



American Shale Oil, LLC

October 23, 2012

Mr. Travis Marshall,
Environmental Protection Specialist
CDRMS
101 South 3rd Street, Suite 301
Grand Junction CO 81501

Mr. Kent Walter, Manager
White River Field Office
Bureau of Land Management
220 East Market Street
Meeker CO 81641

RECEIVED

OCT 25 2012

GRAND JUNCTION FIELD OFFICE
DIVISION OF
RECLAMATION MINING & SAFETY

RE: Modification to Existing Notice of Intent
DRMS NOI No. P-2008-046

Dear Travis and Kent:

AMSO is submitting this modification to our 'Notice of Intent to Conduct Prospecting' (NOI) for your approvals.

AMSO would like to install an Individual Sewage Disposal System (ISDS) on our MWP-1 Pad to service our temporary living quarters on that Pad. The ISDS has been approved by Rio Blanco County; please see the enclosed approval letter. The Rio Blanco County approval is conditioned upon BLM approval.

The ISDS would include a 2,000 gallon septic tank and chamber infiltrators and be installed in the back-filled pit on that Pad. Please see the enclosed Figure/Design Drawing. Upon abandonment, the ISDS would be pumped and the pumped material taken to an approved disposal facility. The ISDS would then be removed according to Rio Blanco County requirements.

No other changes to our NOI are requested at this time.

Your approvals would be appreciated.

Please contact me if you have any questions or need more information.

Sincerely,

Roger L. Day
VP of Operations

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



FORM 1

All information for DRMS use and confidential filing
NOTICE OF INTENT TO CONDUCT PROSPECTING OPERATIONS
FOR HARD ROCK/METAL MINES

CHECK ONE: ☐ There is an NOI Number Already Assigned to this Operation
NOI# P. (Please reference the file number assigned to this operation)
☒ New NOI
Modification to an Existing NOI
NOI# P. 2008-046 (Provide for Modifications to an existing NOI)

GENERAL OPERATION INFORMATION
Type or print clearly, in the space provided, ALL information described below.

I. GENERAL INFORMATION

1. DATE NOI RECEIVED BY THE DIVISION: (office use only)
2. PROJECT NAME: AMSO RD&D Oil Shale Project
3. PROSPECTOR: PERSON MLRB SHOULD CONTACT:
Name: No Change
Title: _____
Company Name: _____
Street: _____
P.O. Box: _____
City: _____
State: _____
Zip Code: _____
Telephone Number: _____
Fax Number: _____

4. APPLICATION FEE: \$86. (NOIs and modifications require an \$86 fee which must accompany this notice or it cannot be processed by the Division).

5. LOCATION INFORMATION:

County: _____
PRINCIPAL MERIDIAN (check one) ☐ 6th (Colorado) ☐ 10th (New Mexico) ☐ (Ute)
SECTION (write number): S _____

TOWNSHIP (write number and check direction) T _____ North ☐ South ☐
RANGE (write number and check direction) R _____ East ☐ West ☐
QUARTER SECTION (check one): ☐ NE ☐ NW ☐ SE ☐ SW
QUARTER/QUARTER SECTION (check one): ☐ NE ☐ NW ☐ SE ☐ SW
GENERAL DESCRIPTION: (the number of miles and direction to the nearest town and the approximate elevation):
No Change _____

NOTE: Supply longitude and latitude or UTM coordinates if lands have not been surveyed or as supplemental information to this NOI. GPS measurements will be acceptable for this purpose: _____

6. LAND OWNERSHIP

Private ☐ Public Domain (BLM) ☐ National Forest (USFS) ☐
State ☐ State Sovereign Lands ☐ Other (please describe): _____

If prospecting is located on BLM or USFS land the remaining section must be completed, otherwise go to Section II, Maps & Drawings

7. PROSPECTING ON BUREAU OF LAND MANAGEMENT (BLM) LAND AND U.S. FOREST SERVICE (USFS) LAND

The Division and the BLM/USFS have entered into cooperative agreements that eliminate the need for a prospector to post a financial warranty with each agency and allow them to coordinate the review of the NOI in order to minimize administrative processing time and effort.

A. CLAIMANT:

Name: _____
Address: _____

Telephone: _____
Fax Number: _____

B. SITE/CLAIM INFORMATION:

List names, serial numbers, and provide legal description to nearest quarter-quarter section of all sites or claims (attach additional page, if necessary).

NAME	SERIAL NUMBER	LEGAL DESCRIPTION
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

C. **LOCATION MAP:** Attach a USGS 7.5 minute quad, or similar map of adequate scale, which locates the prospecting site(s).

D. Are prospect sites (e.g., drill holes, trench locations, etc...) staked on the ground? Yes ☐ No ☐

E. Specify the Land Management Agency, Address and Telephone Number:

No Change

F. The prospector is required to document that the NOI has been sent to the BLM or the USFS. Processing of the NOI will not begin until the prospector has submitted evidence acceptable to the Division that the NOI was sent to the BLM or USFS. Check one:

- ☒ Evidence of notification is attached to this NOI for BLM Land
- ☐ Evidence of notification is attached to this NOI for USFS Land
- ☐ Other proof of notice is attached to this NOI

II. MAPS & DRAWINGS

Accurate topographic base map showing the location of the proposed project must be submitted with this notice. The prospector may submit a U.S.G.S. 7.5 minute quadrangle, or similar map of adequate scale that:

- Identifies the proposed prospecting site(s) or activity areas involving surface disturbance. Activity areas include all drill holes, mud pits, excavations, trenches, adits, shafts, tunnels, rock dumps, stockpiles, impoundments and prospecting roads, and
- Includes sufficient detail to identify and locate known prospecting features and facilities that may be affected and those that are not anticipated to be affected. This includes the location of all drill holes, mud pits, excavations, trenches, adits, shafts, tunnels, rock dumps, stockpiles, impoundments and prospecting roads. Color photographs, adequately labeled (including date, orientation and location), of the prospecting site may be used to fulfill this requirement if included with the NOI submittal.

III. PROJECT DESCRIPTION

1. Mineral(s) and/or Resource(s) being Investigated: No Change

2. Estimated dates of commencement and completion:

Commencement:

Completion:

3. Amount of material to be extracted, moved or proposed to be moved:

4. Identify the type or method of prospecting proposed and quantity (place an "X")

<input checked="" type="checkbox"/> Cuts	<input type="checkbox"/> Pits	<input type="checkbox"/> Trenches	<input type="checkbox"/> Declines
<input type="checkbox"/> shafts	<input type="checkbox"/> tunnels	<input type="checkbox"/> Adits	
<input type="checkbox"/> Air Drilling	<input type="checkbox"/> Fluid Drilling	<input type="checkbox"/> Drilling & Blasting	

5. Describe proposed surface excavation or other land disturbance, including roads, pits, trenches, waste piles, drill pads and collar areas of underground workings, ponds, etc...

No Change

6. Proposed Disturbance (approximate) Describe the proposed drilling to be conducted, including anticipated number of holes, diameter, depth, location, etc... Submit additional pages if necessary:

- A. Drill Pads: Quantity Average Width (ft) Average Length (ft)
- B. Drill Holes: Quantity Depth (ft) Diameter (in)
- C. Mud Pits: Quantity Average Width (ft) Average Length (ft)

Average Depth (ft)

Described proposed underground work, including reopening of old workings, advancement of adits or shafts, trenches, pits, cuts, rock dumps, or other types of disturbance, describe type, quantity and general dimensions:

No Change

D. Other Disturbances (please describe):

No new disturbances, disturbed acreage remains the same.

E. Indicate Chemicals and Fuels used or stored on site. List type, quantity and method to store.

No Change

F. New Road(s): Length (ft) Width (ft)

Significantly Upgraded Road(s) Length (ft) Width (ft)

Are culverts or other crossings proposed? If so, please describe:

No change to road system

G. Total project area to be disturbed _____ (acres)

H. Describe the equipment to be used for the prospecting operations:

No Change

I. Describe and locate any structures to be constructed (i.e. stockpiles, ponds, impoundments):

Install Individual Sewage Disposal System (ISDS) on MWP-1 Pad. Please see enclosed Figure/Design Drawing. Also see enclosed approval letter from Rio Blanco County.

J. Describe anticipated relationship to surface water and groundwater (proximity to streams, penetration of ground water aquifers):

No Change

IV. OPERATION AND RECLAMATION MEASURES:

1. The Board suggests that a photographic record of the pre-prospecting and post-prospecting conditions be kept by the prospector. These photos should be taken from the same location and by the same method to clearly show the pre-prospecting condition of the land and the reclamation efforts. Upon completion of reclamation and request for bond or surety release, the Board may consider the photos as evidence of adequate reclamation, and thus, be able to act more quickly on the request for release.

2. Provide a description of the native vegetation of the area to be disturbed, including tree, shrub, and grass communities of the area. Color photographs, sufficient to adequately represent the ecology of the site and adequately labeled (including date, orientation and location), may be used in lieu of a written description. Based on the quality of the photographs, the Division may require additional detail.

No Change

3. Describe the estimated topsoil depth and how topsoil will be salvaged, stockpiled and redistributed for the re-establishment of vegetation. Specify approximate topsoil redistribution depth:

No Change

4. Describe how drill holes will be plugged (refer to Rule 5.4 of the Rules for required abandonment procedures):

No Change

5. Describe how portals, adits, shafts, ponds, excavations, or other disturbances will be reclaimed (refer to Rule 3 and Rule 5 for specific reclamation performance standards). You may wish to contact the Division for closure specifications.

No change to previous approvals. The ISDS will include a 2000 gallon septic tank and chamber infiltrators. Upon abandonment, the ISDS will be pumped and the pumped material taken to an approved disposal facility. The ISDS will then be removed according to Rio Blanco County requirements.

The incremental cost of ISDS removal/reclamation is estimated to be \$3,500.

6. Describe how roads will be reclaimed or returned to their pre-prospecting (or better) condition:

No Change

7 (FORM 1 - All information for DRMS use and confidential filing)

7. List the seed mixture to be used in the re-establishment of vegetation. See the attached seed mixture calculation to obtain PL S/acre. For assistance with formulating seed mixtures and rates, contact the local NRCS if on private land, BLM/USFS if on public land or State Land Board if on state land.

A. Provide plant name and seeding rate

Plant Name	Seeding Rate (PL/S/acre)
No Change	

B. Describe the method for seed bed preparation, and application method for grass/forb seeding:

No Change

V. TERMS AND CONDITIONS FOR PROSPECTING OPERATIONS:

1. Reclamation measures shall be fulfilled in a timely manner and completed within five (5) years of completion of prospecting activities.
2. The prospecting operations described in this Notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 5, precautions to be taken include:

A. Confinement of operations to areas near existing roads or trails, where practicable. Existing roads which are to remain as permanent roads after prospecting activities are completed shall be left in a condition equal to or better than the pre-prospecting condition.

B. Drilling shall be conducted in such a way as to prevent cuttings and fluids from directly entering any dry or flowing stream channel. Drill cuttings must be spread to a depth no greater than one-half (1/2) inch or buried in an approved disposal pit;

- C. Proper and timely abandonment of drill holes upon completion of drilling;
- D. Reclamation of affected lands upon completion of operations or phases of an operation,;
- E. Backfilling and revegetating any pits to blend in with the surrounding land surface;
- F. Safeguarding mine entries, trenches and excavations from unauthorized entry at all times;
- G. Disposal of any trash, scrap metal, wood, machinery, and buildings;
- H. Control of noxious weeds within the area affected by the prospector
- 3. The prospecting operations shall be conducted in such a manner as to comply with all applicable local, state and federal laws and regulations including applicable state and federal air and water quality laws and regulations.
- 4. The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife to include covering of open drill holes until properly plugged.
- 5. During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to ensure those areas affected by prospecting activities are erosionally and geotechnically stable.
- 6. All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended (34-32-101 et seq. C.R.S.), and all rules and regulations currently in effect or promulgated pursuant thereto. See 2 CCR 407-1, Mined Land Reclamation Board Hardrock /Metal Mining Rules.

VI. ADDITIONAL TERMS AND CONDITIONS FOR PROSPECTING ON BLM/USFS LANDS

- 1. The prospector will supply a copy of this NOI to the appropriate BLM and/or USFS office.
- 2. The prospector authorizes the MLRB to discuss the information in this Notice of Intent with the BLM and/or USFS.
- 3. If on BLM land, the prospector will complete reclamation to the standards described in 43 CFR 3809.1-3 (d) and implement reasonable measures to prevent unnecessary or undue degradation of lands during operations.


VII. FINANCIAL WARRANTY


A financial warranty must be provided for the cost of reclamation of the disturbance described in this Notice. The prospector can either file a "One Site Prospecting Financial Warranty" or a "Statewide Financial Warranty." **The financial warranty must be submitted and approved by the Division prior to entry upon lands for the purpose of prospecting.**


An One-Site Prospecting Financial Warranty is usually filed by individuals or companies where prospecting activities are limited to a single area. It must be filed in the amount of \$2,000 per acre for land to be disturbed, or such other amount as determined by the Division, based on the projected costs of reclamation. A Statewide Financial Warranty is usually filed by companies with multiple prospecting sites. It must be filed in an amount equal to the estimated cost of reclamation per acre of affected land for all anticipated sites statewide. (You may increase the Statewide bond at any time in order to cover additional or expanded prospecting activities.)


VIII. SIGNATURE REQUIREMENT


Please place your initials on the line provided:


 I hereby verify that the foregoing information is true and accurate and commit to the reclamation of the aforementioned prospecting site as required by the Colorado Mined Reclamation Act and the rules as specified in the Hard Rock/Metal Mining Rules and Regulations and this NOI form.


 I have enclosed the required permit fee.

 I authorize the Division to contact and copy the BLM and/or USFS on any correspondence related to the prospecting operation, if the prospecting operation is located on federal public land.

 I have also enclosed the appropriate reclamation surety amount or will post an amount as determined by the office, based on the projected costs of reclamation.

 I understand that I am not authorized to create any surface disturbance until the surety amount is posted and approved in writing from the Division of Reclamation, Mining and Safety.

 I accept and agree to comply with the foregoing terms and conditions and with all of the provisions of Rules 3 and 5, and C.R.S. 34-32-101.

 I hereby certify that concurrent with submittal of this NOI to the Division, I have sent notice to the Boards of County Commissioners in the Counties where the proposed activities will occur. This notice also indicated that non-confidential information regarding the proposed activities will be available for review at the Division's website.

This form has been approved by the Mined Land Reclamation Board pursuant to section 34-32-113, C.R.S., of the Mined Land Reclamation Act. Any alteration or modification of this form shall result in voiding any NOI issued on the altered or modified form and subject the operator to cease and desist orders and civil penalties for operating without a NOI pursuant to section 34-32-123, C.R.S.

I, the undersigned, being the NOI holder or the person authorized to sign on behalf of the NOI holder, declare that the information given in this NOI form is true and correct.

SIGNATURES MUST BE IN BLUE INK

Signed and dated this 23 day of OCT, 2012

Signature of NOI holder or person authorized to sign:



Name (typed or print) Roger L. Day

Title/Position: VP Operations AMSO

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



FORM 2 (Public File)
NOTICE OF INTENT TO CONDUCT PROSPECTING OPERATIONS
FOR HARD ROCK/METAL MINES

CHECK ONE:

☐ There is an NOI Number Already Assigned to this Operation
New NOI
☒ Modification to an Existing NOI
NOI# P-2008-046 (Provide for Modifications to an existing NOI)

GENERAL OPERATION INFORMATION

Type or print clearly, in the space provided, ALL information described below.

I. GENERAL INFORMATION

1. DATE NOI RECEIVED BY THE DIVISION: (office use only)

2. PROJECT NAME: AMSO RD&D Oil Shale Project

8. PROSPECTOR:
Name: No Change

PERSON MLRB SHOULD CONTACT:

Name: No Change

Title: _____
Company Name: _____
Street: _____
P.O. Box: _____
City: _____
State: _____
Zip Code: _____
Telephone Number: _____
Fax Number: _____

Title: _____
Company Name: _____
Street: _____
P.O. Box: _____
City: _____
State: _____
Zip Code: _____
Telephone Number: _____
Fax Number: _____

9. APPLICATION FEE: \$86. (NOIs and modifications require an \$86 fee which must accompany this notice or it cannot be processed by the Division).

10. LOCATION INFORMATION:

County: _____
PRINCIPAL MERIDIAN (check one) ☐ 6th (Colorado) ☐ 10th (New Mexico) ☐ (Ute)
SECTION (write number): S _____
TOWNSHIP (write number and check direction) T _____ North ☐ South ☐

RANGE (write number and check direction) R ☐ East ☐ West ☐
QUARTER SECTION (check one): ☐ NE ☐ NW ☐ SE ☐ SW
QUARTER/QUARTER SECTION (check one): ☐ NE ☐ NW ☐ SE ☐ SW

GENERAL DESCRIPTION: (the number of miles and direction to the nearest town and the approximate elevation):

No Change

NOTE: Supply longitude and latitude or UTM coordinates if lands have not been surveyed or as supplemental information to this NOI. GPS measurements will be acceptable for this purpose:

1. LAND OWNERSHIP
Private ☐ Public Domain (BLM) ☐ National Forest (USFS) ☐
State ☐ State Sovereign Lands ☐ Other (please describe):

If prospecting is located on BLM or USFS land the remaining section must be completed, otherwise go to section II Maps & Drawings

12. PROSPECTING ON BUREAU OF LAND MANAGEMENT (BLM) LAND AND U.S. FOREST SERVICE (USFS) LAND

The Division and the BLM/USFS have entered into cooperative agreements that eliminate the need for a prospector to post a financial warranty with each agency and allow them to coordinate the review of the NOI in order to minimize administrative processing time and effort.

G. CLAIMANT:

Name: _____
Address: _____

Telephone: _____
Fax Number: _____

H. SITE/CLAIM INFORMATION:

List names, serial numbers and provide legal description to nearest quarter-quarter section of all sites or claims (attach additional page, if necessary).

NAME	SERIAL NUMBER	LEGAL DESCRIPTION

I. LOCATION MAP: Attach a USGS 7.5 minute quad, or similar map of adequate scale, which locates the prospecting site(s).

J. Are prospect sites (e.g., drill holes, trench locations, etc...) staked on the ground? Yes ☐ No ☐

K. Specify the Land Management Agency, Address and Telephone Number:
No Change

L. The prospector is required to document that the NOI has been sent to the BLM or the USFS. Processing of the NOI will not begin until the prospector has submitted evidence acceptable to the Division that the NOI was sent to the BLM or USFS. Check one:

- ☒ Evidence of notification is attached to this NOI for BLM Land
☐ Evidence of notification is attached to this NOI for USFS Land
☐ Other proof of notice is attached to this NOI

II. MAPS & DRAWINGS

Accurate topographic base map showing the location of the proposed project must be submitted with this notice. The prospector may submit a U.S.G.S. 7.5 minute quadrangle, or similar map of adequate scale that:

3. identifies the proposed prospecting site(s) or activity areas involving surface disturbance. Activity areas include all drill holes, mud pits, excavations, trenches, adits, shafts, tunnels, rock dumps, stockpiles, impoundments and prospecting roads, and
4. includes sufficient detail to identify and locate known prospecting features and facilities that may be affected and those that are not anticipated to be affected. This includes the location of all drill holes, mud pits, excavations, trenches, adits, shafts, tunnels, rock dumps, stockpiles, impoundments and prospecting roads. Color photographs, adequately labeled (including date, orientation and location), of the prospecting site may be used to fulfill this requirement if included with the NOI submittal.

III. PROJECT DESCRIPTION

7. Mineral(s) and/or Resource(s) being Investigated: No Change

8. Estimated dates of commencement and completion:

Commencement: _____
Completion: _____

9. Amount of material to be extracted, moved or proposed to be moved: _____

10. Identify the type or method of prospecting proposed and quantity (place an "X")

<input type="checkbox"/> Cuts	<input type="checkbox"/> Pits	<input type="checkbox"/> Trenches	<input type="checkbox"/> Declines
<input type="checkbox"/> Shafts	<input type="checkbox"/> Tunnels	<input type="checkbox"/> Adits	
<input type="checkbox"/> Air Drilling	<input type="checkbox"/> Fluid Drilling	<input type="checkbox"/> Drilling & Blasting	

11. Describe proposed surface excavation or other land disturbance, including roads, pits, trenches, waste piles, drill pads and collar areas of underground workings, ponds, etc...

No Change

12. Proposed Disturbance (approximate) Describe the proposed drilling to be conducted, including anticipated number of holes, diameter, depth, location, etc... Submit additional pages if necessary:

- A. Drill Pads: Quantity _____ Average Width _____ (ft) Average Length _____ (ft)
- B. Drill Holes: Quantity _____ Depth _____ (ft) Diameter _____ (in)
- C. Mud Pits: Quantity _____ Average Width _____ (ft) Average Length _____ (ft)
- Average Depth _____ (ft)

Described proposed underground work, including reopening of old workings, advancement of adits or shafts, trenches, pits, cuts, rock dumps, or other types of disturbance, describe type, quantity and general dimensions:

No Change

F. Other Disturbances (please describe):

No new disturbances, disturbed acreage remains the same.

G. Indicate Chemicals and Fuels used or stored on site. List type, quantity and method to store.

No Change

F. New Road(s): Length _____ (ft) Width _____ (ft)
Significantly Upgraded Road(s) Length _____ (ft) Width _____ (ft)

Are culverts or other crossings proposed? If so, please describe: _____

No change to road system

G. Total project area to be disturbed _____ (acres)

K. Describe the equipment to be used for the prospecting operations:

No Change

L. Describe and locate any structures to be constructed (i.e. stockpiles, ponds, impoundments):

Install Individual Sewage Disposal System (ISDS) on MWP-1 Pad. Please see enclosed Figure/Design Drawing. Also see enclosed approval letter from Rio Blanco County.

M. Describe anticipated relationship to surface water and groundwater (proximity to streams, penetration of ground water aquifers):

No Change

IV. OPERATION AND RECLAMATION MEASURES:

1. The Board suggests that a photographic record of the pre-prospecting and post-prospecting conditions be kept by the prospector. These photos should be taken from the same location and by the same method to clearly show the pre-prospecting condition of the land and the reclamation efforts. Upon completion of reclamation and request for bond or surety release, the Board may consider the photos as evidence of adequate reclamation, and thus, be able to act more quickly on the request for release.

2. Provide a description of the native vegetation of the area to be disturbed, including tree, shrub, and grass communities of the area. Color photographs, sufficient to adequately represent the ecology of the site and adequately labeled (including date, orientation and location), may be used in lieu of a written description. Based on the quality of the photographs, the Division may require additional detail.

No Change

8. Describe the estimated topsoil depth and how topsoil will be salvaged, stockpiled and redistributed for the re-establishment of vegetation. Specify approximate topsoil redistribution depth.

No Change

9. Describe how drill holes will be plugged (refer to Rule 5.4 of the Rules for required abandonment procedures):

No Change

10. Describe how portals, adits, shafts, ponds, excavations, or other disturbances will be reclaimed (refer to Rule 3 and Rule 5 for specific reclamation performance standards). You may wish to contact the Division for closure specifications.

No change to previous approvals. The ISDS will include a 2000 gallon septic tank and chamber infiltrators. Upon abandonment, the ISDS will be pumped and the pumped material taken to an approved disposal facility. The ISDS will then be removed according to Rio Blanco County requirements.

The incremental cost of ISDS removal/reclamation is estimated to be \$3,500.

11. Describe how roads will be reclaimed or returned to their pre-prospecting (or better) condition:

No Change

12. List the seed mixture to be used in the re-establishment of vegetation. See the attached seed mixture calculation to obtain PL\$/acre. For assistance with formulating seed mixtures and rates, contact the local NRCS if on private land, BLM/USFS if on public land or State Land Board if on state land.

A. Provide plant name and seeding rate

Plant Name	Seeding Rate (PL\$/acre)
No Change	

B. Describe the method for seed bed preparation and application method for grass/forb seeding:

No Change

V. TERMS AND CONDITIONS FOR PROSPECTING OPERATIONS:

3. Reclamation measures shall be fulfilled in a timely manner and completed within five (5) years of completion of prospecting activities.
4. The prospecting operations described in this Notice will be conducted in such a manner as to minimize surface disturbances. In addition to the measures required in Rule 5, precautions to be taken include:

A. Confinement of operations to areas near existing roads or trails, where practicable. Existing roads which are to remain as permanent roads after prospecting activities are completed shall be left in a condition equal to or better than the pre-prospecting condition;

B. Drilling shall be conducted in such a way as to prevent cuttings and fluids from directly entering any dry or flowing stream channel. Drill cuttings must be spread to a depth no greater than one-half (1/2) inch or buried in an approved disposal pit;

- C. Proper and timely abandonment of drill holes upon completion of drilling;
- D. Reclamation of affected lands upon completion of operations or phases of an operation;;
- E. Backfilling and revegetating any pits to blend in with the surrounding land surface;
- F. Safeguarding mine entries, trenches and excavations from unauthorized entry at all times;
- G. Disposal of any trash, scrap metal, wood, machinery, and buildings;
- H. Control of noxious weeds within the area affected by the prospector
- 3. The prospecting operations shall be conducted in such a manner as to comply with all applicable local, state and federal laws and regulations including applicable state and federal air and water quality laws and regulations.
- 4. The prospecting operations shall be conducted so as to minimize adverse effects upon wildlife to include covering of open drill holes until properly plugged.
- 5. During the prospecting operations, the operator will perform the necessary stabilization and reclamation work to ensure those areas affected by prospecting activities are erosionally and geotechnically stable.
- 6. All prospecting operations shall be in compliance with the Colorado Mined Land Reclamation Act, as amended (34-32-101 et seq. C.R.S.), and all rules and regulations currently in effect or promulgated pursuant thereto. See 2 CCR 407-1, Mined Land Reclamation Board Hardrock Metal Mining Rules.

VI. ADDITIONAL TERMS AND CONDITIONS FOR PROSPECTING ON BLM/USFS LANDS

- 4. The prospector will supply a copy of this NOI to the appropriate BLM and/or USFS office.
- 5. The prospector authorizes the MLRB to discuss the information in this Notice of Intent with the BLM and/or USFS.
- 6. If on BLM land, the prospector will complete reclamation to the standards described in 43 CFR 3809.1-3 (d) and implement reasonable measures to prevent unnecessary or undue degradation of lands during operations.

VII. FINANCIAL WARRANTY

A financial warranty must be provided for the cost of reclamation of the disturbance described in this Notice. The prospector can either file a "One Site Prospecting Financial Warranty" or a "Statewide Financial Warranty." **The financial warranty must be submitted and approved by the Division prior to entry upon lands for the purpose of prospecting.**

An One-Site Prospecting Financial Warranty is usually filed by individuals or companies where prospecting activities are limited to a single area. It must be filed in the amount of \$2,000 per acre for land to be disturbed, or such other amount as determined by the Division, based on the projected costs of reclamation. A Statewide Financial Warranty is usually filed by companies with multiple prospecting sites. It must be filed in an amount equal to the estimated cost of reclamation per acre of affected land for all anticipated sites statewide. (You may increase the Statewide bond at any time in order to cover additional or expanded prospecting activities.)

VIII. SIGNATURE REQUIREMENT

Please place your initials on the line provided:








I hereby verify that the foregoing information is true and accurate and commit to the reclamation of the aforementioned prospecting site as required by the Colorado Mined Reclamation Act and the rules as specified in the Hard Rock/Metal Mining Rules and Regulations and this NOI form.

I have enclosed the required permit fee.

I authorize the Division to contact and copy the BLM and/or USFS on any correspondence related to the prospecting operation, if the prospecting operation is located on federal public land.

I have also enclosed the appropriate reclamation surety amount or will post an amount as determined by the office, based on the projected costs of reclamation.

I understand that I am not authorized to create any surface disturbance until the surety amount is posted and approved in writing from the Division of Reclamation, Mining and Safety.

I accept and agree to comply with the foregoing terms and conditions and with all of the provisions of Rules 3 and 5, and C.R.S. 34-32-101.

I hereby certify that concurrent with submittal of this NOI to the Division, I have sent notice to the Boards of County Commissioners in the Counties where the proposed activities will occur. This notice also indicated that non-confidential information regarding the proposed activities will be available for review at the Division's website.

This form has been approved by the Mined Land Reclamation Board pursuant to section 34-32-113, C.R.S., of the Mined Land Reclamation Act. Any alteration or modification of this form shall result in voiding any NOI issued on the altered or modified form and subject the operator to cease and desist orders and civil penalties for operating without a NOI pursuant to section 34-32-123, C.R.S.

I, the undersigned, being the NOI holder or the person authorized to sign on behalf of the NOI holder, declare that the information given in this NOI form is true and correct.

SIGNATURES MUST BE IN BLUE INK

Signed and dated this 23 day of Oct 2012

Signature of NOI holder or person authorized to sign:



Name (typed or print) Roger L. Day

Title/Position: VP Operations AMSO



**RIO BLANCO COUNTY DEPARTMENT OF
PLANNING AND DEVELOPMENT**

Administration Bldg
200 Main Street
Post Office, Box 599
Meeker, CO 81641

October 19, 2012

American Shale Oil, LLC.
Attn: Roger Day
110 East 3rd Street, Suite 201
Rifle, CO 81650

RE: Special Use Permit #12-8 – request to upgrade Type I TLQ to a Type II TLQ associated
with R, D & D project.

Dear Mr. Day,

The Rio Blanco County Planning and Development Department has reviewed and approved the submitted application request for Special Use Permit #12-8 for the following referenced item:

E½ SW¼ and W½ SE¼ of Section 21, T2S, R98W: Upgrade existing Type I Temporary Living Quarter (TLQ), currently permitted under a Temporary Use Permit (TUP), to a Type II TLQ for the associated American Shale Oil's Research, Design and Development (R, D & D) project on BLM-owned lands to allow the following:

- Extended period of operation of existing TLQ.
- Installation of an Individual Septic Disposal System (ISDS) designed to accommodate a maximum of 12 persons.
- A maximum of 2 RV's to be connected to the ISDS.

This SUP amendment approval grants 3 years of vested property rights in accordance with Section 24-68-101, *et. seq.*, C.R.S.

Receipt of your payment of the application filing fee of \$700 for this SUP is acknowledged by check #10764.

All projects within the County are now subject to Impact Fees. An Impact Fee estimate was not required for this SUP since: 1) the TLQ already exists, 2) impact fees were already assessed under the TUP and SUP for the R,D&D, and 3) the trips generated to install the ISDS are minimal.

This approval is conditioned with the following:

1. Receipt of and compliance with BLM approval for the installation of the ISDS on the property.
2. Provide a copy of the BLM approval pertaining to the ISDS prior to the issuance of the County's ISDS permit.
3. Obtain a building permit for the TLQ.
4. Bear-proof refuse containers must be provided for trash at all locations.

5. Compliance with all standards and measures described in the December 2011 AMSO Health, Environmental Stewardship, Safety and Training Reference Manual.
6. AMSO must ensure that all of its contractors are aware of the requirement to obtain all necessary permits and licenses for all vehicles, buildings, portable office units, equipment, and special mobile machinery used in Rio Blanco County.
7. AMSO must pay all appropriate use and sales taxes for this project as determined by the Rio Blanco County Sales and Use Tax Department.
8. All applicable portions of the Rio Blanco County Land Use Resolution must be met, including the standard for weed control and revegetation.
9. Obtain any necessary and applicable Right of Way Access Permit, Utilities Installation Permit, and/or Special Transport Permits for oversize loads from the County Road and Bridge Department. If impacts to additional County roads do occur, impact fees and applicable permits will also be required for those roads.
10. Any damage to County Roads resulting from AMSO's construction activities must be fully repaired or mitigated to the satisfaction of the RBC Road and Bridge Department.
11. Transportation of personnel, including the employees of contractors and sub-contractors must be accomplished using the minimum number of vehicles possible through use of vans or car-pooling. Individual vehicles that contain specialized equipment, such as welding equipment, or employees that are required and authorized to drive an individual vehicle to the worksites for logistical and/or short term Company's business purposes are exempt from this requirement.
12. Each separate construction crew must have at least one member with current basic first aid and CPR certification.
13. All stationary equipment must meet an ambient noise standard of 65 decibels at the boundary of the work site where such equipment is located.
14. The facilities must be identified with proper signage, including site name, owner/operator, general contact numbers, and emergency contact numbers.
15. At the conclusion of the construction of the project, the company must submit an **As Built Map** in the form of a **GIS ArcView** compatible shape file.
16. Provide the final costs of the project upon completion.

If you have any questions, please do not hesitate to call our office at (970) 878-9583 or email me at asmith@co.rio-blanco.co.us.

Sincerely,



Anna Smith
County Planner

cc:

- Paul Daggett, BLM Mining Engineer (*sent via email*)
- RBC BOCC (*sent via email*)
- RBC Planning Commission (*sent via email*)
- RBC Use Tax (*sent via email*)
- RBC Road & Bridge (*sent via email*)
- RBC Assessor (*sent via email*)
- RBC Impact Fee Technician (*sent via email*)
- RBC Environmental Health Officer (*sent via email*)

