

Attachment 1 - Protocol for Data Entry in AMSCM

This document is intended to provide guidance to Abandoned Mine Lands (AML) Program staff in managing the quality of data entered into the AML AMSCM database. After a site has been updated or changed it should be entered into the AML Project Tracking Sheet.

Projects: Projects are usually created by the State Office as funding allows and can have several attached sites. The projects are located on the left hand side of the AMSCM screen in folders. There are two folders to choose from, AM and SC. AM applies only to Abandoned Mine Lands while SC applies only to Special Cleanup sites or Hazmat sites. Projects have recently been updated to allow attachments at the project level. Examples of project attachments can include Environmental Assessments (EAs), engineering and design plans, and other project-wide documents not related to one specific site.

- **To view a project**, click the plus sign next to the AM folder and click the project that you would like to view. There are five sections on the project page.

Project Data Section: Data that **must** be entered:

- **Project Name**

Project Attachment Section: Projects have recently been updated to allow attachments at the project level. Examples of project attachments can include Environmental Assessments (EAs), engineering and design plans, and other project-wide documents not related to one specific site. Remember to keep it simple when it comes to attachments. Documents designated as (R) “Restricted” and (I) “internal” BLM working documents, especially those including location and access details to particularly hazardous AML sites, should not be attached in AMSCM since the database is available to the public and such information could be used by the public to locate and visit hazardous sites. Anything that may present itself as unsuitable for public disclosure (e.g., details regarding an extremely hazardous feature/condition that could be intriguing to the public) should not be attached in AMSCM at either the project level or the site level.

- There are no required attachments at the Project level but this would be a great place to attach project-wide documents that apply to the suite of sites within the project. Just browse for the document, title it appropriately, and attach it to the project.

Attachments must be in PDF format.

PE Codes and Tracking:

- **AMM and SCM Program Elements:** Program Elements are usually tracked by the State Office and roll up from the sites to the project level. This section doesn't really need a lot of maintenance.

Estimated/Actual Cost of Site Remediation: This section maintains itself. All estimate and actual costs entered at the feature level roll up into the project level. This section will not show the individual cost for a site but for the project as a whole.

Site Data Section: This section is located under the **Core Data** tab.

Data that **must** be entered:

- **Site Name**
- **State AML Number:** if there is no State AML Number then an explanation must given in the **Site Comments** box or in the **Site Status Comments** under the **State Status Section**.
- **Site Type:** can choose from Physical, Environmental, or both.
- **Site Status:** this is a pull down menu with several choices.
- **Status Date:** this field will change depending on how the data is managed – if you are updating a site then the date that you updated the site goes into this box – if you are just viewing the site this doesn't change.
- **Surface Ownership:** be sure that your surface ownership is correct – check all available resources – GIS data in either the State AML Db, Geocommunicator via AMSCM, downloaded GIS data available from the State, existing GIS data in your office, Master Title Plat records, and the LR2000 GEO Index for active mining claims. The most recent current ownership on patented areas can be found at the County Assessors Office.
- **Site Comments:** usually taken from the State's AML Report but also gathered from our data sheets when site visits are done.
- **Date Site Identified:** this comes from the State AML Report or from BLM on-site visits and needs to be entered for every site in AMSCM.

This is the **minimum** data that **must** be entered into the **Site Data Section**.

EPA Status Section: This section is located under the **Core Data** tab.

Unless the site is being processed, funded, or remediated under CERCLIS there will be no data entered in this section. Most of the sites are not tracked under this section and so in many cases this section will be left blank.

State Status Section: This section is located under the **Core Data** tab.

Data that **must** be entered:

- Check the **State Tracked** box if the State has a record of the site in their database.
- **Site Status Comments:** information that should be placed in this box include State AML Project number, whether or not the site has an AMLIS #, State field verification date, and a remediation date if available. An example would look like this: No AMLIS #. State AML Project 17F, 17F100, and 09-B06 or No State AML Project #. Field verified 9/16/2005. Reclaimed 5/20/2006. If the site does have an AMLIS # that data would be added to the **Site Alternate Names** section not in the **Site Status Comments**. If the site has not been reclaimed yet then no comments concerning reclamation dates need to be entered.

Site Alternate Names Section: This section is located under the **Core Data** tab.

Data that **must** be entered:

- **Any mine aliases**
- **AML Number:** Example: AML 102976. Please remember to put the 'AML' before the number to indicate that this is from the State AML Program.
- **AMLIS #:** Example: AMLIS WY050000009 or if the AMLIS # is new NEW AMLIS WY001766.
- **Alpha-numeric County Name:** Some sites may have an alpha-numeric county name and some may not. If an alpha-numeric name exists it must be entered. Example: FRMT0045.
- Any other names that might identify the site. For example, a contractor may name a site something or someone who visits the site may designate a name for it. These visits may be for fencing purposes or inventory purposes, but these names should be included in case documentation from those sources that are added to the site's case file.

Note: This section has a button that loads the information for you. If you have entered data in the sections above but **have not** saved that data, when you click the **Add Alternate Name** button it **will erase the data you have entered above**. It's important to **make sure that you save the data entered in the sections above** the **Site Alternative Names** section or you will lose it and have to reenter it.

Site Commodities Section: This section is located under the **Core Data** tab.

Data that **must** be entered:

- **Commodity Name:** Every site has to have a commodity. Some sites may have more than one commodity.

Note: This section has a button that loads the information for you. If you have entered data in the sections above but **have not** saved that data, when you click the **Add Commodity** button it **will erase all the data that you have entered above**. It's important to **make sure that you save the data entered in the sections above the Site Commodity** section or you will lose it and have to reenter it.

Site Location Tab: This section is where latitude and longitude are entered as well as directions to the site.

Data that **must** be entered:

- **Latitude/Longitude:** Every site must have latitude and longitude. The lat/long projection/coordinate system that is used is WGS 1984. The lat/long for sites needs to be checked against the State AML GIS files in the State's database. GIS files can be downloaded from the State's database and uploaded into ArcMap for viewing.
 - In some cases that State may have a point in the GIS file labeled 'site location.' To get lat/long from this point you have to zoom in and select your Identify button, click on the point and record the lat/long that pops up in the box.
 - Every latitude and longitude should have 6 numbers after the decimal. For example, 42.564789, -108.987234. Anything less than 6 decreases the accuracy of the coordinates. It should be noted that **if a coordinate ends in zeros the AMSCM database will not save those zeros**. For example, if the lat/long of a site is 42.785000, -107.784570, after the data saved will appear as 42.785, -107.78457. That is why it is important to track the changes that you have made to a particular site in the AML Project Tracking Sheet.
 - It is imperative to check other sources of information when entering GIS coordinates for sites. Sometimes the State has more up to date information than BLM. Sometimes BLM data is more accurate.

Comments Section: Located at the bottom of the **Site Location** tab.

Data that **must** be entered:

- **Directions:** Directions to the site are entered here. These directions are gathered from the State AML Combined Selection Report. It should be noted that this field

can accommodate **only** 255 characters so in many cases directions will have to be abbreviated and truncated.

- For example, here are directions to a site that were extremely long in the State's report but have been truncated to fit the 255 characters. "From Shoshoni, go N on Hwy 20 ~3 mi; Go E at Bonneville Ex. Go ~6.3 mi on Badwater Rd; Go N on Quien Sabe Rd ~6 mi; Go N on rd, thru gate, past Quien Sabe Ranch Hmstd to 2nd gate ~1.9 mi; go thru gate, turn E on rd. go NE ~0.2 mi. Go N to site."
- If the State's report does not provide directions to a site the **Comments Section** can be left blank.
- Other comments that can be added to this section include information about the quality of the GIS data. For instance, if the site has old, possibly corrupted data concerning the location a comment can be entered here to alert someone visiting the site.

Study Tab: This section is where any available studies may be attached to a site. The Study Tab tracks the amount of money spent on sites for particular studies. We are not using this tab since the State consistently pays for and implements the studies required for site remediation. Studies may include Bat Surveys, Environmental Assessments, Engineering Designs, and other pertinent documents. If for some reason BLM sponsors or pays for a study to take place at a site the study and cost should be entered and tracked here.

Attachments must be in PDF format.

- **One exception** to the studies tab, when funded by the BLM, is **Cultural Resource Inventories and Evaluations**. The cost for the inventory and evaluation will and should be tracked here if the BLM paid for the study, but the actual results of the study must not be attached to protect those sensitive resources.

Feature Tab: This section is where the creation and updating of particular features takes place.

Data that **must** be entered if creating a new feature:

- **Feature Number:** Feature Numbers are five digits (Example: 00001, 00002, 00010, 00015, etc.).
- **State Feature Number:** this corresponds to the State AML Report and their particular naming conventions. Examples include P-1, PI-3, DPE-2, HEF-1, etc.
- **Feature Type:** This pull down menu has many choices but unfortunately they do not encompass all the features that have or may be reported. For example, the State may report that they have several waste rock piles but AMSCM does not

have that as an option of feature type. The closest thing to waste rock pile is waste dump which can only be an environmental feature. Many waste rock piles are not contaminated and are purely physical features. In this case, **Feature Type** would be **'Other'** with the **Description** being **Waste Rock Pile**.

- See **Appendix B** when entering features that are not currently recognized in the AMSCM pick list.
- **Description:** This field will only appear when 'Other' is selected from the **Feature Type** field. It is important to accurately describe the feature according to agreed upon standards. **(See Appendix A and B for current feature types and feature types not currently accounted for in AMSCM).**
- **Hazard Type:** This is a pull down menu that has two choices – environmental or physical. Depending on the hazard the menu may change.
- **Latitude/Longitude:** Every feature should have individual and unique coordinates unless the feature being created is also the site location. If other features are created it is preferable not to continue using the site location as the lat/long for each feature. **The goal is for each feature to be spatially realistic, having its own coordinates on the landscape.**
- **Comments:** This field should be used to supply additional data about each feature (measurements, hazards, unique aspects, etc). Keep in mind that this field has a limit of 255 characters. Details are good, but keep it concise. **Remember, the public has access to AMSCM. Intriguing descriptions of hazardous features should be avoided.**

Data **not** required but **recommended**:

- **Acres:** This is not a required field but if you have data on the acres fill it in. Sometimes this may require converting square feet to acres from the State AML report. The acres field contains one point to the right of the decimal. For example, there is a spoil pile that is .00457 acres; the AMSCM database will save it as zero acres. In cases like this the acreage can be placed in the comments field. If you have a spoil pile that consists of 4.9873 acres, the AMSCM database will save it as 5 even acres. So this feature rounds up to the next tenth of an acre. If you have 4.0678 acres, it will be saved as 4.1 acres.
- Acreage can also be determined from the GIS data that is collected during an on-site visit.

After creating a feature you will have to add photographs and possibly feature documents. See Appendix C, Photo Log for the recommended method of documenting the photos of each feature. Adding a Feature Document is virtually the same as adding a photo.

Feature Photo: Click on the **Features tab**, click the desired feature, within the feature there are several small tabs, click the **Feature Photo** tab to add photographs.

Data that **must** be entered when uploading a feature photo:

- **Photograph Title:** Each photo must have a title. **Titles should be consistent.** They should express what the photo is, **an overview or an interior shot.** They should contain both the AMSCM feature number and the State AML feature name. When possible they should contain the direction that the photographer was facing when the photo was taken. For example, a photograph of a feature should be labeled either **'Overview of 00001 (P-1) facing northeast'** or **'Interior of 00001 (P-1)'**.
- **Photograph Description:** The photo description should simply state what the photo is of. For example, **'Open adit'**, **'Caved shaft'**, **'Loadout'**, etc. This description should be simple and to the point. **Remember, the public has access to AMSCM. Intriguing descriptions of hazardous features should be avoided.**
- **Photograph File:** Browse for your photo.

Note: If you would like to add more than one photograph at a time simply click the **Add Photograph** button to populate more entries. **Only five photographs can be uploaded at a time.** Usually AMSCM will not allow you to load more than five, but in some instances it will try to let you load six photographs. If this happens do not take advantage of it because you will lose all the photographs that you are trying to load when you click the **Save Photographs** button.

Data that **must** be entered if updating a feature:

- All of the above data should be meticulously checked and entered during the update process. Additionally, GIS data for features must be meticulously checked and correctly entered. As stated above, it is ideal for each feature to have individual and unique GIS coordinates where and when possible.
- GIS data can be accessed either from data collected by office personnel or through the State's AML database. GIS coordinates can be verified in ArcMap.
 - In cases where a feature is a polygon and not a point a coordinate in the relative center of the polygon serves as the coordinate for that feature. For

example, in ArcMap there may be two shafts represented as points and one waste rock pile represented as a circle or polygon. The shafts have unique coordinates but the waste rock pile has bounding coordinates. A point in the center of the polygon should be identified as the coordinates for that feature. The same applies for lines representing highwalls or other linear features. Choosing to assign coordinates in the center of polygonal and linear features ensures that the feature will be found upon future visits.

Photo Tab: This section is for the attachment of various photos pertaining to the **site** as a whole. **Feature photos should not be attached here but to the individual feature.** Likewise, site photos should not be attached to features but to the site itself.

Data that **must** be entered when uploading site photos: Uploading site photos is virtually identical to uploading feature photos.

- **Photograph Title:** Each photo must have a title. Titles should be consistent. They should express what is in the photo. When possible they should contain the direction that the photographer was facing when the photo was taken. For example, a photograph of a site should be labeled **'Overview of Blue Spar site facing northeast'**.
- **Photograph Description:** The photo description should simply state what the photo is of, for example, **'Site Overview'** or **'Overview of access to site'**. This description should be simple and to the point. **Remember, the public has access to AMSCM. Intriguing descriptions of hazardous site features should be avoided.**

Attachment Tab: This section is for the attachment of various documents pertaining to the site. Documents that can be attached here include Environmental Assessments, Engineering Designs, Inventory Data Sheets, State AML Reports, etc., as they pertain to the site.

Attachments must be in PDF format.

Data that **must** be attached:

- **State AML Portal Report:** This report needs to be attached to the site when **updating**. Newly created sites may not yet have a State AML entry and therefore no report. When attaching a State AML Report titles and descriptions should be consistent. **Titles** should consist of the official site name followed by **'State AML Report' (Example: Blue Spar State AML Report)**. **Description** should read **'State AML Portal Report'**. The Attachment Description is optional but to maintain our data quality it should be filled in consistently. Browse for your document and then upload it.

- **Remember to keep titles and descriptions simple.** AMSCM is a database not a case file. Documents that should not be in the public domain should not be attached here.

Appendix A: Current Feature Types

AML Feature Categories: These are the existing features in AMSCM to choose from when entering feature types.

- Adit open
- Adit caved
- Shaft open
- Shaft caved
- Highwalls/pits (This category **only** includes highwalls and pits resulting from strip mining or uranium mining. It **does not** include prospect pits or exploration trenches).
- Mine/mineral processing mill
- Prospect pit
- Repository
- Reserve pits/produced water pond/other E&P waste
- Tailings
- Heap leach
- Other

Hazmat Feature Categories: These are the existing Hazmat features in AMSCM. AML sites **should not** have Hazmat features present. There may be Hazmat features present at an AML site but those features will be tracked through the Hazmat portion of the AMSCM database not the AML portion.

- Industrial facility
- Illegal dump – hazardous waste
- Illegal dump – solid waste
- Illegal dump – solid and hazardous waste
- Landfill
- Non BLM facility (such as DOE, DOD-FUDS)
- Orphaned well
- Pipeline leaks/spills
- Shooting sports area
- Spills (other than pipelines)
- Tanks (above ground and underground)
- Waste dump

- Wire burn

Appendix B: Feature Types not accounted for in AMSCM – The Project Change Management Board (PCMB) is currently working on including the features listed below in the pick list for features. Until these changes are made in AMSCM follow the guidelines below.

- **Subsidence/Subsidence Area:** Will be added to pick list but use ‘Other’ with Subsidence/Subsidence Area in Description Box.
- **Waste Rock Pile:** ‘Waste Dump’ will be changed to ‘Waste Rock Dump’ but use ‘Other’ with Waste Rock Dump in Description Box.
- **Reject Material Pile/Slack Pile:** Will be added to pick list but use ‘Other’ with Reject Material Pile/Slack Pile in Description Box.
- **Building:** Will be added to pick list but use ‘Other’ with the feature type in the Description Box. Building will include the following features.
 - **Hoist Foundation**
 - **Shaft House**
 - **Loadout**
 - **Misc. Foundation**
 - **Shack/Dilapidated Shack**
 - **Fan House**
- **Powder Magazine:** Will be added to pick list but use ‘Other’ with Powder Magazine in Description Box.
- **Equipment/Vehicles:** Will be added to pick list but use ‘Other’ with the feature type in the Description Box. Equipment/Vehicles will include the following features.
 - **Dilapidated Equipment**
 - **Abandoned Vehicles**
- **Trench:** Will be added to pick list but use ‘Other’ with Trench in the Description Box. Trenches will include both hand dug and machine dug trenches.
- **Hazardous Water Body:** This feature is associated with large strip mines and uranium mines. It will be added to the pick list.

Feature Types that will not be added to the pick list:

- **Exploration Pit:** Use ‘Prospect Pit’ with description in the ‘Comments’ box.
- **Reclaimed Area:** Use ‘Other’ with Reclaimed Area in the Description Box.
- **Overburden:** This feature doesn’t occur very often in the State’s database but if it is observed on site use ‘Other’ with Overburden in the Description Box.

- **Environmental Degradation:** Use 'Other' with the feature type in the Description Box. Environmental Degradation will include the following features.
 - **Erosion**
 - **Clogged Stream Lands**
 - **Clogged Streams**
- **Mill:** Use 'Mine/Mineral Processing Mill'.
- **Railroad Grade:** Use 'Other' with Railroad Grade in the Description Box.
- **Air Vent:** Use 'Open/Caved Shaft'
- **Open Pit:** Use 'Highwall/Pits' only when the feature results from strip mining or uranium mining with a definable highwall. Prospect Pits are not 'Open Pits.'
- **Haul Roads:** Use 'Other' with Haul Road in the Description Box.