

pt 65

◆ **Drill Hole Plugging Requirements**

For any drill holes, ten feet or more in depth, encountering groundwater supplies, the State Engineer Office and the State Bureau of Mines and Mineral Resources must be notified and provided with information on the name of the driller, well record, location depth and method of plugging the well within 90 days from the date of discovery. If artesian water is encountered, the hole plugging must be supervised by the State Engineer or a designated representative. All dry holes must also be plugged. Guidelines for addressing dry holes are currently under development by the Division.

**OTHER AGENCY CONTACTS**

**New Mexico Environment Department**  
P.O. Box 26110  
Santa Fe, New Mexico 87502  
505/827-2850

**State Engineer Office**  
Water Rights Division  
P.O. Box 25102  
Bataan Memorial Building  
Santa Fe, New Mexico 87504-5102

## *NORTH CAROLINA*

### **RESPONSIBLE AGENCY**

**Department of Environment and Natural Resources**  
Division of Land Resources, Land Quality Section  
512 North Salisbury Street  
P.O. Box 27687  
Raleigh, North Carolina 27611-7687

**Telephone:** 919/733-4574

**Contact:** (Mr.) Tracy E. Davis, P.E.  
State Mining Specialist

### **REGULATORY AUTHORITY**

1. North Carolina Administrative Code, Title 15A, Chapter 5:  
"Mining"
2. North Carolina Administrative Code, Title 15A, Chapter 4:  
"Sedimentation Control"
3. North Carolina Administrative Code, Title 15A, Subchapter 2C.0100:  
"Well Construction Standards, Criteria and Standards to Water Supply and Certain  
Other Type Wells"
4. The Mining Act of 1971, North Carolina General Statutes Chapter 74,  
Article 7

### **PERMITTING REQUIREMENTS**

#### **◆ General Requirements**

Any company desiring to conduct exploration activities shall coordinate its activities with the Regional Engineer of the appropriate Land Quality Section (LQS) Regional Office prior to any land disturbance.

For areas of disturbance less than one acre, the site falls under the jurisdiction of the Sedimentation Pollution Control Act of 1973.

A mining permit is required for exploration if greater than one acre of land will be disturbed on a given tract of land.

Any contractor engaged in the business of drilling, boring, coring or constructing wells in any manner shall register annually with the State of North Carolina Department of Environment and Natural Resources, Division of Water Quality during the period of January 1 to January 31. Upon approval of the application, the drilling contractor will be issued a certificate of registration.

Prior to any drilling intended for the recovery of minerals or ores, or for the purpose of a monitoring well or water well, a permit must be obtained by the drilling contractor.

### ◆ **Specific Requirements**

1. Notify the Regional Engineer of the LQS Regional Office of the proposed exploration activities.
2. Apply for a Mining Permit as required with the appropriate application fee (refer to the Application Fee Schedule).

Information generally required:

- a. Name, address, and phone number;
  - b. General characteristics of activities;
  - c. Determination of affected area and bond;
  - d. Protection of natural resources;
  - e. Reclamation plan;
  - f. Notification of adjoining landowners;
  - g. Affidavit of Notification;
  - h. Maps; and
  - i. Land entry agreement.
3. Reclamation surety.
  4. Drill hole plugging.

### ◆ **Reclamation Standards**

Reclamation activities should be conducted simultaneously with exploration and mining activities, particularly those relating to the control of erosion. The plan shall provide that reclamation activities be completed within two years after completion or termination of exploration or mining of each segment of the area for which a permit is requested.

The plan shall be coordinated and approved by the LQS and meet the following minimum standards:

1. The final slopes in all excavations shall be at such an angle as to minimize the possibility of slides and be consistent with the future uses of the land.
2. Provision for safety to persons and to adjoining property must be provided in all excavations in rock.
3. Suitable drainage ditches or conduits shall be constructed or installed to avoid small pools or water that are, or are likely to become noxious, odious, or foul. Lakes, ponds, and marsh land shall be considered adequately reclaimed lands when approved by the Department.
4. The type of vegetative cover and methods of its establishment shall be specified in conformance with accepted and recommended agronomic and reforestation restoration practices established by the North Carolina Agricultural Experiment Station and Department of Environment and Natural Resources.

Within 30 days after completion or termination of exploration or mining on an area under permit or within 30 days after each anniversary of the issuance of the operating permit, and each year thereafter until reclamation is completed and approved, a report of activities completed shall be submitted on a form prescribed by the Department of Environment and Natural Resources, which shall include:

1. Project name, operator and permit number.
2. Acreage disturbed in last 12-month period.
3. Amount and type of reclamation carried out in the last 12-month period.
4. Estimated acreage to be newly disturbed in the next 12-month period.
5. Maps.

## ◆ Drill Hole Plugging Requirements

Any well which has been abandoned, either temporarily or permanently, shall be abandoned in accordance with one of the following procedures:

1. Temporary abandonment:
  - a. The well shall be sealed with a water-tight cap or seal compatible with the casing and installed so that it cannot be removed easily by hand;
  - b. The well shall be maintained whereby it is not a source of contamination; and
  - c. The well shall be protected with a casing.
  
2. Permanent Abandonment:
  - a. All casing and screen materials may be removed, if removal shall not cause contamination of the groundwater;
  - b. Entire depth of well must be sounded;
  - c. The well must be disinfected;
  - d. In the case of gravel-packed wells in which the casing has not been removed, neat-cement shall be injected into the well completely filling it from the bottom of the casing to the top;
  - e. "Bored" wells shall be completely filled with cement grout, dry clay, or material excavated during drilling of the well and then compacted in place;
  - f. Wells other than "bored" wells constructed in unconsolidated formations shall be completely filled with cement grout;
  - g. Wells constructed in consolidated rock formation or that penetrate zones of consolidated rock may be filled with cement, sand, gravel, or drill cuttings opposite the zones of consolidated rock. The top of the sand, gravel, or cutting fill shall be at least five feet below the top of the consolidated rock. The remainder of the well shall be filled with cement grout only.
  - h. Test wells less than 20 feet in depth which do not penetrate the water table shall be abandoned in such a manner as to prevent the well from being a channel allowing the vertical movement of water or a source of contamination to the ground water supply. Test wells or borings that penetrate the water table shall be abandoned by completely filling with cement grout.

Drill hole plugging shall be accomplished on any well in which casing has not been installed or from which the casing has been removed, prior to the drill contractor removing his equipment from the site.

◆ **Reclamation Surety Requirements**

An acceptable reclamation bond is required to be posted with the state before an exploration or mining permit can be issued. Bonding methods available are as follows:

1. Assignment of savings account.
2. Surety bonds.
3. Cash deposits.
4. Irrevocable letter of credit.

**OTHER AGENCY CONTACTS**

**State of North Carolina**

Department of Environment and Natural Resources  
Environmental Permit Information Center  
512 N. Salisbury Street  
Raleigh, N.C. 27611-7687  
919/733-1398

**Asheville District**

Richard Philips, P.E.  
Interchange Building  
59 Woodfin Place  
Asheville, NC 28801  
704/251-6208; 704/251-6452 FAX

Counties: Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Yancey

**Fayetteville District**

William E. Vinson, E.I.T.  
Wachovia Building  
Suite 714  
Fayetteville, NC 28301  
910/486-1541; 910/486-0707 FAX

Counties: Anson, Bladen, Cumberland, Harnett, Hoke, Montgomery, Moore, Richmond, Robeson, Sampson, Scotland

**Mooreville District**

Doug Miller, P.E.  
919 North Main Street  
Mooreville, NC 28115  
704/663-1699; 704/663-6040 FAX

Counties: Alexander, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanley, Union

**Raleigh District**

John Holley, P.E., CPESC  
3800 Barrett Drive  
P.O. Box 27687  
Raleigh, NC 27611  
919/571-4700; 919/571-4718 FAX

Counties: Chatham, Durham, Edgecombe, Franklin, Granville, Halifax, Johnston, Lee, Nash, Northampton, Orange, Person, Vance, Wake, Warren, Wilson

**Washington District**

Floyd Williams, P.G.  
1424 Carolina Avenue  
Washington, NC 27889  
919/946-6481; 919/975-3716 FAX

Counties: Beaufort, Bertie, Camden, Chowan, Crave, Currituck, Dare, Gates, Greene, Hertford, Hyde, Jones, Lenoir, Martin, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington, Wayne

**Wilmington District**

Dan Sams, P.E.  
127 Cardinal Drive, Ext.  
Wilmington, NC 28405-3845  
910/395-3900; 910/350-2004 FAX

Counties: Brunswick, Carteret, Columbus, Duplin, New Hanover, Onslow, Pender

**Winston-Salem District**

Matthew Gantt, P.E.  
585 Waughtown Street  
Winston-Salem, NC 27107  
910/771-4600; 910/771-4631 FAX

Counties: Alamance, Alleghany, Ashe, Caswell, Davidson, Davie, Forsyth, Guilford, Rockingham, Randolph, Stokes, Surry, Watauga, Wilkes, Yadkin.

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES

Land Quality Section

Bond Pursuant to "The Mining Act of 1971"  
(G.S. 74-46 through G.S. 74-68)

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_

\_\_\_\_\_ a \_\_\_\_\_ and having its principal office at \_\_\_\_\_

\_\_\_\_\_ in the State of \_\_\_\_\_, as principal, and \_\_\_\_\_

\_\_\_\_\_ a corporation organized under the laws of the State of \_\_\_\_\_ and duly authorized by the Insurance Commissioner of North Carolina to do business in North Carolina, with an office located at \_\_\_\_\_, in the City of \_\_\_\_\_, North Carolina,

as surety, are held and firmly bound unto the State of North Carolina in the sum of \_\_\_\_\_ Bond No. \_\_\_\_\_

lawful money of the United States of America, to the payment of which well and truly to be made, we bind ourselves, our heirs, administrators and successors jointly and severally, firmly by these presents.

Signed, sealed and delivered this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

THE CONDITIONS OF THIS BOND ARE SUCH, That Whereas, the said \_\_\_\_\_

\_\_\_\_\_ conducts or will conduct mining operations in North Carolina as described in the application for an operating permit which includes a Reclamation Plan as provided in G.S. 74-53 and has obtained approval of this application on the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_, from the Department of Environment, Health, and Natural Resources.

NOW THEREFORE, if the said \_\_\_\_\_

\_\_\_\_\_ shall comply with

the requirements set forth in "The Mining Act of 1971" (G.S. 74-46 through 74-68) and with the rules and regulations adopted pursuant thereto and faithfully perform all obligations under his approved Reclamation Plan then this obligation shall be null and void; otherwise to be and remain in full force and effect until released by the Department of Environment, Health, and Natural Resources in accordance with G.S. 74-56 or cancelled by the surety. Cancellation by the surety shall be effectuated only upon 60 days written notice thereof to the Department of Environment, Health, and Natural Resources and the operator as provided in G.S. 74-54.

ATTEST:

\_\_\_\_\_  
Secretary or  
Asst. Sec.

\_\_\_\_\_  
Principal

( Attach )  
( Corporate Seal )  
(here of Corporation)

By \_\_\_\_\_  
President, Vice President,  
Partners, or Owner

\_\_\_\_\_  
Surety

Countersigned at \_\_\_\_\_, North Carolina

\_\_\_\_\_  
Resident Agent of N.C.

By \_\_\_\_\_  
Agent and Attorney in Fact

IRREVOCABLE STANDBY LETTER OF CREDIT

State of North Carolina  
Department of Environment, Health,  
and Natural Resources  
Post Office Box 27687  
Raleigh, N.C. 27611

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit  
No. \_\_\_\_\_, in your favor for the account and at the request of

\_\_\_\_\_, (hereafter referred to as  
(Operator)

\_\_\_\_\_ ) of

\_\_\_\_\_, City of  
(Address)

\_\_\_\_\_, County of \_\_\_\_\_, State

of \_\_\_\_\_, for a sum not to exceed

\_\_\_\_\_ U.S. dollars (\$ \_\_\_\_\_), available  
(in words) (amount)

by your draft(s) drawn on us at sight.

For information purposes only:

(1) \_\_\_\_\_ desires to engage in mining  
(Operator)

operations in the State of North Carolina and such mining operations  
are subject to the provisions of the Mining Act of 1971, Article 7,  
Chapter 74 of the General Statutes of North Carolina (N.C.G.S.);

(2) N.C.G.S. 74-50 requires that mine operators obtain a permit  
from the North Carolina Department of Environment, Health, and Natural  
Resources (hereinafter referred to as "DEHNR" or the "Department")  
before engaging in mining operations, and N.C.G.S. 74-54 requires that  
a surety bond in favor of the State of North Carolina be maintained or  
other security be filed with the Department in connection with the  
permit;

(3) Therefore, this Letter of Credit is issued to you pursuant  
to N.C.G.S. 74-54 in lieu of the bond required to be posted by  
\_\_\_\_\_ pursuant to N.C.G.S. 74-54.  
(Operator)

(The foregoing amount is hereinafter referred to as the "Bond Amount").

This Letter of Credit is effective as of \_\_\_\_\_  
(date)

and shall expire on \_\_\_\_\_  
(date at least one (1) year later)

but such expiration date shall be automatically extended for a period  
of \_\_\_\_\_ on \_\_\_\_\_  
( at least one (1) year) (date)

and on each successive expiration date, unless, at least sixty (60)  
days before the current expiration date, we will notify you and  
\_\_\_\_\_ by certified mail that we have decided not to  
(Operator)

extend this letter of credit beyond the current expiration date. In  
the event you are so notified, any unused portion of the credit shall  
be available upon presentation of your or your designee's sight draft  
for sixty (60) days after the date of receipt of notification by both  
you and \_\_\_\_\_, as shown on the latter of the signed  
(Operator)  
receipts.

Funds under this Letter of Credit are available to you against  
your sight draft(s), referring to the number of this Letter of Credit,  
and accompanied by the following:

- (a) Your signed certificate, referring to the number of this  
Letter of Credit, and stating that:

"We have received a notice issued in accordance with  
N.C.G.S. 74-59 of forfeiture of part or all of the Bond  
Amount and the amount of our drawing does not exceed the  
amount of the forfeiture set forth in such notice";

- or -

- (b) Your signed certificate, referring to the number of this  
Letter of Credit, and stating that:

"We have received from you written notice to us stating  
that you have elected not to renew such Letter of Credit and  
the amount of our drawing does not exceed the Bond Amount,  
reduced by the amount of any previous forfeitures thereunder  
pursuant to notices received in accordance with N.C.G.S.  
74-59";

- or -

- (c) Your signed certificate, referring to the number of this  
Letter of Credit and stating that:

"We have received from you written notice to us stating that there exists an Event of Default under the Credit Agreement (as defined in such Letter of Credit) and instructing us to make a drawing under such Letter of Credit and the amount of our drawing does not exceed the Bond Amount, reduced by the amount of any previous forfeitures thereunder pursuant to notices received in accordance with N.C.G.S. 74-59".

Whenever this Letter of Credit is drawn on, under, and in compliance with the terms of this credit, we shall honor such draft upon presentation to us, and we shall pay the draft amount in accordance with you or your designee's instructions.

If any demand for payment made by you hereunder is not, in any instance, in strict conformity under the terms and conditions of this Letter of Credit, we shall give you prompt notice that the purported negotiation was not effected in accordance with the terms and conditions of this Letter of Credit, stating the reasons therefore and that we are holding any documents at your disposal or are returning the same to you, as we may elect. Upon being notified that the purported negotiation has not effected in accordance with this Letter of Credit, you may attempt to correct any such non-conforming demand for payment if, and to the extent that, you are entitled (without regard to the provisions of this sentence) and able to do so.

This Letter of Credit is non-transferable.

Except as otherwise expressly stated herein, this Letter of Credit is subject to the Uniform Customs and Practices for Documentary Credits (1983 Revision), International Chamber of Commerce Publication No. 400 (the "Uniform Customs"). This Letter of Credit shall, as to matters not governed by the Uniform Customs, be governed by and construed in accordance with the laws of the State of North Carolina, without regard to principles of conflicts of law.

We will give prompt notice to \_\_\_\_\_ (Operator)

and to you of any action filed alleging our insolvency or bankruptcy or alleging any violation of regulatory requirements which could result in suspension or revocation of our charter or if we become unable to fulfill our obligations hereunder for any reason.

Communications with respect to this Letter of Credit shall be in writing and shall be addressed to us at \_\_\_\_\_ (address)

City of \_\_\_\_\_, County of \_\_\_\_\_

State of \_\_\_\_\_, Attention: \_\_\_\_\_ (Contact Person)

This Letter of Credit sets forth in full our undertaking, and such undertaking shall not in any way be modified, amended, amplified or limited by reference to any document, instrument or agreement referred to herein (including, without limitation, the Bond) and any such reference shall not be deemed to incorporate herein by reference any document, instrument or agreement.

We hereby agree with the drawer of a draft drawn under and in compliance with the terms and conditions of this Letter of Credit that the same shall be duly honored on presentation of the drawee.

Very truly yours,

\_\_\_\_\_  
(Bank)

By: \_\_\_\_\_  
(Signature and title of authorized  
official of issuing bank)

\_\_\_\_\_  
(Date)

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, \_\_\_\_\_

Notary Public  
My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(Affix Seal)

ASSIGNMENT OF SAVINGS ACCOUNT

This Assignment, made and entered into the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_,  
by and between \_\_\_\_\_, of \_\_\_\_\_,  
(operator) address

City of \_\_\_\_\_, County of \_\_\_\_\_, State of  
North Carolina and the North Carolina Department of Environment, Health, and  
Natural Resources; and

WHEREAS, The undersigned \_\_\_\_\_ (hereinafter  
(operator)  
referred to as "Operator") is desirous of engaging in mining operations in the  
State of North Carolina and such mining operations are subject to the provisions  
of the Mining Act of 1971, Article of 1971, Chapter 74 of the General Statutes of  
North Carolina; and

WHEREAS, NCGS 74-50 requires that mine operators obtain a permit from the  
Department of Environment, Health, and Natural Resources (hereinafter referred to  
as "Department") before engaging in mining operations, and NCGS 74-54 requires  
that a surety bond in favor of the State be maintained or other security be filed  
with the Department, in connection with said permit; and

WHEREAS, Operator has a savings account in \_\_\_\_\_  
(bank name)  
at \_\_\_\_\_, City of \_\_\_\_\_,  
(address)  
County of \_\_\_\_\_, State of North Carolina, Savings Account  
No. \_\_\_\_\_; and

WHEREAS, NCGS 74-54 authorizes the Department to accept from Operator an  
assignment of a savings account in a North Carolina bank, in lieu of a surety  
bond;

NOW, THEREFORE, in consideration of the premises and the Department  
accepting an assignment of said savings account in lieu of a surety bond, the  
undersigned Operator does hereby sell, assign, transfer, set over to the  
Department of Environment, Health, and Natural Resources

\_\_\_\_\_ dollars (\$ \_\_\_\_\_) of the sums on deposit in his name  
(dollar amount written)

in \_\_\_\_\_, City of \_\_\_\_\_ County of \_\_\_\_\_  
(bank name)  
State of North Carolina, Savings Account No. \_\_\_\_\_

and further authorizes \_\_\_\_\_  
(bank name)

to pay over to the Department of Environment, Health, and Natural Resources the  
above sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_) out of the above  
money deposit in the above account in his name.

The condition of the foregoing assignment is that if the assignor Operator conducts the mining operations faithfully, honestly, and lawfully and in compliance with the requirements of the Mining Act of 1971 and applicable Rules and Regulations adopted pursuant thereto, then this assignment shall be null and void; otherwise it shall remain in full force and effect. Compliance with the requirement of the Mining Act of 1971 and applicable Rules and Regulations shall be determined by the Department.

This assignment is made and the \_\_\_\_\_ (passbook, deposit book, etc.) is to be held by the Department as collateral security for all direct or indirect liabilities of the assignor Operator to the assignee Department which may arise by reason of the Mining Act 1971, Article 7, Chapter 74 of the General Statutes of North Carolina.

This assignment shall be direct authorization to \_\_\_\_\_ (bank name) to pay said sum to Department on demand by Department.

\_\_\_\_\_  
(Signature of Operator)

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 19 \_\_\_\_\_

Notary Public  
My Commission Expires

\_\_\_\_\_  
(Affix Seal)

**ACKNOWLEDGEMENT BY BANK**

The foregoing Assignment of Savings Account is hereby acknowledged this \_\_\_\_\_

day of \_\_\_\_\_, 19 \_\_\_\_\_  
It is further acknowledged that funds in the above mentioned account shall not be disbursed except to the assignee, Department of EHNR so long as the assignment remains in effect.

This the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

by \_\_\_\_\_  
(authorized agent for bank) (Bank Seal)

\_\_\_\_\_  
(mailing address of bank)

Sworn to before me this \_\_\_\_\_

day of \_\_\_\_\_, 19 \_\_\_\_\_  
Notary Public  
My Commission Expires

\_\_\_\_\_  
(Affix Seal)

NORTH CAROLINA

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COUNTY \_\_\_\_\_

THIS INDENTURE, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_, by and between \_\_\_\_\_ and wife, \_\_\_\_\_, parties of the first part; and the State of North Carolina, party of the second part;

WITNESSETH

That whereas \_\_\_\_\_ is required by G.S. 75-65 of the laws of North Carolina to execute a bond to the State of North Carolina, Conditioned upon the faithful performance by him of those laws and requirements set out in Article 7 of Chapter 74 of the General Statutes entitled "The Mining Act of 1971", in the sum of \_\_\_\_\_, or in lieu thereof to execute a mortgage upon real estate upon the same condition and in the same amount; and whereas said \_\_\_\_\_ and wife, \_\_\_\_\_ have elected to execute this mortgage in lieu of said bond.

Now therefore, in consideration of the premises and for the purpose aforesaid, said parties of the first part have bargained and sold and by these presents do bargain, sell, and convey unto said party of the second part a certain tract or parcel of land lying and being in \_\_\_\_\_ Township, \_\_\_\_\_ County, North Carolina and more particularly described and bounded as follows:

(LEGAL DESCRIPTION)

TO HAVE AND TO HOLD said land and premises, together with all privileges and appurtenances thereunto belonging, to the said party of the second part and its assigns forever; but upon the express condition that if said \_\_\_\_\_, shall faithfully do and perform all of the requirements and duties as by law required in the above mentioned statutes, during the period of the existence of this instrument and the obligation set forth in said statutes, then these presents shall terminate and be void. This instrument shall be continuous in nature and shall remain in force until released by the Department of Environment, Health, and Natural Resources pursuant to G.S. 74-56.

But if the said \_\_\_\_\_, shall make default as to the performance of any of the duties and requirements set forth in said article during the term of this instrument and obligation, then and in that event it shall be lawful for the duty of the Department of Environment, Health, and Natural Resources on behalf of and in the name of the State of North Carolina, to sell said land at public auction for cash to the highest bidder at the Courthouse door in the County of \_\_\_\_\_, after having advertised said sale as by law required, and upon such sale to collect the purchase price and convey title to the purchaser, and from the proceeds of such sale to pay to the persons entitled thereto all sums due by the said \_\_\_\_\_, by reason of such default, including the cost of any action or other legal proceeding brought to determine such default, and the cost of such sale, and thereafter to pay the surplus, if any remain, to said parties of the first part.

IN TESTIMONY WHEREOF, said parties of the first part have hereunto set their hands and seals the day and year first above written.

\_\_\_\_\_ (Seal)

\_\_\_\_\_ (Seal)

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 19 \_\_\_\_\_

Notary Public

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_ (Affix Seal)

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES

Land Quality Section

Bond Pursuant to "The Mining Act of 1971"  
(G.S. 74-46 through G.S. 74-68)

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_

\_\_\_\_\_ a \_\_\_\_\_ and having its principal office at \_\_\_\_\_ in the State of \_\_\_\_\_, as principal, and

\_\_\_\_\_ a corporation organized under the laws of the State of \_\_\_\_\_ and duly authorized by the Insurance Commissioner of North Carolina to do business in North Carolina, with an office located at \_\_\_\_\_, in the City of \_\_\_\_\_, North Carolina, as surety, are held and firmly bound unto the State of North Carolina in the sum of \_\_\_\_\_ Bond No. \_\_\_\_\_ lawful money of the United States of America, to the payment of which will and truly be made, we bind ourselves, our heirs, administrators and successors jointly and severally, firmly by these presents.

Signed, sealed and delivered this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

THE CONDITIONS OF THIS BOND ARE SUCH, That Whereas, the said \_\_\_\_\_ conducts or will conduct mining operations in North Carolina as described in the application for an operating permit which includes a Reclamation Plan as provided in G.S. 74-53 and has obtained approval of this application on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_ from the Department of Environment, Health, and Natural Resources.

NOW THEREFORE, if the said \_\_\_\_\_

\_\_\_\_\_ shall comply with the requirements set forth in "The Mining Act of 1971" (G.S. 74-46 through 74-68) and with the rules and regulations adopted pursuant thereto and faithfully perform all obligations under his approved Reclamation Plan then this obligation shall be null and void; otherwise to be and remain in full force and effect until released by the Department of Environment, Health, and Natural Resources in accordance with G.S. 74-56 or canceled by the surety. Cancellation by the surety shall be effectuated only upon 60 days written notice thereof to the Department of Environment, Health, and Natural Resources and the operator as provided in G.S. 74-54.

ATTEST:

\_\_\_\_\_  
Secretary or  
Assistant Secretary

\_\_\_\_\_  
Principal

( Attach )  
( Corporate Seal )  
(here of Corporation)

By \_\_\_\_\_  
President, Vice President,  
Partners, or Owner

\_\_\_\_\_  
Surety

Countersigned at \_\_\_\_\_, North Carolina

\_\_\_\_\_  
Resident Agent of N.C.

By \_\_\_\_\_  
Agent and Attorney in Fact

# IRREVOCABLE STANDBY LETTER OF CREDIT

LETTER OF CREDIT NO.: \_\_\_\_\_

EFFECTIVE DATE: \_\_\_\_\_

AMOUNT: \_\_\_\_\_

**ISSUING INSTITUTION:**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip Code

\_\_\_\_\_  
County

**BENEFICIARY:**

State of North Carolina  
Department of Environment, Health and Natural Resources  
Post Office Box 27687  
Raleigh, North Carolina 27611-7687

**APPLICANT/OPERATOR:**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip Code

\_\_\_\_\_  
County

Dear Sir or Madam:

(1) The APPLICANT/OPERATOR desires to engage in mining operations within the State of North Carolina, under the provisions of the Mining Act of 1971, N. C. Gen. Stat. §74-46, et seq., and the administrative rules promulgated thereunder.

(2) N. C. Gen. Stat. §74-50 requires that operators engaged in mining shall first obtain an operating permit from the N. C. Department of Environment, Health and Natural Resources ("DEHNR") which covers the affected land and which has not terminated, been revoked, been suspended for the period in question, or otherwise become invalid. N. C. Gen. Stat. §74-54 requires that each applicant for an operating permit, or for the renewal thereof, shall file with DEHNR, and shall thereafter maintain in force, a bond in favor of the State of North Carolina in an amount as prescribed by Title 15A N.C. Administrative Code Subchapter 5B. 0003. N. C. Gen. Stat. §74-54 further provides that in lieu of the surety bond, an applicant or operator may file with DEHNR a cash deposit, negotiable securities, or an assignment of a savings account in a North Carolina bank.

(3) Thus, this IRREVOCABLE STANDBY LETTER OF CREDIT is issued to DEHNR, in lieu of the surety bond required to be filed by the APPLICANT/OPERATOR, as provided by N. C. Gen. Stat. §74-54.

(4) The undersigned hereby establishes its IRREVOCABLE STANDBY LETTER OF CREDIT in favor of DEHNR, for the account of \_\_\_\_\_ (APPLICANT/OPERATOR)

for the amount of \_\_\_\_\_ dollars and no 100's (\$ \_\_\_\_\_), available by DEHNR's draft(s) drawn on sight.

(5) This IRREVOCABLE STANDBY LETTER OF CREDIT shall expire on \_\_\_\_\_ (date at least one (1) year from effective date)

The expiration date shall be extended automatically for a period of \_\_\_\_\_ on \_\_\_\_\_ and \_\_\_\_\_ (one year or more) (expiration date) and on each successive expiration date, unless, at least sixty (60) days prior to the expiration date, the undersigned notifies DEHNR and the OPERATOR by certified mail, return receipt requested that the undersigned will not extend this letter of credit beyond the current expiration date. If the undersigned notifies DEHNR that this letter of credit will not be extended, any unused portion of the credit shall be available upon presentation of DEHNR's sight draft within sixty (60) days after DEHNR's or the OPERATOR's receipt of such notification, whichever is later.

(6) This IRREVOCABLE STANDBY LETTER OF CREDIT is non-transferable.

(7) Draft(s) shall be marked "Drawn Under \_\_\_\_\_  
\_\_\_\_\_ Credit No. \_\_\_\_\_"  
(Issuing Institution)  
and shall include the following documentation:

- (a) A signed certificate by DEHNR, referring to the effective date and Number of this IRREVOCABLE STANDBY LETTER OF CREDIT, and stating that:

"In accordance with N. C. Gen. Stat. §74-59, we have received a notice of forfeiture of part or all of the Bond Amount. The amount of our drawing does not exceed the amount of the forfeiture as set forth in such notice.";

-or-

- (b) A signed certificate by DEHNR, referring to the effective date and Number of this IRREVOCABLE STANDBY LETTER OF CREDIT, and stating that:

"We have received from \_\_\_\_\_  
(Issuing Institution)  
written notice stating (1) that this IRREVOCABLE STANDBY LETTER OF CREDIT has not been renewed; and, (2) that the amount of our drawing does not exceed the Bond Amount, less any previous forfeitures thereunder, pursuant to notices received in accordance with N.C. Gen. Stat. §74-59.";

-or-

- (c) A signed certificate by DEHNR, referring to the effective date and Number of this IRREVOCABLE STANDBY LETTER OF CREDIT, and stating that:

"We have received from \_\_\_\_\_  
(Issuing Institution)  
written notice stating (1) that there exists an Event of Default under the Credit Agreement (as defined in the IRREVOCABLE STANDBY LETTER OF CREDIT); (2) that a drawing should be made under this IRREVOCABLE STANDBY LETTER OF CREDIT; and, (3) that the amount of the drawing does not exceed the bond amount, less any previous forfeitures thereunder, pursuant to notices received in accordance with N. C. Gen. Stat. §74-59."

(8) This IRREVOCABLE STANDBY LETTER OF CREDIT is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500 and the laws of the State of North Carolina. In the event of any conflict, the laws of the State of North Carolina will control.

(9) \_\_\_\_\_ hereby agrees  
(Issuing Institution)  
with the drawers, endorsers, and bona fide holders that all drafts drawn under and in compliance with the terms of this IRREVOCABLE STANDBY LETTER OF CREDIT will be duly honored upon presentation to this bank/issuing institution.

Very truly yours,

\_\_\_\_\_  
(Issuing Institution)

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

Sworn and subscribed to before me this  
the \_\_\_\_\_ day of \_\_\_\_\_,  
199\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_  
Date

(SEAL)

# ASSIGNMENT OF SAVINGS ACCOUNT

This Assignment, made and entered into the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by and between \_\_\_\_\_ (operator) of \_\_\_\_\_, City of \_\_\_\_\_ (address) County of \_\_\_\_\_, State of North Carolina and the North Carolina Department of Environment, Health, and Natural Resources; and

WHEREAS, The undersigned \_\_\_\_\_ (operator) (hereinafter referred to as "Operator") is desirous of engaging in mining operations in the State of North Carolina and such mining operations are subject to the provisions of the Mining Act of 1971, Article 7, Chapter 74 of the General Statutes of North Carolina; and

WHEREAS, NCGS 74-50 requires that mine operators obtain a permit from the Department of Environment, Health, and Natural Resources (hereinafter referred to as "Department") before engaging in mining operations, and NCGS 74-54 requires that a surety bond in favor of the State be maintained or other security be filed with the Department, in connection with said permit; and

WHEREAS, Operator has a savings account in \_\_\_\_\_ (bank name) \_\_\_\_\_ at \_\_\_\_\_, City of \_\_\_\_\_ (address) \_\_\_\_\_ County of \_\_\_\_\_, State of \_\_\_\_\_, Savings Account No. \_\_\_\_\_; and

WHEREAS, NCGS 74-54 authorizes the Department to accept from Operator an assignment of a savings account in a North Carolina bank, in lieu of a surety bond;

NOW, THEREFORE, in consideration of the premises and the Department accepting an assignment of said savings account in lieu of a surety bond, the undersigned Operator does hereby sell, assign, transfer, set over to the Department of Environment, Health, and Natural Resources

\_\_\_\_\_ dollars (\$ \_\_\_\_\_) of the sums on (dollar amount written) deposit in his name in \_\_\_\_\_, City of \_\_\_\_\_ (bank name) \_\_\_\_\_ County of \_\_\_\_\_, State of \_\_\_\_\_, Savings Account No. \_\_\_\_\_ and further authorizes \_\_\_\_\_ (bank name) to pay over to the Department of Environment, Health, and Natural Resources the above sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_) out of the above (dollar amount written) money deposit in the above account in his name.

The condition of the foregoing assignment is that if the assignor Operator conducts the mining operations faithfully, honestly, and lawfully and in compliance with the requirements of the Mining Act of 1971 and applicable Rules and Regulations adopted pursuant thereto, then this assignment shall be null and void; otherwise it shall remain in full force and effect. Compliance with the requirement of the Mining Act of 1971 and applicable Rules and Regulations shall be determined by the Department.

This assignment is made and the \_\_\_\_\_ (passbook, deposit book, etc.) is to be held by the Department as collateral security for all direct or indirect liabilities of the assignor Operator to the assignee Department that may arise by reason of the Mining Act 1971, Article 7, Chapter 74 of the General Statutes of North Carolina.

This assignment shall be direct authorization to \_\_\_\_\_ (bank name) \_\_\_\_\_ to pay said sum to Department on demand by Department.

\_\_\_\_\_  
(Signature of Operator)  
Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 19\_\_\_\_

Notary Public  
My Commission Expires \_\_\_\_\_

\_\_\_\_\_  
(Affix Seal)

ACKNOWLEDGEMENT BY BANK

The foregoing Assignment of Savings Account is hereby acknowledged this \_\_\_\_\_

day of \_\_\_\_\_, 19\_\_\_\_.

It is further acknowledged that funds in the above mentioned account shall not be disbursed except to the assignee, Department of EHNR while the assignment remains in effect.

This the \_\_\_\_\_ day of \_\_\_\_\_,

19 \_\_\_\_ by \_\_\_\_\_  
(authorized agent for bank)

\_\_\_\_\_  
(mailing address of bank)

Sworn to before me this \_\_\_\_\_

day of \_\_\_\_\_, 19\_\_\_\_

Notary Public  
My Commission Expires \_\_\_\_\_

\_\_\_\_\_  
(Affix Seal)

## ***NORTH DAKOTA***

### **RESPONSIBLE AGENCY**

**Geologic Survey**  
600 E Boulevard  
Bismarck, North Dakota 58505

**Telephone:** 701/328-8000

**Contact:** Ed Murphy

### **REGULATORY AUTHORITY**

1. NDAC Chapter 43-02-02, Subsurface Mineral Exploration and Development, Section 01 through 50, NDCC Chapter 38/12/01-05

### **PERMITTING REQUIREMENTS**

#### **◆ General Requirements**

None

#### **◆ Specific Requirements**

1. ~~File for a state exploration permit.~~

Information required:

- a. Location description;
- b. Method of operation;
- c. Abandonment plan; and
- d. Reclamation plan.

2. ~~Fee of \$100.~~
3. ~~Reclamation bond.~~
4. Completion report within 30 days following completion of any well drilled.
5. File Notice of Intent to abandon prior to commencement of plugging operations.

◆ **Reclamation Standards**

None

◆ **Drill Hole Plugging Requirements**

North Dakota law requires all exploration drill holes be plugged in a manner which will confine permanently all subsurface mineral, oil, gas and water in the separate strata originally containing them, through the use of mud-laden fluid, cement, and plugs, used singly or in combination. Specific hole plugging procedure to be used will be determined by the State Geologist on an individual basis.

◆ **Reclamation Surety Requirements**

None

**OTHER AGENCY CONTACTS**

North Dakota  
Public Service Commission/Reclamation Div.  
State Capitol  
Bismarck, North Dakota 58505  
701/328-2400  
Director Jim Deutsch

## OREGON

### RESPONSIBLE AGENCY

**Department of Geology and Mineral Industries**  
1536 Queen Avenue SE  
Albany, OR 97321

**Telephone:** 541/967-2039 **FAX:** 541/967-2075

**Contact:** Allen Throop

### REGULATORY AUTHORITY

1. ORS Chapter 517, Regulations: Chapter 632, Division 33 Oregon Administration Rules (Division 33 Rules)
2. The Surface Mining and Reclamation Act is administered by the Department of Geology and Mineral Industries.
3. Land use permitting for some exploration activities on private land may require a conditional use permit from the county.

### PERMITTING REQUIREMENTS

#### ◆ **General Requirements**

All exploration which causes more than one acre of surface disturbance or includes drilling exploration holes is regulated by the Department of Geology and Mineral Industry.

#### ◆ **Specific Requirements**

1. A permit must be obtained prior to the initiation of any exploration program which disturbs more than one cumulative acre or drilling of an exploration hole greater than 50 feet in length.
2. With the permit application, submit a project description, reclamation plan, drill hole abandonment plan, and \$400 fee.
3. The Department will notify the applicant of deficiencies within 30 days of filing. Deficiencies are to be remedied within 60 days after receipt of the notice.

4. The completed application is to be approved or denied in writing within 30 days.
5. A site inspection may be conducted prior to approval of the application.
6. The exploration permit is valid for one year from the date issued, and is automatically renewed annually with the submission of a \$300 fee.

◆ **Reclamation Standards**

Exploration is to be conducted so as to prevent a decrease in quality or loss of quantity of an existing or potential water supply to the greatest practicable extent.

Vegetation is to be properly removed and disposed of, and topsoil salvaged. All drill cuttings must be spread to one inch or less, or buried in approved locations. Surface disturbances must be returned to approximate the original contour, and topsoil respread. Disturbed areas are to be revegetated with an acceptable species mix.

◆ **Drill Hole Plugging Requirements**

Artesian holes must be filled with neat cement slurry from the bottom of the hole to two feet of the original land surface or collar of the hole, whichever is the lowest elevation. Holes encountering ground water that does not flow to the surface are to be filled with high quality sodium bentonite, cement grout or other appropriate drill hole abandonment material.

Dry holes must be surface capped with a minimum of a five foot column of Portland cement or concrete placed on top of a nonslip hole cap. The top must be a minimum of two feet below the land surface with the remainder of the hole backfilled with native materials.

Whenever possible, surface casing is to be pulled for all holes. If the casing cannot be pulled, it must be cut off at a minimum depth compatible with local cultivation/rangeland practices.

◆ **Reclamation Surety Requirements**

Prior to disturbance, an adequate financial surety must be submitted to assure performance of requirements of the exploration permit. Bonding is determined by estimating the cost of surface reclamation and drill hole abandonment if the state were to perform the reclamation.

Blanket financial surety may be posted for two or more exploration projects. Double bonding with the BLM or Forest Service is not required.

**OTHER AGENCY CONTACTS**

**Oregon Department of Environmental Quality**  
811 S.W. Sixth Avenue  
Portland, Oregon 97204  
541/229-5395 or their regional offices

**Water Resources Department**  
158 - 12th Street N.E.  
Salem, OR 97310  
541/378-8455

## ***SOUTH CAROLINA***

### **RESPONSIBLE AGENCY**

**South Carolina Department of Health and Environmental Control**  
Bureau of Solid and Hazardous Waste Permitting  
2600 Bull Street  
Columbia, SC 29201

**Telephone:** 803/896-4263      **Fax:** 803/896-4001  
**E-Mail:** wpo{dhec4005.columb34.kennedrc}@gmo.state.sc.us

**Contact:** Craig Kennedy

### **REGULATORY AUTHORITY**

1. The South Carolina Mining Act, Title 48, Chapter 20: "Code of Laws of South Carolina"
2. The South Carolina Mining Act, Chapter 20, Article 1: "Mining Act Regulations"
3. South Carolina Well Standards and Regulations
4. 1976 Code of Laws of South Carolina, Chapter 23

### **PERMITTING REQUIREMENTS**

#### **◆ General Requirements**

An Exploration Certificate issued by the Department of Health and Environmental Control (DHEC) is required for exploration activities in an affected area of two acres or less and involving the development of open pits, trenches, open cuts, or tunneling. If notification of denial of the Exploration Certificate is not received within fifteen calendar days of tendering the application, the application is considered approved.

An Operating Permit is required for exploration involving an affected area **greater than two acres**.

Application for permits must be accompanied by a Reclamation Plan for exploration (copies attached).

An Exploration Certificate is not required for exploration activity on an area already covered by an Operating Permit; or for (1) drilling core holes; (2) drilling bore holes; or (3) conducting geophysical and geochemical sampling and analysis.

Any contractor engaged in the business of drilling, boring, coring or constructing wells in any manner shall apply for certification as a well driller in the state of South Carolina. Certification is to be renewed annually by June 30 of each year. Individuals who intend to drill only open-bore holes that are less than 70 feet in depth and that are not intended for permanent installation must obtain a temporary license which shall be valid for six months.

◆ **Specific Requirements**

1. Apply for an Exploration Certificate.

Information required:

- a. Name, address, and phone number;
- b. Mapping requirements;
- c. Information on the tract of land to be explored;
- d. Method of exploration;
- e. Estimation of acres affected by exploration; and
- f. Reclamation bond.

2. Submit Reclamation Plan for Exploration.

Information required:

- a. Name, address, and phone number;
- b. Sediment and erosion control plan;
- c. Public safety;
- d. Reclamation procedures; and
- e. Reclamation schedule.

3. Receive approval from the Department of Health and Environmental Control (DHEC) prior to the construction of any monitoring wells.

Information required:

- a. Proposed locations on a scaled map;
- b. Proposed construction detail; and
- c. Intended purpose.

4. Report all wells for mineral exploration to the State Geologist within two years after completion. An extension may be granted upon request.

5. ~~Reclamation surety.~~

6. ~~Drill hole plugging.~~

◆ **Reclamation Standards**

The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on each segment of the area for which an operating permit is requested unless a longer period specifically is permitted by the DHEC. The plan shall meet the following minimum standards:

1. The final slopes of all excavations shall be at such an angle as to minimize the possibility of slides and be consistent with the future use of the land.
2. Provision for safety to persons and to adjoining property must be provided in all excavations in rock. Safety provisions may be required for excavations in unconsolidated materials that are adjacent to residential developments, schools, churches, hospitals, and commercial and industrial buildings.
3. Suitable drainage ditches or conduits shall be constructed or installed to avoid small pools of water that are, or likely to become noxious, odious, or foul. Lakes, ponds, and marsh land shall be considered adequately reclaimed lands when approved by the DHEC.
4. The type of vegetative cover and methods of its establishment shall be specified by the South Carolina Agricultural Experiment Station of Clemson University and the South Carolina Forestry Commission.

Within 30 days following the end of the state fiscal year, and each year thereafter until reclamation is completed and approved, the operator shall file a report of activities completed during the preceding year which shall include:

1. Project name, operator and permit number.
2. Acreage disturbed in the last 12-month period.
3. Amount and type of reclamation carried out in the last 12-month period.
4. Estimated acreage to be newly disturbed in the next 12-month period.

5. Amount and type of reclamation expected to be carried out in the next 12-month period.
6. Maps.

◆ **Drill Hole Plugging Requirements**

Any well which has been abandoned, either temporarily or permanently, shall be abandoned in accordance with one of the following procedures:

1. Temporary abandonment:
  - a. The well shall be sealed with a water-tight seal compatible with the casing and installed so that it cannot be removed easily by hand; and
  - b. The well shall be maintained whereby it is not a source of contamination.
2. Permanent abandonment:
  - a. All casing and screen materials may be salvaged except where material has been cemented in place;
  - b. Wells shall be filled with sand or gravel to within twenty feet of the surface and the remainder shall be filled with cement grout only;
  - c. Abandonment procedure shall be by forced injection of grout or pouring through a tremmie pipe starting at the bottom and proceeding to the surface in one continuous operation; and
  - d. A variance in the plugging procedure may be used if approved by the Ground Water Protection Division.

◆ **Reclamation Surety Requirements**

A separate bond must be filed for each Certificate of Exploration or Operating Permit issued or a blanket bond may be filed covering all certificates or permits in the state. ~~The amount of each bond required for a Certificate of Exploration must be \$2,500.~~ The amount of each bond for Operating Permits is based upon the area of affected land to be reclaimed under the approved reclamation plan to which it pertains. A cash deposit, registered securities acceptable to the DHEC, an assignment of a savings account in a South Carolina bank, or other securities acceptable to the DHEC may be filed in lieu of the surety bond.

**OTHER AGENCY CONTACTS**

**Environmental Certification Board**  
2221 Devine Street, Suite 320  
Columbia, South Carolina 29205

**Telephone:** 803/734-9240

**Department of Health and Environmental Control**  
Ground Water Protection Division  
2600 Bull Street  
Columbia, South Carolina 29201

**Telephone:** 803/734-5365

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
BUREAU OF SOLID AND HAZARDOUS WASTE  
DIVISION OF MINING AND RECLAMATION  
2600 Bull Street,  
Columbia, SC 29201

Telephone Number (803) 734-9121

Fax Number (803) 734-9136

\*\*\*\*\* APPLICATION FOR AN EXPLORATION CERTIFICATE \*\*\*\*\*

1. Name of Company \_\_\_\_\_

Check form of business entity: Corporation \_\_\_\_\_ Partnership \_\_\_\_\_

Limited Partnership \_\_\_\_\_ Sole Proprietorship \_\_\_\_\_

2. Name of Exploration Tract \_\_\_\_\_ County \_\_\_\_\_

3. Home Office Address \_\_\_\_\_  
(Street or P.O. Box) (Telephone No.)

(City) (State) (Zip Code) (Fax. No.)

4. Local Office Address \_\_\_\_\_  
(Street or P.O. Box) (Telephone No.)

(City) (State) (Zip Code) (Fax. No.)

5. Designate to which office Official Mail is to be sent:

Home Office \_\_\_\_\_ Local Office \_\_\_\_\_

6. Name of exploration company personnel to be the contact for official  
business and correspondence: \_\_\_\_\_

7. Provide the U.S.G.S. Topographic Map name where the exploration site is  
located and give UTM coordinates for the approximate center of the  
exploration activity on this tract of land.

Topographic Map \_\_\_\_\_ Northing \_\_\_\_\_

Easting \_\_\_\_\_

Department Use

Date application Rec'd _____	Application Fee Rec'd _____
Exploration Certificate Number _____	

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V. INFORMATION ON THE TRACT OF LAND TO BE EXPLORED

1. Name of Land Owner \_\_\_\_\_
2. Land Owner Address \_\_\_\_\_  
(Street or P.O. Box)  
\_\_\_\_\_  
(City) (State) (Zip Code) (Telephone Number)
3. Tax Map Number \_\_\_\_\_ Area of Tract of Land \_\_\_\_\_
4. If leased land, provide date when lease terminates or any options that may prevent the applicant from having access to the tract of land.  
Lease termination date \_\_\_\_\_
5. Describe the present land use of the area under exploration and the general land use of neighboring property. Neighboring is defined as land adjacent to the tract of land under exploration.

3. METHOD OF EXPLORATION

Pursuant to Section 48-20-50, "A certificate of exploration issued by the department is required for exploration activities in an affected area of two acres or less and involving the development of open pits, trenches, open cuts, or tunnelling. A certificate of exploration is not required for exploration activity on an area already covered by an operation permit or for (1) drilling core holes, (2) drilling bore holes, or (3) conducting geophysical and geochemical sampling and analysis."

1. Check the method(s) of exploration to be conducted on this tract of land for which a certificate of exploration is required.  
Trenching \_\_\_\_\_ Open pit \_\_\_\_\_ Open cuts \_\_\_\_\_  
Tunneling \_\_\_\_\_
2. Number of exploration excavations and approximate spacing between excavations to be dug on this tract of land.
3. What type of equipment will be used to conduct the exploration excavation(s)?

4. Will explosives be used in the exploration activity? If yes, please explain.

### C. MAPPING REQUIREMENTS

On a map(s) of sufficient scale, please show the following information:

1. A map should show the entire tract of land as identified by the tax map number given. The property lines on this map shall be taken from the most recent plat recorded in the tax assessors office. If the explorer does not have access to the entire tract of land, then the map should delineate where the explorer does and does not have access for exploration.
2. Topographic information that adequately shows land relief and natural and manmade waterways/water bodies.
3. Location of individual exploration excavations, placement of spoil material from the excavations, sediment and erosion control structures (referenced in Reclamation Plan), access roads denoting roads existing before exploration activities and new roads constructed specifically to gain access for exploration.
4. Map(s) shall have a North arrow, locate reference point for UTM coordinates, title block with company name, name of person preparing map, date map prepared, scale and county of exploration site.

### D. ESTIMATION OF ACRES AFFECTED BY EXPLORATION

In the space below, sketch a typical exploration excavation proposed for this site. The sketch shall show the dimensions of the excavations and placement of spoil materials.

Estimate the total area, in acres, that will be affected during exploration. The estimate submitted shall take into account all excavations, spoil material stockpiled during excavating and the area needed for sediment and erosion control structures. Affected area estimation shall be shown in the space below and should account for each excavation and spoil pile from each excavation.

Continuation of ACREAGE ESTIMATION

E. RECLAMATION BOND

Pursuant to Section 48-20-50, "Upon approval of an application for a certificate of exploration, the department shall require a performance bond or other security in an amount, and pursuant to requirements, set forth in Section 48-20-110". Section 48-20-110 states, "The applicant may file a separate bond for each certificate of exploration or operating permit or may file a blanket bond covering all exploration activities or mining operations within the State for which he holds certificates or permits. The amount of bond required for a certificate of exploration must be two thousand, five hundred dollars."

The applicant will receive written notification that the application for the exploration certificate has been approved. The applicant may then post a performance bond with the SC Department of Health and Environmental Control with one of the following: surety bond, cash deposit, registered securities acceptable to the department, an assignment of a savings account in a South Carolina bank, or other securities acceptable to the department on an assignment form prescribed by the department.

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7. PROPRIETARY INFORMATION

Pursuant to Section 48-20-50, "The department shall treat the application for a certificate of exploration and the certificate, if any, and any materials submitted with the application, as confidential trade secrets and proprietary business information of the applicant. The application and the certificate, if any, and any material submitted with the application is exempt from the Freedom of Information Act and is not part of the public record."

1. The information in this application and issued certificate of exploration will be treated as proprietary information by the SC Department of Health and Environmental Control. In the space below, the applicant is directed to provide names of people and/or necessary identification for persons to present to the SCDHEC upon requesting to view the explorer's confidential files.

The explorer acknowledges that Section 48-20-130, Code of Laws of South Carolina, 1976 provides in part:

"Upon receipt of the operator's annual report or report of completion of reclamation and at any other reasonable time the department may elect, the department shall inspect the permit area to determine if the operator has complied with the reclamation plan, the requirement of this chapter, regulations promulgated by its authority, and the terms and conditions of this permit. Accredited representatives of the department at all reasonable times may enter upon the land subject to the certificate of exploration or operating permit for the purpose of making the inspection."

\_\_\_\_\_  
Signature of Explorer or His Authorized Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

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SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL  
BUREAU OF SOLID AND HAZARDOUS WASTE  
DIVISION OF MINING AND RECLAMATION  
2600 Bull Street  
Columbia, SC 29201  
Telephone Number (803) 734-9121  
Fax Number (803) 734-9136

\*\*\*\*\* RECLAMATION PLAN FOR EXPLORATION \*\*\*\*\*

1. Name of Company \_\_\_\_\_
2. Name of Exploration Tract \_\_\_\_\_ County \_\_\_\_\_
3. Home Office Address \_\_\_\_\_  
(Street or P.O. Box) (Telephone No.)  
\_\_\_\_\_  
(City) (State) (Zip Code) (Fax. No.)
4. Local Office Address \_\_\_\_\_  
(Street or P.O. Box) (Telephone No.)  
\_\_\_\_\_  
(City) (State) (Zip Code) (Fax. No.)
5. Designate to which office Official Mail is to be sent:  
Home Office \_\_\_\_\_ Local Office \_\_\_\_\_
6. Name of exploration company personnel to be the contact for official  
business and correspondence: \_\_\_\_\_
7. Provide the U.S.G.S. Topographic Map name where the exploration site is  
located and give UTM coordinates for the approximate center of the  
exploration activity on this tract of land.  
Topographic Map \_\_\_\_\_ Northing \_\_\_\_\_  
Easting \_\_\_\_\_

Department Use

Date application Rec'd _____	Application Fee Rec'd _____
Exploration Certificate Number _____	

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## SEDIMENT AND EROSION CONTROL

1. Length of time exploration excavations will remain open before backfilling and reclamation begins?
2. Will water be allowed to accumulate in the excavation(s) or will excavations be dug to gravity drain and released from exploration site(s)?
3. Describe in detail how storm water runoff from exploration sites will be controlled so as to prevent sediment from leaving the exploration sites. If a sediment basin is planned, provide design information on sediment basin and show location on site map.
4. Describe in detail how sediment will be controlled from new constructed access roads to active exploration sites.

## PUBLIC SAFETY

5. Distance from the nearest exploration site on the tract of land being explored to the nearest public or private road and dwelling, commercial building or other building not part of the tract of land being explored.
6. State plans to prevent the exploration site(s) from being a safety hazard to public or to persons with access to the tract of land being explored but may not be familiar with exploration activities.

## RECLAMATION

7. When backfilling exploration excavation(s), how will explorer compact or place spoil material so as to prevent undue settling of backfilled spoil resulting in a hazardous depression.

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8. Will all exploration excavations be backfilled to original ground surface? If not, please explain why?

9. Describe how spoil material not backfilled into the excavation(s) will be reclaimed.

10. If basins or traps are used for sediment control, describe how such structures will be reclaimed.

11. In exploration sites that are not backfilled, the final allowable maximum surface gradient for excavations or spoil in soil, sand, or other unconsolidated or unstable saprolitic materials is a 3H:1V (18 degrees) slope. How will the surface of these exploration sites be restored?

12. State the final vertical height (measuring from toe of slope to original ground surface) of excavations not completely backfilled to original ground surface.

13. Describe the plan for revegetation or other surface treatment of affected area(s). This plan should include type of vegetation to be used, mulching materials and fertilizer.

14. State what materials, equipment, and/or other constructed manmade items, the explorer may plan to leave on site after final reclamation is completed. State reasons why such items will remain a part of the final reclamation of the exploration site.



YOU ARE NOTIFIED THAT:

1) The explorer must file an application to modify the reclamation plan in the event actual reclamation varies from that set forth hereinabove, and

YOU ARE FURTHER NOTIFIED THAT:

2) Section 48-20-130 states, "If at any time the department finds that reclamation of the permit area is not proceeding in accordance with the reclamation plan and that the operator (explorer) has failed within thirty days, or any extension of that date after receiving a notice of uncorrected deficiencies to commence corrective action, or if the department finds that reclamation has not been completed properly in conformance with the reclamation plan within two years, or longer if authorized by the department, after termination of the mining (exploring) on any segment of the permit area, the operator shall show cause why it has not complied, and, upon just cause given, an extension of time to comply must be granted. If just cause is not demonstrated, the department shall initiate forfeiture proceedings against the bonds or other security filed by the operator (explorer) under Section 48-20-170. The failure constitutes grounds for suspension or revocation of the operator's permit (explorer's certificate) as provided in Section 48-20-160.

\_\_\_\_\_  
Signature of Explorer or Authorized Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

FOR OFFICE USE

CERTIFICATE NO. \_\_\_\_\_

PLAN APPROVED \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

CERTIFICATE ISSUED \_\_\_\_\_  
DATE \_\_\_\_\_

## **SOUTH DAKOTA**

### **RESPONSIBLE AGENCY**

**Department of Environment and Natural Resources**  
Minerals and Mining Program  
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501-3181

**Telephone:** 605/773-4201

**Web page:** <http://www.state.sd.us/denr/DES/mining/mineprog.htm>

**Contact:** Robert Townsend, Program Administrator

### **REGULATORY AUTHORITY**

1. South Dakota Mineral Exploration Act, Chapter 6C of Title 45
2. Administrative Rules of South Dakota, Article 11 of Title 74

### **PERMITTING REQUIREMENTS**

#### **◆ General Requirements**

Any person desiring to conduct an exploration operation (on public or private lands) shall file with the Department of Environment and Natural Resources a **Notice of Intent to Conduct an Exploration Program**, on a form approved by the Board of Minerals and Environment (copy attached). Each Notice of Intent is limited to sixteen contiguous townships. The Notice includes a Notice form, plan of reclamation, map, fee, and reclamation surety.

Exploration is defined as the act of searching for or investigating a mineral deposit, including, but not limited to, sinking shafts, tunneling, drilling test holes, digging pits or cuts or other works for the purpose of extracting samples, including bulk samples, prior to commencement of development or extraction operations, and test facilities to prove the commercial grade of a mineralized deposit. The term does not include those activities which cause very little or no surface disturbance, such as airborne surveys and photographs, use of instruments or devices which are hand carried or otherwise transported over the surface to make magnetic, radioactive or other tests and measurements, boundary or claim surveying, location work, annual assessment work required to maintain the validity of a mineral claim or any other work which causes no greater land disturbance than is caused by ordinary lawful use of the land by persons not exploring for mineral deposits.

Information provided to state agencies in the Notice of Intent to Conduct Mineral Exploration shall be public information, except that the tentative test hole locations and the location of completed test holes are confidential for two years after the completion of the exploration operation.

The Notice of Intent is approved for the life of the exploration operation.

◆ **Specific Requirements**

1. **File Notice of Intent to Conduct Mineral Exploration.**

Information required:

- a. Name of operator conducting exploration;
- b. Operator's address and principal place of business;
- c. Name and address of resident agent for service of process;
- d. Description of the mineral exploration operation;
- e. Legal description of the land to be explored; and
- f. Date of anticipated operation commencement.

2. **Plan of Reclamation.**

Information required:

- a. Description of type of reclamation;
- b. Proposed timetable for reclamation;
- c. Description of how reclamation will rehabilitate affected lands;
- d. Description of hole plugging and capping procedures; and
- e. Estimated cost of implementing and completing proposed reclamation.

3. **Map of exploration area.**

4. **Notice to Department of Game, Fish and Parks.**

5. **Notice to State Archaeologist.**

6. **Proof of consultation with surface owner.**

7. **Notice of filing of Notice of Intent published in a newspaper of general circulation (by the Department of Environment and Natural Resources).**

8. **Filing fee of \$250.**

9. **Reclamation Surety.**

10. ~~Annual report of~~ activities conducted under Notice of Intent for each Notice of Intent held by an operator.

The annual report shall be submitted to the Department by January 1 of each year. An operator holding more than one Notice may submit a single annual report describing activities conducted under all Notices. The annual report includes the following information:

- a. The total number of drill holes, trenches, bulk sampling sites or shot holes allowed by the notice;
- b. The total number of drill holes, trenches, bulk sampling sites or shot holes completed during the previous year under the notice;
- c. The total amount of surface disturbance created as the result of conducting exploration activities under the notice;
- d. The total number of drill or shot holes plugged and reclaimed during the previous year including the method used to plug each hole;
- e. The total amount of surface disturbance reclaimed during the previous year;
- f. The total amount of surface disturbance remaining to be reclaimed;
- g. The total number of drill or shot holes remaining to be plugged and reclaimed; and
- h. A description of the coming year's activities to be conducted under the notice.

The annual report shall be accompanied by a map to clearly depict the information required in the annual report if exploration was conducted during the previous year.

#### ◆ Reclamation Standards

1. Drill sites and other affected land shall be restored as nearly as possible to the original condition including, but not limited to, backfilling of mud pits, scattering drill cuttings, and reseeding of drill sites and access trails.
2. Trash removed from the site.
3. Drill sites shall be reseeded with a seed mix approved by the local Conservation District.

#### ◆ Drill Hole Plugging Requirements

The operator shall cap, seal, and plug each test hole sunk for exploratory purposes on all public and private lands within the state immediately following the drilling and probing. An operator may apply in writing to the Board of Minerals and Environment to temporarily keep the test hole open.

Drill hole abandonment shall be as follows:

1. Minimum acceptable plugging method. The minimum acceptable mineral well plugging method shall be the return of the excess drill cuttings to the drill hole to a point not less than eight feet below the ground surface. A nonslip plug shall be placed at a point not less than eight feet below the ground surface, and a five-foot column of low-shrink, sulfate-resistant Portland cement grout shall be placed above the plug. The water-to-cement ratio for mixing the grout shall not exceed nine gallons of water per ninety-four-pound bag of cement, and a minimum of six pounds of drilling-grade bentonite per ninety-four-pound bag of cement shall be added to the grout mixture. Topsoil or material representative of the undisturbed surface material shall be tamped into the upper three feet of the drill hole.
2. Plugging and sealing confined aquifer. All confined aquifers shall be plugged with high quality sodium bentonite gel having a Marsh Funnel viscosity of at least twenty seconds greater than that of the returned completion drilling fluid. The use of inert, non-degenerative weighing materials to overcome formation pressures is allowable. The upper eight feet of the hole shall be plugged in accordance with the specifications set forth above. Alternate plugging methods shall be approved by the Department.
3. Plugging in unconsolidated granular material. Any drill hole that intersects water-bearing unconsolidated granular material above the bedrock shall be plugged in the following manner: a column of drilling-grade sodium bentonite slurry having a minimum density of fifteen pounds per gallon shall be placed from the bottom of the hole to a point not less than five feet below the bedrock surface and a column of Portland cement grout having a density of not more than fourteen pounds per gallon shall be placed between the bentonite slurry and three feet below the ground surface. The dry constituents of the grout mixture shall be in the proportions of six pounds of drilling-grade bentonite per ninety-four-pound sack of sulfate-resistant cement, and the water-to-cement ratio shall not exceed nine gallons of water per ninety-four-pound sack of cement. Upon initial settling of the cement grout, the remainder of the drill hole shall be plugged with topsoil or a suitable substitute. Any drill hole that intersects non-water bearing unconsolidated granular material above the bedrock surface shall be plugged in the following manner: the hole shall be plugged by returning all excess drill cuttings to the hole to a point not less than thirteen feet below the ground surface. The remainder of the hole shall be plugged with Portland cement grout together with topsoil or other suitable material in a manner consistent with the specifications set forth above. If drill cuttings are not available in quantities sufficient to fill the hole to within thirteen feet of the ground surface, that portion of the hole remaining to be filled may be plugged with either Portland cement or free-flowing mineral aggregate.
4. Flowing artesian wells. All flowing artesian wells shall be plugged with high sulfate-resistant cement grout from the bottom of the hole to within three feet of the surface or by other permanent means which may be required to seal the well. Any alternate