducted six (6) inspections of this facility since August 10, 1999.

The Division issued Notice of Violation (NOV) #00-37 to the permittee on August 28, 2000, for the following violations of the *Tennessee Water Quality Control Act* and the NPDES permit:

- two unpermitted point source discharges, and formation of a bar of waste material within the receiving stream, resulting in a distinctly visible plume extending approximately 500 feet downstream.

A Compliance Review Meeting was held on December 5, 2000, at the Cookeville Environmental Assistance Center. Attendees included Mr. Tom Bewley (the previous owner of Nolichecky Sand Co., Inc.), Mr. David Jackson and Mr. Richard Young (consultants). During the month subsequent to this meeting, no new treatment plans were submitted by Mr. Bewley or his consultants.

On January 26, 2001, the Division issued a Notice of Show Cause Hearing to the permittee. The Show Cause Hearing was held on February 26, 2001, in the Division's 6<sup>th</sup> Floor office at the L & C Annex in Nashville.

On October 3, 2001, the Division issued Director's Order 01-048. The permittee filed a timely appeal. On March 27, 2002, the permittee entered into an Agreed

Order which concluded that the permittee had violated T. C. A. § 69-3-108(b)(1) & (6), for unlawful discharges.

Nolichuckey Sand Company, Inc., was purchased by Vulcan Materials Company on August 7, 2002. The dredge has not been operated during the tenure of Vulcan Materials Company.

## **IX. STORMWATER DISCHARGES ASSOCIATED WITH ACCESS ROADS AND HAUL ROADS**

### Background

In 1987, Congress enacted the *Water Quality Control Act*. This legislation amended the *Clean Water Act (CWA)* by including, among other provisions, controls for point source discharges composed entirely of stormwater. These amendments also directed EPA to promulgate NPDES permit application rules for “stormwater discharges associated with industrial activity.” *CWA §402 (p)(4)*. EPA regulations issued on November 16, 1990, and amended March 21, 1991, November 5, 1991, and April 2, 1992, set forth the requirements and procedures for making application for an NPDES permit to cover discharges associated with industrial activity. The regulations define stormwater as “stormwater runoff, snow melt runoff, and surface runoff and drainage.” *40 CFR 122.26*.

EPA regulations include active and inactive mining operations within the meaning of “industrial activity” subject to the stormwater application requirement. The definition of “industrial activity” also includes access roads and haul roads because “... these are areas that are likely to accumulate extraneous material from raw materials, intermediate products and finished products that are used or transported within, or to and from, the facility. These areas will also be repositories for pollutants such as oil and grease from machinery or vehicles using these areas. As such they are related to the industrial activity at facilities.” *55 Federal Register 48302, November 16, 1990*.

The NPDES permits issued to mining operations prior to 1992 authorized the discharge of treated wastewater from all point sources within the mining permit area. The permits also provided for implementation of adequate controls for precipitation events within the permitted area. However, the NPDES permits issued prior to 1992 did not specifically authorize stormwater discharges (or controls for these discharges) associated with access roads and haul roads. In accordance with EPA regulations, the Division has added a provision to the NPDES to cover monitoring and reporting requirements for stormwater discharges associated with access roads and haul roads. These requirements are as follows:

Parameter	Reporting Level	Monitoring Requirements	
		Measurement Frequency	Sample Type
Total Suspended Solids	200 mg/L	Annually	Grab
Oil & Grease	15 mg/L	Annually	Grab
pH	5.0 to 9.0 Standard Units	Annually	Grab

The permittee shall monitor at least once a year the designated stormwater outfalls (or demonstrated representative outfalls) associated with access roads and haul roads. The once per year monitoring requirement is based on 40 CFR 122 and Best Professional Judgment (BPJ) of the Division.

The sources for the parameter reporting levels for storm water discharges associated with access roads and haul roads include Sector AD of the Tennessee Storm Water Multi-Sector General Permit (TMSP), TNR050000 and Best Professional Judgment (BPJ) of the Division. The TMSP was reissued on February 6, 2002, and became effective on March 1, 2002. Sector AD establishes reporting levels for pH, Oil and Grease, and Total Suspended Solids, the pollutants of primary concern relating to mine access roads and haul roads.

**NOTE:** Limitations on Coverage of the Stormwater Provisions

*These provisions are not applicable if all stormwater discharges associated with access and haul roads are controlled and monitored at existing treatment structures and outfalls. Sufficient documentation (i.e. narrative, drainage maps, etc.) of such treatment shall be provided to the Division before this exemption is valid.*

*The stormwater provision does not apply to discharges (and associated mine drainage) from mineral mining facilities subject to the effluent limitations guidelines contained in 40 CFR 436. Discharges of stormwater that combines with mine drainage regulated under 40 CFR 436 must comply with the applicable effluent guidelines. The Division may apply the EPA guidelines to drainage from access roads and haul roads that are constructed of mine waste materials and/or where mine wastewater (if the wastewater is regulated under 40 CFR 436) is used for dust suppression. This determination shall be made on a case-by-case basis.*

**X. MONITORING REQUIREMENTS FOR WASTEWATER DISCHARGES**

EPA regulations require that monitoring and sampling frequencies be sufficient to yield data that are representative of the monitored activity including, if appropriate, continuous monitoring. See 40 CFR 122.48. A measurement schedule of twice per month for Total Suspended Solids, Settleable Solids, Flow, and pH will be established for Outfall 001. A measurement schedule of twice per month for Total Suspended Solids, Settleable Solids,

and Flow will be established for the two additional monitoring points (directly upstream of the dredge, and at the point of inflow to the treatment structure).

Monitoring at the two additional points shall be maintained for a period of one year from the effective date of this permit.

The nature and effect of the discharge and its impact on the receiving waters shall be the basis for any change or modification in monitoring frequency. Impacts on the receiving waters include the impairment of stream use classifications. These classifications are specified under *Rules of the Tennessee Department of Environment and Conservation Chapter 1200-4-3, Criteria for Water Uses (3) Fish and Aquatic Life*.

## **XI. STATE OF TENNESSEE ANTIDegradation POLICY**

Tennessee's Antidegradation Statement is found in *Chapter 1200-4-3-.06 of the Rules of the Department of Environment and Conservation*. The primary purpose of the antidegradation policy is to establish a greater level of protection for those waters that are identified to be of high quality. High quality waters can be identified as those at near pristine condition. Others are determined to be high quality due to specialized uses and/or unique features. Generally, there are two types of high quality waters. Outstanding National Resource Waters (ONRWs) or Tier 3 waters, are specifically designated by the Water Quality Control Board and are afforded the greatest level of protection. No new discharges or expansion of existing discharges are allowed to result in degradation of the existing water quality. Other high quality waters are identified by the Department as Tier 2 waters and are also protected against degradation. Some degradation may be allowed only if the Water Quality Control Board deems it economically and socially necessary. Other surface waters not specifically identified and/or designated as high quality are referred to as Tier 1 waters. Tennessee's Water Quality Standards must be achieved and/or maintained in these waters.

The Nolichucky River is not designated as state High Quality Waters. The area of the Nolichucky River to be dredged by this operation is on the State of Tennessee's 303(d) list. This listing is a compilation of the streams and lakes in Tennessee that are "water quality limited" or are expected to exceed water quality standards in the next two years and need additional pollution controls. This segment of the Nolichucky River is listed on the 303(d) list because of siltation deposits from agriculture, resource extraction, and from various sources originating in adjacent states.

The Division believes that this dredging operation will alleviate some of the chronic sediment problems within the Davy Crockett impoundment. Discharges from the processing plant may cause a slight plume in the reservoir. A settling basin has been proposed in order to prevent excessive siltation and coloration of the receiving stream.

Use classifications are designated in *Chapter 1200-4-4-.10 of the Rules of the Department of Environment and Conservation*. This river is also a Class I stream for canoeists that depart from Davy Crockett Birthplace State Park and Nolichucky Dam.

The Nolichucky River in Greene County meets the conditions for classification as a Tier 1 stream as described in *Chapter 1200-4-3-.06, Section (5)*.

Federal and state-listed, threatened or endangered species of aquatic life are not recorded as occurring in a one-mile radius of the Nolichucky Sand Company, Inc.'s Birds Bridge Dredge site. It is unlawful to take, harass, or destroy wildlife listed as threatened or endangered; or to knowingly destroy the habitat of such species as indicated in the *Tennessee Wildlife Resources Commission Proclamation 00-15*.

## **XII. PERMIT DURATION**

The proposed limitations meet the requirements of *Section 301(b)(2)(A), (C), (D), (E), and (F) of The Federal Clean Water Act of 1987*. This permit will be reissued for a new five (5) year term.