SECTION I: BACKGROUND INFORMATION


B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Kennecot Tailings Expansion, SPK-2009-01213-UO.
Name of water being evaluated on this JD form: Clarification Canal and Clarification Canal Wetlands; Toe Ditch and Toe Ditch Wetlands; Historic Toe Ditch Wetlands (Jones Spring Area).

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: UT  County: Salt Lake  City: Magna
Center coordinates of site (lat/long in degree decimal format): Lat: 40.7189 N, Long: 112.0874 W
Universal Transverse Mercator:
Name of nearest waterbody: Great Salt Lake.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A.
Name of watershed or Hydrologic Unit Code (HUC): 16020204.
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: SPK-2009-01213 JD1, JD2, JD3, Playa Area/Jones Spring, Adamson Spring.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
Office (Desk) Determination. Date: June 14, 2012.
Field Determination. Date(s): September 6, 2011, November 22, 2010.

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]

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 waters (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 Historic Toe Ditch Wetlands near Jones Spring, the Toe Ditch and the Clarification Canal are part of Kennecot Utah Copper’s (KUC) industrial process water system. A system of drains and channels that are pumped

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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.
uphill to the Copperton Concentrator, approximately 9 miles to the south. The industrial process water system is used
to process ore and to transport tailings, the waste product of mineral extraction, to the decant pond located on top of
the North Tailing Impoundment. From the decant pond, the water either evaporates, is pumped to the clarification
channel, returns to the toe drain, or is pumped from the decant pond to Outfall 012 which discharges to the Great Salt
Lake, the closest TNW. Although the Historic Toe Ditch Wetlands near Jones Spring, the Clarification Canal and the
Toe Ditch, along with the wetland associated with them, potentially drain to the Great Salt Lake the Toe Ditch and
Clarification Canal were constructed as part of a permitted discharge (SPK-1994-50301) to construct the North
Impoundment in 1996 or were constructed as part of the historical tailings impoundment prior to the Clean Water Act.
The wetlands associated with the Toe Ditch and Clarification Canal and historic Toe Ditch receive hydrology only
through rainfall and from the industrial process water system. These aquatic features are all at a higher elevation
(approx. 30-50 higher) than any surrounding jurisdictional waters or any natural water source. If the tailings
operation ceased, these aquatic features would lose their artificial hydrology and would revert to being uplands.
Therefore, the normal circumstances of these areas are upland and not jurisdictional waters.

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).
       [X] Other: (explain, if not covered above): These are artificial waters that would dry up and revert to uplands if industrial
           processes and pumping of water ceased.

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): _____ 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.
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.

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: Wetland Delineation by WP Natural Resources Consulting, Inc. dated July 2011 and received July 8, 2011.
- 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: ______.
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: FARNSWORTH PEAK AND MAGNA 7.5-Minute Quadrangles.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Included in 2011 Supplemental JD.
- National wetlands inventory map(s). Cite name: FWS Wetlands Mapper.
- State/Local wetland inventory map(s): ______.
- FEMA/FIRM maps: ______.
- 100-year Floodplain Elevation is: ______ (National Geodectic Vertical Datum of 1929)
- Photographs: ☒ Aerial (Name & Date): Included in 2011 Supplemental JD
  or ☒ Other (Name & Date): Included in 2011 Supplemental JD.
- Previous determination(s). File no. and date of response letter: ______.
- Applicable/supporting case law: ______.
- Applicable/supporting scientific literature: ______.
- Other information (please specify): ______.

B. ADDITIONAL COMMENTS TO SUPPORT JD: ______.
Figure 8: Water Management

- **Analysis Area**
  - Playa Analysis Area
  - Toe Ditch Road Analysis Area
  - Clarification Canal Analysis Area
  - Jones Spring Analysis Area
- **Outfall**
- **Spring**
- **Culvert**
- **Breach**
- **Headgate**
- **Well Head**
- **Stream/Ditch**
- **Industrial Process Water**

Legend:
- **Direction of Flow**
- **Jurisdictional Wetland**
- **Non-Jurisdictional Wetland**
- **Non Jurisdictional Water**
- **Waters of the US**
- **Industrial Process Water**

Great Salt Lake

Toe Ditch Area: Figure 12

Jones Spring Area: Figure 9

Clarification Canal Area: Figure 10b

Clarification Canal Area: Figure 10a
4.5.1.1 Figure 9: Jones Spring Area Wetland Features

Jones Spring Area Ditch and Non-jurisdictional wetlands. Remnants of the historic toe ditch (Total Non-wetland=0.81; Total Wetland=4.54 acres).

Jurisdictional waters covered under separate JD form.
Non-jurisdictional wetlands draining to Clarification Canal. Total = 13.8 acres

Adamson Spring, jurisdictional waters covered under separate JD form.

Clarification Canal, non-jurisdictional water Total = 40.11 acres
4.5.2.2 Figure 10b: Clarification Canal Area Wetland Features

- Toe Ditch, non-jurisdictional water. Total = 6.17 acres
- Sedimentation pond, part of Clarification Canal.
- Playa area jurisdictional waters covered under separate JD form.
- Non-jurisdictional wetlands draining to Toe Ditch. Total = 6.2 acres
- Non-jurisdictional wetlands draining to Clarification Canal. Total = 13.53 acres
- Clarification Canal, non-jurisdictional water. Total = 40.11 acres
4.5.3.1 Figure 11: Toe Ditch Road Area Wetland Features

- Playa area: jurisdictional waters covered under separate JD form.
- Toe Ditch, non-jurisdictional water. Total = 6.17 acres
- Non-jurisdictional wetlands draining to Toe Ditch. Total = 6.2 acres

Disclaimer:
This information is for general reference and may not have been updated or is not suitable for legal engineering or permitting purposes. Users from different jurisdictions may require additional consultation. The map is intended for informational purposes only and may not reflect the current legal or regulatory status of the depicted areas. Users should consult with appropriate authorities for any specific application or purpose, including but not limited to guidance on identifying or delineating wetlands or jurisdictional waters.