

Revision No 3	11/2004	Page 1 of 2
Kennecott Utah Copper Corporation Safety and Health Standards		Standard No.: 16.13 Jumper Permits

16.13.1 **INTRODUCTION**

16.13.1.1 Installation of electrical circuit "jumpers" can be extremely hazardous to personnel and equipment if improperly installed or precautions are not taken. This standard does not apply to jumpers used during troubleshooting of equipment. However, all jumpers must be removed promptly after each use.

16.13.2 **REQUIREMENTS**

16.13.2.1 Jumpers can be used on any interlock, contact, loop, etc. that has **temporarily** been put out of service. This includes hardwire and software types. Jumpers can only be installed by trained electrical or control systems employee(s) or other qualified and authorized personnel designated by plant management.

16.13.2.2 Prior to installation of the jumper, a "Jumper Permit / Jumper Tag" (see Exhibit 16.13.1) must be completed and approved by an authorized person as designated by plant management. The completed Jumper Permit will be forwarded to the electrical supervisor for inclusion in the Jumper Log.

16.13.2.3 The Jumper Tag must be placed on the device or inside the panel where the jumper is contained. For software jumpers (or temporary modification), the Jumper Tag must be placed in the PLC/CPU rack. When a control system technician or electrician removes a jumper, the tag must be returned to the electrical supervisor and the Jumper Permit updated that the jumper was removed.

16.13.2.4 A Jumper Log must be maintained by the electrical supervisor. The log must contain all pertinent information, including dates jumpers were installed and removed with a copy of the Jumper Permit. The record log must be kept for a minimum of two years.

16.13.2.5 Under no circumstances will a jumper be used to bypass an emergency safety shutdown device, e.g., pullcord switch, stop button, etc. Also, jumpers will not be used to deactivate or circumvent an activated lock out system. Whenever installing a jumper that may affect personnel safety a risk assessment must be completed.

16.13.2.6 Precautions must be taken on equipment when protection devices are jumpered, e.g., lube flow switches, RTDs, etc.; precautions could include more frequent interval inspections of equipment, temporary replacement devices, or constant employee watch. In any case, the risk of equipment loss must be reduced to the maximum extent possible.

References:					
Signatures					
Original signed by:		Original signed by:		Original signed by:	
Frank Klobchar	11/30/04	Chris Crowl	12/02/04	Bill Champion	12/03/04
Standards Committee Chairman	Date	Vice President Human Resources	Date	President, KUCC	Date

KENNECOTT UTAH COPPER CORPORATION JUMPER PERMIT (Standard 16.13)

Rev 4 – 11/04

TAG NO. 1000

EMOC #

EQUIPMENT NUMBER DATE

DEVICE JUMPERED TIME AM PM

Work Order No. Hardwire? Yes No Software? Yes No

Duration of Permit From To

Reason for Jumper:

Recommendations concerning safety, operating restrictions, or special instructions:

APPLICABLE INFORMATION:

Location & Equipment Description <input style="width: 500px; height: 20px;" type="text"/>					
DWG <input style="width: 60px; height: 20px;" type="text"/>	MCC <input style="width: 100px; height: 20px;" type="text"/>	Term. Box <input style="width: 100px; height: 20px;" type="text"/>	Wire No. <input style="width: 100px; height: 20px;" type="text"/>		
PLC External Force: <input style="width: 100px; height: 20px;" type="text"/>	Cabinet <input style="width: 100px; height: 20px;" type="text"/>	Block <input style="width: 100px; height: 20px;" type="text"/>	I/O Point <input style="width: 100px; height: 20px;" type="text"/>		
PLC Software: <input style="width: 100px; height: 20px;" type="text"/>	PLC ID No. <input style="width: 100px; height: 20px;" type="text"/>	Rung <input style="width: 100px; height: 20px;" type="text"/>	I/O Point <input style="width: 100px; height: 20px;" type="text"/>		

	<i>Print Name</i>	<i>Signature</i>	<i>Date</i>
Requested By	<input style="width: 190px; height: 20px;" type="text"/>	<input style="width: 210px; height: 25px;" type="text"/>	<input style="width: 140px; height: 25px;" type="text"/>
Approved By	<input style="width: 190px; height: 20px;" type="text"/>	<input style="width: 210px; height: 25px;" type="text"/>	<input style="width: 140px; height: 25px;" type="text"/>
Installed By	<input style="width: 190px; height: 20px;" type="text"/>	<input style="width: 210px; height: 25px;" type="text"/>	<input style="width: 140px; height: 25px;" type="text"/>

JUMPER REMOVAL

	<i>Print Name</i>	<i>Signature</i>	<i>Date</i>
Removed By	<input style="width: 190px; height: 20px;" type="text"/>	<input style="width: 210px; height: 25px;" type="text"/>	<input style="width: 140px; height: 25px;" type="text"/>

Distribution: Electrical Supervisor

1000

TAG NO.

JUMPER

TAG

TRACK completed for this task (*Initials*):

APPROVED BY

EQUIPMENT NO.

INSTALLED BY

DATE

TIME

NOTE: RECORD ALL INFORMATION IN "JUMPER LOG" BOOK.