

**NORTH STAR MINERALS, INC.  
ACTON CLAY QUARRIES  
MONITORING AND REPORTING PROGRAM CI-8516**

**ORDER NO. R4-2002-0189**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. CI-8516  
FOR**

**NORTH STAR MINERALS, INC.  
(ACTON CLAY QUARRIES)  
ORDER NO. R4-2002-0189  
(FILE NO. 99-176)**

The following shall constitute the monitoring and reporting program for the Acton Clay Quarry Mines (hereafter WMU):

**I. GENERAL FACILITY MONITORING**

The discharger shall record the following on a monthly basis and report to the Regional Board semi-annually:

- A. Cumulative precipitation and reporting of significant (one inch or greater) precipitation in a 24-hour period.
- B. Quantity, in tons and cubic yards, of mill grade ore mined and transported.
- C. A diagram indicating the area of each Waste Management Unit (WMU) that is being mined shall be submitted semi-annually.

**II. SOLID WASTE CLASSIFICATION MONITORING**

Representative composite samples of ore and waste rock shall be tested semi-annually for the constituents described below:

- A. The pH of ore and waste rock shall be determined from a paste prepared according to Sobek, et al., (1978), "Field and Laboratory Methods Applicable to Overburden and Minesoils", EPA 600/2-78-054, or a procedure approved by the Executive Officer.

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- B. The acid-producing potential (APP) of ore and waste rock shall be determined, and expressed as metric tons of calcium carbonate equivalents per thousand metric tons of waste, by multiplying the total sulfur content in weight percent by 31.25. The total sulfur content of such materials must be determined using a method that is capable of quantifying the sulfur content within one percent by weight of the true value. The Regional Board's Executive Officer (Executive Officer) may approve the use of the sulfide-sulfur content of a given waste, in lieu of the total sulfur content, if the Discharger can demonstrate that the sulfide-sulfur method of analysis is capable of quantifying the sulfide-sulfur content within five percent of the true value.
- C. The following additional tests shall be performed on ore and waste rock samples that exhibit a paste pH of less than 5.0, or contain greater than 0.3 percent sulfide-sulfur:
1. The acid neutralizing potential (ANP) of ore and waste rock shall be determined by the method of Sobek, et al., (1978), "Field and Laboratory Methods Applicable to Overburden and Minesoils", EPA 600/2-78/054, or a procedure approved by the Executive Officer.
  2. The net neutralizing potential (NNP) shall be determined, which is the difference between the ANP and the APP.
- D. The following additional tests shall be performed on ore and waste rock that exhibit either a total sulfur content over 1.0 percent or an ANP that is less than three times the APP:
1. humidity cell tests;
  2. metals, total dissolved solids, and electrical conductivity shall be determined by the California Waste Extraction Test (WET) listed in title 22, California Code of Regulations, section 64823. Metals shall include arsenic, cadmium, total chromium, chromium VI, copper, lead, mercury, nickel, and zinc. All metals, with the exception of arsenic, chromium VI, and mercury, may be analyzed using Inductively Coupled Argon Plasma Atomic Emission Spectroscopy (ICAP).

**III. REPORTING**

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A. All monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit. The reporting period and the compliance file number (CI-XXXX) must be clearly displayed on the file page to facilitate routing to the appropriate staff and file.

B. Monitoring reports shall be submitted by the dates for the following schedule:

<u>Reporting Period</u>	<u>Report Date</u>
January – June	August 15
July – December	February 15

C. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved the by the Executive Officer. Laboratory methods must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

D. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, location from where the sample was taken, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with waste discharge requirements. Each monitoring report shall include a finding as to the status of compliance with waste discharge requirements.

E. Monitoring reports shall be submitted to the Regional Board, as indicated above, 45 days following the end of the monitoring period. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Board.

F. An annual report shall be submitted by February 15<sup>th</sup> of each year. The annual report shall be a comprehensive document assessing compliance with waste discharge requirements. Proposed updated background or baseline concentrations for naturally occurring detectable constituents of concern shall be included in the annual report.

G. Each report shall contain the following statement:

“I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those

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individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

\_\_\_\_\_(Signature)

\_\_\_\_\_(Title)"

Ordered By: \_\_\_\_\_

DENNIS A. DICKERSON  
Executive Officer

December 12, 2002