ADDENDUM TO THE PRELIMINARY JURISDICTIONAL DETERMINATION FOR ROSEMONT’S SANTA RITA ROAD UTILITY LINE: 38 ACRES NEAR THE HELVETIA TOWNSITE, PIMA COUNTY, ARIZONA

Prepared for: U.S. Army Corps of Engineers
Prepared by: WestLand Resources, Inc.
Date: March 13, 2012
Project No: 1049.32 806 806

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Memorandum

To: Bev Everson
CC: Chris Garrett
From: Kathy Arnold
Doc #: 022/12-15.3.2
Subject: Transmittal Various Reports
Date: March 29, 2012

Rosemont Copper is having delivered via courier, the following materials in hard copy and cd format.

Santa Rita Utility Line Reports/Addendums, three (3) hard copies of each report for the Forest Service and two (2) hard copies of each to SWCA as well as one (1) cd of all reports dated March 19, 2012:

- Addendum to the Preliminary Jurisdictional Determination for Rosemont’s Santa Rita Road Utility Line: Approximately 49.7 Acres along Corto, Country Club, and Dawson Roads, Pima County, Arizona, dated March 15, 2012 by WestLand Resources, Inc.


- Revised Addendum to the Rosemont Mine State-Protected Plant and Noxious Weed Inventory on ASLD Lands East of Sahuarita, Pima County, Arizona Report: Approximately 42.4 Acres along Corto, Country Club, and Dawson Roads, dated March 13, 2012 by WestLand Resources, Inc.

- Addendum to the Preliminary Jurisdictional Determination for Rosemont’s Santa Rita Road Utility Line: 38 Acres near the Helvetia Townsite, Pima County, Arizona, dated March 13, 2012 by WestLand Resources, Inc.


Updated biological survey information, three (3) hard copies of each report for the Forest Service and two (2) hard copies of each to SWCA as well as one (1) cd for each:


Finally Rosemont is providing one copy each of the Air Permit Application amendment as accepted by ADEQ on March 23, 2012. Disk copies are included on the back cover of each amendment.

- Amendment to: Application for a Class II Permit and Emission Inventory Information Rosemont Copper Project Southeastern Arizona, dated March 19, 2012 by JBR Environmental Consultants, Inc.
1. INTRODUCTION

On November 1, 2010 the U.S. Army Corps of Engineers (Corps) approved a preliminary jurisdictional determination (JD) of potential waters of the United States (waters) for the Rosemont Copper Company (Rosemont) alignment of the Santa Rita Road utility line alternative (SPL-2008-00816-MB), under Corps Regulatory Guidance Letter (RGL) 08-02 for Preliminary JDs. Subsequently, approximately 38 acres of additional Rosemont Holdings (Addendum Area) were added to the alignment, near a “pinch point” (a narrow connection of Rosemont Holdings between other privately owned lands) around the old Helvetia Townsite, located in portions of Sections 22 and 23, Township 18 South, Range 15 East, Gila and Salt River Base Meridian (Figures 1 and 2). WestLand Resources, Inc. (WestLand) has completed a delineation of potential waters within the Addendum Area, as documented in this report.

2. METHODS

WestLand visited the Addendum Area on September 2, 2011, to collect information and photographs to support determinations of potential waters and special aquatic sites. Analysis of the physical characteristics of the evaluated drainages is informed by the August 2008 delineation manual A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States and the December 2008 U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook and its attachments. The 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) was referenced for methodology to identify wetlands. Refer to WestLand’s preliminary jurisdictional determination report dated October 29, 2010, for a more detailed description of the methods used in determining potential waters and special aquatic sites.

3. RESULTS

WestLand delineated five potential waters of the U.S. within the Addendum Area (Appendix A). Ground photographs of are provided in Appendix B. The Addendum Area is an expansion of areas where the Corps has approved a Preliminary JD for Rosemont. The only waters identified within the Addendum Area were downstream extensions of waters previously approved by the Corps. The lengths and areas of the potential waters of the U.S. within the Addendum Area are provided in Table 1.
Table 1. Length and Area of Potential Waters of the U.S. within the Addendum Area and Original Area of the Utility Line Pinch Point Vicinity.

<table>
<thead>
<tr>
<th>Drainage ID</th>
<th>Addendum Area (Not Approved by the Corps)</th>
<th>Original Area (Approved by the Corps)</th>
<th>Total (Approved Plus Not Approved by Corps)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length (feet) of Waters</td>
<td>Acreage of Waters</td>
<td>Length (feet) of Waters</td>
</tr>
<tr>
<td>87</td>
<td>228</td>
<td>0.02</td>
<td>1,678</td>
</tr>
<tr>
<td>88</td>
<td>765</td>
<td>0.14</td>
<td>895</td>
</tr>
<tr>
<td>89</td>
<td>200</td>
<td>0.01</td>
<td>900</td>
</tr>
<tr>
<td>90</td>
<td>1,345</td>
<td>0.79</td>
<td>858</td>
</tr>
<tr>
<td>91</td>
<td>144</td>
<td>0.02</td>
<td>313</td>
</tr>
<tr>
<td>Total</td>
<td>2,682</td>
<td>0.98</td>
<td>4,644</td>
</tr>
</tbody>
</table>

4. CONCLUSION

The potential waters of the U.S. identified with the Addendum Area have not been approved by the Corps. Based on the preliminary JD approved by the Corps for Rosemont’s Santa Rita Road alignment, we do not anticipate that the Corps would alter our delineation for the Addendum Area. However, only the Corps can provide final approval of a jurisdictional determination, whether under the Preliminary JD guidance or through an approved JD.
Survey Area Located:
T18S, R15E, Portion of Sections 22 & 23,
Pima County, Arizona
Helvetia USGS 7.5’ Quadrangle

ROSEMONT PROJECT
Santa Rita Road
Utility Line Pinch Point Addendum
Preliminary Jurisdictional Determination

VICINITY MAP
Figure 1
T18S, R15E, Portion of Sections 22 & 23, Pima County, Arizona.

Photo Source: National Agriculture Imagery Program, 2010

Figure 2

ROSEMONT PROJECT
Santa Rita Road Utility Line
Pinch Point Addendum Preliminary Jurisdictional Determination
AERIAL OVERVIEW
Figure 2

Legend
- Addendum Boundary
- Original Survey Area
- Out Parcel
- Addendum Jurisdictional Waters (Not Approved by Corps)
- (Approved Preliminary JD)
APPENDIX A

PRELIMINARY JURISDICTIONAL DETERMINATION
<table>
<thead>
<tr>
<th>Data Point</th>
<th>Drainage Condition and Indicators</th>
<th>Photo ID</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3429n 3430p</td>
<td>no bed/bank no OHWM</td>
</tr>
<tr>
<td>B1</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3431u 3432b</td>
<td>Sandy/gravelly bottom Distinct bed/bank Point at property boundary</td>
</tr>
<tr>
<td>B2</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3433u 3434d</td>
<td>Sandy/gravelly bottom Point at property boundary</td>
</tr>
<tr>
<td>B3</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3435u 3436d</td>
<td>Sandy bottom - distinct bed/bank</td>
</tr>
<tr>
<td>C1</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3437u 3438d</td>
<td>Non jurisdictional &lt; 18&quot; wide</td>
</tr>
<tr>
<td>C2</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3439u 3440b</td>
<td>Small channel rocky bottom</td>
</tr>
<tr>
<td>D1</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3441u 3442b</td>
<td>Sandy bottom Distinct bed/bank</td>
</tr>
<tr>
<td>D2</td>
<td>Average side slopes: 1:1 or less, 2:1, 3:1, 4:1 or greater (Circle one)</td>
<td>3443u 3444b</td>
<td>Sandy bottom Distinct bed/bank</td>
</tr>
</tbody>
</table>

Numeric codes for OHWM indicators:
1. Clear, natural line impressed on the bank
2. Changes in soil character
3. Shifting
4. Vegetation matted down, bent, or absent
5. Leaf litter disturbed or washed away
6. Abrupt change in plant community
7. Debris
8. Destruction of terrestrial vegetation
9. Presence of high tide line (wrack line)
10. Sediment sorting (well-sorted or poorly-sorted)
11. Scour
12. Multiple observed or predicted flow events
13. Sediment deposition
14. Water Staining
15. Other (Explain)
APPENDIX B

REPRESENTATIVE PHOTOGRAPHS OF DRAINAGES
Photo A1 – Data Point A1, Upstream view of Wash 88; 7 feet wide

Photo A2 – Data Point A2, Upstream view of Wash 88; 7 feet wide

Photo A3 – Data Point A3, Upstream view of Wash 89; Not Jurisdictional at this point
Photo A4 – Data Point A4, Downstream view of Wash 91; 6 feet wide

Photo A5 – Data Point A5, Downstream view of Wash 90; 7 feet wide

Photo A6 – Data Point A6, Upstream view of Wash 90; 7 feet wide