

APPENDIX F.-BOND CALCULATION EXAMPLE

An example reclamation performance bond calculation for a hypothetical heap leach facility is included on the HEAPREC diskette and labeled EXAMPLE.WK1. EXAMPLE.WK1 was included to allow the user immediate access to a reclamation bond calculated with HEAPREC. Use EXAMPLE.WK1 to become familiar with how HEAPREC works. Modify data inputs in EXAMPLE.WK1 and analyze how different parameters and assumptions affect the overall cost of a bond. Use EXAMPLE.WK1 to compare the relative costs for using different sizes and/or types of earthmoving equipment for completing the same task. See what input parameters have the greatest or least impact on cyanide detoxification costs. Notice that all four of the cyanide detoxification methods were evaluated for cost comparison purposes; however, only the fresh water rinse procedure was included in the bond estimate.

A brief description of the site, assumed disturbances, and planned reclamation activities used in EXAMPLE.WK1 are presented below. Refer to EXAMPLE.WK1 for the actual inputs used. The amount of detail presented below is not dissimilar from the type of data found in preliminary reclamation plans submitted to initiate the permitting process.

EXAMPLE.WK1 PROPOSED SITE RECLAMATION PLAN

The following is the proposed reclamation plan for the EXAMPLE Mines and associated heap leach facilities located in central Nevada.

The goal of reclamation will be to stabilize the natural and biological processes on the site by regrading and revegetating disturbed lands. The primary intent of this activity is to accelerate the natural invasion and succession processes at the site.

All disturbed areas will be regraded to the approximate original contours, except for heaps and mines dumps which will be reshaped to blend into the surrounding topography. Compacted areas will be ripped on contour to a depth of 1 to 1.5 ft, salvaged topsoil will be spread judiciously as possible with preference to applying topsoil to facilities and heap areas first, and seed will be broadcast then covered using a harrow. Revegetative succession, determined after two growing seasons, will be based on pre-existing vegetative cover in the area of 5% to 15%. A list of the disturbed areas including dimensions of the disturbance and planned reclamation are presented below

HEAPS: Heaps 1 and 2 will respectively contain 5.25 x (10⁶) st and 1.75 x (10⁶) st of agglomerated material. Heaps will be detoxified using fresh water rinsing, lab-scale testing show that four pore volumes of rinsate will reduce CN_F levels below state standards. Heap heights average 75 ft. Slope faces will be reduced from 2:1 to 3:1.

BUILDINGS: The office and plant steel-framed buildings will be disassembled, with salvage considered, rubbish will be disposed of in an approved on-site solid waste disposal