Project Name: Rosemont Copper Project

404 Permit Type (Select one):  ____ Nationwide Permit or Regional General Permit (Number: _____)  
X    Individual Permit

Except for the signature page, an electronic (scanned copy) submittal of this application including maps/drawings may be acceptable after making arrangements with the ADEQ 401 Certifications project manager.

Signatures must be original; i.e., no copies, faxes or electronic versions.

Mailing Address For Completed Form: Arizona Department Of Environmental Quality  
Surface Water Section, 401 Certification, 5415A-1  
Attn.: Robert Scalamera  
1110 West Washington  
Phoenix, Arizona 85007

Questions or requests for an application in another format may be directed to Robert Scalamera at the above address or:  email: rs3@azdeq.gov  
Voice: (602) 771-4502

All submitted maps, drawings and other attachments must be either 8½ x 11” or 11 x 17” in size unless other arrangements have been made with the ADEQ project manager.

The sizing or spacing of the application form may be adjusted as needed to fit the required information (attach additional pages as necessary). Signatures should be on one page. Typeface should be an easily readable font (Times New Roman or Arial are preferred) and type size should be 10 point or greater (12 point is preferred). No other changes are acceptable; altered applications will be rejected.

Provide all information. Failure to do so may result in delay in processing or rejection of the application.
Project Name: Rosemont Copper Project

U.S. Army Corps of Engineers Project/File Number (if available): 2008-00816-MB

Project Site Location Information
Street Address (If available. For projects encompassing multiple addresses, either “n/a” or on-site office address acceptable.): Not applicable

City/town (indicate if near rather than within municipal boundaries): Near Greaterville, Arizona
County: Pima Site Zip code: Site telephone (if available):

Approximate Center of Project (In degrees, minutes, seconds):
Latitude: 31° 49’ 45.3"
Longitude: 110° 44’ 35.2"

Directions to project location (from nearest intersection of major streets/highways). Include maps or drawings displaying location relative to state boundaries and nearby cities, highways, waterbodies, etc.

The Property is located approximately 30 miles (mi) southeast of Tucson, west of State Route 83, and can be reached from Interstate 10. Turn south off Interstate 10 at State Route 83. Take State Route 83 south to East Hidden Springs Road. Turn right on East Hidden Springs Road to access the property. Additional information regarding nearby waterbodies is provided in the previously submitted Section 404 permit application and addendum information.

Impacted and downstream waterbody(ies) (from Water Quality Standards for Surface Waters [18 A.A.C. 11, Article 1], otherwise “unnamed” or “unnamed tributary to”). Include flow regime (ephemeral, intermittent or perennial), name of downstream waterbody(ies) and name of watershed (from 18 A.A.C. 11, Article 1).
Example: Deluge Wash (ephemeral) and several unnamed ephemeral washes, all tributary to the Big Sandy River, in the Bill Williams River Watershed:

McCleary Canyon Wash, Scholefield Canyon Wash, and Wasp Canyon Wash, all tributary to Barrel Canyon Wash (also impacted), which is tributary to Davidson Canyon in the Santa Cruz River Watershed. The majority of the onsite potential waters of the U.S. are ephemeral, flowing only in response to storm events. Springs located within McCleary Canyon will occasionally discharge for an extended period after storm events, resulting in minor surface water flow within McCleary Canyon before the spring water infiltrates back into the ground.

Area Of Disturbance (label units; e.g., acres, linear feet, square feet, square miles, etc.)
1. Provide the total jurisdictional area within the project boundaries: 101.6 acres
2. Provide the impacted jurisdictional area: 41.85 acres
3. Provide the project area: Approximately 7,000 acres

PROJECT DESCRIPTION
Project Purpose: The Applicant’s purpose and need for the project is to mine and process copper sulfide ore and oxide ore from the Rosemont ore deposit for the purpose of producing copper, as well as recovering by-product metals such as silver and molybdenum, in a manner that is sensitive to the natural environment and in compliance with applicable regulations, with an economic return
adequate to justify the development costs and risks associated with the construction of the mine site and associated facilities.

**Describe Work To Be Performed** (e.g., pad fill, utility crossings, bridges, channel modification, detention pond, etc.), including fill material to be used, armor material, structure material and revegetation / reclamation plan.

The work to be performed is described fully in the application for the Section 404 permit for the project, along with its addendum, which were provided to ADEQ previously, per ADEQ request.

**Describe the measures** to be taken in order to control the discharge of pollutants into waters of the U.S. (WUS).

These measures may be procedural or physical in nature, temporary or permanent and must be functional prior to beginning any construction activity other than the creation of the measures themselves.

Facility stormwater controls are described at length in the Section 404 permit application, submitted previously. Additional information is provided in the April 2010 Tetra Tech report entitled “Site Water Management Update”, all five volumes of which are available online at:


These volumes are referred to as “Site Water Volume [X] April 2010”. Although these reports reference the “Phased Tailings” alternative, most of the concepts are applicable to the “Barrel Only” alternative, considered in this application. A summary of stormwater controls as described in these volumes is provided here.

Except for access roads, development of the Rosemont Project will be upgradient of the Compliance Point Dam and within the watersheds comprised of Barrel, Wasp, and McCleary canyons. During early development of the project, best management practices (BMPs) will be employed to control sediment loading to downgradient receptors. Localized sediment control BMPs are anticipated to include some or all of the following:

- Temporary diversion channels and sediment traps;
- Containment berms;
- Riprap slope protection and culvert protection;
- Flow-through rock weirs; and,
- Silt fencing, straw bales, and wattles.

Project facilities such as haul roads and stormwater ponding areas will also provide localized sediment control once constructed. Once the starter embankments for the Dry Stack Tailings Facility and Waste Rock Storage Facility are constructed, they will provide sediment control for the entire area upgradient of the structures. Stormwater runoff in these areas will filter through the flow-through drains and exit in Lower Barrel Canyon, upgradient of the Compliance Point Dam. The stormwater pollution prevention plan (SWPPP) for the project will be upgraded prior to construction to include the specific BMPs that will be used for the project.
The soil salvage operation can begin in Barrel Canyon once the starter embankment for the Dry Stack Tailings Facility is constructed. Until this point, construction activities will generally be limited to the Plant Site area and to the Heap Leach Pad area. The main flow-through drain alignment along Barrel Canyon drainage will likely be used to access the other flow-through and finger drain sediments in the Barrel Canyon drainage. Once the starter embankment is constructed, the ground will be cleared and grubbed in an upgradient, or westerly, direction, generally followed by placement of the finger drains and other flow-through drains.

Flow-through and finger drain construction also provide the opportunity for localized sediment and/or stormwater control within the watershed basin upgradient of the starter embankments. Stormwater would be routed out of the system via the flow-through drains while sediments would be filtered out by the protective geotextile segregating the flow-through drains from the tailings and waste rock material.

Once the starter embankments for the Dry Stack Tailings Facility and the Waste Rock Facility are constructed, the outer surface will be reclaimed and revegetated as soon as practicable. The final design results in a reclaimed landform that minimizes direct runoff from the landform to downgradient receptors. Until the reclaimed surfaces stabilize, sediment basins may be installed between the toe of the landform and the Compliance Point Dam for local sediment control.

If, in lieu of entering the information here, a reference is made to another document; e.g., stormwater pollution prevention plan, the applicable portions of the referenced document must be included with this application.

Note:

**Waters of the U.S./WUS** refers to the stream channel between the Ordinary High Water Marks (OHWM) of that channel.

**Temporary** means not longer than the period of this certification (two to five years typically). For purposes of this certification, **native material/fill** is defined as pollutant-free soil, sand, gravel, etc. that makes up the streambed or banks in the immediate area of the permitted work.

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**Attach only the maps or drawings** (either 8½ x 11” or 11 x 17” in size) necessary to provide an overview of the project. If details are needed, the ADEQ project manager will contact the applicant or agent requesting additional material.

The following are required:

- U.S.G.S. 7.5 min. Topographic map or other contour map of project area.
- Map delineating the ordinary high water mark of jurisdictional waters affected by activity to be certified.
Project Name:

APPLICANT INFORMATION (Complete all that apply. Use “N/A” for not applicable)

Applicant Name: Kathy Arnold  Title: Vice President of Environmental and Regulatory Affairs
Company, Agency, etc: Rosemont Copper Company
Phone Number: (520) 495-3500  Email Address: karnold@rosemontcopper.com
Mailing Address: 2450 W Ruthrauff Road, #180
City: Tucson  State: AZ  Zip Code: 85705

I have reviewed the Arizona Water Quality Standards for Surface Waters (18 A.A.C. 11, Article 1) (available through www.azdeq.gov).

Application is hereby made for Arizona certification under CWA section 401 for the above-named project. I certify that I am familiar with the information contained or referenced in this application and that the information is true, accurate and complete.

Applicant’s Signature: ________________________________ Date: ________.

(delete this section if not applicable)
I hereby authorize (agent) Brian Lindenlaub to act in my behalf in the processing of this application and to furnish any supplemental information in support of this application. I understand that I am bound by the actions of my agent.

Applicant’s Signature: ________________________________ Date: ________.

Agent Name: Brian Lindenlaub  Title: Principal
Company, Agency, etc: WestLand Resources, Inc.
Phone Number: (520) 206-9585  Email Address: blindenlaub@westlandresources.com
Mailing Address: 4001 E Paradise Falls Dr
City: Tucson  State: AZ  Zip Code: 85712

Agent’s Signature: ________________________________ Date: ________.