



**Rosemont Copper Company  
Dry Stack Tailings Storage Facility  
Stormwater Management Preliminary  
Design Report**

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Submitted to:

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Project 84201191

**Appendix A**  
**Design Criteria**

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		DATE: (ORIGINAL) 4/24/2009
		REVISION: B DATE: 7/1/2009

THIS TITLE SHEET IS THE FIRST PAGE OF THE DOCUMENT AND IS A RECORD OF EACH ISSUE OR REVISION.

REV	DATE	APPROVALS			PAGES	REMARKS
		DESIGN MANAGER	PROJECT MANAGER	ORIGINATOR		
A	4/24/2009	JFL	DTW	JLW	4	Issued for Permitting
B	7/1/2009	JFL	DTW	JLW	4	Issued for Final Design

**DOCUMENT APPROVAL**

APPROVED WITHOUT COMMENTS  
 APPROVED AS NOTED  
 NOT APPROVED – RESUBMIT

Rosemont Copper / M3 Engineering \_\_\_\_\_  
 Approved by \_\_\_\_\_ Date \_\_\_\_\_

DOCUMENT ISSUED FOR:

<input type="checkbox"/> ENTIRE DOCUMENT ISSUED THIS REVISION	<input checked="" type="checkbox"/> REVIEW AND COMMENT	<input type="checkbox"/> DESIGN
<input type="checkbox"/> REVISED PAGES ONLY ISSUED THIS REVISION	<input type="checkbox"/> CLIENT APPROVAL	<input type="checkbox"/> PURCHASE
	<input type="checkbox"/> INQUIRY/BID	<input type="checkbox"/> CONSTRUCTION



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### 1.0 GENERAL

This document defines the general design basis for site water management work associated with the Rosemont Copper Project Dry Stack Tailings Storage Facility. All design work to be completed in general accordance with United States standards and commonly accepted industry standards.

#### 1.1 Site Location

The project is located approximately 30 miles southeast of Tucson, Arizona, west of State Highway 83 on the east slopes of Santa Rita Mountains within the Coronado National Forest in Pima County

Location Coordinates: 31° 50' N and 110° 45' W.

#### 1.2 Information Sources

The following source code letters refer to the origin of each criterion:

Code	Description
A	Criteria provided by Rosemont Copper Company
B	Criteria provided by AMEC E&E
C	Tetra Tech Reports June 2007
D	M3 Engineering
E	Manufacturer's standard
F	Standard engineering practice
G	Assumed data
H	BADCT Guidance Manual

#### 1.3 Codes, Standards, and Regulations

The design, as applicable, shall conform to the requirements of the latest issues of the following codes, standards, and regulations:

- ASTM American Society for Testing and Materials
- GRI Geosynthetic Research Institute
- AASHTO American Association of State Highway and Transportation Officials
- ADWR State of Arizona, Department of Water Resources
- WRCC Western Regional Climate Center
  
- ADEQ State of Arizona, Department of Environmental Quality

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- BADCT (Best Available Demonstrated Control Technology Standard)

### 2.0 DIVERSION CHANNELS AND CULVERTS

DESCRIPTION	VALUE	COMMENT	SOURCE
<b><i>DIVERSION CHANNELS AND CULVERTS</i></b>			
Storm event for depth sizing	Local Storm PMP		A
Erosion Protection	100-year/24-hour		A
Channel Foundation	Bedrock	Channels to be excavated into the bedrock where possible.	A, B
<b>Culverts</b>			
Storm event for size requirement	½ the flow produced by Local Storm PMP		A
Diameter requirement	As required by flow	Use multiple culverts if necessary.	A
Material type	CMP	Corrugated Metal Pipe	A
Material type	Concrete	Typical box culvert modules	A