

4007013 Incoming

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Lila Canyon Project
P. O. Box 910
East Carbon, Utah 84501
Phone: (435) 888-4000
(435) 650-3157
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February 3, 2012

Daron Haddock
Permit Supervisor
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: UtahAmerican Energy, Inc. Lila Canyon Mine, ACT/009-013, (12-002) Update Plates 5-2 and 7-5 and ASCA

Dear Mr. Haddock:

Please find attached three (3) copies of submittal 12-002 which updates our interim drainage plan and revises the ASCA section of Appendix 7-4.

As you are aware Phase I earthwork is complete at Lila Canyon with Phase II to follow in the next year or two. The final drainage plan cannot be implemented until Phase II is complete all earthwork is done. This submittal updates the temporary changes which have been instituted.

Even though parts of the existing drainage plan are temporary, All temporary drainage reports to either ASCA's or sediment control ponds. Additional culverts and ditches will be added to the temporary drainage as needed and eventually the temporary changes will result in the final drainage control plan.

C1 and C2 forms are included.

A CD disk has been included containing all the changes.

If you have any questions please give me a call.

Sincerely,

R. Jay Marshall P.E.
Project Manager / Chief Engineer
Lila Canyon Mine

RECEIVED

FEB 06 2012

DIV. OF OIL, GAS & MINING

File in:

Confidential

Shelf

Expandable

Date Folder 020612 00070013

Incoming

APPLICATION FOR PERMIT PROCESSING

<input type="checkbox"/> Permit Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: ACT/007/013
Title of Proposal: Update interim drainage and Revise ASCA information 12-002						Mine: Horse Canyon
						Permittee: UtahAmerican Energy, Inc.

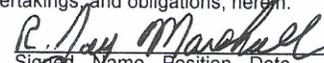
Description, include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation

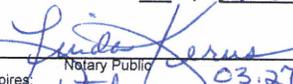
<input type="checkbox"/> Yes	<input type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO #
<input type="checkbox"/> Yes	<input type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	9. Is the application submitted as a result of a Violation? NOV #
<input type="checkbox"/> Yes	<input type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: Permit Renewal
<input type="checkbox"/> Yes	<input type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

X Attach 3 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

 2/3/12
 Signed - Name - Position - Date

Subscribed and sworn to before me this 3rd day of February 2012


 Notary Public

My Commission Expires: 03-27-13 }
 Attest: STATE OF Utah }
 COUNTY OF Carbon }



LINDA KERNS
 NOTARY PUBLIC • STATE OF UTAH
 COMMISSION # 578211
 COMM. EXP. 03-27-2013

Received by Oil, Gas & Mining

RECEIVED

FEB 06 2012

DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER

**Appendix 7-4
Lila Canyon Mine
Sedimentation and Drainage Control Plan**



Revised
January 2001
October 2002 RJM
February 2007 TJS
April 2008 TJS
July 2008 TJS
June 2009 TJS
January 2010 TJS
January 2012 TJS

Alternate Sediment Control for Lila Surface Facilities

Based on the topography of the site and the improvements required for development of the mine facilities, there are small portions of the site drainage that can not be reasonably collected and drained to a sediment pond. The Division allows an exemption from standard sediment control rules as considered under R645-301-742.240 for these areas. The criteria for the exemption:

“may be granted if the disturbed drainage area within the total disturbed area is small and the operator demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed areas to meet the effluent limitations under R645-301-751 or the applicable Utah and federal water quality standards for the receiving waters.”

These areas that are exempted are referred to as Alternate Sediment Control Areas or “ASCAs”.

There are several areas of the mine facilities that can not be easily drained to a sediment pond. These are:

- slope below water treatment area,
- slopes below roads or pads,
- ventilation break-outs,
- and topsoil storage area sites.

5.1 ASCA Areas

For the Lila mine site, the following will be considered ASCA areas:

- slope below water treatment area,
- slopes below roads or pads,
- and topsoil storage area sites.

For these areas sediment control will be accomplished with a combination of one or more of the following: berms, silt fences, and straw bales. Due to lack of final engineering details, the exact location of the berms, silt fences, and subsequent erosion techniques will be determined in field with the approval of UDOGM. The ASCA's will have berms, silt fences, and straw bales removed and be seeded upon final reclamation.

5.1.1 Water Treatment Area

The outslope of the water treatment pad will have a silt fence located along the disturbed area boundary to treat the runoff from the slope. While some portions of this area will be disturbed as a result of the fill material placed for the pad and road construction, the major portion of this area is expected to remain undisturbed. As an added protection, the portions of the area that are disturbed by the fill placement will be covered with an erosion control mat to minimize the erosion from this slope and that area seeded to aid in the establishment of a vegetative cover.

RUNOFF CALCULATIONS:

Acreage:	0.37 acres
Design Storm: 10 year/24 hour:	1.90"
CN:	90
S:	1.111
$Q = \frac{(P-0.2S)^2}{P+0.8S}$	= 1.01" of runoff

Total run-off = 0.03 acre feet

5.1.2 Road and Pad Slopes

For portions of the outslope of the portal access road and coal pads, a silt fence will be located along the toe of the slope to treat the runoff. While some portions of this area will be disturbed as a result of the fill material placed for the pad and road construction, the major portion of this area is expected to remain undisturbed. As an added protection, the portions of the area that are disturbed by the fill placement will be covered with an erosion control mat to minimize the erosion from this slope and that area seeded to aid in the establishment of a vegetative cover.

RUNOFF CALCULATIONS:

Acreage:	1.37 acres
Design Storm: 10 year/24 hour:	1.90"
CN:	90
S:	1.111
$Q = \frac{(P-0.2S)^2}{P+0.8S}$	= 1.01" of runoff

Total run-off = 0.12 acre feet

5.1.3 Topsoil Storage Area

The topsoil collected from the mine site will be placed in the topsoil storage area. To provide extra sediment control for this site, a berm will be constructed to enclose the storage site. The berm will be constructed a minimum of two feet high and have 2:1 side slopes. The berm will control the flow up to a 10 year-24 hour precipitation event. Silt fencing materials will be selectively placed to help control run-off. The berm will be stabilized with vegetation to prevent erosion.

The outside of the containment berm will be protected with a silt fence or gravel. The gravel, if used, would help augment the revegetation. Construction details of the silt fence/filter fence are shown in Figure 5.

RUNOFF CALCULATIONS:

Acreage:	2.61 acres
Design Storm:10 year/24 hour:	1.90"
CN:	90
S:	1.111
$Q = \frac{(P-0.25S)^2}{P+0.8S}$	= 1.01" of runoff

Total run-off = 0.22 acre feet

5.2 Non-ASCA Areas

There are two areas that are not considered ASCA areas. These are the north and south ventilation break outs. The ventilation breakouts are just punch outs and will have insignificant disturbance associated with them (see Plates 5-2 and 7-2). Due to the configuration of these sites, there will be no offsite runoff. The slope of the pads are back into the portals, therefore the limited runoff will be toward the portals. These pad areas are very limited:

North Pad	20'x60'	1200 ft ²
South Pads	3 @ 20'x20' each	400 ft ² each or 1200 ft ² total

Based on these drainage areas, even assuming that 100% of the rainfall runs off, the runoff amounts are extremely limited:

North Pad

Precip	1.9 in
CN	100
Q	0.0044 AF or 190 ft ³ or 1422 gals

South Pads 1, 2, & 3

Precip	1.9 in
CN	100
Q	0.0015 AF or 65 ft ³ or 489 gals for each portal
	0.0045 AF or 196 ft ³ or 1467 gals for all 3 total

Due to this small amount of water, it is assumed, as these breakouts are intakes for ventilation, that the majority of this water will evaporate due to the air movement into the portals and that portion that is not evaporated will flow to the sumps underground and be treated with the mine water prior to any discharge.

Additionally, as these pads are mainly bedrock surfaces that form the bottom of the portal opening, there is little potential for any runoff to erode or carry significant sediment. Therefore, no significant sediment load nor water quality degradation will be developed.

Based on the plan proposed, by allowing the runoff from the pads to flow to the portals, only a very limited volume of water would be introduced underground and no additional disturbance on the downslope of these area would be required. The water quality standards and effluent limitations would be met. The flow would be at a known maximum rate and that rate is easily within the limits of what can be accommodated by the underground workings. Therefore the intent of protecting the environment from operational drainage will be achieved and no additional disturbance will be required.

WordPerfect Document Compare Summary

Original document: T:\HD-ProjectBackup\UtahAmerican\Lila Hydrology-2011\Site Drainage\Appendix 7-4 10-010 Partial.wpd

Revised document: T:\HD-ProjectBackup\UtahAmerican\Lila Hydrology-2011\Site Drainage\Appendix 7-4 10-010-2 TJS.wpd

Deletions are shown with the following attributes and color:

~~Strikeout~~, **Blue** RGB(0,0,255).

Deleted text is shown as full text.

Insertions are shown with the following attributes and color:

Double Underline, Redline, **Red** RGB(255,0,0).

The document was marked with 9 Deletions, 12 Insertions, 0 Moves.

**Appendix 7-4
Lila Canyon Mine
Sedimentation and Drainage Control Plan**



Revised
January 2001
October 2002 RJM
February 2007 TJS
April 2008 TJS
July 2008 TJS
June 2009 TJS
January 2010 TJS

Dec 2012 TJS

Alternate Sediment Control for ~~Fan Site and Topsoil Storage Area~~

Lila Surface Facilities

Based on the topography of the site and the improvements required for development of the mine facilities, there are small portions of the site drainage that can not be reasonably collected and drained to a sediment pond. The Division allows an exemption from standard sediment control rules as considered under R645-301-742.240 for these areas. The criteria for the exemption:

“may be granted if the disturbed drainage area within the total disturbed area is small and the operator demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed areas to meet the effluent limitations under R645-301-751 or the applicable Utah and federal water quality standards for the receiving waters.”

These areas that are exempted are referred to as Alternate Sediment Control Areas or “ASCAs”.

There are several areas of the mine facilities that can not be easily drained to a sediment pond. These are:

- slope below water treatment area,
- slopes below roads or pads,
- ventilation break-outs,
- and topsoil storage area sites.

5.1 ASCA Areas

~~Sediment Control at~~ For the Lila mine site, the following will be considered ASCA areas:

- slope below water treatment area,
- slopes below roads or pads,
- and topsoil storage area sites.

For these areas sediment control will be accomplished with a combination of one or more of the following: berms, silt fences, and straw bales.

~~The ventilation breakouts are just punch outs and will have insignificant disturbance associated with them. (Plate 5-2) However, they are addressed as ASCA’s and are addressed here even though there will be only insignificant surface disturbance. The ASCA’s will~~ Due to lack of final engineering details, the exact location of the berms, silt fences, and subsequent erosion techniques will be

determined in field with the approval of UDOGM. The ASCA's will have berms, silt fences, and straw bales removed and be seeded upon final reclamation.

The topsoil collected from the topsoil storage area sites will be located downslope from the sites and will be used in the construction of the berm. The berm will be constructed a minimum of two feet high and have 2:1 side slopes. The berm will control the flow from a 10 year-24 hour precipitation event. Silt fence will be selectively placed to help control run-off. The berm will be stabilized with vegetation to prevent erosion. As much as practical, the vegetation techniques used on the main topsoil pile will be utilized on the fan topsoil berm.

The outside of the berm will be protected with a silt fence or gravel. The gravel, if used, would help augment the revegetation. Construction details of the silt fence/filter fence are shown in Figure 5.

5.1.1 Water Treatment Area

The outslope of the ~~portal access road, outslope of the~~ water treatment pad, ~~and ventilation break outs~~ will have a silt fence located along the disturbed area boundary to treat the runoff from the slope. While some portions of this area will be disturbed as a result of the fill material placed for the pad and road construction, the major portion of this area is expected to remain undisturbed. As an added protection, the portions of the area that are disturbed by the fill placement will be covered with a erosion control mat to minimize the erosion from this slope and that area seeded to aid in the establishment of a vegetative cover.

~~Due to lack of final engineering details, the exact location of the berms, silt fences, and subsequent erosion techniques will be determined in field with the approval of UDOGM. The final determination will be made prior to the start of topsoil removal.~~

Run-off Calculations

5.2 Ventilation Break Outs

~~Insignificant surface disturbance.~~

5 RUNOFF CALCULATIONS:

<u>Acreage:</u>	<u>0.37 acres</u>
<u>Design Storm:10 year/24 hour:</u>	<u>1.90"</u>
<u>CN:</u>	<u>90</u>
<u>S:</u>	<u>1.111</u>
<u>$Q = \frac{(P-0.2S)^2}{P+0.8S}$</u>	<u>= 1.01" of runoff</u>

Total run-off = 0.03 acre feet

5.1.2 Road and Pad Slopes

For portions of the outslope of the portal access road and coal pads, a silt fence will be located along the toe of the slope to treat the runoff. While some portions of this area will be disturbed as a result of the fill material placed for the pad and road construction, the major portion of this area is expected to remain undisturbed. As an added protection, the portions of the area that are disturbed by the fill placement will be covered with a erosion control mat to minimize the erosion from this slope and that area seeded to aid in the establishment of a vegetative cover.

RUNOFF CALCULATIONS:

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<u>Design Storm: 10 year/24 hour:</u>	<u>1.90"</u>
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<u>S:</u>	<u>1.111</u>
<u>$Q = \frac{(P-0.2S)^2}{P+0.8S}$</u>	<u>= 1.01" of runoff</u>

Total run-off = 0.12 acre feet

5.1.3 Topsoil Storage Area

The topsoil collected from the mine site will be placed in the topsoil storage area. To provide extra sediment control for this site, a berm will be constructed to enclose the storage site. The berm will be constructed a minimum of two feet high and have 2:1 side slopes. The berm will control the flow up to a 10 year-24 hour precipitation event. Silt fencing materials will be selectively placed to help control run-off. The berm will be stabilized with vegetation to prevent erosion.

The outside of the containment berm will be protected with a silt fence or gravel. The gravel, if used, would help augment the revegetation. Construction details of the silt fence/filter fence are shown in Figure 5.

RUNOFF CALCULATIONS:

Acreage:	2.61 acres
Design Storm: 10 year/24 hour:	1.90"
CN:	90
S:	1.111
$Q = \frac{(P-0.25S)^2}{P+0.8S}$	= 1.01" of runoff

Total run-off = 0.22 acre feet

5.4 Water Treatment Area

~~Acreage: 0.37 acres~~

Design Storm: 10 year/24 hour: 1.90"
 CN: 90
 S: 1.111
 $Q = \frac{(P-0.2S)^2}{P+0.8S} = 1.01"$ of runoff

Total run-off = 0.03 acre feet

5.2 Non-ASCA Areas

There are two areas that are not considered ASCA areas. These are the north and south ventilation break outs. The ventilation breakouts are just punch outs and will have insignificant disturbance associated with them (see Plates 5-2 and 7-2). Due to the configuration of these sites, there will be no offsite runoff. The slope of the pads are back into the portals, therefore the limited runoff will be toward the portals. These pad areas are very limited:

<u>North Pad</u>	<u>20'x60'</u>	<u>1200 ft²</u>
<u>South Pads</u>	<u>3 @ 20'x20' each</u>	<u>400 ft² each or 1200 ft² total</u>

Based on these drainage areas, even assuming that 100% of the rainfall runs off, the runoff amounts are extremely limited:

North Pad

<u>Precip</u>	<u>1.9 in</u>
<u>CN</u>	<u>100</u>
<u>Q</u>	<u>0.0044 AF or 190 ft³ or 1422 gals</u>

South Pads 1, 2, & 3

<u>Precip</u>	<u>1.9 in</u>
<u>CN</u>	<u>100</u>
<u>Q</u>	<u>0.0015 AF or 65 ft³ or 489 gals for each portal</u>
	<u>0.0045 AF or 196 ft³ or 1467 gals for all 3 total</u>

Due to this small amount of water, it is assumed, as these breakouts are intakes for ventilation, that the majority of this water will evaporate due to the air movement into the portals and that portion that is not evaporated will flow to the sumps underground and be treated with the mine water prior to any discharge.

Additionally, as these pads are mainly bedrock surfaces that form the bottom of the portal opening, there is little potential for any runoff to erode or carry significant sediment. Therefore, no significant sediment load nor water quality degradation will be developed.

Based on the plan proposed, by allowing the runoff from the pads to flow to the portals, only a very limited volume of water would be introduced underground and no additional disturbance on the downslope of these area would be required. The water quality standards and effluent limitations would be met. The flow would be at a known maximum rate and that rate is easily within the limits of what can be accommodated by the underground workings. Therefore the intent of protecting the environment from operational drainage will be achieved and no additional disturbance will be required.