

Mountain Coal Company, LLC West Elk Mine 5174 Highway 133 Somerset, CO 81434

Kathleen G. Welt Environmental Engineer III kwelt@archcoal.com phone: 970.929.2238

January 02, 2018

Mr. Leigh D. Simmons Colorado Division of Reclamation, Mining and Safety Office of Mined Land Reclamation 1313 Sherman Street, Room 215 Denver, Colorado 80203

Re: Mountain Coal Company, LLC, West Elk Mine; Permit No. C-1980-007; Quarterly Summary of Subsidence Observations; 4th Quarter 2017

Dear Mr. Simmons:

Mountain Coal Company, LLC (MCC) began longwall mining the E-Seam in December 2008. MCC has completed longwall mining of longwall panels E1 through E6 and continued mining of longwall panel E7 during the 4th Quarter of 2017. At the end of 2017, MCC had mined out longwall panel E7 almost to cross-cut 46.

There was one stock pond (Pond DF-30) within twice the angle-of-draw of the mined area during this quarter and longwall mining did not occur within one mile of Monument Dam. Routine monthly inspections were conducted and inspection reports for Forest Service Roads, Stock Ponds, and Monument Dam are included with this letter report to document the inspection findings.

Please don't hesitate to contact me at (970) 929-2238 or by e-mail should you have questions regarding this submittal.

Sincerely,

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Kathleen G. Welt Environmental Engineer III

- Enclosures: Monument Dam Inspections Fourth Quarter 2017 US Forest Service Road Inspections – Fourth Quarter 2017 Stock Pond Inspections – Fourth Quarter 2017
- cc: D. Gray USFS W. Norris – MCC M. Peacock – MCC Availability of Records File

Forest Service Roads Inspection Form

	10/17		
	2:00		
Name	of Insp	ector: MIKE PEACOCK	
Curre	nt Panel	and XC Being Mined: AC76, C 7 rand	
Road((s) Bein	g Inspected:	
Yes	No	and XC Being Mined: NC 46, E7 Pawe L g Inspected: Dry tock - None	
	ľ	Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):	
		Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):	
		Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:	
		Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:	
		Is mitigation needed? If yes, list suggestions:	
Notes:			
Signature of Inspector:			

* If any potential subsidence induced features are observed that could cause harm to the public or operations, notify Mike Peacock or Kathy Welt immediately.

Forest Service Roads Inspection Form

Date: 11/27/17 Time: 11:00 am Name of Inspector: Mike Repcack Current Panel and XC Being Mined: E7 Panel, 42XC Road(s) Being Inspected: Dry Fork Rd			
Yes	No		
		Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):	
		Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):	
		Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:	
		Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:	
		Is mitigation needed? If yes, list suggestions:	
Notes:			
Signature of Inspector: Mike Beacock			

* If any potential subsidence induced features are observed that could cause harm to the public or operations, notify Mike Peacock or Kathy Welt immediately.

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Forest	Servic	e Roads
Insp	ection	Form

Date: 12/21/17 Time: 11:00 Name of Inspector: Mi Ke Percoek Current Panel and XC Being Mined: ET, XC40 Road(s) Being Inspected: Dry Fork			
Yes	No		
	9	Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):	
		Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):	
		Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:	
		Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:	
		Is mitigation needed? If yes, list suggestions:	
Notes:			
Signature of Inspector: Mito eacoch			

* If any potential subsidence induced features are observed that could cause harm to the public or operations, notify Mike Peacock or Kathy Welt immediately.

Stock Pond Inspection Form

Date: 10/17/17 Time: スロリカ Name of Inspector: MIKE PERCOCK Current Panel and XC Being Mined: Pawe LE7, XC46 Stock Pond(s) Being Inspected:			
Yes	No		
Ø		Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):	
	ď	Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):	
	Ø	Is there any evidence of potential subsidence induced water loss? If yes, describe:	
Ð		Is there water in the pond? If yes, describe: Water in stagnant Approx 3' deep in middle	
		Is mitigation needed? If yes, list suggestions:	
Notes	:		
Signat	ture of	Inspector:	

* If any potential subsidence induced features are observed that could cause harm to the pond, notify Mike Peacock or Kathy Welt immediately.

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<u>Stock Pond</u> Inspection Form

Date: 11/27/17 Time: 12:00 PM Name of Inspector: MIKE PEAcock Current Panel and XC Being Mined: ETHANEC, XC42 Stock Pond(s) Being Inspected: DF 30			
Yes	No		
D		Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):	
	9	Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):	
	4	Is there any evidence of potential subsidence induced water loss? If yes, describe:	
		Is there water in the pond? If yes, describe: No water rubning w, water appears to be enaporating, lots of algae	
	P	Is mitigation needed? If yes, list suggestions:	
Notes	:		
Signature of Inspector:			

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Stock Pond Inspection Form

Date: $2/20/17$ Time: 11-30 Name of Inspector: Mike Peacock Current Panel and XC Being Mined: E7, XC 40 Stock Pond(s) Being Inspected: DF-30			
Yes	No		
Ċ		Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):	
		Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):	
	ď	Is there any evidence of potential subsidence induced water loss? If yes, describe:	
	9	Is there water in the pond? If yes, describe:	
	Ø	Is mitigation needed? If yes, list suggestions:	
Notes	:	Pond Frozen	
Signature of Inspector:			

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Monument Dam Inspection Form

Date: 10/17/17 Time: 1:45 Name of Inspector: M1KE PEAC⊙CK Current Panel Being Mined: E7 □ Weekly Inspection I Monthly Inspection

Yes	No	Is mining within 1 mile of Monument Dam?
		Are there visible surface cracks on the dam? If yes, indicate length and size of crack
	T	Is there evidence of subsided areas on or around the dam? If yes, indicate where and degree
		Are there bulges on the dam? If yes, indicate where and degree
		Are there signs of seeps on the dam? If yes, indicate where and estimated flow
	Ø	Are there any other potentially damaging features on the dam? If yes, describe
	0	Are there any recent evidences of slope failure on the landside south of the dam (perform visual inspection and data analysis of inclinometers)? If yes, describe.
NT days		

Notes:

Signature of Inspector: ______

Inspections are performed under the direction of Mike Peacock, P.E.

If cracks or other potentially damaging features occur, notify Mike Peacock or Kathy Welt immediately.

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Monument Dam Inspection Form

Date: 11/27/17 Time: 10;45 Name of Inspector: MIKE PEACack Current Panel Being Mined: E TPanel U Weekly Inspection D Monthly Inspection

Yes	No	
		Is mining within 1 mile of Monument Dam?
	₽∕	Are there visible surface cracks on the dam? If yes, indicate length and size of crack.
	Ľ	Is there evidence of subsided areas on or around the dam? If yes, indicate where and degree
	ď	Are there bulges on the dam? If yes, indicate where and degree
	R	Are there signs of seeps on the dam? If yes, indicate where and estimated flow
	Ø	Are there any other potentially damaging features on the dam? If yes, describe.
	₽∕	Are there any recent evidences of slope failure on the landside south of the dam (perform visual inspection and data analysis of inclinometers)? If yes, describe

Notes:

Mike Beacock Signature of Inspector:

Inspections are performed under the direction of Mike Peacock, P.E.

If cracks or other potentially damaging features occur, notify Mike Peacock or Kathy Welt immediately.

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Monument Dam Inspection Form

Date: 12/20(17 Time: 10:45 Am Name of Inspector: Mike Percock Current Panel Being Mined: E7 □ Weekly Inspection □ Monthly Inspection Yes No Is mining within 1 mile of Monument Dam? Are there visible surface cracks on the dam? 14 If yes, indicate length and size of crack. Is there evidence of subsided areas on or around the dam? R If yes, indicate where and degree. Are there bulges on the dam? 4 If yes, indicate where and degree. _____. Are there signs of seeps on the dam? D If yes, indicate where and estimated flow._____. Are there any other potentially damaging features on the dam? T If yes, describe. Are there any recent evidences of slope failure on the landside south of the 4 dam (perform visual inspection and data analysis of inclinometers)? If yes, describe. Notes:

Signature of Inspector: Marken Ceacoch

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