

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 10, 2010.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Barrick Gold U.S., Inc., Dee Arturo Project, SPK-2000-25139.

Name of water being evaluated on this JD form: Channels 1, 2, 3, 4, 5, 6a, 6b, 6, 7, 8a., 8b, 8c, 8d, 8e, 8, East and West Swales, Wetlands AR01, AR05, AR05a, AR09, AR16, AR17, and AR27, and any associated springs or seeps.

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Nevada County: Elko City: In northern Boulder Valley, approximately 23 miles South of Dunphy.

Center coordinates of site (lat/long in degree decimal format): Lat: 41.0312 N, Long: -116.4329 W

Universal Transverse Mercator: 11.

Name of nearest waterbody: Humboldt River.

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: _____.

Name of watershed or Hydrologic Unit Code (HUC): 16040105.

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form. List other JDs: _____

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: May 28, 2010.

Field Determination. Date(s): _____.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: _____.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: _____ linear feet _____ width (ft) and/or _____ acres.

Wetlands: _____ acres.

c. Limits (boundaries) of jurisdiction based on: Pick List and Pick List

Elevation of established OHWM (if known): _____.

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: The waters identified as Channels 1, 2, 3, 4, 5, 6a, 6b, 6, 7, 8a, 8b, 8c, 8d, 8e, 8, East and West Swales, Wetlands

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

AR01, AR05, AR05a, AR09, AR16, AR17, and AR27, and any associated seeps are intrastate isolated waters. Flows either terminate and infiltrate within the project area or flow to Boulder Creek. Boulder Creek loses its definition in lower Boulder Valley, 17.4 stream miles downstream from the project boundary. The last observation of jurisdictional features (scour, bed/bank, ordinary high water mark, etc) is 6.7 miles north of Rock Creek Ditch, a tributary of the Humboldt River.

SECTION III: CWA ANALYSIS

- A. TNWs AND WETLANDS ADJACENT TO TNWs: NOT APPLICABLE
- B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS: NOT APPLICABLE
- C. SIGNIFICANT NEXUS DETERMINATION: NOT APPLICABLE
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE: NOT APPLICABLE

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):⁴

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): **41,308** linear feet **2** width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: 4.22 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.

⁴ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Plates 1.1, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, Appendix A, Barrick Gold U.S., Inc., Dee Arturo Project, Jurisdictional Waters Review, Elko County, Nevada, prepared for Barrick Gold of North America, Inc., by JBR Environmental Consultants, Inc., November 12, 2009. Map 1, Wetlands Delineation for the Dee Project, prepared for SRK consulting (U.S.), Inc., by Cedar Creek Associates, Inc., September 2008, revised January 2009.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: _____.
- Corps navigable waters' study: _____.
- U.S. Geological Survey Hydrologic Atlas: _____.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: _____
- USDA Natural Resources Conservation Service Soil Survey. Citation: _____.
- National wetlands inventory map(s). Cite name: _____.
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____ (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): _____
or Other (Name & Date): Appendix B, Channel Features at Project Site Photographs 1-13, and Appendix C, Channel Features Boulder Valley Photographs 14-22, part of Jurisdictional Water Review by JBR Environmental Consultants, Inc., and Plates 1 through 16, part of Wetlands Delineation by Cedar Creek Associates, Inc.,
- Previous determination(s). File no. and date of response letter: SPK-2000-25139, November 20, 2006 and July 18, 2001.
- Applicable/supporting case law: _____.
- Applicable/supporting scientific literature: _____.
- Other information (please specify): _____.

B. ADDITIONAL COMMENTS TO SUPPORT JD: In November 2006, the Corps reviewed the Barrick Goldstrike Mine, Inc., 2006 Boulder Creek Jurisdictional Assessment, and on November 20, 2006 determined 11.5 miles of waters, identified as Boulder, Bell, Brush, and Rodeo Creeks intrastate isolated waters with no apparent interstate or foreign commerce connection. According to the Corps' 2006 evaluation, the Boulder Creek channel lost definition approximately 3 miles north of Rock Creek Ditch. In the 2001 delineation report, Boulder Creek channel lost definition between 5.2 and 7.4 miles north of Rock Creek Ditch.

In September 2008, a wetlands delineation was prepared for the project area. The waters identified as Channel 4 (0.020 acres), Channel 5 (0.202 acres), Channel 6a (0.019 acres), Channel 6b (0.010 acres), Channel 6 (0.124 acres), West Swale, Wetland AR27 (0.014 acres) and its associated seep, were determined to terminate within the project area and infiltrate into the ground. West Swale is an approximate 1800 linear foot swale with no defined channel or other jurisdictional feature. Since surface water flows terminate within the project boundaries, Channels 4, 5, 6a, 6b, and 6, West Swale, Wetland AR27 and its associated seep were determined to be isolated waters since they are approximately 28 miles from Rock Creek Ditch, the nearest potential jurisdictional waterway.

The waters identified as Channel 1 (0.147 acres), Channel 2 (0.020 acres), Channel 3 (0.002 acres), Channel 7 (0.051 acres), Channel 8a (0.272 acres), Channel 8b (0.052 acres), Channel 8c (0.036 acres), Channel 8d (0.005 acres), Channel 8e (0.010 acres), Channel 8 (0.220 acres), East Swale, Wetland AR01 (0.059 acres), Wetland AR05 (1.431 acres), Wetland AR05a (0.206 acres), Wetland AR09 (2.006 acres), Wetland AR16 (0.250 acres), Wetland AR17 (0.256 acres), and their associated seeps or springs, were determined to flow to Boulder Creek.

The gradient in Boulder Valley, between the point where Boulder Creek crosses Dunphy Road in northern Boulder Valley to the creek's mapped confluence with Rock Creek Ditch is very flat, averaging approximately 11 feet per mile or a 0.2% slope. In this flat valley setting, the Boulder Creek channel braids and meanders considerably as it flows south through the valley, greatly increasing the distance over which water must pass to reach a tributary to the Humboldt River. The USGS mapped Boulder Creek channel terminates at a diversion of Rock Creek. This diversion and a series of other diversions and ditches are used to convey water for agricultural use. The Rock Creek Ditch flows to the White House ditch, which in turn flows westward and enters the natural Rock Creek channel. Rock Creek, in turn, continues to the west and enters the Humboldt River near the Town of Battle Mountain. Several alternate paths from the Rock Creek Ditch to the Humboldt River are apparent. Diversions and ditches split flows, allowing some of it to reach the Humboldt River sooner than the remainder. Depending on the exact path and diversion route flows travel through, water in Rock Creek Ditch may be conveyed as few as 5 miles or as far as 30 miles before reaching the Humboldt River.

In the project vicinity, Boulder Creek is a cobble and boulder-bedded channel averaging approximately 8 feet in width (Photo 14). The channel widens downstream, to approximately 30 feet wide at the point the channel crosses to the western side of Boulder Valley Road. As the channel continues through the side part of the valley, the channel width decreases. A 6-foot active channel was observed and photographed approximately 14.5 stream miles downstream of the project area (Transect 1- Photo 15). A discontinuous 3-foot OHWM channel was observed and photographed approximately 16.9 miles from the project (Transect 2-Photo 16). At approximately 17.8 miles

from the project area at Transect 3, no evidence of OHWM was found. Transects 2 and 3 crossed several old, inactive, channels filled with mature sagebrush. The consultant investigated further downstream and documented no OHWM evidence at Transects 4, 5, and 6 (Photos 17-22). The consultant's report documents a 6.7-mile gap between Boulder Creek and Rock Creek Ditch. The distance from Rock Creek Ditch to the Humboldt River, the nearest potential jurisdictional tributary to Rye Patch Reservoir, a TNW, is 23-30 miles. Since Boulder Creek loses its definition 6.7 miles from Rock Creek Ditch, Wetlands AR01, AR05, AR05a, AR09, AR16, AR17, and their associated seeps or springs were determined to be isolated waters since they are approximately 28 miles from Rock Creek Ditch, the nearest potential jurisdictional waterway..

Channels 1, 2, 3, 4, 5, 6a, 6b, 6, 7, 8a., 8b, 8c, 8d, 8e, 8, East and West Swales, Wetlands AR01, AR05, AR05a, AR09, AR16, AR17, and AR27, and any associated seeps or springs have limited or intermittent surface water flow and do not support recreation, fishery, commercial, or industrial uses. No interstate commerce connections were found that would be adversely affected as a result of degradation or destruction of these waters.

Therefore, the Corps has determined that these waters are non-jurisdictional because they are intrastate isolated, non-navigable waters with no interstate commerce connection.