C/007/041 Incoming
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OK
cc: Steve C.
Ken
Ingrid

State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

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Walter L. Baker
Executive Secretary

April 13, 2012

CERTIFIED MAIL
(Return Receipt Requested)

Mr. David Hibbs, President
UtahAmerian Energy, Inc.
P.O. Box 910
East Carbon, UT 84520

Dear Mr. Hibbs:

Subject: Salinity-Offset Program Funding Agreement for UPDES Permit Numbers UT00224368-Crandall Canyon Mine; and UT0025640-West Ridge Mine

Attached please find an original copy of the fully executed Salinity-Offset Program Funding Agreement for the above referenced UPDES permits. As you are aware, the UtahAmercian Energy, Inc. (UEI) mine facilities, as referenced above by their respective UPDES Permits, are required to participate in and/or fund a salinity-offset program to compensate for the amount of salinity discharged from each facility which is above the one-ton/day permit limits.

A plan for the two mine facilities to fund a salinity-offset program was drafted by UEI and submitted to the Division of Water Quality (DWQ) in early 2012 and subsequently finalized by March 12, 2012. The plan, titled "Colorado River Salinity Offset Program Participation Plan", which is attached as "Exhibit A" to the Salinity-Offset Program Funding Agreement, was approved by DWQ and will be appended to each of the UPDES permits referenced above to be effective March 1, 2012.

With the Salinity-Offset Program Funding Agreement now finalized, the first payment of $75,748.00 is due by May 31, 2012. A separate invoice has been prepared and included herewith. Therefore, please remit the full invoice amount by May 31, 2012 to:

Department of Environmental Quality
Division of Water Quality
Attn: Jalynn Knudsen
P.O. Box 144870
Salt Lake City, UT 84114-4870

Please make check payable to "Utah Division of Water Quality" and be sure to include the invoice number with you remittance. DWQ expects the three payments from UEI to be made in accordance with the payment schedule as outlined in paragraph 2 of the Funding Agreement.

Your continued efforts to remain in compliance with the provisions of your UPDES permits are appreciated. If you have any questions, please contact Jeff Studenka of this office at (801) 536-4395, or by e-mail at jstudenka@utah.gov .

Sincerely,

Utah Water Quality Board

Walter L. Baker, P.E.
Executive Secretary

WLB: JAS: mc

Enclosures (2): 1-Funding Agreement
2- Invoice

cc (w/ enclosure 1): Amy Clark, EPA Region VIII
Laura Lockhart, Utah Office of Attorney General
Claron Bjork, SE Utah District Health Department
Dave Ariotti, DEQ District Engineer
Daron Haddock, DOGM
Mark Quilter, UDAF *(Hand Delivered on 4/9/12)*
Mike Herkimer, DWQ
Robert King, Division of Water Resources
Don Barnett, Colorado River Basin Salinity Control Forum

C:\Documents and Settings\Ustudenka\My Documents\Misc\UEI Salinity-Offset 2012 docs\April 2012 Salinity Offset FA invoice ltr.docx

FUNDING AGREEMENT
to
Colorado River Salinity Offset Program Participation Plan

THIS Funding Agreement, dated effective as of March 1, 2012("Effective Date"), is between the Utah Water Quality Board, Department of Environmental Quality, by and through the Executive Secretary of that Board ("Executive Secretary") and UtahAmerican Energy, Inc. ("U.E.I.").

Recitals

A. Andalex Resources, Inc. is a wholly-owned subsidiary of UtahAmerican Energy, Inc. Genwal Resources, Inc. is a wholly-owned subsidiary of Andalex Resources, Inc. and is the operator of the Crandall Canyon Mine ("Crandall") located in Emery County, Utah. West Ridge Resources, Inc. is a wholly-owned subsidiary of Andalex Resources, Inc. and is the operator of the West Ridge Mine ("West Ridge") located in Carbon County, Utah. These mines are collectively referred to as the "Mines". Crandall holds UPDES Permit UT0024368, and West Ridge holds UPDES Permit UT0025640 (collectively, "UPDES Permits"). The UPDES Permits are issued and managed by the Division of Water Quality ("DWQ").

B. In conjunction with the UPDES Permit renewal process and in order to meet total dissolved solids ("TDS") salt loading limits, U.E.I., on behalf of the Mines, proposed participation in a salinity offset program through a plan entitled "Colorado River Salinity Offset Program Participation Plan," a copy of which is attached as Exhibit A hereto ("Offset Participation Plan"). The Offset Participation Plan requires U.E.I. to fund an account pursuant to a funding agreement to purchase salinity credits as offsets against discharges made under the UPDES Permits.

C. This Funding Agreement is executed in furtherance of the Offset Participation Plan.

NOW, THEREFORE, for and in consideration of the covenants set forth in the Offset Participation Plan, the terms of this Funding Agreement, and other good and valuable consideration, the parties agree as follows:

1. Offset Participation Plan. The Executive Secretary, the Utah Department of Agriculture and Food ("UDAF") and the Colorado River Basin Salinity Control Forum ("CRBSCF") approve and ratify the Offset Participation Plan and acknowledge that the Plan establishes a salinity offset program under which U.E.I. is purchasing a total of 5,570 TDS credit tons ("Credit Tons") for the monetary sum of $227,240 ("Credit Funds"). The number of Credit Tons purchased is based on U.E.I.'s current estimate of the number of Credit Tons that it will require to meet permit requirements for approximately 5 years. U.E.I. shall not be required to make any additional payments or incur any additional costs in order to purchase and use the 5,570 Credits even if the costs of the Offset program funded by the Plan increase.

2. Payment. U.E.I. shall pay the Credit Funds by the following payment schedule: 1) an initial payment of $75,748 due on or before May 31, 2012; 2) a second payment of $75,746 due on or before December 31, 2012; and 3) a third payment of $75,746 due on or before June 30, 2013. Payments of the Credit Funds shall be made by certified check payable to the Utah Division of Water Quality delivered by a generally acceptable overnight delivery service to the address shown herein.

3. Fund Account. DWQ shall establish an account ("Account") in the Operating Budget of the Department of Environmental Quality, within the State of Utah General Fund. Revenues and expenditures will be tracked through that Account as dedicated credits. The Credit Funds shall be dispersed from the Account by DWQ pursuant to procedures established by DWQ and consistent with any agreement between DWQ and Utah Department of Agriculture and Food for the purposes of funding certified Colorado River salinity offset programs. U.E.I. shall have no responsibility for the Credit Funds once the funds have been paid to DWQ pursuant to this Funding Agreement.

4. Monitoring and Reporting. U.E.I. shall monitor and report TDS concentrations in its mine discharge waters in UPDES Discharge Monitoring Reports ("DMR"), as specified in the UPDES permits and in the Offset Participation Plan. U.E.I. shall also calculate and report by the 28th of each month the number of TDS tons discharged by each of the Mines in the previous month in excess of their respective TDS limits. U.E.I. will make that calculation for each of the Mines as follows:

a. U.E.I. will estimate the total number of TDS tons released by the Mine. This number will be based on statistically appropriate methods which consider effluent outflows as measured and sampling of those outflows for TDS.

b. U.E.I. will subtract from the number derived in (a) the TDS permit limit for the Mine.

The report submitted by U.E.I. shall show, for each of the Mines, the calculations described in this paragraph. The report shall be made in substantially the form illustrated in the TDS Tracking Spreadsheet Table of the Offset Participation Plan.

5. Use and reporting of credits. U.E.I.'s 5,570 Credit Tons shall be decreased initially by the number of TDS tons described in paragraph 6 of this Funding Agreement, and then shall be decreased monthly by the total number of TDS tons discharged by the Mines in excess of their TDS limits, as described in paragraph 4 of this Funding Agreement. U.E.I. will, by the 28th of each month, submit a report ("Credit Chart") with the number of Credit Tons used in the previous months, and the number that remain available for use in future months. The report shall be made in substantially the form illustrated in the TDS Tracking Spreadsheet Table of the Offset Participation Plan.

6. Credits for period before execution of this agreement. Using the methods and forms described in paragraph 4 of this Funding Agreement, U.E.I. shall calculate and report, by April 28, 2012, the number of TDS tons discharged by the Crandall Canyon Mine and the West Ridge Mine in the period between January 1, 2012 and March 31, 2012. U.E.I. shall also submit a Credit Chart for that period, as described in Paragraph 5.

7. Effect of agreement. The Mines will be in compliance with the TDS limits of its UPDES Permit if it does not exceed the discharge volume limit in its permit, if U.E.I. has sufficient Credit Tons remaining to accommodate the TDS discharges in excess of the permit limits for TDS, and if U.E.I. is current with its submission of reports and other communications required under this Agreement.

8. Colorado River Salinity Program. DWQ shall be solely responsible for use of the Credit Funds and approval of projects to apply the Credit Funds in accordance with applicable law and requirements of the Colorado River Salinity Program. U.E.I. shall have no responsibility for or obligation to establish, participate in, monitor or make any additional payments toward any salinity programs used to create offsets under this Agreement.

9. Termination. This Funding Agreement will terminate on December 31, 2021 or on the date that U.E.I. has used all of the 5,570 Credit Tons funded under this agreement, whichever is earlier. In the event of remaining TDS credit tons funded under this agreement on or after December 31, 2021, the parties have previously agreed that the remaining credit tons shall be null and void.

10. Miscellaneous.

a. All notices or required communications under this Funding Agreement shall be in writing, and shall be addressed as follows:

If to U.E.I.:

UtahAmerican Energy, Inc.
P.O. Box 910
East Carbon, UT 84520
Attention: President

If to DWQ:

Division of Water Quality
195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870
Attention: Executive Secretary

Any party may change its address by notice to the other parties. Notices or other communications to DWQ or the Executive Secretary must be received at the offices of the DWQ by 5 p.m. on the date they are due.

b. This Funding Agreement may not be altered or amended, nor may any rights hereunder be waived, except by an instrument in writing executed by the party or parties to be changed with such amendment or waiver.

c. No provision of this Funding Agreement shall, nor shall it be interpreted to, amend, modify or waive any provision of the UPDES Permits. No provision of this Funding Agreement, including paragraph 10.a., shall, nor shall it be interpreted to, amend, modify or waive the right of the Executive Secretary to modify or terminate the UPDES Permits as permitted by law.

d. U.E.I. may assign or transfer U.E.I.'s interest in and to this Funding Agreement in conjunction with approved sale or transfer of the UPDES Permits or sale or transfer of either of the Mines.

e. This Funding Agreement, together with the Offset Participation Plan, and the UPDES Permits constitutes the entire understanding among the parties with respect to the subject matter hereof. No representation, warranty, covenant, agreement, promise, inducement or statement, whether oral or written, has been made by the parties that is not set forth in this Funding Agreement.

f. This Funding Agreement may be executed in multiple counterparts, each of which shall be deemed an original but which together shall constitute one and the same instrument.

g. This Funding Agreement and all of its terms and provisions shall be governed by and interpreted according to the laws of the State of Utah. Any judicial action brought under this Agreement shall be brought in a court of appropriate jurisdiction within the State of Utah.

THE UNDERSIGNED PARTIES have executed this Funding Agreement as of the Effective Date.

Division of Water Quality
Department of Environmental Quality
State of Utah

By the Water Quality Board

By: _____ 29 March 2012
Its: Executive Secretary Date

UtahAmerican Energy, Inc.

By: Daniel W. Hill 3/19/12
Its: President Date

JOINED AND RATIFIED for the sole purposes of Paragraph 1 herein:

Utah Department of Agriculture and Food

By: Leonard M. Blackham Date 4-9-12

Colorado River Basin Salinity Control Forum

By: _____ Date 3/29/12

Exhibit A
To Funding Agreement

Colorado River Salinity Offset Program Participation Plan

Colorado River Salinity Offset Program Participation Plan

Utah American Energy, Inc.

Introduction

UtahAmerican Energy, Inc. (U.E.I.), through its Utah subsidiaries, operates two coal facilities that hold active Utah Pollutant Discharge Elimination Systems (UPDES) Individual Permits for discharging intercepted groundwater and/or storm water runoff to waters of the State. The UPDES permit program is operated by the Utah Department of Environmental Quality's Division of Water Quality (DWQ). Because the receiving waters for all of these facilities are ultimately tributary to the Colorado River, the UPDES permits also incorporate Colorado River Basin Salinity Control Forum (CRBSCF) salinity standards and relevant implementation policies.

Both of the UtahAmerican Energy facilities are: the Genwal Resources, Inc. Crandall Canyon Mine, the West Ridge Resources, Inc. West Ridge Mine. Both mines are owned by U.E.I. The two UPDES individual Permits for these facilities are listed below.

FACILITY	UPDES PERMIT No.	RECEIVING WATER
Crandall Canyon Mine	UT0024368	Crandall Creek
West Ridge Mine	UT0025640	C Canyon ephemeral drainage

Each of these two permits incorporates a CRBSCF requirement that limits salt load to no more than one ton/day. Salt load is a function of the quantity (rate) of water discharged and its total dissolved solids (TDS) concentration. All water that has been discharged historically at the U.E.I mines is groundwater that has been intercepted during mining. This groundwater must be pumped out of mine workings in order to maintain a safe and viable mine operation. (Although permitted discharge outfalls are also in place at each facility to discharge storm water runoff, they have never been used because all runoff has been stored in sediment retention ponds located upstream of the outfalls.) As will be discussed later, the one ton/day salt load limit has become difficult to meet at these mines.

DWQ and the CRBSCF recognize that neither the quantity nor quality of groundwater intercepted by mines can be easily controlled. They also recognize that discharging intercepted groundwater is a different situation than discharging many other industrial wastewaters. One of the CRBSCF implementation policies that apply to intercepted groundwater is to allow salt offset. The DWQ administers a Colorado River Salinity Offset Program wherein salinity credits can be purchased as offsets against UPDES-permitted discharges. This program enables mines to continue to operate when salt load limits cannot be met. The Individual UPDES permits for both facilities stipulate that if the TDS load limit cannot be met, participation in the Offset Program must be pursued.

Therefore, UtahAmerican Energy Inc. plans to participate in the program by funding a salinity offset project. This will generate TDS credits so that mine operations can continue. The following information describes how U.E.I. proposes to meet those.

Discharge History

The Salinity Offset Program operates on a ton-for-ton basis. This means that offset needs (over the above and allowable one ton/day) must be estimated for each facility using existing or projected discharge rate and TDS concentration data. Each of the facilities and their discharge history is briefly described below.

Crandall Canyon Mine

The Crandall Canyon Mine began operation in the early 1990s. The mine is covered by an individual UPDES Permit (#UT0024368), and the current permit term is May 1, 2011 to April 30, 2016. There are two permitted discharge outfalls for this facility: Outfall 001 is located immediately downstream from the sediment pond that collects all surface runoff from the mine surface facilities; and Outfall 002 collects and discharges intercepted groundwater from several underground sumps in various locations of the underground mine. Outfall 001 has rarely discharged. Outfall 002 has essentially discharged continuously for the past 10 years. Both outfalls discharge into Crandall Creek, which is tributary to Huntington Creek in San River Basin.

Since January 2000, average monthly discharges have ranged from about 135 gallons per minute (gpm) to about 940 gpm, with an average of about 580 gpm. Over that time period, though there have been some fluctuations in flow, as expressed by the range, there have been no trend toward either increasing or decreasing flows.

TDS of the groundwater intercepted by the Crandall Canyon Mine has averaged about 440 mg/L since January 2000, but in the last few years, has often been in the mid-500 mg/L range. Under the UPDES permit terms there is no TDS load limit in effect during months when the average monthly TDS is 500 mg/L or less. During the past year, about half of the months were less than 500 mg/L and half were greater than 500 mg/L.

When TDS is greater than 500 mg/L, the one ton/day salt load limit is *typically* exceeded by Crandall Canyon's discharge.

West Ridge Mine

The West Ridge Mine has been operating since 1999. Originally, the mine was covered by the UPDES General Permit for Coal Mine Discharges. Currently, it is covered under an individual UPDES Permit (#UT0025640), with a permit term from May 1, 2011 through April 30, 2016. There are two permitted discharges for this facility: Outfall 001 is located immediately downstream from the sediment pond that collects all surface runoff from the mine surface facilities; and Outfall 002 collects and discharges intercepted groundwater from an underground sump located within the mine. Outfall 001 has never discharged. Outfall 002 has essentially discharged continuously since January 2002. The receiving stream for these

discharges is an ephemeral channel in C Canyon, which is tributary to Grassy Trail Creek in the Price River Basin.
When discharge first began at West Ridge, flows were minimal and sporadic. They soon became continuous, and have continued to increase. They appear to be leveling off, however, at an average rate of about 1500 gpm.

Groundwater intercepted by the West Ridge Mine contains much higher dissolved solids than does the Crandall Canyon Mine. This is a typical difference between groundwater found in the Wasatch Plateau and that found in the Book Cliffs. TDS has averaged about 1,350 mg/L since January 2003; however it has recently trended downward.

Due to both increased discharge rates and increased TDS concentrations, this mine also had difficulties meeting the one ton/day salt load limit. Previously, this made it necessary to obtain an individual UPDES Permit rather than continue coverage under the General Permit.

Offset Plan Elements

U.E.I., after discussions with DWQ staff, proposes to participate in the Salinity Offset Program by contributing monies to the state's special revenue Salinity Offset Fund. This alternative has been chosen over the other potential mechanism for obtaining salt offset credits – that of designing, constructing, and implementing and offset project. Funds provided by U.E.I. will be used to finance salinity reduction projects that will be provided to result in a ton-for-ton salt reduction.

There are three steps to determine the funding amount that U.E.I. must provide:

1) U.E.I. must ***estimate the salt load*** it will add to receiving waters in excess of the allowable one ton/day.
2) DWQ will use various numeric formulas and published figures (including basin-specific efficiency ratios of leaching fractions), factoring in amortization engineering uncertainty, and administrative costs, to ***determine a current, project-specific salinity removal cost.***
3) Numbers generated during the first two steps will then dictate the ***total sum*** that U.E.I. will need to contribute to the Offset Fund.

In deriving the estimate for the first step, U.E.I has assumed the following:

- The historical discharge rates and TDS concentrations at the facilities are a reasonable predictor of future load needs. The future load estimates are generally based upon the historical averages, while also considering more recent trends.

- Both facilities will participate jointly in the Salinity Offset project. The total combined salt credits needed will be purchased jointly, and used as a common "bank". The bank will be depleted by each facility according to its need.

- U.E.I. will purchase a sufficient amount of salt credits to cover an assumed five year life-of-mine at each operation. While the mines may have sufficient reserves to last more than five years, coal mining economic considerations mean that actual mine life is unpredictable. Five years follows a UPDES permit term, and is a reasonable projection of offset need. (Should offset credits be depleted before five years, U.E.I would need to initiate participation in the Offset Program anew.) It is believed that the West Ridge Mine will not discharge at the end of 2012.

The following table shows the predicted salt load derivation at each facility. It also shows a calculated net total salt offset needed of 11.76 tons/day (after the allowable one ton/day/facility is subtracted). Over a five year period, this results in a total amount of 5,570 tons of salt credits that U.E.I. will need to purchase.

FACILITY	ASSUMED FUTURE AVERAGE FLOW RATE (gpm)	ASSUMED FUTURE AVERAGE TDS CONCENTRATION (mg/L)	CALCULATED AVERAGE DAILY SALT LOAD (tons/day)
Crandall Canyon Mine	410	650	1.60
West Ridge Mine	1500	1350	12.16
		Total Salt Load	13.76
		Net Total of Salt Offset Needed*	11.76

*(after subtraction of allowable one ton/day/facility)

The unit costs that DWQ will assess to U.E.I. will vary according to the salinity-control unit in which the discharges are located. Both facilities are in the Upper Colorado River Basin's Price-San Rafael Unit, but they occur within two different sub-units, with different efficiency ratios. The Crandall Canyon Mine is within the San-Rafael unit, and the remaining two facilities are in the Price unit.

Plan Monitoring Schedule

In addition to the routine monitoring and reporting via Discharge Monitoring Reports (DMRs) that is currently required for each of the UPDES permits, U.E.I. will also need to closely track its use of the banked salt credits. The basis for this tracking will be the average daily TDS load for each month, which is reported as tons per day on the monthly DMRs. In addition to both of the facilities submitting their individual DMRs each month, U.E.I. will submit a tracking spreadsheet to the DWQ each month. The spreadsheet will be similar to the one attached to this plan. It

will include an accounting of the salt credits used by each facility for the current month; a cumulative, running total of salt credits depleted up to and including the current month; and a record of the remaining available salt credits.

The tracking spreadsheet will be evaluated regularly by U.E.I and by DWQ as it will be an attachment to the monthly DMR forms for each facility, which are to be submitted by the 28th of each month. U.E.I. and DWQ will review on at least an annual basis beginning in Quarter 1 2012, the salt credits used to date vs. the remaining salt credits available. When and if remaining available salt credits begin to run low, a renewed assessment of future salt credit needed by U.E.I. will be undertaken. This will be done in a timely manner to ensure that there is sufficient time to prepare and obtain approval for a new or updated Salinity Offset Program Participation Plan prior to complete depletion of the available credits. U.E.I. understands that the cost of any additional needed credits will be based upon cost data in effect at the time, which is likely to be greater than the cost basis for credits purchased under this current plan. Further, implicit in the current plan is the assumption that, while the best possible estimates were used to derive a total five-year credit need, actual use of the purchased salt credits cannot be predicted exactly. Credits may be depleted at a faster or slower rate than has been assumed. U.E.I. understands that any credits that are purchased, but remain unused, will not be reimbursed.

Program Costs and Payment Schedule

The total cost for U.E.I. to participate in the Salinity Offset Program by purchasing 5,570 tons of salt offset credits is estimated to be approximately $227,240 based upon published 2011 average costs.

U.E.I will contribute this dollar amount to the state's special revenue Salinity Offset Fund based upon the terms set forth in a Funding Agreement to be developed by U.E.I. and DWQ.

	Genwal	West Ridge	Total Credit
2010 Average	25.63	253.54	
2011 Average	31.15	352.14	
Credits used for Calculations	35.00	450.00	0
Total Credits per Year	300.00	4200.00	4500.00
Average Flow Rate (gpm)	410	1500	
Average TDS Concentration	650	1350	
Average Calculated Salt Load	1.60	12.16	
Subtract Allowable 1 ton/day	0.60	11.16	
Total Credit	219.10	4073.30	4292.40
	Genwal	**West Ridge**	**Total Credit**
Assumption credits/month	25.00		0
Total Credits per Year	300.00	0.00	300.00
Average Flow Rate (gpm)	410		
Average TDS Concentration	650		
Average Calculated Salt Load	1.60		
Subtract Allowable 1 ton/day	0.60		
Total Credit	219.10	50.00	269.10
	Genwal	**West Ridge**	**Total Credit**
Assumption credits/month	25.00		0
Total Credits per Year	300.00	0.00	300.00
Average Flow Rate (gpm)	410		
Average TDS Concentration	650		
Average Calculated Salt Load	1.60		
Subtract Allowable 1 ton/day	0.60		
Total Credit	219.10	10.00	229.10
	Genwal	**West Ridge**	**Total Credit**
Assumption credits/month	20.80		0
Total Credits per Year	250.00	0.00	250.00

Average Flow Rate (gpm)	410		
Average TDS Concentration	650		
Average Calculated Salt Load	1.60		
Subtract Allowable 1 ton/day	0.60		
Total Credit	219.10	0.00	219.10
	Genwal	**West Ridge**	
Assumption credits/month	20.80		
Total Credits per Year	220.00	0.00	220.00
Average Flow Rate (gpm)	410		
Average TDS Concentration	650		
Average Calculated Salt Load	1.60		
Subtract Allowable 1 ton/day	0.60		
Total Credit	219.10	0.00	219.10

Year 2012	300.00	4200.00	4500.00
Year 2013	300.00	0.00	300.00
Year 2014	300.00	0.00	300.00
Year 2015	250.00	0.00	250.00
Year 2016	220.00	0.00	220.00
Total Credit for 5 Years	1370.00	4200.00	5570.00

➡ It is believed that the West Ridge Mine will not discharge at the end of 2012: