FINAL

EXCLUSIONS
2006 PRIORITY ACTION WORK PLAN
EMPIRE MINE STATE HISTORIC PARK

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FIGURE

Figure 1 Exclusions Area
1.0 PURPOSE

The purpose of this work plan is to expeditiously implement exclusion measures as a 2006 priority action at the Empire Mine State Historic Park (SHP). These exclusion measures are designed and will be implemented to control access to closed areas of the SHP and to limit potential human health exposures to mine and mill related materials. The exclusion areas have been previously identified by the California Department of Parks and Recreation (CDPR), the California Department of Toxic Substances Control (DTSC), and the California Central Valley Regional Water Quality Control Board (CVRWQCB) as areas where human exposure to mine and mill related materials is otherwise likely to occur. Certain actions to limit access to these areas have in some circumstances previously been taken by CDPR. The priority actions planned and described in this work plan will enhance and expand upon previous measures installed by CDPR, through the installation of a broader range of exclusion measures, education, and public awareness. Exclusion of the public will also allow for further characterization of these areas to determine if permanent controls or other actions are warranted. This work plan has been prepared by MFG, Inc. for Newmont Mining Corporation and CDPR.
2.0 SCOPE OF WORK PLAN

This work plan describes those areas that have been identified by CDPR, DTSC, and CVRWQCB as areas of potential human health exposures due to the presence of exposed bare ground accumulations of mine or mill related materials (i.e. no vegetation or other cover to prevent human contact) or sediment accumulation that could pose a human health exposure to the public and CDPR employees during routine SHP uses. The exclusion measures to be implemented by this 2006 Priority Action Work Plan will be a combination of fencing, natural barriers, signage, pamphlets, and other educational materials which provide education to more fully inform the visiting public, CDPR employees, and volunteers as to the reasons for restriction, a history of the specific location or operation, and a clear delineation of each exclusion so that inadvertent access will not occur.

The work plan describes the means and methods for the installation of exclusion measures in a manner that will compliment the SHP’s uses, but restrict public and CDPR employee/volunteer access to the identified areas of the SHP, to maximize achievement of the priority action exclusion and education objectives of the work plan.
3.0 EXCLUSION AREAS

The specific areas for which exclusion measures will be implemented are:

- The Empire Mine Cyanide Plant (CN Plant)
- The Empire Mine Red Dirt Pile (RDP)
- The Cyanide Plant Conveyance Ditch (the natural drainage that links the CN Plant and RDP to the Sand Dam tailing area and which was used historically to hydraulically convey mill sands to the Sand Dam)
- The Sand Dam tailing area
- The Magenta Drain and drainage corridor within Memorial Park

These areas are within the closed area previously delineated by CDPR as shown on Figure 1, except for the Magenta Drain drainage corridor.
4.0 EXCLUSION MEASURES

A combination of exclusion measures will be implemented to prohibit access by the public to the exclusion areas. The measures are described in the following sections.

4.1 Fencing
Fencing will be used to clearly define the boundaries of the closed areas and effectively exclude the public. Fencing accompanied with signage and education, will provide a positive deterrent to public entry into these closed areas. Fencing will consist of a combination of split rail, woven wire, and wire strand fencing. The selection of the fencing type, height, and construction design will be based on site specific consideration of constructability, aesthetics/compatibility with SHP setting/uses, and cost. Fencing installations shall be completed to allow wildlife passage. The fencing will extend from approximately one foot above ground surface to a maximum height of 5 feet, and wildlife corridor openings shall be left in the fence line to allow the safe passage of wildlife. Wildlife corridor openings will be spaced no further than 1,000 feet apart and each of these corridor openings will be appropriately signed to alert the visiting public of the “Closed Area” and the purpose for the corridor opening. New fencing will not be installed where existing fencing or natural barriers, such as Little Wolf Creek or the Sand Dam marshes, provide effective exclusion. However, where natural barrier exclusion is determined effective, signage will be installed as described below. The 2006 Priority Action Health and Safety Plan (HASP) addresses the health and safety concerns and needs associated with the installation of these measures.

4.2 Signage
Signage will be installed at various locations at the SHP to inform park visitors and CDPR employees and volunteers of reasons for exclusions with the closed area and to provide clear identification, along with fencing, of the close area boundary. Signage will be:

- Descriptive and informative
- Clearly visible (size, color and printing)
- In accordance with regulations
- Located at major trails heads and at no less than 200 foot intervals along the closed area boundary (on fences or free standing where natural barrier exclusions exist)
Signage will include the following:

**CLOSED AREA**

- Areas within the fenced boundaries contain historic mine and mill related materials.
- WARNING - These areas may contain certain naturally-occurring minerals (lead, arsenic, mercury, etc.) known to the State of California to cause cancer or birth defects or other reproductive harm.
- Potential exposure could occur by breathing or ingesting these materials if park visitors fail to follow simple, safety guidelines.
- Public access to this area is currently restricted to keep the park visitors safe until further studies and any necessary environmental cleanup measures are conducted in the restricted areas.
- Your cooperation and assistance following these closed area restrictions is appreciated and will help expedite re-opening of the closed area following completion of necessary evaluations and environmental cleanup measures.

4.3 **Education**

Education in the form of CDPR employee/volunteer training and communications and the distribution of written materials, such as pamphlets, that provide accurate and timely information will be distributed to SHP visitors. These educational materials will address the purpose, potential exposures, nature, and future work intended with the closed areas. The information provided and disseminated to CDPR employees, park visitors and the public at large, will address all priority action activities planned for the SHP in 2006, not just exclusion measures.
5.0 IMPLEMENTATION

The exclusion measures will be implemented in the following steps:

- Closed Area Boundary Delineation – The existing closed area boundary will be reviewed and adjusted as necessary to accurately include the footprint of mine and/or mill related materials. The closed area boundary will be confirmed by field reconnaissance survey. The field survey reconnaissance will locate the closed area boundary in the field and adjust the alignment as necessary based on the actual conditions (landforms, vegetation, etc.) to establish a final alignment along which construction of a fence and/or freestanding signage can be accomplished. The closed area boundary alignment will be surveyed using GPS coordinates, which will be used to develop an updated closed area boundary base map. In addition, the closed area boundary/fence alignment will be marked with survey stakes and tape to guide subsequent construction of fencing and signage.

- Selection of fencing and signage – During establishment of the final closed area boundary, appropriate fencing will be selected based on the criteria presented above, and the signage discussion presented above. These details will be incorporated in a construction plan suitable for use as a contractor request for bid document and to guide construction of boundary delineation.

- Selection of wildlife corridor openings – During establishment of the final closed area boundary and fencing design, the wildlife corridor openings locations will be established. These details will be incorporated in a construction plan suitable for use as a contractor request for bid document and to guide construction of boundary delineation.

- Site Health and Safety Plan (HASP) – The site HASP will include the necessary protective measures necessary to facilitate installation of the 2006 priority exclusion actions. The HASP will be included in bid request documents and for use during construction.

- Contractor selection and construction.
6.0 COMPLETION REPORT

Within 60 days of completion of the 2006 Priority Action Exclusions Work Plan activities, a completion report will be submitted to DTSC and the CVRWQCB. This completion report shall include a GPS surveyed final boundary, the identification of specific fencing materials installation, the location and specifics of signage installations, and a description of other educational presentations and materials undertaken or distributed in implementing this 2006 Priority Action Exclusions Work Plan. The completion report will also specify maintenance activities that will be performed.