



Barrick Gold of North America, Inc.  
136 East South Temple, Suite 1800  
Salt Lake City, Utah 84111  
Telephone: (801) 990-3900  
Fax: (801) 359-0875

March 28, 2011

John Jaros, Civil Investigator  
United States Environmental Protection Agency (SFD-9-4)  
Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

RE: *Request for Information Pursuant to Section 104(e) of CERCLA for the  
McDermitt Mercury Mine, Humboldt County, Nevada*

Dear Mr. Jaros:

This letter responds to James C. Hanson's letter, dated January 28, 2011, requesting information (the "Request") from "Rocky Chase, Manager, Closure Properties, c/o Barrick Gold of North America Inc." regarding the McDermitt Mercury Mine, Humboldt County, Nevada (the "Site"). As previously agreed by Joshua Wirtschafter from USEPA Region 9 Office of Regional Counsel, this response is on behalf of Barrick Gold U.S., Inc., formerly Placer Dome U.S., Inc. (hereafter "Respondent"). Neither Mr. Chase nor Barrick Gold of North America Inc. will be providing a separate response.

As also previously agreed by Mr. Wirtschafter, Respondent has limited the scope of documents produced in response to the Request. Respondent understands that USEPA may request additional documents after review of this response. We appreciate this accommodation by USEPA as well as the extension of time granted.

#### GENERAL OBJECTIONS

As a preliminary matter, Respondent makes the following General Objections without regard to whether Respondent otherwise provides a response, whether partial or complete, to any particular question provided in the Request:

1. Respondent objects to the Information Request to the extent it is directed to Mr. Chase or Barrick Gold of North America Inc., rather than Respondent.
2. Respondent objects to the Request on the grounds that it is vague, overbroad, unduly burdensome, and prohibitively time consuming.

3. Respondent objects to the Request, and to each paragraph therein, to the extent that the Request calls for information or documents that are protected under the attorney-client privilege, the work product doctrine, the Joint Defense Privilege, or any other available privilege. In the event that any privileged documents are inadvertently provided to USEPA as part of this response, Respondent does not waive its right to assert a privilege in the future.

4. Respondent objects to the Request, and to each paragraph therein, to the extent the Request seeks to impose on Respondent an obligation to obtain information or documents from third persons or others, which are not in Respondent's custody or control.

5. Respondent objects to the Request, and to each paragraph therein, to the extent the Request seeks information or documents that are outside the scope and purview of USEPA's authority under 42 U.S.C. § 9604(e).

6. Respondent, by responding to this Request, makes no admissions of liability with respect to the Sites, and any information provided herein is not, and should not be construed as, an admission of liability by Respondent.

Respondent may also include additional specific objections in its responses below. Such specific objections are in addition to, and should not be construed as a waiver of, any General Objection.

#### OBJECTIONS TO THE INSTRUCTIONS AND DEFINITIONS

Without waiving or limiting its General Objections, Respondent makes the following Objections to the Instructions and Definitions, and to all requests for information and for copies of documents that purport to use these Instructions and Definitions.

1. Respondent objects to Instructions Nos. 3 and 4 on the ground that 42 U.S.C. § 9604(e) imposes no obligation to research, investigate, and obtain information from persons other than current employees. The Request exceeds this limitation insofar as it requires Respondent to respond on the basis of information and documents in the possession, custody, or control of other persons.

2. Respondent objects to Definition No. 2 as vague and overly broad. For purposes of this response, Respondent's use of the term Site will include only the real property actually owned by Respondent and operated as the McDermitt Mine and will not include adjacent or nearby properties including, without limitation, the Cordero Mine.

3. Respondent objects to questions that request Respondent to provide "all relevant" documents in response to a question. Respondent does not concede that the documents requested or submitted are relevant to this action. Respondent reserves the right to challenge the competency, relevancy, materiality, and admissibility of the documents identified herein in any subsequent proceeding or in the trial of this or any other action, and to object on any grounds to the use of these responses in any subsequent proceeding or in trial of this or any other action. As agreed between Respondent and USEPA, Respondent has made a good faith effort to provide representative documents that support the statements provided herein, but has not attempted to provide "all" or "every" such document.

Without waiving or limiting its General Objections or Objections to the Instructions and Definitions, Respondent has attempted to respond to the Request as completely as possible. In

responding to the Request, Respondent has undertaken a reasonable investigation, search, and review of Respondent's files expected to contain information responsive to the Request. Respondent is providing responsive documents to the USEPA in electronic format. A DVD accompanies this Response with folders corresponding to the Attachments herein. Although Respondent has attempted to organize the documents in such a way so as to correspond to the USEPA's individual Questions, all of the documents should be considered as a whole when evaluating any specific response.

## **RESPONSE TO THE QUESTIONS**

**Question No. 1: Please provide your full name, your mailing address and telephone number where we can contact you.**

Response to Question No. 1: The person answering these questions on behalf of Respondent is Patrick S. Malone, Senior Counsel with Barrick Gold of North America, on behalf of Barrick Gold U.S, Inc. Mr. Malone's office address is 136 East South Temple, Suite 1800, Salt Lake City, Utah 84111. His office telephone number is (801) 990-3846.

In preparing these responses, Respondent has relied on information provided by the following current Barrick employees with substantive knowledge regarding the Site: Bill Upton (Environmental Director, Barrick Gold Corporation), John Porterfield (Mine Superintendent, Ruby Hill), Rocky Chase (Manager of Closure Properties, Barrick Gold of North America), and Orson Tingey (Landman, Barrick Gold of North America).

**Question No. 2: Please provide your current occupation at Barrick Gold of North America ("BGNA"), including date(s) of employment, as well as the address and telephone number of your place(s) of business. Please describe in detail all the duties and responsibilities of your present position.**

See response to Question No. 1. Mr. Malone has been employed by BGNA since July of 2010. His duties and responsibilities include providing legal advice and representation to the various companies that comprise Barrick Gold's operations in North America, including Barrick Gold U.S., Inc.

**Question No. 3: Please state whether BGNA is financially capable of paying for or reimbursing the United States for all costs incurred in the response action at the Site.**

Respondent objects to this question as overly broad and vague. Respondent is unaware what costs the United States has incurred or will incur with regard to the Site and therefore is without a basis to answer this question. However, Respondent notes that the assets of Barrick Gold U.S., Inc. include, without limitation, a 100% ownership interest in the Bald Mountain Mine, a 100% ownership in Golden Sunlight Mines, Inc., a 100% ownership interest in Barrick Cortez Inc., and a 50% ownership interest in Donlin Creek LLC.

**Question No. 4: Please describe in detail the purchase of the Placer Dome mine by BGNA and provide all relevant documents that substantiate this transaction.**

Respondent objects to this question as overly broad and vague. BGNA did not purchase the "Placer Dome mine." Respondent assumes that this question was intended as an inquiry into the circumstances by which Respondent came to own the Site property.

Respondent also objects to the request to “provide all relevant documents that substantiate this transaction.” It is not clear what documents EPA would deem relevant. As previously discussed with counsel to USEPA in this matter, Respondent is providing select documents that, to its best knowledge, accurately summarize Respondent’s history with the Site. Additional documentation can be made available upon request, if necessary.

The Site is located in the Opalite mining district, where mercury was mined throughout most of the 20<sup>th</sup> century. The first mining claims in the area were reportedly located as early as 1929. In the 1940s, The Cordero Mining Company, Inc. (a subsidiary of Sun Oil, now Sunoco, Inc.) began acquiring mineral leases in the area and developed the Cordero Mine. In 1967, Fred H. Lenway & Co., Inc. (now Trans-Global Resources Inc.) acquired Cordero’s interest. In 1972, after the Cordero mine had been closed, Sierra Mineral Management (“Sierra”) acquired Lenway’s interest. *See* Memorandum from O. Tingey to C. Wilsey, dated March 5, 2011 (Exhibit 1); Memorandum from O. Tingey to P. Malone, dated March 25, 2011 (Exhibit 1A); Letter from E. Jackson to B. Iverson, dated Feb. 12, 1997 (Exhibit 2).

In October of 1972, Sierra, as general partner of Mineral Exploration Company, Ltd., a New Jersey limited partnership (“MECL”), executed an agreement under which MECL granted American Exploration and Mining Co. (“Amex”) the right to explore the Cordero claims. *See* Agreement of October 20, 1972 (Exhibit 3).

In 1973, MECL and Amex (which changed its name to Placer Amex Inc. that same year) formed a joint venture called McDermitt Mine. Under the 1973 Joint Venture Agreement, Placer Amex owned 51% of the joint venture and MECL owned 49%. *See* Joint Venture Agreement of May 8, 1973 (Exhibit 4).

The terms of the 1973 Joint Venture Agreement were restated in a 1983 Joint Venture Agreement (the “JV Agreement”) between the successors to Placer Amex (renamed Placer U.S. Inc. in 1983) and Sterling Mineral Venture, a joint venture consisting of Sterling Venture Limited, a New Jersey limited partnership, and MECL. *See* JV Agreement (Exhibit 5). As detailed in Exhibit A to the JV Agreement, the assets of the McDermitt Mine Joint Venture included a number of patented and unpatented mining claims, as well as lease interests.

In 1979 and 1980, the JV partners patented a number of the unpatented claims. These claims, together with other previously patented claims, comprise the Site. Notably, the old Cordero mine was located on part of the Alcorta leasehold, which was not patented, although the mill site (including the calcine pile) extended onto the extreme southern portion of the patented claims. *See, e.g.*, Maps attached to Letter from A.M. Laird to C.E. McFarland, dated Oct. 16, 1975 (Exhibit 6); *see also*, Memorandum from O. Tingey to P. Malone, dated March 25, 2011 (Exhibit 1A).

In 1987, Placer U.S. Inc changed its name to Placer Dome U.S. Inc. After Barrick Gold Corporation acquired 100% of the stock of Placer Dome Inc., which owned 100% of the stock of Placer Dome U.S. Inc. in 2006, the name of Placer Dome U.S. Inc. was changed to Barrick Gold U.S., Inc. in 2007. Documentation related to Respondent’s various name changes is included as Exhibits 7A-7E.

Title to the patented claims remains with the McDermitt Mine JV, of which Respondent is a 51% owner. For convenience, Respondent has included a map depicting the patented claims superimposed over a satellite image of the site as Exhibit 8. The map has not yet been verified

on the ground by a surveyor, but Respondent believes the map to be a reasonably accurate depiction of its ownership interests in the Site.

**Question 5: Please describe in detail a concise chronological history of Placer Dome's mining operations at the site prior to purchase by BGNA. Please provide all relevant documentation.**

Respondent objects to the request to "provide all relevant documents that substantiate this transaction." It is not clear what documents USEPA would deem relevant. As previously discussed with counsel to USEPA in this matter, Respondent is providing select documents that, to Respondent's best knowledge, summarize its operations at the Site.

In addition to the information provided in response to Question 4, above, Respondent also provides the following "concise chronological history" of Respondent's operations at the Site:

- Exploration activities began in 1972.
- Construction and stripping activities began in April of 1974.
- The mine and mill complex opened in May of 1975.
- Mining operations ceased in September of 1990, with ore processing operations completed in November of 1990.
- Reclamation activities began soon after closure in 1991 and decommissioning activities were commenced in 1992.
- Nevada Division of Environmental Protection (NDEP) issued a mine operation reclamation permit, approving Respondent's proposed reclamation plan, in 1993. *See Exhibit 9.*
- NDEP issued a closure letter for the Site in December of 1994. *See Exhibit 10.*

For convenience, Respondent is providing a copy of an undated document titled "McDermitt Mine, McDermitt, Nevada Description of Operations" as Exhibit 11. Although Respondent cannot verify the source of this document, it has no reason at this time to believe that the document is anything other than an accurate description of the McDermitt Mine operations and history. Respondent has also included a brochure for the McDermitt Mine that was likely prepared in the 1980s, which provides an overview of the Mine's history and operations, including a simplified flow diagram. *See McDermitt Mine Brochure (Exhibit 12).*

In 1988, while the mine was in operation, USEPA prepared a site investigation report that includes a description of the mine operations. Notably, the 1988 report recommended no further CERCLA action for the Site. *See EPA Site Investigation Report (Exhibit 13).*

Respondent is in possession of a large number of documents that relate to these operations, including many photographs of the site. Additional documentation can be made available upon request, as necessary.

**Question 6:** EPA is in possession of the following documents related to the closure of the McDermitt Mine:

**Third party oversight and sampling activities for clean closure of the McDermitt Venture Mercury Mill in 1992, submitted by Morrison Knudsen Corp.**

**McDermitt Mine Final Closure Report, September 1993, prepared by Jeff White, Placer Dome U.S. Inc.**

**December 1, 1994, letter from Steven Schoen, Placer Dome to David Gaskin, re: Final Closure Report-McDermitt Mine.**

**Does BGNA possess additional documents relating to the closure of the McDermitt Mine? If so, please provide copies of all relevant documents.**

Respondent objects to the request to “provide copies of all relevant documents.” It is not clear what documents USEPA would deem relevant. In addition to the three documents identified in the Request, Respondent is in possession of many documents relating to the closure of the McDermitt Mine, including bid documents and correspondence with contractors, documents relating to the sale of equipment from the Site, and at internal and external audits prepared under the advice of legal counsel.

As previously discussed with counsel to USEPA in this matter, Respondent is providing select documents that, to Respondent’s best knowledge, provide accurate summaries of the closure activities associated with the Site. As necessary, additional documentation can be made available upon request.

In addition to the closure documents referred to in response to Question 6, Respondent is providing copies of the following additional documents relating to closure of the Site:

- McDermitt Mine Final Closure Plan: Proposed February 1989 (Exhibit 14);
- Health and Safety Plan for Clean Closure of the McDermitt Joint Venture Mill Building Complex at McDermitt, Nevada, dated December 1991 (Exhibit 15);
- Clean Closure McDermitt Joint Venture McDermitt Mine Sampling and Analysis Plan, dated December 1991 (Exhibit 16);
- Decontamination Plan and Waste Management Plans for Clean Closure of McDermitt Joint Venture McDermitt Mill Complex, dated December 1991 (Exhibit 17); and
- Clean Closure McDermitt Nevada Mill Complex Phase I Planning, dated December 1991 (Exhibit 18).

**Question 7:** On the Site, there is an area of red-colored materials that is currently surrounded by a chain link fence. These materials have been referred to as calcines or calcine materials. Please provide any knowledge that you or BGNA has regarding the origin of these materials. To the best of your knowledge or that of anyone associated with BGNA, are these materials related to operations conducted at Placer Dome or any other

**historical operator at the Site? Please provide all documentation to support your responses.**

To the best of its knowledge, the red-colored calcine materials are in no way related to Respondent's operations. The calcine pile was in existence prior to Respondent's operations. Respondent is enclosing copies of three pictures clearly documenting the existence of the calcine pile during the initial development of the McDermitt Mine. The dates of the pictures are: July 1973 (Exhibit 19), 1974 (Exhibit 20) and 1975 (Exhibit 21).

**Question 9 [sic]: Please provide any information you have regarding the origin and composition of the "calcine materials." Provide any documents in your possession of sampling these materials.**

To the best of Respondent's knowledge, the Cordero Mine was a whole ore roasting operation, meaning that run of mine ore was sent directly to the roaster to drive off the mercury. The "calcine materials" are believed to be the solid fraction left over from the Cordero operations after roasting. Because it was simply the material left over after ore processing, the calcine material would be expected to be quite similar to the native rock from the surrounding area. Any mercury left in the material would be expected to be present in relatively immobile compounds, since the primary purpose of roasting would be to remove as much of the mercury from the material as possible.

By contrast, as evident from the process flow charts included with Exhibits 11 and 12, Respondent's operations sent ore first through a semi-autogenous grinding (SAG) mill for crushing. The crushed ore was then sent to a flotation circuit from which the mineral portion was floated to the surface in froth, which was collected and sent through a disk filtration system. The remaining fraction left over from the flotation circuit was a relatively inert, sandy material commonly referred to as "tails," which was sent to the tailings impoundments.

The filtrate was heat processed to remove the mercury. The small quantities of material left over after processing was also referred to as a "calcine" material; however, the process flow charts indicate that these materials were sent directly to the tailings impoundments. Furthermore, the "calcine" produced by Respondent's operations was a fine-grained, clay-like material that would be easily distinguishable from the coarse, red material from the Cordero Mine operations.

In 2010, in response to USEPA's inquiries, Mr. Rocky Chase collected limited field data relating to the Cordero Mine calcine materials. A table summarizing this data is included as Exhibit 22.

Other than data previously provided by USEPA, Respondent is not aware of any other data analyzing the composition of these materials.

**Question 8: Do you or anyone associated with BGNA have any knowledge of prior movement of these "calcine" materials off the Site. Please include in your response, who moved the materials, what quantity was moved, when were the materials moved, who authorized movement of these materials, and to what location were the materials moved.**

Respondent has no specific knowledge regarding the prior movement of the calcine materials. Barrick's John Porterfield, who grew up in the McDermitt area, recalls the red calcine

material being used as road base or construction material at various times in the 1950s and 1960s, including the construction of a new wing of the McDermitt school in approximately 1962-1964.

Barrick's Bill Upton, who assisted with the McDermitt mine closure, recalls that trespassers removed calcine material from the pile, without any authorization from Respondent, while the McDermitt mine was in the process of closure in the early 1990s. Mr. Upton suspects that this material may have been used to construct a road that leads to a landfill on the Fort McDermitt Indian Reservation.

Respondent has no basis to estimate the amount of calcine material that may have been removed from the pile at any particular point in time. Respondent notes that similar calcine materials were likely produced by other historic mine operations in the area and that these materials may have also been used for construction purposes.

**Question 9: To the best of your knowledge or that of anyone else associated with BGNA, is any part of the "calcines material" that is surrounded by the chain link fence located on property owned by BGNA? If so, please describe how much of the calcines are located on BGNA property or provide a map which depicts the location of the calcines with respect to BGNA property.**

Respondent believes that approximately 2/3 of the calcine pile is located on property owned by the McDermitt Mine Joint Venture. The calcine pile is easily identifiable in the map described in response to Question 4 and enclosed as Exhibit 8.

Respondent has arranged to have the Site surveyed to determine exactly where the pile is located relative to the Site boundaries, but this survey has not yet been completed. Respondent can make a copy of the survey report available upon completion and request from USEPA.

**Question 10: Are you or anyone else associated with BGNA aware of "calcines" being transported from the Site and used as road base or fill material within the town of McDermitt, on the Fort McDermitt Paiute Shoshone Reservation, or any other areas. If so, please name the person(s) involved in transporting the "calcines" and to what specific areas the "calcines" were transported and deposited. Also, please provide your best estimate of the quantity of "calcines" deposited to each location, and the basis for this estimate.**

*See response to Question 8, above.*

**Question 11: Did Placer Dome or BGNA ever operate the Cordero Mine? If so, please provide the dates of operation, a description of the operation(s) and any documents which are relevant to operational practices.**

Respondent never operated the Cordero Mine. Respondent's only possible relationship to the Cordero Mine (other than proximity) is that for a period of time the McDermitt Mine held lease interests in some of the unpatented mining claims upon which the Cordero Mine was located; it is possible that exploration activities were conducted on some of these unpatented claims. *See also* response to Question 4, above.

**Question 12: Do you or anyone else associated with BGNA have any knowledge of past operators at the Cordero Mine? If so, please provide all contact information, name, address, and phone number (if known) and dates of operation.**

See response to Question 4 above.

**Question 13:** For each and every question contained herein, if information or documents responsive to this Information Request are not in your possession, custody, or control, then identify the persons from whom such information or documents may be obtained.

Source documents and individuals have been identified in the responses provided herein.

**Question 14:** If you have reason to believe that there may be persons able to provide a more detailed or complete response to any question contained herein, or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.

The past owners and operators of the Cordero Mine are likely the best source of information regarding the calcine pile, its origin and use. In particular, Sunoco and Trans-Global Resources are likely to be able to provide additional information.

**Question 15:** Identify the person(s) answering these questions on behalf of the Respondent.

See response to Question No. 1.

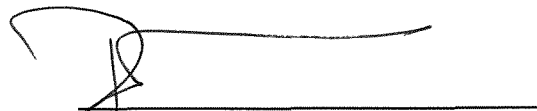
Respondent submits this Response without admitting any liability or any issue of law or fact, and without waiving its right to object to admissibility, relevancy, materiality, accuracy, genuineness, or confidentiality of the information contained herein or to the weight, if any, to be given to the information, or whether any privilege would attach to any of the information.

Respondent has responded to the questions set forth in the Request in good faith and as completely as possible, given Respondent's present knowledge and available resources. Respondent reserves the right to supplement its Response to the USEPA if additional responsive information is located.

If you have any questions regarding this information, please feel free to contact me at your convenience.

Sincerely,

**BARRICK GOLD U.S., INC.**



---

Patrick S. Malone  
Senior Counsel  
Barrick Gold of North America, Inc.

cc: J. Wirtschafter  
R. Chase

Enclosures