

ANNUAL SUMMARY EVALUATION
of the
ALASKA ABANDONED MINE LANDS RECLAMATION PROGRAM
for
EVALUATION YEAR 2008
(July 1, 2007, through June 30, 2008)



August 18, 2008

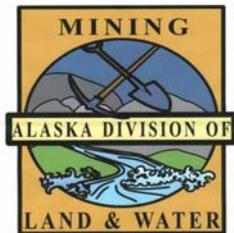


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ACRONYMS

AAMLRP	Alaska Abandoned Mine Lands Reclamation Program
AKSAS	Alaska Statewide Accounting System
AML	abandoned mine land
AMLIS	Abandoned Mine Land Inventory System
AMR	abandoned mine reclamation
DFD	Denver Field Division (of the Office of Surface Mining)
DNR	Alaska Department of Natural Resources
NAAMLPLP	National Association of Abandoned Mine Land Programs
OIG	Office of the Inspector General (of the U.S. Dept. of the Interior)
OSM	Office of Surface Mining (of the U.S. Dept. of the Interior)
SMCRA	Surface Mining Control and Reclamation Act of 1977, as amended

Cover photo: Reclaimed Jonesville Fire phase 2 project. May 15, 2008.

I. Introduction

Title IV of the Surface Mining Control and Reclamation Act of 1977 (SMCRA or “the Act”) established the Abandoned Mine Reclamation Fund. The Fund’s primary purpose is to pay for mitigation of past mining effects. The Office of Surface Mining Reclamation and Enforcement (OSM) administers the Fund on behalf of the Secretary of the Interior. OSM awards grants to States and Tribes from the Fund to pay their administration costs and reclaim abandoned mines. SMCRA puts the highest priority on correcting the most serious abandoned mine land (AML) problems that endanger public health, safety, general welfare, and property. OSM, State, and Indian tribal AML programs work together to achieve the goals of the national program. OSM also works cooperatively with the States and Indian tribes to monitor their AML programs.

On December 20, 2006, the President signed the Tax Relief and Health Care Act of 2006 (P.L. 109-432). That legislation included the Surface Mining Control and Reclamation Act Amendments of 2006 (the 2006 Act). The 2006 Act amended title IV of SMCRA to make significant changes in the abandoned mine reclamation fee and the AML program. OSM published a **Federal Register** on June 20, 2008, in which it proposed to align the 30 CFR regulations with the SMCRA amendments (73 FR 35214). The comment period for that proposed rule ends on August 19, 2008.

Directive AML-22 generally describes how OSM evaluates State and Tribal AML reclamation programs in “enhancement and performance reviews.” Following that Directive, a team of State and Federal personnel has been evaluating the Alaska Abandoned Mine Lands Reclamation Program (AAMLRP) since January 1996. The team includes representatives of AAMLRP and OSM’s Denver Field Division (DFD). It also includes other individuals on an ad-hoc basis as needed. AAMLRP employees involved in the 2008 evaluations included Joe Wehrman, Roger Allely, and Justin Ireys. Brian Heise, Manager of the Department of Natural Resources’ Computer Information Center, helped with one of the topic evaluations. Division of Mining, Land and Water Management employees Stacey Schlect and Karlyn Herrera helped evaluate two of the performance measures related to grants and finance. Frank Atencio and Ron Sassaman represented OSM-DFD for the evaluations.

This report summarizes our reviews and evaluations of the Alaska Abandoned Mine Lands Reclamation Program for the 2008 evaluation year, which included the period of July 1, 2007, through June 30, 2008.

II. General Information on the Alaska Program

On December 23, 1983, the Secretary of the Interior approved Alaska’s AML reclamation plan (“State reclamation plan”) under Title IV of SMCRA. That approval allows Alaska to reclaim abandoned mines in the State in non-emergency AML projects. Effective November 16, 1992, the Secretary approved Alaska’s AML emergency response reclamation program. AAMLRP is part of the Division of Mining, Land and Water Management in the Department of Natural Resources (DNR). It administers

Alaska's AML program under its approved plan. The Denver Field Division of OSM's Western Region works with AAMLRP to fund and approve AML projects in Alaska and to evaluate AML reclamation and other aspects of the Program.

Section 405(f) of SMCRA authorizes State and Tribal AML programs to apply to OSM each year for a grant to support their programs and reclaim specific projects. OSM awards grants to AAMLRP to fund the Program's administration costs for the period of July 1st of one year through June 30th of the following year. The same grants award construction funding that is available to the Program during the same period for each of three years after the initial grant award date. Alaska has not yet certified under section 411(a) of SMCRA that it completed reclamation of its known abandoned coal mine problems.

OSM awarded AAMLRP a total of \$1,525,000 in the 2007 grant. That grant includes \$25,000 for emergency coal projects. Alaska's 2007 grant funds 3.75 full-time equivalents and program administration costs. It also funds three coal projects and planning for two additional coal projects. As stated in the application, the Program is likely to undertake projects addressed in previous Governors' requests under section 409(c) of SMCRA that pre-date the latest February 2007 request. AAMLRP also is likely to address noncoal projects on National Park lands that are included in the 409(c) letter dating from February 2007 under this grant.

Alaska's 2008 AML grant funding totaled \$1,750,000. The 2008 grant includes \$25,000 for emergency coal reclamation and supports program administration and 3.75 full-time equivalents. The State's grant funds two, and possibly three coal projects and possibly one or more noncoal projects included in the 2007 and 2008 Governor's 409(c) letters.

AAMLRP completed one emergency coal project by the week of July 9, 2007, just after the beginning of the 2008 evaluation year. The Eska Creek Subsidence Pit 1a emergency involved a subsidence opening that occurred suddenly in the immediate area of the Eska Creek Phase 1 coal reclamation project. OSM declared an emergency on May 11, 2007, based on the State's request. AAMLRP completed the emergency abatement under the same construction contract that it awarded for the Eska Creek Phase 1 non-emergency project.

Alaska does not have an OSM-approved subsidence insurance protection program.

III. Noteworthy Accomplishments

AAMLRP continued to partner with other entities for AML reclamation. In the 2007 evaluation year, it provided partial funding to the U.S. Department of the Interior (DOI), National Park Service (NPS) to reclaim the Jumbo Mine subsidence feature in a popular hiking area of the Wrangell-St. Elias National Park and Preserve. Sloughing of the surrounding talus slope filled the opening shortly after the State provided the funding but before the subsidence could be filled. The funding remains available while the National Park Service determines if the natural closure needs to be improved. During the 2008

evaluation year, the Program provided partial funding to the National Park Service to reclaim a portal and vertical opening in the Nuka Bay / Harrington Prospect project in the Kenai Fjords National Park. That work is expected to be completed early in the evaluation year. The Alaska Mental Health Trust provided additional funding in the contract for AAMLRP's Ester Dome project near Fairbanks. That funding supported clean-up work that went beyond the scope of the AML project. Usibelli Coal Mine, Inc., enabled the State to save money during demolition of the conveyor and grizzly in the Suntrana tipple coal project near Healy by allowing AAMLRP to use the company's solid waste disposal site.

Our 2008 evaluation of the 1(a) performance measure (SEE section IV.A of this report) noted that willow cuttings AAMLRP planted at the reclaimed Jonesville Fire Phase 2 project area near Sutton were sprouting. The U.S. Department of the Interior, Fish and Wildlife Service, provided those cuttings to the State to improve moose habitat.

AAMLRP also promoted public awareness of AML hazards and its reclamation projects during the evaluation period. It kept the Sutton Community Council informed of the ongoing Jonesville and Eska Creek projects by attending Council meetings and providing written updates. AAMLRP solicited Community input when planning those projects and involved the local fire chief in the projects' access and water issues. The Program also participated in field visits with Community leaders on request. A representative of the Community Council attended part of our 2008 evaluation of the 1(a) performance measure at the Jonesville Fire Phase 2 project area. AAMLRP published an article in a local newspaper to inform the public of its Ester Dome project and asked the public for information on any other abandoned mine problems in the area. It also informed residents of the Healy area of the need, and its plan, to demolish the Suntrana tipple and conveyor to protect public health and safety.

As noted in section IV.C of this report, AAMLRP was the driving force behind the development of DNR's computer training facility. This room is modeled after OSM's Technical Innovation and Professional Services (TIPS) training room in Denver. AAMLRP staff, employees of other State agencies and the Governor's office, Federal employees, and Environmental Systems Research Institute employees used this facility an average of three days per week during the evaluation period.

IV. Results of Enhancement and Performance Reviews

We updated the "Alaska AML Evaluation Team Performance Agreement" to describe the principles of excellence and performance measures that we planned to review in the 2008 evaluation year. We finalized the updates on November 20, 2007, based on earlier discussion we had in a conference call on November 1.

Principles of excellence and performance measures emphasize on-the-ground or end-results as much as possible. Each general principle of excellence has one or more specific performance measure(s). Performance measures describe: Why we selected that topic; what the review population and sample sizes will be; how we will do the

review and report the results; and our schedule for completing the review. The principles of excellence and specific performance measures we chose for our 2008 evaluation of the Alaska Abandoned Mine Lands Reclamation Program are:

Principle of Excellence 1: The State's on-the-ground reclamation is successful.

- *Performance Measure (a):* Does reclamation meet the goals of the project?

Principle of Excellence 2: The State AML program procedures are efficient and effective.

- *Performance Measure (e):* Does the information the State entered into the Abandoned Mine Land Inventory System (AMLIS) beginning July 1, 2004, agree with information in its files?
- *Performance Measure (g):* How is information technology (IT) being used to implement AML program activities?

Principle of Excellence 3: The State has systems to properly manage AML funds.

- *Performance Measure (a):* Is State program income accounted for properly?
- *Performance Measure (d):* Do State AMLR Program managers have adequate financial information to manage the projects and the program?
- *Performance Measure (h):* Are the State's drawdowns of AML grant funds in accordance with requirements of the Federal Assistance Manual (FAM)?

Results of our 2008 evaluation are described below in Parts IV.A through F. We described our evaluation results in much greater detail in an enhancement and performance review report for each performance measure. Those reports are on file in OSM's Denver Field Division and are the factual basis of this report's summary of our evaluations of performance measures 1(a), 2(e), 2(g), 3(a), 3(d), and 3(h).

A. Summary Evaluation of Performance Measure 1(a)

Our goal for this evaluation was to determine if reclamation met project goals. We empirically compared AAMLRP's reclamation to its project specifications and used its closeout reports for additional information for the five sample projects we visited. We considered measures AAMLRP approved in change orders during construction to address site-specific conditions. We also considered any requirements resulting from interagency consultation it completed to help OSM comply with the National Environmental Policy Act and other laws. Our evaluation focused on determining whether completed reclamation met project goals by continuing to abate original hazards, complying with conditions of interagency consultation, and improving overall site conditions compared to pre-reclamation conditions.

The evaluation sample included the Ester Dome noncoal project and the Suntrana tipple – grizzly and conveyor removal phase, Jonesville Fire phase 2, Eska Creek phase 1 and subsidence pit 1(a) emergency, and the Eska Creek phase 2 coal projects. AAMLRP’s work at these projects was complete. We noted that work continued at the Ester Dome project to remove old mining equipment, abandoned cars, and other debris with funding the Alaska Mental Health Trust (landowner) provided under the same contract. We observed AAMLRP’s work to abate hazards attendant to 17 reclaimed vertical openings and two reclaimed portals, eight hazardous structures, and 21 acres of surface burning.

We found that the hazard abatement measures AAMLRP used in the sample projects were intact and functional. We did not find problems directly compromising those measures, though in one case a new subsidence-related vertical opening had the potential to compromise an adjacent backfilled closure. We recommended that AAMLRP monitor the Ester Dome reclaimed project areas for ongoing subsidence problems and address new hazardous openings when possible. We also found that AAMLRP’s reclamation abated hazards to public health and safety and reduced environmental problems such as erosion, sedimentation, smoke, and odor while promoting revegetation. Based on these findings, we concluded that the sample projects met their respective goals.

B. Summary Evaluation of Performance Measure 2(e)

In September 2004, the U.S. Department of the Interior, Office of the Inspector General (OIG), issued report number 2003-I-0074 based on its review of AMLIS data for four eastern States’ AML programs. That report criticized the accuracy of data in Problem Area Descriptions (PADs), concluding that AMLIS data did not match data in the respective States’ files. In part, the OIG recommended establishing “a quality control system that ensures that States, Tribes, and OSM, as applicable, review and certify the accuracy of data entered into AMLIS.”

In response to that recommendation, we developed performance measure 2(e) to require an annual comparison of data in a sample of Alaska’s AMLIS PADs to data in Alaska’s files to ensure that they agree. AAMLRP uses data from the Alaska Statewide Accounting System (AKSAS) and its project managers to complete its project closeout reports and update AMLIS. We consider the project closeout reports to be AAMLRP’s “system” for ensuring that completion data Alaska enters into AMLIS match data in its files. We compared data in AAMLRP’s project closeout reports to data in those projects’ respective PADs. This report summarizes our third annual evaluation of AAMLRP’s use of that system to update AMLIS. Data we reviewed for this evaluation pertained to the Eska Creek phase 1 (including the Eska Creek subsidence pit 1(a) emergency), Eska Creek phase 2, Jonesville Fire phase 2, and Suntrana tipple phase 2 (grizzly and conveyor removal phase) coal projects and the Ester Dome noncoal project.

We also considered other AMLIS requirements for this evaluation. State and Indian tribal AML programs help OSM maintain an inventory of abandoned mine land problems. They are required to update PADs in AMLIS when OSM approves funding for individual reclamation projects and upon project completion. Those programs also are required to complete priority documentation forms to support the priorities they assign to AML problems in PADs.

Our review of the sample project closeout reports and their respective PADs made a number of findings. We found that AAMLRP updated AMLIS PADs with completion data and completed closeout reports for all the sample projects. However, completion data in all the sample PADs we reviewed differed in various ways from their respective project closeout reports, including data in performance measures linked to AMLIS. Only one PAD did not include a priority documentation form, most likely because it is the oldest PAD in the sample. Last, for the one sample project that involved cost sharing, AAMLRP identified the shared cost in the closeout report and in the PAD's linked performance measures.

We reached three conclusions based on our findings. First, AAMLRP formatted information in the sample project closeout reports consistent with formatting improvements it made in the 2007 evaluation year. Second, AAMLRP updated sample AMLIS PADs upon project completion as required in 30 CFR 886.23(b). Last, AAMLRP's use of project closeout reports to ensure that data in its files match AMLIS PAD data was not successful for the sample projects we reviewed in this evaluation period.

Further, we made two recommendations based on our findings and conclusions. We recommended that AAMLRP correct the completion data it entered into AMLIS for the sample projects to match completion data in its closeout reports for those projects. We also recommended that AAMLRP include a quality control check in the process of updating AMLIS to ensure that the data it enters in PADs and performance measures match data in the respective project closeout reports.

C. Summary Evaluation of Performance Measure 2(g)

We planned this evaluation to identify the primary information technology (IT) resources AAMLRP uses and to emphasize what it accomplished with them. This is the first time we evaluated this performance measure for AAMLRP. The sample for this evaluation included the primary IT resources and products used and generated from July 1, 2006, to March 6, 2008.

As expected, we found that IT resources and related technology are essential to AAMLRP's routine work and specialized activities. We concluded that AAMLRP makes effective and efficient use of the IT resources available to it. AAMLRP effectively uses expertise available through other State entities to keep its systems operational. It also relies heavily on ongoing OSM Technical Innovation and Professional Services (TIPS) software and hardware support.

The Land Records Information Section (LRIS) oversees DNR's computer systems and network services. As part of LRIS, the Computer Information Center (CIC) handles AAMLRP's licensing and purchases of standard software that must meet the State's requirements. It also makes non-standard purchases for special applications. LRIS/CIC updates AAMLRP's software, troubleshoots the system, maintains the network and its security, manages daily server backup operations to protect data retention in case of system failure, and maintains the computer training room. AAMLRP purchases all computer hardware for its staff members' workstations with SMCRA grant funds. LRIS, not AAMLRP, purchases the workstations installed in the TIPS training room and updates them on a four year replacement cycle. Though LRIS also oversees DNR's geographic information system, AAMLRP operates all of its GIS-related software through OSM Western Region servers under licenses issued to OSM's TIPS program.

As noted in Part II of this report, AAMLRP's use of IT resources involves training. AAMLRP is largely responsible for establishing the DNR's TIPS training room. This facility has 16 networked workstations that can access State and OSM software. It is open to all State bureaus and Federal agencies, though AAMLRP and the coal regulatory program have priority access. The DNR now pays most of the facility's overhead costs and the Division of Mining, Land and Water Management pays for a CIC person to provide IT assistance to AAMLRP. This arrangement enables AAMLRP to use the SMCRA grant funds it previously spent to support this facility for reclamation-related work instead. CIC updates the training room's hardware and maintains its software at no cost to AAMLRP.

AAMLRP uses All Topo Maps Version 7 Professional to generate high resolution location maps. As a registered viewer, AAMLRP receives automatic updates and can use this software on an ordinary workstation and printer. AAMLRP uses this software to generate maps of different scales that it can annotate with text, images, hyperlinks, icons, and property boundaries. It also uses it to search its map collection by place name, township/range, map name, and location. Further, the software enables AAMLRP to export georeferenced images to AutoCAD, ArcView, ArcGIS, and other GIS applications as a high resolution seamless base map. It also can interface with digital media (pictures) and GPS track logs. All Topo Maps enables AAMLRP to generate composites of multiple maps by automatically seaming quads (removing the collars/borders). We looked at examples of individual topo maps and a composite map AAMLRP created with All Topo Maps.

AAMLRP also uses ArcPad™. ArcPad is software for mobile GIS and field mapping applications using handheld and mobile devices such as tablets or GPS units. It enables creation, editing, analysis, and display of GIS data in vector and raster image files. The software supports GPS receivers, rangefinders, and integrated digital cameras with GIS data collection. It also enables high-quality mapping on mobile devices in conjunction with ArcGIS. AAMLRP used ArcPad to increase the efficiency of its field inventory of coal mine features. For example, AAMLRP input raster and georeferenced data into a tablet personal computer. Then, it used a Bluetooth™ to

generate inventory data in real time and transfer the data to the tablet when flying over areas to see where underground mines open to the surface and to locate other abandoned mine problems. This data then can be manipulated using other software for mapping and project planning.

ArcGIS®™ is software AAMLRP uses to model geographic information it gathers through field inventories and other sources. ArcGIS enables the Program to analyze spatial data by discovering and characterizing geographic patterns. The software also organizes and manages geographic information in a geodatabase that can be used in the office or the field. The geodatabase supports data that include vector shapefiles, raster data, attribute tables, geographic features, satellite and aerial imagery, surface modeling data, and survey measurements. This feature enables the Program to model spatial relationships between the data. Also, ArcGIS is a mapping tool that enables AAMLRP to display its data in ways that can identify patterns and trends by showing changes over time and space. We viewed a map AAMLRP created using this technology that delineated roads, reclaimed areas and other features on an aerial view of Slipper Lake and the reclaimed Jonesville fire project area.

SurvCADD® is a software package for engineering design that works with AutoCAD® and includes several modules for specialized applications. SurvCADD helps AAMLRP transform raw survey data into completed drawings. AAMLRP can use various modules for surveying and site layout, mapping contours and calculating material volumes, and creating profiles and cross sections and designing by cross section. SurvCADD enables AAMLRP to generate elevational data in conjunction with boundaries to determine volumetrics of spoil piles and topography of reclaimed and unreclaimed areas. The Program also uses it to create three-dimensional images showing the same data and to generate plan and cross-sectional views for construction contract documents. AAMLRP uses data it manipulates with ArcGIS in conjunction with SurvCADD to develop annotated elevational drawings and volumetric calculations for excavation and fill areas. AutoCAD software by Autodesk remains one of AAMLRP's basic tools for use with other software such as SurvCADD to do two- and three-dimensional design and drafting.

GPS units such as the Trimble® GeoExplorer II® and CE/XT® and Trimble's TerraSync™ and Pathfinder® Office software for those units are mainstays of AAMLRP's work. The Program uses TerraSync software on CE/XT and other Trimble platforms to gather GPS point, line, and polygon vector data in rover files collected in field surveys. It uses Pathfinder Office software to download data from GPS units onto desktop personal computers. Pathfinder Office uses base station data to post-process rover files to correct for ionospheric and other errors and can export corrected geometries in formats that include shapefiles, drawing interchange/exchange format (dxf) files, or American Standard Code for Information Interchange (ASCII) files for import into GIS, AutoCAD, All Topos, or other programs. AAMLRP has used Trimble platforms and software that OSM provided since 1997 for field inventories, design layout, field verification, and as-built surveys. The Program can generate data with sub-

meter accuracy using these newer Trimble platforms, which it finds indispensable for engineering work.

The Program did engineering work for a number of projects with the technology described above. It contracted for terrestrial surveys that generated base maps of original ground and final as-built surfaces. AAMLRP used a Trimble CE/XT GPS unit with TerraSync, Pathfinder Office, and SurvCADD software starting from the original ground coverage to plan projects. Its planning included generating drillhole patterns on AutoCAD maps that it uploaded into Trimble GPS units. Using those GPS units, it then staked-out drillhole patterns in the field. The Program also used this technology to outline patches of vegetation to aid engineer's estimates and to generate as-built drillhole data. It also used data showing drillhole depths to bottom of combustible materials to model material volumes.

Phases 1 and 2 of the Jonesville Fire project provided opportunities for innovative use of IT resources. A contractor surveyed and modeled excavation surfaces throughout phase 1 to calculate pay quantity volumes. AAMLRP also analyzed that data using SurvCADD to independently verify the completed work. During project work and after completion, AAMLRP mapped cultural features, new road alignments, and watercourses using a Trimble CE/XT GPS unit and rendered that data in SurvCADD for updated coverage. In phase 2, the Program used spirit leveling in combination with the CE/XT GPS unit to model topography in unsurveyed areas. It established elevations with the spirit level and used the GPS unit to establish eastings and northings (x and y coordinates, respectively). Using that data, AAMLRP generated three-dimensional coordinates and then derived original ground contours. After the contractor completed the project, AAMLRP spliced the new elevation contours and the altered natural and cultural features into the original coverage inside disturbed area boundaries to update its map data.

The Program uses Cumulus® to manage its imaged data. Cumulus is digital asset management software. Using this software, AAMLRP can store digital files and identify them with attributes that are, or are not, visible in the image to make files easier to manage and search. It also can use it to share and publish digital files. AAMLRP used Cumulus to store digital photographs taken of several abandoned coal and noncoal mine problems before, during, and after reclamation and photos of the DNR TIPS training room, including those it has provided to OSM.

We note that AAMLRP also uses other devices to facilitate measuring features in the field. It used an electronic rangefinder and clinometer to map and measure large abandoned pit walls. Also, it used a portable field seismic unit to locate underground voids that caused, or could cause, subsidence. AAMLRP found that the seismic unit worked best to show the depth to bedrock and was somewhat less successful at showing the dimensions of subsurface voids. Nevertheless, it enabled AAMLRP to determine how deep excavation needed to go to reach the bottom of features that could cause surface subsidence.

D. Summary Evaluation of Performance Measure 3(a)

The purpose of this evaluation was to determine if the State properly accounts for program income. This was the first time we evaluated this performance measure for Alaska.

We determined that AAMLRP does not generate program income. However, Alaska's coal regulatory program does. Though we evaluated the State's accounting for income its regulatory program generates, our report of that evaluation is maintained in OSM-DFD's grants/financial files and is not discussed here.

E. Summary Evaluation of Performance Measure 3(d)

We evaluated this topic to determine if the AAMLRP manager has adequate financial information to manage projects and the Program. We evaluated this performance measure once before in 1998. For this evaluation, we looked at how the AAMLRP Manager acquires financial data from his staff and his authority to make funding available to successful contract bidders for AML project construction.

We reviewed sample transactions such as the Small Procurement Document, Part A – Request for Proposals and Part B - Proposed Statement of Services. These two documents cover all the required services, estimated costs, and all contract requirements for AAMLRP's reclamation projects. Additionally we reviewed AAMLRP's January 31, 2008, long-term plan for "Future Projects and Timelines for Work." This long-range plan provides the Division and its management with a chart listing possible AML projects through the year 2025. It includes estimated costs for each listed project and a projected budget. The plan also predicts any possible carry over funds to be applied in subsequent years. This information helps the AAMLRP Manager and staff plan future activities with some sense of guidance in terms of timing and funding. The AMLR Manager and staff make real-time adjustments to update the plan at the start of each fiscal year.

Mining engineering staff of the Division of Mining, Land and Water Management estimate costs for projects and discuss them with the AMLR Manager before putting projects out for bid. Projections are based on features, location, or unique characteristics that apply to each specific AML project. Project information is contained within the Request for Proposal (RFP) that the AAMLRP advertises. The RFP contains a prepared statement of reclamation/construction services that will be required.

AAMLRP holds pre-bid conferences to explain what needs to be done for a specific project or project area. These conferences provide the same information to all interested bidders. AAMLRP tells bidders what the problem(s) are and where the work needs to be done. All questions are answered to avoid misunderstandings as to what project work is being advertised.

The AAMLRP Manager and staff focus on certain aspects of contractors' competitive bids. Those aspects include the low bid amount, contractor capabilities, prior experience with construction projects similar to the AML project being advertised, and sometimes the best strategy to accomplish a proposed project.

On occasion AAMLRP will advertise special lump-sum contracts with a fixed contract price. As a general rule, overages in quantities encountered during construction are considered only under rare circumstances. These contracts are based on the entire job to be done, not unit pricing or volume estimates.

The Alaska Division of Mining Land and Water has a signed reimbursable services agreement (RSA) with the Alaska Division of Parks - Design and Construction Section. The Division of Parks is the only entity in Alaska State government outside the Department of Transportation with contracting authority. The Division of Parks guides and helps AAMLRP with contract preparation and the bidding process to ensure that contracts comply with State protocols. Division of Parks staff engineers are registered professional engineers (PEs) and stamp project designs for AAMLRP. AAMLRP is working to have its staff engineer obtain PE status to have the qualification to stamp project designs in-house.

We found that the State has adequate systems in place to properly manage AML funds. The AAMLRP Manager has access to, and obtains, financial information adequate to manage and operate the Program. The Administrative Officer and Accounting Technician provide account balances to the Manager as needed. The Manager receives a monthly report from the AKSAS to track individual project expenses.

F. Summary Evaluation of Performance Measure 3(h)

Our evaluation of this performance measure determined that the State draws-down AML grant funds in accordance with requirements of the Federal Assistance Manual (FAM). Our review sample included drawdown reports from fiscal years 2006 and 2007. This is the first time we evaluated this performance measure for Alaska.

AAMLRP submits monthly billing reports to the Alaska Department of Revenue, Treasury Division, Cash Management Section, in Juneau for reimbursement. The report shows all amounts expended by each program subaccount. The State's Department of Revenue then submits a payment request to the Federal Government through OSM's Automated Standard Application for Payment (ASAP) Draw Down system.

AKSAS tracks all costs for individual projects and services. This system keeps a running total of all direct and indirect charges for each program budget cost. Expenditures are subtracted and the unencumbered, updated balances are provided to the AMLR Program Director on a monthly basis. This report provides the AMLR Program with a monthly update of how much each active account has available for future drawdown purposes.

AAMLRP operates on a cash reimbursement basis. Alaska spends its own funds before drawing-down Federal funds. The State pays all costs up-front through Alaska’s accounting system and then is reimbursed for the amount it paid out for program expenses. AAMLRP is unlikely to be in noncompliance with Chapter 5-55 of the FAM because it is on the reimbursement method of payment.

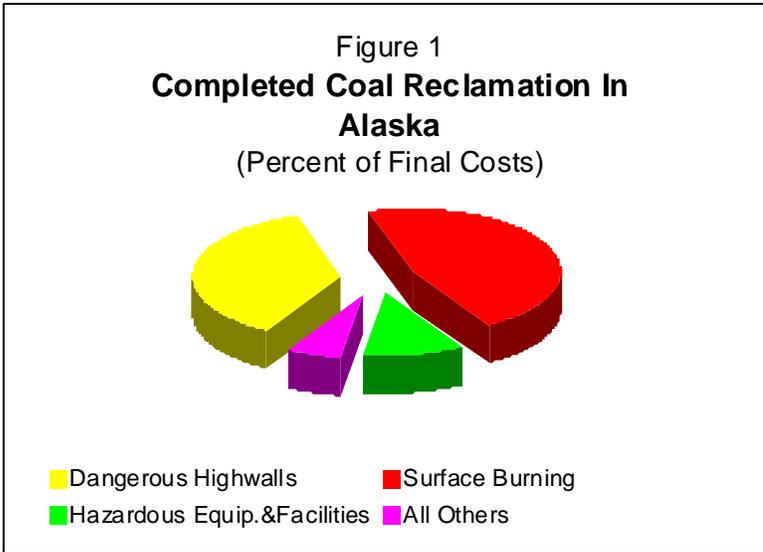
Also, because Alaska operates on a cash reimbursement basis and does not receive Federal funds in advance, AAMLRP does not need to concern itself with how long it keeps cash on hand before retail customers or contractors are paid. The actual and optimal days required to pay funds under the State’s system are not a concern because Alaska pays all debts from its treasury first. It does not keep a cash balance on hand before paying out Federal funds.

We concluded that the Division of Mining, Land and Water Management maintains a financial drawdown system that complies with Federal and State requirements.

V. Accomplishments and Inventory Reports

Title IV of SMCRA emphasizes reclamation of abandoned coal mine-related problems because active mines pay a fee on each ton of coal produced, and that fee generates the AMR Fund. The 2006 Act increases that emphasis. The State maintains an inventory of abandoned coal mine problems in AMLIS from which AAMLRP selects problems to reclaim. Alaska also requests funding to abate priority 1 noncoal mine hazards under section 409(c) of SMCRA.

Alaska spent over \$17.3 million to reclaim abandoned coal mine problems since the Secretary approved the State’s program in late 1983. That amount is 94.7 percent of all the SMCRA grant funds it spent on abandoned mine reclamation in that time, based on AMLIS data. To date, Alaska’s coal projects abated hazards associated with 10,220 linear feet of dangerous highwalls, 1,479 structures and pieces of equipment, 50.5 acres of spoil areas and 42 acres of surface burning. Slightly more than 94 percent of AAMLRP’s expenditures on coal reclamation to date funded abatement of surface burning (46.1%), dangerous highwalls (37%), and hazardous equipment and facilities (11.1%). Figure 1 (right)



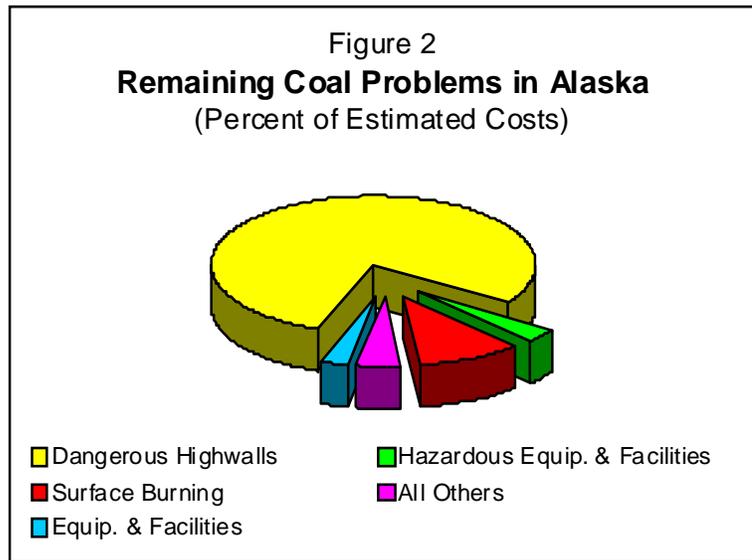
illustrates AAMLRP’s completed reclamation of priority 1, 2, and 3 coal problems as

percentages of final costs. Appendix 1 shows completed units and final costs of Alaska’s coal reclamation in greater detail based on AMLIS data. It also gives more detail on the nine types of coal problems that Figure 1 combines into “all others.”

AAMLRP worked on four coal projects during the 2008 evaluation period. It completed revegetation and final payment on the Jonesville Fire Phase 2 project near Sutton. It also completed the Eska Creek Phase 1 project (including the Eska Creek subsidence pit 1(a) emergency) and the Eska Creek phase 2 projects near Sutton early in this evaluation period. The Program removed the grizzly and conveyor in phase 2 of the Suntrana Tipple project near Healy. AAMLRP also solicited bids on the next phase of the Suntrana project, which removed the tipple and the horizontal span of the nearby abandoned bridge over Healy Creek early in the 2009 evaluation year.

Figure 2 (below right) is an illustration of the unfunded coal problems Alaska has remaining. It is based on a comparison of their estimated reclamation costs as currently inventoried in AMLIS. The cost of reclaiming those problems is estimated to be \$61,478,609.

That figure is an increase of more than \$18.3 million in the estimated cost of abating Alaska’s coal problems since the 2007 evaluation year and an increase of over \$25.2 million since 2006. Most of the State’s remaining coal problems include dangerous highwalls (81.3%), surface burning (10.9%), hazardous equipment and facilities (3.5%), and other equipment and facilities (2.8%).

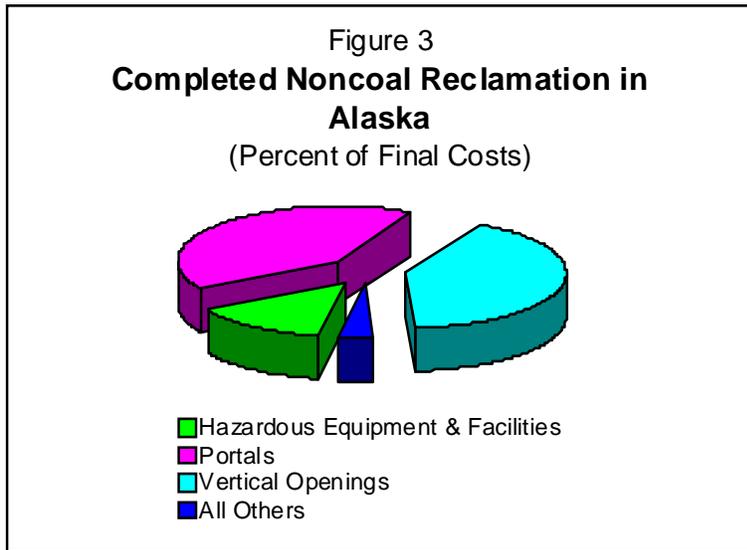


The remaining 1.5 percent of Alaska’s coal problems, shown as “all others” in Figure 2, include dangerous piles and embankments, vertical openings and lower priority mine openings, hazardous water bodies, and haul roads. That means about 96.8 percent of the estimated cost of reclaiming Alaska’s remaining inventoried coal problems is associated with unfunded priority 1 and 2 problems. Unfunded priority 3 problems make up the remaining 3.2 percent. Appendix 1 shows Alaska’s remaining unfunded coal problems and the estimated costs of addressing them in greater detail.

Appendix 2 shows the changes the Program made to AMLIS during the year. As stated previously, those updates added over \$18.3 million in unfunded abandoned coal mine problems, including dangerous highwalls, hazardous equipment and facilities, and hazardous water bodies. In the 2007 summary evaluation report, we noted that AAMLRP planned to update AMLIS to include previously un-inventoried coal problems that it believes need to be addressed before it can certify completion of all known

eligible coal problems. The \$18.3 million of added coal problems is one result of that effort, with more additions possible. Appendix 2 also shows changes in AMLIS data resulting from updates AAMLRP made to reflect its completion of funded coal reclamation during the year. However, those data need to be corrected as we found in our evaluation of the 2(e) performance measures, as described in Part IV.B of this report.

As an uncertified State, Alaska also funds abatement of priority 1 hazards of abandoned noncoal mines under section 409(c) of the Act. The State may abate lower priority noncoal hazards only in rare instances when necessary to abate a priority 1 problem. It also partners with other agencies to leverage its funding, resulting in abatement of a wider range of noncoal problems. Figure 3 (below, left) compares the final costs of the noncoal reclamation AAMLRP completed since program approval based on AMLIS data.



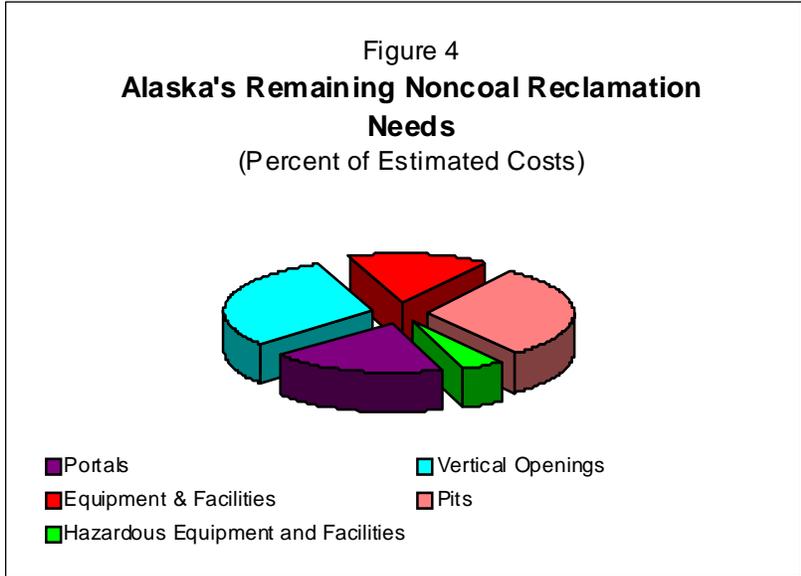
Those data show that about 96.5 percent of Alaska’s noncoal expenditures from all funding sources addressed vertical openings, portals, and hazardous equipment and facilities by the end of the 2008 period. Safeguarding vertical openings and portals made up about 41.8 and 40.9 percent of that total cost, respectively, followed by the cost of addressing hazardous

equipment and facilities at about 13.7 percent. The category “all others” shown in Figure 3 includes the 3.5 percent of remaining noncoal completion costs attributed to reclaiming dangerous highwalls, dangerous piles and embankments, and subsidence. Appendix 3 shows Alaska’s noncoal reclamation accomplishments to date in greater detail.

AAMLRP reclaimed one noncoal project and provided partial funding for a cooperative project during the 2008 evaluation year. It completed the Ester Dome noncoal project in mid September 2007. That project safeguarded eight vertical openings and one portal. As we noted in Part III of this report, AAMLRP also provided partial funding to the U.S. Department of the Interior, National Park Service to close a portal and a vertical opening in the Kenai Fjords National Park. That work should be finished early in the 2009 evaluation year.

Alaska has inventoried an estimated total of \$661,000 in unfunded priority 1 and 3 noncoal problems in AMLIS, the same amount reported in 2007. The State’s noncoal inventory data in AMLIS are incomplete, however. As currently inventoried, priority 1 vertical openings, portals, and hazardous equipment and facilities make up about 54.5

percent of the \$661,000 estimated unfunded total cost. The State presently does not have unfunded priority 2 noncoal problems in AMLIS. Priority 3 equipment and facilities and pits make up the remaining 45.5 percent of Alaska’s estimated unfunded cost of noncoal hazard abatement. Figure 4 (below, left) compares the estimated costs of reclaiming Alaska’s remaining unfunded noncoal problems, based on AMLIS data. The



scope of the estimated noncoal reclamation costs and problems is shown in greater detail in Appendix 3.

Appendix 4 shows the changes AAMLRP made to unfunded, funded, and completed noncoal data in AMLIS during the evaluation. The changes reflect AAMLRP’s reclamation accomplishments and costs during the year and adjustments in the data to reflect changes in the status of problems in the field and in

AAMLRP’s project planning. Completion data, however, are not entirely accurate as we noted in the findings we made for the 2(e) performance measure noted in Part IV.B of this report.

Appendix 1

Alaska Abandoned Mine Lands Reclamation Program

Coal Reclamation Accomplishments Since December 23, 1983, and Remaining Reclamation Needs*

Problem Type and Description	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
Dangerous Highwalls	20,000 feet	\$50,001,109	0	0	10,220 feet	\$6,411,380	30,220 feet	\$56,412,489
Dangerous Impoundments	0 (count)	0	0	0	4 (count)	\$79,362	4 (count)	\$79,362
Dangerous Piles & Embankments	5 acres	\$150,000	0	0	3.5 acres	\$12,959	8.5 acres	\$162,959
Equipment & Facilities	7 (count)	\$1,750,000	0	0	0	0	7 (count)	\$1,750,000
Gobs	0	0	0	0	1.5 acres	\$7,500	1.5 acres	\$7,500
Hazardous Equipment & Facilities	46 (count)	\$2,175,000	2	\$200,000	1,479 (count)	\$1,925,464	1,527 (count)	\$4,300,464
Haul Road	5 acres	\$17,500	0	0	0	0	5 acres	\$17,500
Hazardous Water Body	1	\$500,000	0	0	2 (count)	\$123,640	3 (count)	\$623,640
Industrial / Residential Waste	0	0	0	0	4 acres	\$266,370	4 acres	\$266,370
Mine Openings	1 (count)	\$ 75,000	0	0	0	0	1 (count)	\$75,000
Portals	0	0	0	0	6 (count)	\$37,0355	6 (count)	\$37,035
Subsidence	0	0	0	0	0	0	0	0
Spoil Area	0	0	0	0	50.5 acres	\$96,969	50.5 acres	\$96,969
Surface Burning	30 acres	\$6,750,000	0	0	42 acres	\$7,987,463	72 acres	\$14,737,463
Slump	0	0	0	0	25.0 acres	\$11,000	25.0 acres	\$11,000
Vertical Openings	3 (count)	\$60,000	0	0	13 (count)	\$354,384	16 (count)	\$414,384
ALASKA TOTAL COSTS		\$61,478,609		\$200,000		\$17,313,526		\$78,992,135

* This table is based on a Problem Type Unit and Cost Summary Report from the Abandoned Mine Land Inventory System as of July 22, 2008. Coal accomplishments and costs shown are the same whether reported as SMCRA-funded only or as funded by all sources.

Appendix 2

Alaska Abandoned Mine Lands Reclamation Program

Coal Reclamation Accomplishments and Inventory Changes in the 2008 Evaluation Year

Problem Type and Description	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
Dangerous Highwalls	+7,500 feet	+\$16,200,000					+7,500 feet	+\$16,200,000
Equipment & Facilities	-3 (count)	-\$10,000					-3 (count)	-\$10,000
Gobs					-5 acres	-\$3,993	-5 acres	-\$3,993
Hazardous Equipment & Facilities	-2 (count)	-\$2,136,000	-9 (count)	+\$60,251	+11	\$335,665		-\$1,740,084
Hazardous Water Body	+1 (count)	+\$500,000					+1	\$500,000
Portals	-6 (count)	-\$17,000			-1 (count)	-\$15,950	-7 (count)	-\$32,950
Spoil Area					+3.5 acres	+\$12,034	+3.5 acres	+\$12,034
Subsidence			-2 acres	-\$28,286			-2 acres	-\$28,286
Surface Burning	-4 acres		-15 acres	-\$1,908,000	-21.2 acres	+\$5,499,025	-21.2 acres	+\$3,591,025
Vertical Openings	-4 (count)	-\$74,000	-2 (count)	-\$11,093	+9 (count)	+\$286,633	-3 (count)	+\$201,540

* This table is based on a comparison of Problem Type Unit and Cost Summary Reports from the Abandoned Mine Land Inventory System as of July 19, 2007, and July 22, 2008. Coal accomplishments and costs shown are the same whether reported as SMCRA-funded only or as funded by all sources.

Appendix 3

Alaska Abandoned Mine Lands Reclamation Program

Noncoal Reclamation Accomplishments Since December 23, 1983, and Remaining Reclamation Needs*

Problem Type and Description	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
Dangerous Highwalls	0	0	0	0	70 (feet)	\$13,350	70 (feet)	\$13,350
Dangerous Piles & Embankments	0	0	0	0	2 acres	\$5,000	2 acres	\$5,000
Equipment & facilities	1.5 (count)	\$100,000	0	0	0	0	1.5 (count)	\$100,000
Hazardous Equipment & Facilities	2 (count)	\$32,000	0	0	13 (count)	\$139,613	15 (count)	\$171,613
Portals	20 (count)	\$127,000	0.5 (count)	\$12,500	31.1(count): SMCRA	\$389,431: SMCRA	51.6 (count): SMCRA	\$528,931: SMCRA
					36 (count): all sources	\$416,431: all sources	56.5 (count): all sources	\$555,931: all sources
Pits	3 acres	\$200,000	0	0	0	0	3 acres	\$200,000
Subsidence	0	0	0.4 acre: SMCRA	\$14,000: SMCRA	3.0 acres	\$17,031	3.4 acres: SMCRA	\$31,031: SMCRA
			1 acre: all sources	\$47,800: all sources			4 acres: all sources	\$64,831: all sources
Vertical Openings	30 (count)	\$202,000	0.5 (count)	\$7,000	35.7(count): SMCRA	\$403,813: SMCRA	66.2 (count): SMCRA	\$618,313: SMCRA
					37 (count): all sources	\$424,813: all sources	67.5 (count): all sources	\$639,313: all sources
ALASKA TOTAL COSTS		\$661,000		\$39,000: SMCRA		\$968,238: SMCRA		\$1,668,238: SMCRA
				\$72,800: all sources		\$1,016,238: all sources		\$1,750,038: all sources

* This table is based on a Problem Type Unit and Cost Summary Report from the Abandoned Mine Land Inventory System as of July 22, 2008. AMLIS does not include a complete inventory of Alaska's unfunded noncoal problems.

Appendix 4

Alaska Abandoned Mine Lands Reclamation Program

Noncoal Reclamation Accomplishments and Inventory Changes in the 2007 Evaluation Year

Problem Type and Description	Unfunded		Funded		Completed		Total	
	Units	Costs	Units	Costs	Units	Costs	Units	Costs
Portals			-0.5 (count)	+\$10,500	+1 (count)	+\$5,677	-0.5 (count)	+\$16,177
Spoil Areas	-20 acres	-\$1,000,000					-20 acres	-\$1,000,000
Subsidence			-3.0 acres: SMCRA	-\$7,000: SMCRA	+3 acres	+17,031		+\$10,031: SMCRA
			-3.0 acres: all sources	-\$7,800: all sources				+\$10,031: all sources
Vertical Openings			-2.5 (count)		+3 (count): SMCRA	+\$17,031: SMCRA	+0.5(count): SMCRA	+\$22,531: SMCRA
					+3 (count): all sources	+\$17,031 sources	+0.5 (count): all sources	+\$22,531: all sources

* This table is based on a comparison of Problem Type Unit and Cost Summary Reports from the Abandoned Mine Land Inventory System as of July 19, 2007, and July 22, 2008.

Appendix 5

State Comments on the Report

From: Wehrman, Joseph F (DNR) [joe.wehrman@alaska.gov]
Sent: Friday, August 15, 2008 9:21 AM
To: Ronald Sassaman
Subject: RE: Draft Annual Report Review

The Alaska Abandoned Mine Land Program is very proud of its record of committing 95% of the funds from OSMRE towards coal projects with only 5% being committed to high priority non-coal safety hazards. As one of several Minimum Program States, we continue to struggle with how we can attack large dollar projects, which most of our remaining coal problems are, with the limited annual grant amounts available. The interpretation that OSMRE made of the "phase in" restrictions on increased base support for Minimum Program State grants provided in the 2006 SMCRA Amendment is not helping us to get large individual project needs met - and even that level would be insufficient to get the job done under standard contracting procedures. The AAMLPL is actively pursuing more cost-effective methods of mitigating hazardous conditions any way we can in an effort to get all remaining coal sites addressed prior to production fee collection termination. We have been allowed to use the only contracts ever let by the State of Alaska government under which "project completion is subject to future funds availability". There remains one last set of coal strip pits with safety issues that we are aware of that has yet to be added into AMLIS and we will try to get that accomplished this fiscal year. We did manage to reduce the unfunded liability of remaining coal problems by some two million dollars as a result of recent favorable bids and innovative mitigation methods as compared to original AMLIS engineer's estimated costs.

We acknowledge that more work remains on making completion reports match exactly the data included in AMLIS. It appears that the differences are mainly more related to terminology than accomplishments or methods, but regardless of the source of discrepancies we will be working toward getting the situation corrected. Hopefully the updated version of AMLIS will allow us to correct issues such as duplicated completion dates when updated information gets incorporated.

The willing support and assistance of OSMRE staff in the programmatic assistance, technical support, and training operations functional areas has always been, and continues to be, exemplary and appreciated.