0003

C/015/017 Incoming
CC: Jim

ENERGY WEST
MINING COMPANY
A SUBSIDIARY OF PACIFICORP

Energy West Mining Company
P. O. Box 310
15 No Main Street
Huntington, Utah 84528

February 18, 2009

Utah Division of Oil Gas and Mining
Coal Program
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Subject: **Deficiency Response to the Phase I Bond Release of Remaining Reclaimed Areas [Sedimentation Pond, Pond Access, and Remote Breakouts], PacifiCorp, Des Bee Dove Mine, C/015/0017, Task ID #3043**

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby responds to the above stated deficiency document dated February 2, 2009. The following deficiencies concern information regarding soil redistribution and depths and other information that has not (to this date) been included in the Des Bee Dove Mining and Reclamation Plan Appendix XVI, Phase 3 Reclamation Plan. Updating this volume is forthcoming. Reclamation of the sediment pond was completed in January 2006. Phase I Bond release was applied for in August 2008.

The responses to the deficiencies are attached. Upon approval of Phase I Bond Release the entire Appendix XVI, Phase 3 Reclamation Plan volume will be submitted to the Division as an amendment to update this Plan. General information regarding the site reclamation project is included with this deficiency response. If there are any questions or concerns contact Dennis Oakley at (435) 687-4825.

Sincerely,

Kenneth S. Fleck

Ken Fleck
Manager of Geology and Environmental Affairs

Cc Pricilla Burton (DOGM, PFO)
File

RECEIVED
FEB 23 2009
DIV. OF OIL, GAS & MINING

Deficiency Response Document

The following responses to deficiencies are formatted as found in the technical analysis document. They are broken down into logical section headings similar to the R645 regulations. In each section, the regulation number along with the associated deficiency is follow by the Permittee's italicized response.

R645-301-880.310 -

1. **The application should indicate whether the subsoil pile was over-excavated to remove an additional two feet of topsoil material to be redistributed over the reclaimed site, as stated on page 5 of Appendix XVI.**

   The subsoil pile was not over-excavated to remove an additional two feet of topsoil material. During excavation of the material in the sediment pond dam embankment (Jan. '06), it was noticed in the field that this material was visually better (color and texture) than the material already salvaged for substitute topsoil, as well as superior to the grab samples taken from the native materials below the subsoil pile. The subsoil pile was sampled (3/14/05) on 1.0 ft intervals to a depth of approximately 1.0 ft. below the bottom of the pile (the native material). SAR's and EC's were extremely high throughout the pile except for the top 2.0 ft. of the surface. Test results for native material in hole #1 showed an EC of 10,200uS / SAR of 16.4 and hole #2 showed an EC of 10,400uS / SAR of 16.3.

   The quality of the dam embankment material was communicated to M. Pete Hess and Ms. Priscilla Burton as EWMC suggested that this material be used for a substitute topsoil material. Ms. Burton required a field paste pH/EC analysis conducted on this material. EWMC completed this test with the results of an EC of 1885uS and a pH of 7.45. With the texture of this material having many small rock fragments, the Division approved use of this material.

   It was communicated by email (see e-mail dated January 9, 2006) to the Division Inspector, Mr. Hess, and Ms. Burton that topsoil would be stripped off a portion of the borrow area and stored. The subsoil from this area would be used as fill for the west side of the pond. A portion of the dam embankment would be redistributed over this fill material. And the stored topsoil from the borrow area would be used up in this area. The remaining portion of substitute topsoil from the dam embankment was redistributed over the east side of the pond and partly over the subsoil storage area. Substitute topsoil from the outslope of the subsoil pile was utilized as a top covering in the subsoil pile area.

2. **The plan should indicate on an as-built drawing the approximate location of the boundary between the mulching and non-mulching areas.**

   This boundary will be incorporated on the maps as the Des Bee Dove mining and reclamation plan Phase 3 Appendix XVI, Reclamation Plan is updated in the near future.

3. **The plan should either provide copies of original laboratory sheets or provide the name and address of the laboratory that ran the analyses found in Appendix B in Appendix XVI.**

   The sample analysis results were emailed to Mr. Jim Smith and Ms. Burton on May 5, 2005 along with a C2 form for incorporation into the MRP. These results were in an EXCEL format as EWMC received them from Intermountain Labs. The Division approved this submittal and incorporated the sample results (reformatted by EWMC) into Phase 3, Appendix XVI, Reclamation Plan, Soils Section, Appendix B on September 26, 2005. A scanned copy of Intermountain Labs hard copy of the sample results is included with this response. These original lab results will be included when Appendix XVI is updated.

4. **Use of the pond embankment as substitute topsoil was a field change that was to have been provided with the as-built information. Inspection Report 876 refers to four field changes that were to have been provided as updates to the Phase 3 Appendix XVI.**

   As-built maps have been provided with the Phase I Bond Release information which shows soil redistribution and depths. For Phase I Bond Release, backfilling and grading was conducted nearly consistent with the approved plan. All reclamation activities that varied from the plan (i.e. reclamation topographic elevations) are provided on as-built maps submitted with the bond release application.

   The four field changes that the Division has identified will be included with the amendment to update the Phase 3, Appendix XVI, Reclamation Plan, at a future date prior to Phase II Bond Release activities. EWMC has identified one other field change that will be included. The five changes are listed below:

   a) *Use of the dam embankment material as substitute topsoil material and field paste pH/EC results.*
   b) *Use of the soil material stripped of the subsoil pile as fill for recontouring the subsoil pile area (includes end of the access road). Includes field paste pH/EC results.*
   c) *Material from the subsoil pile and dam embankment proved sufficient to contour the pond area. Only a small portion of the borrow area was utilized for topsoil and fill.*
   d) *Access road utilized hay mulch spread by hand and not ground and blown.*

e) *While incorporating hay mulch to the access road, supplies of the mulch ran short. Demarcation of the terminal boundary of the mulch has been marked in the field.*

5. **Appendix XVI describes a final topsoil cover depth of 10 inches composed of A and B horizon materials, but As Built DWG 200-2A describes only a three inch depth of topsoil replacement over the pond area and a 12 inch replacement depth over the subsoil storage area. Why?**

As explained in response #1, the dam embankment and borrow materials were utilized in numerous areas throughout the reclamation site. The salvaged sediment material from the pond was also utilized as fill as outlined in the plan as well as the material from the subsoil pile. These materials made up the "B Horizon" throughout the site. The "A Horizon" or topsoil placement utilized the topsoil from the borrow area, the dam embankment, and the outslope of the subsoil pile. The plan stated that the reclamation site provides enough substitute topsoil material to cover the area with 1.5" of "A Horizon" or topsoil material, plus an additional 2" from the top two feet of the subsoil pile. This gives a total of 3½" total depth of a topsoil covering.

Utilizing the borrow material, dam embankment material, and sediment material from the pond, there was sufficient material to backfill, grade, and provide a substitute topsoil covering to the pond area. The top two feet of material that was salvaged from the subsoil pile was redistributed over the entire area of the subsoil pile (which includes the access road) as shown on the as-built map.

6. **Section R645-301-243 of Appendix XVI describes nutrients and amendments to be added based upon laboratory analyses. Please indicate whether any fertilizer was used.**

Quality parameters of the disturbed substitute topsoil areas were compared to those of the borrow area topsoil material. Because they were somewhat equal, no other nutrients or amendments or additives (other than hay mulch) were used. This fact will be incorporated when Phase 3, Appendix XVI, Reclamation Plan is updated.

Inter-Mountain Laboratories, Inc.

Report ID: 010502206

1633 Terra Avenue
Sheridan, WY 82801

Soil Analysis Report
Energy West Mining Co.
P.O. Box 310
Huntington, UT 84528

Client Project ID: Des Bee Dove
Date Received: 04/20/05

Set #0105S02206
Report Date: 05/05/05

Lab Id	Sample Id	Depths (Feet)	pH s.u.	Saturation %	EC @ 25°C dS/m	Calcium meq/L	Magnesium meq/L	Sodium meq/L	SAR
0105S02206	DBD 0105	0 - 1	7.5	36.9	2.16	12.1	7.11	2.39	0.77
0105S02207	DBD 0205	1 - 2	7.2	39.0	4.47	17.5	19.8	13.9	3.23
0105S02208	DBD 0305	2 - 3	7.5	38.3	6.93	16.3	25.5	38.9	8.51
0105S02209	DBD 0405	3 - 4	7.6	41.7	8.42	16.7	27.7	51.6	11.0
0105S02210	DBD 0505	4 - 5	7.4	46.1	7.16	14.3	20.9	42.8	10.2
0105S02211	DBD 0605	5 - 6	7.8	42.0	7.78	14.3	20.7	51.0	12.2
0105S02212	DBD 0705	6 - 7	7.6	39.8	7.69	13.0	16.9	41.0	10.6
0105S02213	DBD 0805	7 - 8	7.9	42.7	8.19	14.3	20.9	55.0	13.1
0105S02214	DBD 0905	8 - 9	8.1	42.8	9.11	12.6	20.7	59.4	14.6
0105S02215	DBD 1005	9 - 10	8.0	41.4	10.8	12.2	24.3	73.2	17.1
0105S02216	DBD 1105	10 - 11	7.9	39.4	9.69	12.7	21.4	69.5	16.8
0105S02217	DBD 1205	11 - 12	7.8	37.6	8.69	11.7	20.3	62.7	15.7
0105S02218	DBD 1305	12 - 13	7.9	37.2	10.6	12.9	26.3	76.4	17.3
0105S02219	DBD 1405	13 - 14	8.1	37.2	10.2	13.1	25.4	72.0	16.4
0105S02220	DBD 1505	0 - 1	7.3	35.1	1.94	12.0	5.83	0.93	0.31
0105S02221	DBD 1605	1 - 2	7.2	35.4	3.22	17.2	15.4	5.15	1.28
0105S02222	DBD 1705	2 - 3	7.6	37.3	5.56	15.7	19.3	26.7	6.40
0105S02223	DBD 1805	3 - 4	7.8	40.0	7.92	13.9	21.7	47.8	11.3
0105S02224	DBD 1905	4 - 5	7.9	39.0	9.69	15.0	27.9	66.1	14.3
0105S02225	DBD 2005	5 - 6	8.0	41.4	9.59	14.0	26.9	64.5	14.2
0105S02226	DBD 2105	6 - 7	8.0	40.2	8.59	14.6	24.3	61.4	13.9
0105S02227	DBD 2205	7 - 8	7.9	36.8	8.74	13.1	21.1	58.4	14.1
0105S02228	DBD 2305	8 - 9	7.9	36.7	9.79	14.6	21.6	65.6	15.4
0105S02229	DBD 2405	9 - 10	8.0	37.1	10.8	15.0	24.9	76.1	17.0
0105S02230	DBD 2505	10 - 11	7.9	37.8	10.4	13.8	23.0	70.0	16.3
0105S02231	DBD 2605	0 - 2	7.6	47.3	6.56	18.2	16.3	33.4	8.02

These results only apply to the samples tested.

Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed By: _____
Joey Sheeley, Soils Lab Supervisor

Inter-Mountain Laboratories, Inc.

Report ID: 010502206

1633 Terra Avenue
Sheridan, WY 82801

Soil Analysis Report
Energy West Mining Co.
P.O. Box 310
Huntington, UT 84528

Client Project ID: Des Bee Dove
Date Received: 04/20/05

Set #0105S02206
Report Date: 05/05/05

Lab Id	Sample Id	Depths (Feet)	Coarse Fragments %	Sand %	Silt %	Clay %	Texture	Field Capacity %	Wilt Point %
0105S02206	DBD 0105	0 - 1	24.4	22.0	56.0	22.0	SILT LOAM	21.7	11.9
0105S02207	DBD 0205	1 - 2	60.7	26.0	52.0	22.0	SILT LOAM	21.3	13.2
0105S02208	DBD 0305	2 - 3	60.5	28.0	48.0	24.0	LOAM	20.3	13.8
0105S02209	DBD 0405	3 - 4	64.0	30.0	44.0	26.0	LOAM	21.0	14.9
0105S02210	DBD 0505	4 - 5	67.3	30.0	44.0	26.0	LOAM	20.4	15.2
0105S02211	DBD 0605	5 - 6	42.3	30.0	44.0	26.0	LOAM	21.2	15.8
0105S02212	DBD 0705	6 - 7	46.8	30.0	44.0	26.0	LOAM	22.1	15.2
0105S02213	DBD 0805	7 - 8	55.6	30.0	44.0	26.0	LOAM	21.9	14.7
0105S02214	DBD 0905	8 - 9	61.5	28.0	46.0	26.0	LOAM	20.3	14.5
0105S02215	DBD 1005	9 - 10	62.0	28.0	45.0	27.0	CLAY LOAM	21.7	15.4
0105S02216	DBD 1105	10 - 11	70.1	28.0	46.0	26.0	LOAM	20.5	15.1
0105S02217	DBD 1205	11 - 12	61.0	28.0	46.0	26.0	LOAM	21.2	14.2
0105S02218	DBD 1305	12 - 13	54.9	34.0	41.0	25.0	LOAM	20.8	13.3
0105S02219	DBD 1405	13 - 14	59.4	42.0	37.0	21.0	LOAM	21.2	12.4
0105S02220	DBD 1505	0 - 1	32.6	24.0	52.0	24.0	SILT LOAM	21.9	12.8
0105S02221	DBD 1605	1 - 2	62.7	27.0	49.0	24.0	LOAM	22.8	13.1
0105S02222	DBD 1705	2 - 3	53.8	27.0	46.0	27.0	CLAY LOAM	23.0	14.5
0105S02223	DBD 1805	3 - 4	58.4	29.0	45.0	26.0	LOAM	23.0	14.1
0105S02224	DBD 1905	4 - 5	65.6	34.0	40.0	26.0	LOAM	23.1	13.5
0105S02225	DBD 2005	5 - 6	71.7	36.0	40.0	24.0	LOAM	22.6	13.8
0105S02226	DBD 2105	6 - 7	72.2	33.0	41.0	26.0	LOAM	22.3	13.7
0105S02227	DBD 2205	7 - 8	60.6	30.0	44.0	26.0	LOAM	21.5	13.3
0105S02228	DBD 2305	8 - 9	51.6	31.0	43.0	26.0	LOAM	19.5	11.3
0105S02229	DBD 2405	9 - 10	63.4	30.0	45.0	25.0	LOAM	19.0	11.7
0105S02230	DBD 2505	10 - 11	65.2	34.0	42.0	24.0	LOAM	19.3	11.6
0105S02231	DBD 2605	0 - 2	18.6	19.0	53.0	28.0	SILTY CLAY LOAM	25.7	16.6

These results only apply to the samples tested.

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Date Received: 04/20/05

Set #0105S02206
Report Date: 05/05/05

Lab Id	Sample Id	Depths (Feet)	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t	Boron ppm	Selenium ppm
0105S02206	DBD 0105	0 - 1	0.28	8.75	133	124	0.61	<0.02
0105S02207	DBD 0205	1 - 2	0.35	10.9	139	128	0.78	0.02
0105S02208	DBD 0305	2 - 3	0.39	12.2	150	138	0.76	0.04
0105S02209	DBD 0405	3 - 4	0.39	12.2	159	147	0.81	0.04
0105S02210	DBD 0505	4 - 5	0.40	12.5	156	144	0.80	0.02
0105S02211	DBD 0605	5 - 6	0.37	11.6	158	146	0.87	0.02
0105S02212	DBD 0705	6 - 7	0.36	11.2	150	138	0.81	0.02
0105S02213	DBD 0805	7 - 8	0.29	9.06	151	142	0.67	0.02
0105S02214	DBD 0905	8 - 9	0.47	14.7	150	135	0.70	0.02
0105S02215	DBD 1005	9 - 10	0.54	16.9	152	135	0.64	0.02
0105S02216	DBD 1105	10 - 11	0.50	15.6	150	134	0.62	0.04
0105S02217	DBD 1205	11 - 12	0.49	15.3	149	133	0.64	0.06
0105S02218	DBD 1305	12 - 13	0.51	15.9	169	153	0.49	0.06
0105S02219	DBD 1405	13 - 14	0.41	12.8	184	171	0.57	0.06
0105S02220	DBD 1505	0 - 1	0.30	9.37	140	131	0.52	<0.02
0105S02221	DBD 1605	1 - 2	0.38	11.9	145	133	0.61	0.02
0105S02222	DBD 1705	2 - 3	0.37	11.6	151	139	0.58	0.02
0105S02223	DBD 1805	3 - 4	0.48	15.0	156	141	0.66	0.02
0105S02224	DBD 1905	4 - 5	0.38	11.9	157	145	0.91	0.02
0105S02225	DBD 2005	5 - 6	0.48	15.0	157	142	0.96	0.02
0105S02226	DBD 2105	6 - 7	0.48	15.0	152	137	1.04	0.02
0105S02227	DBD 2205	7 - 8	0.51	15.9	151	135	1.04	0.04
0105S02228	DBD 2305	8 - 9	0.48	15.0	150	135	1.04	0.02
0105S02229	DBD 2405	9 - 10	0.60	18.7	151	133	0.75	0.02
0105S02230	DBD 2505	10 - 11	0.44	13.7	156	142	0.61	0.02
0105S02231	DBD 2605	0 - 2	0.30	9.37	168	159	0.57	0.02

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Lab Id	Sample Id	Depths (Feet)	pH s.u.	Saturation %	EC @ 25°C dS/m	Calcium meq/L	Magnesium meq/L	Sodium meq/L	SAR
0105S02232	DBD 2705	0 - 2	7.6	50.7	4.47	17.7	12.8	16.7	4.27
0105S02233	DBD 2805	0 - 2	7.5	32.8	2.69	19.9	7.73	3.19	0.86

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Lab Id	Sample Id	Depths (Feet)	Coarse Fragments %	Sand %	Silt %	Clay %	Texture	Field Capacity %	Wilt Point %
0105S02232	DBD 2705	0 - 2	12.8	20.0	50.0	30.0	CLAY LOAM	25.4	16.5
0105S02233	DBD 2805	0 - 2	30.6	53.0	28.0	19.0	SANDY LOAM	19.5	9.4

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Lab Id	Sample Id	Depths (Feet)	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t	Boron ppm	Selenium ppm
0105S02232	DBD 2705	0 - 2	0.24	7.50	162	154	0.69	<0.02
0105S02233	DBD 2805	0 - 2	<0.01	0.00	567	567	0.39	<0.02

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0105S02228	DBD 2305	8 - 9	7.9	36.7	9.79	14.6	21.6	65.6	15.4
0105S02228D	DBD 2305	8 - 9	7.9	36.2	8.13	14.7	17.7	51.1	12.7
0105S02231	DBD 2605	0 - 2	7.6	47.3	6.56	18.2	16.3	33.4	8.02
0105S02231D	DBD 2605	0 - 2	7.6	48.0	6.31	17.2	15.4	31.4	7.79
0105S02232	DBD 2705	0 - 2	7.6	50.7	4.47	17.7	12.8	16.7	4.27
0105S02232D	DBD 2705	0 - 2	7.6	50.9	4.29	17.3	12.6	16.5	4.27

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Abbreviations for extractants: PE= Saturated Paste Extract, H20Sol= water soluble,AB-DTPA= Ammonium Bicarbonate-DTPA, AAO= Acid Ammonium Oxalate
Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage

Reviewed By: _____
Joey Sheeley, Soils Lab Supervisor

Inter·Mountain Laboratories, Inc.

Report ID: 010502206

1633 Terra Avenue
Sheridan, WY 82801

Soil Analysis Report
Energy West Mining Co.
P.O. Box 310
Huntington, UT 84528

Client Project ID: Des Bee Dove
Date Received: 04/20/05

Set #0105S02206
Report Date: 05/05/05

Lab Id	Sample Id	Depths (Feet)	Coarse Fragments %	Sand %	Silt %	Clay %	Texture	Field Capacity %	Wilt Point %
0105S02228	DBD 2305	8 - 9	51.6	31.0	43.0	26.0	LOAM	19.5	11.3
0105S02228D	DBD 2305	8 - 9		30.0	44.0	26.0	LOAM		
0105S02231	DBD 2605	0 - 2	18.6	19.0	53.0	28.0	SILTY CLAY LOAM	25.7	16.6
0105S02231D	DBD 2605	0 - 2		21.0	51.0	28.0	CLAY LOAM	25.2	15.5
0105S02232	DBD 2705	0 - 2	12.8	20.0	50.0	30.0	CLAY LOAM	25.4	16.5
0105S02232D	DBD 2705	0 - 2		22.0	48.0	30.0	CLAY LOAM	26.9	16.5

These results only apply to the samples tested.

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P.O. Box 310
Huntington, UT 84528

Client Project ID: Des Bee Dove
Date Received: 04/20/05

Set #0105S02206
Report Date: 05/05/05

Lab Id	Sample Id	Depths (Feet)	Total Sulfur %	T.S. AB t/1000t	Neutral. Pot. t/1000t	T.S. ABP t/1000t	Boron ppm	Selenium ppm
0105S02228	DBD 2305	8 - 9	0.48	15.0	150	135	1.04	0.02
0105S02228D	DBD 2305	8 - 9	0.48	15.0	150	135	0.79	0.04
0105S02231	DBD 2605	0 - 2	0.30	9.37	168	159	0.57	0.02
0105S02231D	DBD 2605	0 - 2	0.30	9.37	168	159	0.54	0.02
0105S02232	DBD 2705	0 - 2	0.24	7.50	162	154	0.69	<0.02
0105S02232D	DBD 2705	0 - 2	0.24	7.50	158	151	0.70	<0.02

These results only apply to the samples tested.

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Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neutral. Pot.= Neutralization Potential
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