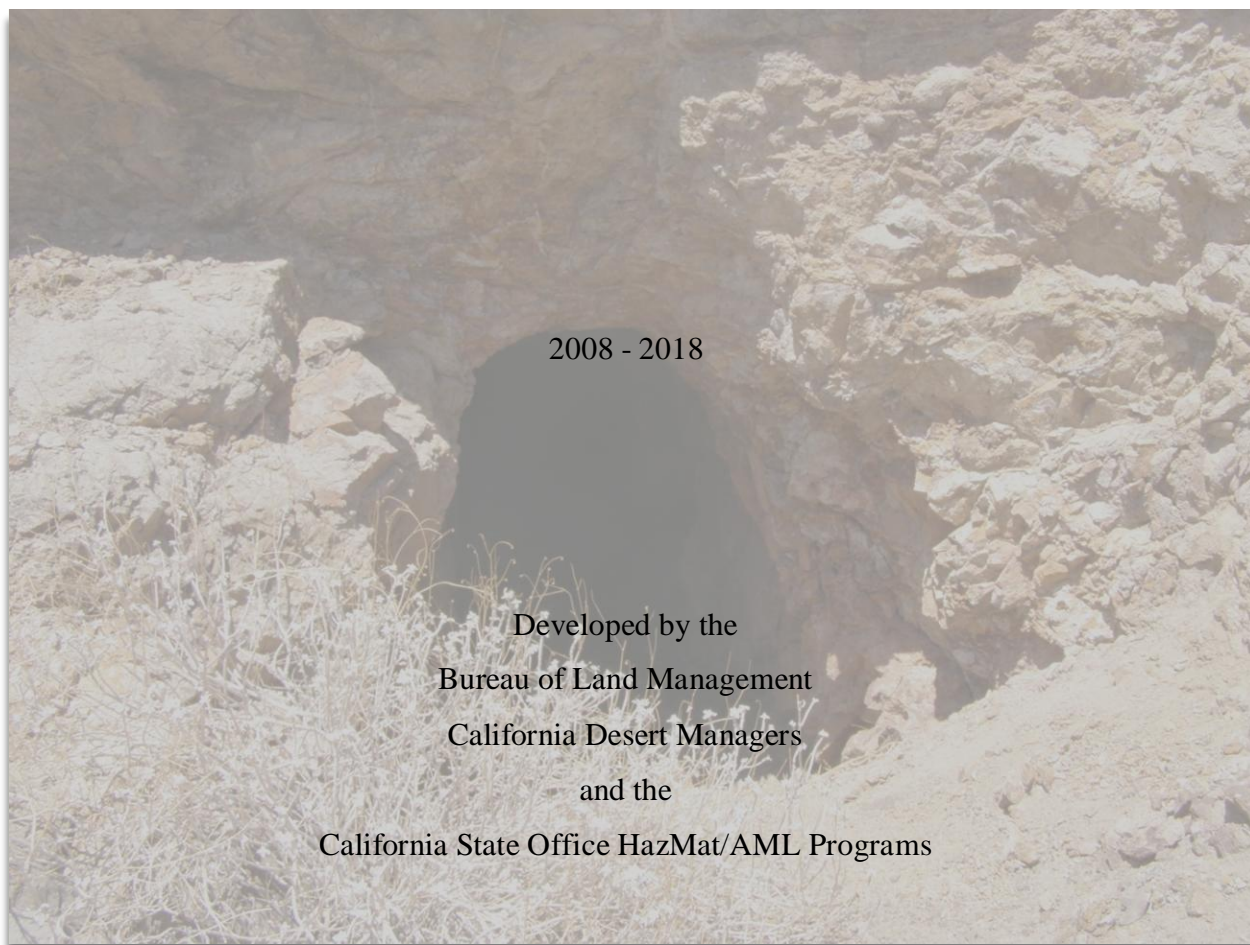




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California Desert District Strategic Plan for the Abandoned Mine Lands Program



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1. Introduction

The Abandoned Mine Lands (AML) Program Strategic Plan establishes the context whereby the Bureau of Land Management - California Desert District (BLM-CDD) mitigates and remediates hardrock AML sites on or affecting public lands. The plan supports the Department of the Interior's (DOI) strategic plan, and is implemented through BLM's Annual Work Plan (AWP) and California State and Field Office operational plans.

The AML program is a "white hat" restoration program, and exemplifies cooperative conservation. This plan applies AML program business processes in the context of Cooperative Conservation by:

- Cooperation in gauging risks and setting priorities;
- Communicating program objectives and values; and
- Consultation with government and non-government partners.

Building on the initial AML pilot efforts from the 1990's, the CDD AML program has developed and has matured. It is timely and appropriate to look forward and plan for the future of the program. The results of our planning efforts are reflected herein.

This plan provides field managers and staff with a policy framework for setting local or state priorities and provides senior management and budget personnel with explanations of program values, processes, issues and factors that may impact the program's future over the plan's timeframe. The plan links national goals with State Office multi-year operational plans.

1.1. Applicability

The plan applies to AML water quality projects funded under the soil, water and air management subactivity (1010); hazardous materials and physical safety hazard projects funded under the Hazard Management and Resource Restoration subactivity (1640), including the Special Cleanup Fund; projects funded under the Department's Central Hazardous Materials Fund (subactivity 2640); projects funded by damage lands program (5320) and projects funded by contributed funds (7123). This plan facilitates coordination when projects are proposed for funding under multiple budget subactivities.

1.2. Timeframe

The plan covers the remaining period of the DOI and BLM current five-year strategic and operational plan (FYs 2008 – 2018) and provides a foundation for development of the next plan (FYs 2018 and beyond).

1.3. Funding Assumptions

The plan assumes that program funding will remain level except for increases to cover uncontrollable costs (e.g., salaries and benefits). Without additional funds, it is assumed that costs of monitoring and maintenance of remediated sites will begin to chip away at available funds for new projects. In addition, the AML program will continue to reflect a bureauwide scope

throughout the CDD. Appendix A provides background information about hardrock AML site impacts.

2. Strategic Approach

2.1. Program Objectives

The purpose of CDD's AML program is to assist partners in fulfilling broad missions of improving water quality and enhancing public safety. Our vision is to mitigate hazards to protect public health and safety, and restore watersheds for resources, recreation, and wildlife by remediating significant hardrock AML sites on or affecting the public lands. Key program objectives are to:

- Identify sites within a quarter (.25) of a mile of populated or high use visitor areas.
- Prioritize sites based on risks.
- Remediate sites with available resources over specified time periods.
- Report program accomplishments.
- Conduct education and outreach activities to warn people about the potential dangers of AML sites.

In so doing, BLM aims to:

- Maintain a working inventory of known AML sites, with accurate and complete information needed by the public and decision-makers.
- Select from the inventory sites to be remediated based on priority criteria.
- Ensure that each Field Office with AML sites receives its fair share of available funds.
- Complete ongoing remediation and mitigation projects before engaging in new projects, except for emergency related situations.
- Conduct further inventory and field validation work in accordance with land use planning efforts.
- Report, manage and reduce contingent environmental cleanup liabilities.
- Leverage funds and achieve cost savings through partnerships, use of volunteers, and cost avoidance/cost recovery authorities.
- Provide needed policy, direction, and program management tools to State and Field Offices.

2.2. Program Overview

There is an unknown number of abandoned mine features in the California Desert District found within the many mining districts (Appendix B). Local historians say that there may be as few as 8,000 abandoned mines on BLM-administered public lands, of which many contain physical hazardous mine features. Currently, CDD Field Offices are either developing or updating short- and long-term AML project list which are aimed at providing better information about the scope of AML impacts and the resources needed to address them (appendix C).

CDD Field Offices are developing these plans in cooperation with other Federal, State and local partners. Presently, most of the known sites have not been fully assessed, and it is extremely

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difficult to estimate how long it would take to address half of them because of the wide variation in site complexity, mixed-ownership of affected lands, and the need for environmental engineering analyses called for under statutory and regulatory remediation methods.

Commodities mined were primarily gold, silver, copper, lead, zinc, chrome, antimony, nickel, iron, rare earths (lanthanides), uranium, sulphur, talc, tungsten, and asbestos.

2.3. Units of Performance

The following table will be used to report units of accomplishment for the CDD Abandoned Mine Lands Program. While out-year forecasting is challenging, AML program leads are to review planned projects and associated workload in order to develop supportable targets for the out-years.

AML Performance Elements	Measure	CY-1 Actual	CY Target	CY+1 Target
Assess HazMat Sites	# of sites			
Other Hazard Sites Assessed	# of sites			
Inventory AML Sites	# of sites			
Respond to HazMat Risk Sites	# of actions			
Mitigate Other Hazards	# of sites			
Remediate AML Physical Safety Hazards	# of sites			
Implement AML Projects to Restore Water Quality	# acres			
Monitor & Maintain HazMat & NRDAR Sites	# of sites			
Evaluate PRPs for Cost Avoidance/ Recovery	# actions completed			
Process Hazmat Cost Avoidance/ Recovery Cases	# cases referred			

2.4. Risk-Based Approach

Most estimates about hardrock AML sites maintain that only a relatively small portion of sites cause significant environmental degradation (primarily through water pollution) or pose physical safety hazards. Based on initial CDD inventories, most sites vary in site complexity, extent of resource impact, and size.

Similarly, from a risk standpoint, there is a higher level of visitor safety expectations at places where the CDD Field Offices have invited the public to visit, such as a designated recreation area, as opposed to a remote location on public lands. Accordingly, higher priority needs to be placed on cleaning up AML sites in close proximity to the urban interface and designated recreation areas.

2.5. Priority Ranking Criteria

These criteria are applied by CDD Field Offices and their partnering agencies and organizations and reflected in multi-year AML plans and in BLM’s Annual Work Plan. Specific projects are evaluated through project peer review processes (see Appendix D).

2.6. Implementation

The AML program is administered in the CDD as follows:

- AML Program Leads in the CDD are split between full-time and collateral duty (often with Hazard Management, Mining Law Administration/Geology, and/or Natural Resource Protection responsibilities).

The AML program has a business process that can be managed by tools such as the GeoCommunicator website which is the publication site for the Bureau of Land Management's National Integrated Land System (NILS), the Abandoned Mine Module (AMM), the BLM Management Information System and its several modules (e.g., Budget Planning System, Performance Module, and Cost Management Reports). These tools are available to all AML program personnel throughout the CDD.

AML program coordinators will collaborate on specific needs and actions that are necessary and desirable to make progress towards achieving program objectives. These actions are explained in the next section.

3. Actions

3.1. Cooperation

Cooperation signifies emphasis on voluntary action, partnerships, collaborative work, and commitment to work in concert with all partners to attain common conservation goals.

3.1.1. Reduce Burden on Taxpayers

3.1.1.1. Potentially Responsible Parties

BLM will continue to pursue potentially responsible parties (PRPs) under CERCLA. BLM will use the Abandoned Mine Module (AMM) database to ensure that PRP searches are conducted on all water quality projects (e.g., 1010 subactivity funded projects). BLM will also conduct a CERCLA cost recovery case review for eligible AML projects to ensure that Field Offices are following the applicable processes.

3.1.1.2. CERCLA “Comfort Letters”

BLM, in consultation with the Office of the Solicitor, will consider use of CERCLA “comfort letters” on a case-by-case basis with non-liable third parties who want to approach BLM with a plan to restore abandoned mine sites.

3.1.1.3. Mining Claimants

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The AML and Solid Minerals programs will identify mining claimant responsibilities related to AML sites. This will help determine if the site falls within the parameters of the AML program or should be addressed through BLM's surface management program.

Letters will be issued by the Field Office stating that if a claimholder wishes to prevent the closure of any of the opening(s) found on a claim(s), BLM policy requires that claimholder submit a notice or plan of operations under the 43 CFR 3809 regulations to accept current and future responsibilities for these openings to protect the general public's health and safety. As part of that notice or plan, a reclamation bond would have to be posted to cover the costs of closure of the openings in the future (Appendix E).

3.1.2. Increase Collaborative Work

3.1.2.1.1. Service First Partnerships (Working Together)

BLM will work with the National Park Service and the US Forest Service (adjacent to public lands administered by the CDD) to apply the Service First approach in the context of AML program coordination. Examples where this approach may make sense range from joint field operations activities on specific AML sites such as installing bat gates, technical training, and development of shared resources.

3.1.2.1.2. California Desert Managers Group (DMG)

BLM will utilize the DMG forum to address and discuss AML issues of common concern and will work to create opportunities and develop partnerships.

3.1.2.1.3. Reducing Risks and Liabilities

CDD Field Offices will ensure that AML sites posing human and environmental risks are reported accurately. CDD Field Offices will utilize the CDD Abandoned/Inactive Mine Hazard Analysis Form to document AML physical safety hazards (Appendix F). These sites will be given priority through the ranking criteria and project selections.

3.1.3. Leverage Funds

CDD and its partners have limited funds for restoring abandoned mine lands. This makes it imperative to leverage funds effectively wherever possible. Moreover, mitigating risks to our publics' approach envisions that partnering agencies and landowners will do just that. While most partnerships necessarily involve project coordination and pooling of funds, some may result in more significant leveraging.

3.1.4. Mining Waste Exclusion

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When evaluating AML sites it is important that employees, contractors, and managers be familiar with the exemption status of mining wastes. Failure to correctly recognize Bevill exempt mining wastes can result in unnecessary and expensive remediation efforts if exempt wastes are incorrectly identified as hazardous wastes and attempts are undertaken to remove the material from the mine or processing site for offsite disposal. The exemption status of mine wastes should be discussed in site characterization documents. The reader is referred to the U.S. Environmental Protection Agency for more information regarding the Mining Waste Exclusion.

More information can be found at the following websites:

- <http://www.epa.gov/epaoswer/other/mineral/bevilltraining.pdf>
- www.epa.gov/epaoswer/

3.2. Communication

Communication highlights commitment to transparency and accountability and the innovation that occurs through the exchange of ideas and ongoing dialogue with partners.

3.2.1. Enhance Openness and Broaden Outreach

CDD will make program information more readily available. For example, CDD will post and distribute this strategy to its partners in the Desert Managers Group and the Desert Advisory Council. The District and Field Office WebPages will be revised to include a link to the “Stay Out! Stay Alive!” (SOSA) program led by the U. S. Department of Labor’s Mine Safety and Health Administration (MSHA). CDD Field Office public outreach efforts should include a message about the SOSA program.

3.2.2. Improve Accountability

3.2.2.1. AML Data

CDD Field Offices will continue to improve and verify AML data by collecting site specific information (see Instruction Memorandum IM 2008-189), biological data, cultural/historic information, and document the site by taking pictures of the physical safety hazard before and after closure (Appendix G and H).

3.2.2.2. AML Project Review Process

CDD Field Offices will identify, maintain and share a multi-year AML project list that will provide a backdrop to gauge the needs of long-term funding commitment.

3.2.3. Foster Innovation through Exchange of Ideas

3.2.3.1. Technology Transfer

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CDD Field Offices will seek to have local AML program staff represented and participate in or at periodic technical forums and conferences.

3.2.3.2. Share Best Practices

CDD Field Offices will encourage more AML personnel to share their lessons learned and best practices. This can be done, for example, by working with local bat specialist who can assist BLM in making the determination if a mine may contain bats or offer suitable roosting conditions. This partnership has yielded useful guidance in handling the impact of mine closures on bat habitat.

3.2.3.3. Ongoing Dialogue with Partners

CDD will continue collaboration with Federal and State partners on AML program policies, issues, and strategies. For example, the CDD-DOI Coordinator and members of the Desert Managers Group (DMG) routinely share cross-cutting issues and discuss ways to solve problems.

3.3. Consultation

Consultation signifies Interior's commitment to integrated decision-making, and our focus on using local information and knowledge to address place-based conservation challenges.

3.3.1. Integrate Decision-Making

BLM will work with programs supported by AML such as Hazard Management and Resource Restoration, Solid Minerals, Land Use Planning, Clean Water, Recreation, Cultural and Historic Preservation, and Wildlife. Such internal coordination is essential for all of CDD. For example:

- Hazard Management and Resource Restoration: Fund leveraging; Avoidance of duplicative project funding; Consolidating AMM and SCM; CERCLA policy development and implementation; and Reporting Contingent Environmental Cleanup Liabilities
- Solid Minerals: Mining claimant site restoration policy; LR 2000 enhancements.
- Clean Water Program: Water quality standards and Total Maximum Daily Loads; Watershed priorities and assessment.
- Land Use Planning: Future AML inventory and field validation priorities; NEPA policy.
- Recreation: Priorities for AML physical safety hazard mitigation at designated recreation areas, National Land Conservation System (NLCS) areas, OHV and other trails, and special recreation use permit areas.
- Cultural and Historic Preservation: NHPA requirements and policy.
- Fisheries: Fish habitat protection and restoration.
- Wildlife: Habitat and migration corridor protection and restoration.
- Special Status Species: habitat protection and restoration.

3.3.2. Increase Use of Local Information and Knowledge

3.3.2.1. Development of Multi-Year Plans

CDD Field Offices are to develop work plans for AML program activities to foster long-range planning. These multi-year plans will provide critical information needed for interagency program coordination, facilitating strategic plan support, and for budget projections. Initial plans are in place. Plan updates will occur as part of the AML project peer review process. Offices are to invite their partners to participate in developing and revising their plans.

4. Summary

This CDD AML program strategic plan provides CDD Field Managers and staffs with a policy framework for setting local priorities, and delineates program values for upper management and budget personnel. The AML program is a “white hat” restoration program, and exemplifies implementation of CDD’s approach to cooperative conservation. Our program vision of eliminating all AML sites and risks to the public is far-reaching. Though unattainable in the near future, BLM can make significant progress.

AML sites are the product of over a century of historical mining, and it will take time and resources to address their impacts over a short timeframe. Fortunately, not all AML sites are impacting water quality or posing physical safety problems. BLM and its partners have identified methods and developed risk-based criteria to establish manageable priorities and resource requests. BLM will continue to work in priority watersheds to help foster improvements in water quality, and focus on populated and high-use areas first when remediating AML sites posing physical safety hazards. BLM will also conduct outreach and sponsor awareness activities about the potential dangers AML sites may pose.

Program success measures are in place. Management systems and business processes have been developed. Program policies are being consolidated into a manual and handbook. Our internet web page is being redesigned. Recognizing that more needs to be done, AML program personnel have come together to identify specific action steps that are needed to support their on-the-ground activities. This plan builds on successes and lessons learned to date, and provides a foundation for the AML program’s future.

Appendix A - Magnitude of Hardrock AML Sites

Historic Mining in the West

Historic mines produced precious metals, base metals, and other mineral commodities (e.g., gold, silver, copper, lead, zinc, mercury, etc.) The mines shut down, became inactive, or were abandoned according to the conditions affecting mineral economics of the time. Many of the mines were operated as far back as the Civil War period, and transcended major gold and silver rushes that occurred in throughout the West, including large-scale rushes in Alaska, California and Nevada. Extensive mining supported World War I and II strategic mineral needs. Many of the mines involve extensive underground workings. Mines also needed mills to crush the ore, and smelters to produce the metals. Gold mining in Alaska involved placer techniques. Hydraulic mining in California resulted in stream siltation and potential erosion problems. Since these sites are old, most were not bonded or whatever bond may exist is insufficient to cover the remediation costs. The BLM conducts baseline searches to identify mining claimants and other persons who can assist in the remediation directly or in-kind. Where warranted, the BLM conducts more extensive searches for Potentially Responsible Parties who can be held liable for the costs. Few financially viable parties exist to share the costs.

AML Impacts

Safety Hazards

Many abandoned mines may pose physical safety hazards and may cause environmental degradation, primarily through water pollution. Common safety hazards at AML sites include: open shafts and adits; unstable rock and decayed support structures; highwalls/open pits; contaminants; and confined space risks.

Environmental Hazards

Typical kinds of environmental problems stemming from AML sites include: contaminated/acidic surface and ground water; and stockpiled waste rock and mill tailing piles. Many affected watersheds are in arid climates in the West, where water is scarce, and the need to improve water quality for human and aquatic resources use is critical. Some western watersheds may be significantly impacted by widespread mercury contamination. In addition to abandoned mine sites, there are abandoned smelter sites where remaining tailings piles from past milling operations continue to impact the environment.

Addressing AML impacts is becoming increasingly important due to increased exposure to people and risks of accidents, injuries, and tort claims.

Increased Exposure

Growing and Changing West

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According to the 2000 Census, the West is the fastest growing region of the Nation, and 9 of the 12 fastest-growing States are in the West, where most BLM-managed land is located. Today, more than 63 million people live in the West, and the growth is expected to continue. Over 22 million people live within 25 miles of the public lands. From an AML standpoint, more heretofore remote sites are now in closer proximity to population centers.

Recreational use of public lands

Increased population growth in the West is also reflected in higher demand for outdoor recreation on public lands. Recreation areas, national by-ways, and campground facilities on public lands can be located in proximity to AML sites. Use of Off-Highway Vehicles often transpires at AML sites amid risks of dangerous shafts, and exposure to contaminants in the soil, water and air. Wilderness explorers can also be placed in proximity of AML sites when exploring the backcountry within the CDD.

Budget Impacts

Compliance

Nearly all AML remediation activities must comply with relevant legal requirements including NEPA, CERCLA, CWA, NHPA, and ESA. Studies and documentation of proposed actions require resources.

Mixed-ownership

Many AML sites and impacts traverse property boundaries between private land owners and land management agencies. Moreover, water runoff can flow among adjacent in-holdings. Split estate complexities also necessitate coordination. Consequently, shared remediation can involve expenses associated with developing partnership agreements.

Water treatment

Water treatment can be prohibitively expensive, particularly if it involves active treatment methods.

Repositories

Addressing mine wastes and tailings may involve transport to environmentally safe repositories. Where possible, BLM and its partners construct and maintain joint repositories. Such shared remediation may necessitate longer-term responsibilities for monitoring and maintenance.

Threatened and Endangered Species

Threatened and endangered species may reside in or around AML affected lands and waters. This is especially true for bat species. Adits often provide bat habitat. Thus, remediation of AML sites may require special techniques, such as use of bat gates, at additional cost.

Cultural and Historical Preservation

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Some old mining communities want to preserve old mine workings and equipment. The BLM must work with local communities when reclaiming AML sites to meet National Historic Preservation Act requirements and desired restoration outcomes.

Monitoring and Maintenance

Virtually all reclaimed sites require continued monitoring and maintenance. Even signs and markers need to be replaced due to weathering or vandalism.

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Appendix B – CDD Mining Districts

MINING DISTRICT	WATERSHED	COMMODITY	Water Quality Issues	Physical Safety Hazards
Ridgecrest Field Office				
Darwin	Panamint Valley Basin	Ag, Pb, Zn	Confirmed	Confirmed
Soledad Mountains/ Rosamond –Tropico Hills	Mojave River Basin	Au, Ag, Hg	Confirmed	Confirmed
Rademacher Hills	Mojave River Basin)	Au, Ag	Probable	Confirmed
Argus Mountains	Panamint Valley /Searles Lake Basin	Au, Ag	Probable	Probable
Cerro Gordo	Owens River	Au, Ag	Probable	Probable
Keeler	Owens River	Au, Ag, Pb, Zn	Probable	Probable
El Paso Mountains	Koehn Lake Basin	Au, Ag	Probable	Probable
South Inyo Mountains	Owens River	Au, Ag, Pb, Zn	Probable	Probable
Atolia MD	Cuddeback Lake Basin	Au, Ag, Hg	Confirmed	Probable
Rand Mountain	Koehn Lake Basin and Cuddeback Lake Basin	Au, Ag	Confirmed	Confirmed
Barstow Field Office				
Calico Mountains	Mojave River Basin	Ag, Au	Probable	Confirmed
Shadow Mountains	Mojave River Basin	Au, Ag	Probable	Confirmed
Oro Grande Mountains	Mojave River Basin	Au, Ag	Probable	Probable
Johnson Valley	Colorado River Basin	Au, Ag	Probable	Probable
Music Valley	Colorado River Basin	Au, Ag	Probable	Probable
Pinto Mountains	Colorado River Basin	Au, Ag	Probable	Probable
Clark Mountain	Colorado River Basin	Rare Earths	Confirmed	Confirmed
Needles Field Office				
Sacramento Mountains	Colorado River Basin	Ag, Au	Probable	Probable
Ship Mountains	Colorado River Basin	Au, Ag	Probable	Probable
Kingston Mountains	Amargosa River Basin	Au, Ag	Probable	Probable
Old Woman Mountains	Colorado River Basin	Au, Ag	Probable	Probable
Turtle Mountains	Colorado River Basin	Au, Ag	Probable	Probable
Clark Mountain	Colorado River Basin	Rare Earths	Confirmed	Confirmed
Whipple Mountains	Colorado River Basin	Au, Ag	Probable	Confirmed
Palm Springs Field Office				
Big Maria Mountains	Colorado River Basin	Ag, Au	Probable	Probable
Little Maria Mountains	Colorado River	Au, Ag	Probable	Probable

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	Basin			
Chuckwalla Mountains	Colorado River Basin	Au, Ag	Probable	Probable
Steele Peak	Santa Ana River Basin	Au, Ag	Probable	Probable
Mule Mountains	Colorado River Basin	Au, Ag	Probable	Confirmed
Riverside Mountains	Santa Ana River	Au, Ag	Probable	Probable
EI Centro Field Office				
Ogilby	Colorado River Basin	Ag, Au	Probable	Confirmed
Cargo Muchacho	Colorado River Basin	Au, Ag	Probable	Confirmed
Julian	Colorado River Basin- Salton Trough	Au, Ag	Probable	Probable
Buck Canyon	Colorado River Basin- Salton Trough	Au, Ag	Probable	Confirmed
Picacho Peak	Colorado River Basin	Au, Ag	Probable	Probable
Chocolate Mountains	Colorado River Basin	Au, Ag	Probable	Confirmed

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Appendix C. Field Office AML Priority List Form

	PROJECT NAME	No. of Physical Safety Hazards	FY Start /Finish (duration)	EST TOTAL COST	EST BLM PORTION	KEY PARTNERS
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

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Appendix D - AML Evaluation Criteria Worksheet

1. Water Quality Criteria

Score: Up to 10 points for each criterion met.

A. State government priority.

Under the watershed approach, the State government has identified the watershed or watershed segment as a high priority in the context of Unified Watershed Assessment Categories I and II, and the State Watershed Restoration Action Strategy.

B. Partnerships.

The project reflects a collaborative effort (such as fund leveraging) with other land management agencies having an interest in a specific watershed or watershed segment.

C. Cost avoidance/cost recovery.

A realistic potential exists for cost avoidance or cost recovery by having potentially responsible parties contribute to the remediation efforts.

D. Impairment of water quality standards.

The AML sites are causing, contributing to, or could contribute to an impairment of one or more water quality standards (Federal, State, Tribal, or local).

E. Water quality violations.

The AML sites are causing, contributing to, or could contribute to a violation of Federal or State water quality law or regulation.

F. Threat to public health or safety.

The AML sites are causing, contributing to, or could contribute to a threat to public health or safety.

G. Threat to the environment.

The AML sites are causing, contributing to, or could contribute to a threat to the environment. In some cases, the actual violation may be significantly downstream in a watershed, in which case only a hydrologic connection to the AML need be demonstrated in order to justify funding.

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H. Continuing/expediting an existing on-the-ground project.

The additional funding will contribute to or expedite completion of ongoing AML watershed remediation (as opposed to an inventory work in a new watershed).

I. Location.

The AML sites to be addressed are documented in BLM's Abandoned Mine Land Inventory System and are located on BLM-managed lands (not privately owned lands or mixed-ownership sites).

J. Cost efficient.

The mitigation or remediation actions to be funded can achieve results by applying low cost, low maintenance measures (as opposed to higher cost, active water treatment methods).

2. Physical Safety Hazard Criteria

Score: Up to 20 points for each criterion met.

A. Death or injury has occurred.

A death or injury is known to have occurred at the AML site and the site has not already been addressed.

B. Visitation/high use.

The AML site is situated on or in immediate proximity to developed recreation sites and areas with high visitor use. Areas with High Visitor Use can include dry lake beds, sand dunes, high use roads, frequently used special event areas, open Off-Highway Vehicle (OHV) areas. Other sites qualify if a formal risk assessment indicates a risk level of high or extremely high.

C. Accessibility.

The AML sites are judged to be easily accessible. Examples could include those located on main visitation pathways and adjacent areas when there is reason to believe visitation is occurring or has occurred in the past.

D. Location.

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The AML sites to be addressed are documented in BLM's Abandoned Mine Land Inventory System and are located on BLM-managed lands (not privately owned lands or mixed-ownership sites).

E. Cost efficient.

The mitigation or remediation actions to be funded can achieve results by applying low cost, low maintenance measures.

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Appendix E: Example Claimant Letter

Claimant Name
Address

Dear Sir/Madam:

The Bureau of Land Management has identified an Abandoned Mine Lands Project to address ___ hazardous abandoned mine openings on public lands in the T. ___ R. ___ Sec. ___ 1/4/1/4 ___ area of _____ County, California. The work is being proposed because these open abandoned mines pose physical safety hazards to the general public. The proposed work can only be carried out with the written consent of the claimant. All of the openings are on lands managed by the _____ Field Office of the BLM. You are being contacted by this office with regard to your unpatented mining claim, the _____, which falls on BLM-managed lands within the project area. Various mine openings located within the boundaries of your claims will be affected by the proposed closure work. The mine entries proposed for closure and the closure methods are identified on the enclosed map and closure summary.

As a claimant affected by this project, the BLM supports the remediation of all mine openings on BLM-managed lands. Current BLM policy is to utilize all means possible to protect bat and tortoise habitat in mines by avoiding permanent closure methods in mines occupied by bats. This policy allows for protection of human health and safety while allowing continued access to important wildlife habitat.

If you, as a claimholder in the project area, wish to prevent the closure of any of the opening(s) found on your claim(s), BLM policy requires that you submit a notice or plan of operations under the 43 CFR 3809 regulations to accept current and future responsibilities for these openings to protect the general public's health and safety. As part of that notice or plan, a reclamation bond would have to be posted to cover the costs of closure of the openings in the future.

If you do not notify BLM within 30 days of receipt of this letter of your intent to file a notice or plan of operations and a reclamation bond for any mine entries located within the boundaries of your unpatented mining claims, BLM will restrict access / close the mine entries as proposed in their plan.

If you have any questions regarding this matter, please call _____ at this office at _____.

Sincerely,

Field Manager

Bureau of Land Management

Appendix F: Instructions for populating and cleanup of the Site Cleanup Module

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240
<http://www.blm.gov>
September 3, 2008

In Reply Refer To:
1703, 3720 (280) P

EMS TRANSMISSION 09/05/2008
Instruction Memorandum No. 2008-189
Expires: 09/30/2009

To: All Field Officials

From: Assistant Director, Renewable Resources and Planning
Subject: Abandoned Mine and Site Cleanup Module Database
DD: 12/31/08; October 31, 2009

Program Areas: Abandoned Mine Lands (AML), Hazard Management and Resource Restoration (Hazmat).

Purpose: This Instruction Memorandum (IM) establishes policy and responsibilities for populating and updating the Abandoned Mine – Site Cleanup Module (AMSCM) database system. The IM specifies the types of AML and Hazmat sites to be included and the mandatory data requirements for each record.

Policy/Action: It is the policy of the Bureau of Land Management (BLM) to maintain an inventory of and central repository for data about each AML and Hazmat site. The types of sites to be included are those that fall under the purview of either of these two programs. Refer to the following manuals and handbooks for specifications of sites to include: Abandoned Mine Lands Program Policy Manual (MS 3720) and Handbook (H-3720-1); Hazard Management and Resource Restoration Manual (MS 1703); and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Response Actions Handbook (H-1703-1).

All AML and Hazmat sites must be entered into the AMSCM before funds are spent on studies and cleanup actions. Data from site verification, emergency and time-critical response actions should be entered into AMSCM upon completion. As cleanup activities ensue the database must be updated regularly and must be able to support accomplishments entered into the Management Information System (MIS) for Fiscal Year (FY) 2008 and the Financial and Business Management System (FBMS) for FY 2009 and beyond. These actions will enable the BLM to produce an audit trail linking detailed information from AMSCM with summary data reported in MIS and FBMS.

The BLM also utilizes the AMSCM database to record all of its Environmental and Disposal Liabilities (EDL) sites. These sites are uploaded from AMSCM to the Department of Interior EDL database.

An AMSCM record contains mandatory data fields and discretionary data fields. Some of the data must be collected when visiting the site. Other data fields are more easily completed in an office setting as they may require research using other databases and file records. Data to be completed in the field are shown

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on the attached field inspection checklist form. An electronically fillable version of the form is under development. The attached form may be used until the electronic form is released.

Recommendations from an Office of Inspector General (OIG) audit report and recent program reviews have identified the need to improve accountability for AMSCM data quality and currency. State Directors, District Managers, and Field Managers are responsible for: 1. ensuring that the AMSCM is populated and updated accurately and in a timely manner; 2. assigning AMSCM responsibilities to appropriate field managers and employees; 3. accountability of AMSCM responsibilities through Employee Performance Appraisal Plans; 4. ensuring that designated employees are trained and have sufficient AMSCM access rights and; 5. monitoring system use to ensure that records are being entered and updated.

Timeframe: By **December 31, 2008**, program elements reported by MIS as accomplishments for Fiscal Year (FY) 2008 must be supported by underlying records and reports from AMSCM. Accomplishments for FY 2009 that are entered into FBMS must be entered into AMSCM by **October 31, 2009**. Records reported as an EDL must be entered into AMSCM as soon as due care is completed. All EDLs must be updated quarterly.

Budget Impacts: Development and maintenance costs for the AMSCM are borne by the Washington Office and National Operations Center (NOC). State and Field Offices will incur normal labor costs.

Background:

The AMSCM was created in 2007 with the merger of the AML and Hazmat site databases. Because of the intrinsic nature of AML and Hazmat sites, it was determined that the two databases could be merged into one, resulting in a greater efficiency of effort. Recent OIG audits and program reviews have identified data quality weaknesses. Verification of the merged data is an ongoing effort.

For more detailed information about AMSCM, visit the eLearning Site at <http://ilmnirm0ad19105:8300/elearning/>. The eLearning site includes online access to training, user documentation, and relevant links. A "train the trainer" session on using AMSCM was conducted in Denver in May 2007. This session was recorded and is available on the eLearning site. Several field offices have had supplemental training conducted at their locations. Refer to the contacts below if you desire to arrange for on-site training.

Manual/Handbook Sections Affected: None.

Coordination: The AMSCM and data requirements were developed by a team of program coordinators from all levels of the Bureau.

Contacts: Contact Georgette A. Fogle, WO AMSCM Representative for policy and guidance questions at (202) 452-5123. Contact Kris Doebbler, AMSCM User Representative and Data Steward, NOC, at (303) 236-3350 for business, training, and AML/Hazmat technical questions. Contact Cheryl Laudenbach, NOC, at (303) 236-1955 for access, training, security and information technology questions.

Signed by: Authenticated by:
Edwin L. Roberson Robert M. Williams
Assistant Director Division of IRM Governance, WO-560
Renewable Resources and Planning

[Attachement - Temporary Form](#)

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Appendix G: Mine Closure Form

Agency/Office:	Recorder Name:
Date:	Name of Mine:
UTM:	T., R., Sec., Qtr.:

Picture 1a

Picture 2a

Picture 3a

Picture 1b

Picture 2b

Picture 3b

Notes

Notes

Notes

Type of Opening

Number (s)

Opening Size

Est. Depth

Type of Closure

Type of Opening

Number (s)

Opening Size

Est. Depth

Type of Closure

Type of Opening

Number (s)

Opening Size

Est. Depth

Type of Closure

Date	Work Performed By:	Comments:

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Appendix H: External Wildlife Mine Survey/Monitoring Sheet

Mine Name _____ Survey Date(s) _____
Feature ID # _____ Surveyor(s) _____
Mountain Range _____ County _____
Topographic Sheet _____ Land Owner _____
Map Datum (WGS 84 NAD 27 NAD 83) _____ Elevation (feet or meters) _____
Lat/Long (DEG.DDDDD) _____
UTM (Zone Easting Northing) _____

Distance to nearest road _____ Road Type _____

Type of Working - (adit, shaft, prospect, decline, stope)
Dimensions of opening _____ Approx. depth/length (ft or m) _____
Aspect ** _____ Declination *** _____
Photos taken (Y or N) Time _____ Photo folder location _____
Mine is too dangerous to Approach (Y or N) Historic material is present (Y or N)
Is ALL of mine visible (Y or N) Known Multiple Entrances (Y, N or ?)
Cribbing (Wood Sides) (Y, N or ?) Water in mine (Y or N)
Wood or debris in mine (Y, N r ?) Trash in mine (Y or N)
Rock crevices in mine (Y, N or ?) Is mine fenced or gated (Y or N)

Notes (Wildlife, historic material in or around mine)

Mine Rating (A - D) * _____ Exclusion/Survey Prior to Closure is needed: (Y or N)

Closure Information: _____

Night Survey Done (Y or N) Date(s) _____
Surveyor(s) _____ Type of equipment used: (NV goggles, NS camera, other)
Number of bats seen _____ Number of Owls seen _____
Other Wildlife seen: _____ Acoustic recordings (Y or N)
Anabat # _____ Species detected _____
Cloud cover % _____ Temperature at sunset: _____
Wind speed (1-5) or mph _____ Moon phase (%) _____
Time of moon rise _____

*Mine Rating:
A = Bats present
B = Possible bat habitat (needs further survey)
C = Can see all of mine (bat habitat is limited to crevices)
D = No wildlife habitat potential

** If you were looking out from the portal, the aspect is the direction you are facing.
*** Zero degrees is horizontal, positive numbers refer to degrees below the horizontal.