



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building

1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469

Phone (505) 827-2900 Fax (505) 827-2965

www.env.nm.gov



BUTCH TONGATE
Cabinet Secretary

J.C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 10, 2017

40-8903

Thomas Wohlford, Interim Closure Manager
Homestake Mining Company of California
P.O. Box 98
Grants, NM 87020

**RE: Homestake Mining Company of California (HMC), Condition 21, Discharge Permit
200 (DP-200), San Andres Well Integrity Testing**

Dear Mr. Wohlford:

On May 4, 2017, the New Mexico Environment Department, Mining Environmental Compliance Section (MECS), along with the Nuclear Regulatory Agency (NRC), the US Environmental Protection Agency (EPA), and NM Office of the State Engineer (OSE) (collectively "the Agencies") met with HMC to discuss the results of HMC's well evaluations required pursuant to Condition 21 of DP-200. Condition 21 of DP-200 requires a workplan and an implementation schedule to evaluate the integrity of all HMC wells completed within the San Andres-Glorieta aquifer (SAG). The objective of this study was to determine if cross-contamination from overlying aquifers into the SAG is occurring through any existing HMC wells completed within the SAG.

During the meeting on May 4, 2017, HMC proposed that Well 943 be plugged and abandoned due to well casing integrity concerns, likely resulting in increasing concentrations of contaminants, including uranium and selenium within the SAG. Presently, ground water quality standards are exceeded in Well 943 under Section 20.6.2.3103.A NMAC for selenium and uranium and standards under Section 20.6.2.3103.B NMAC for sulfate and total dissolved solids.

The Agencies are concerned about potential contamination migrating from upper aquifers into the SAG. The Agencies believe that a new well is required in the vicinity of Well 943 that would serve as a sentinel upgradient monitoring well in the SAG.

NM5501
NM55

Marked as original
by PM
JAW

Prior to initiation of plugging and abandonment of Well 943, MECS requests that the following actions be performed by HMC to evaluate the source and extent of the contamination.

1. The Agencies request that HMC cease use of Well 943 as a water source, effective immediately.
2. HMC shall install a monitoring well in the immediate area of Well 943 and into the SAG to properly evaluate ground water quality. Within 30 days from the date of this letter, a 'Work Plan' shall be submitted, for approval, to NMED and OSE concurrently describing the well location, well construction, and the drilling method and materials to be used. Monitoring well construction shall be performed in accordance with NMED, March 2011, "Monitoring well construction and abandonment guidelines (rev. 1.1)" (attached) and the regulations in 19.27.4 NMAC that have been issued by the New Mexico Office of the State Engineer, unless an alternative method is approved. In addition, the Work Plan shall include a proposal for water quality sampling, including collection of water quality samples immediately following well development and stabilization.

A report documenting well details, including volumes of materials used, composition of materials, drilling method, and aquifers (alluvial and/or Chinle) encountered, shall be submitted to NMED within 30 days of well completion. [20.6.2.3107 NMAC]

3. Upon completion of the monitoring well installation and sampling as required in Condition 2 listed above, HMC shall conduct a pump test to evaluate hydrologic connectivity between adjacent Chinle or Alluvial wells, as well as hydrologic influence with adjacent SAG wells. Within 60 days from the date of this letter, a 'Pump Test Work Plan' shall be submitted for approval to NMED and OSE concurrently describing the methods and materials to be used for the pump test.
4. Within 30 days from the date of this letter, HMC shall submit an explanation of the potential source(s) and pathway(s) of contamination detected in Well 943.
5. Based on evaluation of data collected from the monitoring well pump test and initial sampling event, the Agencies will determine, in consultation with HMC when Well 943 will be plugged and abandoned.

If you have any questions, please contact Bill Pearson at (505) 827-0602 or by e-mail at william.pearson@state.nm.us

Sincerely,



Kurt Vollbrecht, Program Manager
Mining Environmental Compliance Section
Ground Water Quality Bureau

Enclosure: "NMED-GWQB Monitoring well construction and abandonment guidelines (rev. 1.1)"

E-Mailed Copies:

Sairam Appaji, EPA, Region 6 (appaji.sairam@epa.gov)
Bernadette Tsosie, DOE (Bernadette.Tsosie@lm.doe.gov)
Matthew Meyer, NRC (matthew.meyer@nrc.gov)
Mark Purcell, EPA, Region 6 (purcell.mark@epa.gov)
Chris Burrus, NM OSE (Christopher.Burrus@state.nm.us)
Jeff Peterson, NM OSE (JeffL.Peterson@state.nm.us)
Bill Pearson, NMED, (william.pearson@state.nm.us)
Kurt Vollbrecht, NMED, (kurt.vollbrecht@state.nm.us)