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TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

July 27, 2020

VIA Electronic Mail: Zach.Trujillo@state.co.us
Mr. Zach Trujillo
Environmental Protection Specialist
Division of Reclamation, Mining, & Safety
Coal Program Support Staff
1313 Sherman Street, RM 215
Denver, Colorado 80203

RE: June 2020 Discharge Monitoring Report Submittal
CDPS Permit #CO-0045161
Colowyo Coal Company, LP – Colowyo Mine
DRMS Mine Permit #C-1981-019

Dear Mr. Trujillo:

Enclosed is the Discharge Monitoring Report (DMR) for the Colowyo Coal Company, LP. (Colowyo) – Colowyo Mine CDPS Permit No. CO-0045161 for June of 2020. Tri-State Generation and Transmission Association, Inc. (Tri-State) is the parent of Axial Basin Coal Company, which is the general partner of Colowyo Coal Company, L.P. The enclosed June DMRs were submitted electronically through the EPA's NetDMR program.

If you have any questions about the enclosed reports, please contact Darlene Crosby at 303-254-3055.

Sincerely,

DocuSigned by:
Daniel Casiraro
B70D69F114324DE...

Daniel J. Casiraro
Senior Manager
Environmental Services

DJC:DC:der

Enclosure

cc: DRMS Representative, Denver, CO
Darlene Crosby (via email)
Chantell Johnson (via email)
Tony Tennyson (via email)
File: G471 – 11.3(10)a-9a
Colowyo CF 21.1.2.2013

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	003 External Outfall	**Discharge:**	**003-A** Gossard Pond to Wilson Creek		
Report Dates & Status					
Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Alternate limitations for TR iron and settleable solids - see pg 6 and 8. Oil and grease - see I.C.1.b, pp 5-6. Report SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00094	**Conductivity**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			7B - dS/m		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge						
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		01/30 - Monthly	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00440	**Bicarbonate ion- [as HCO3]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00918	**Calcium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00921	**Magnesium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00923	**Sodium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00931	**Sodium adsorption ratio**	EG - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI									C - No Discharge		C - No Discharge				
00931	**Sodium adsorption ratio**	P - See Comments	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI									C - No Discharge		C - No Discharge				

00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.									<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01304	**Silver, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
03582	**Oil and grease**	1 - Effluent Gross	0	--	Sample																
					Permit Req.											<=	10.0 INST MAX	19 - mg/L		77/77 - Contingent	GR - GRAB
					Value NODI												C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample																
					Permit Req.	<=	0.82 30DA AVG		Req Mon DAILY MX	03 - MGD										01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge												
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
84066	**Oil and grease visual**	1 - Effluent Gross	0	--	Sample																
					Permit Req.				Req Mon INST MAX	AB - abst=0;prst=1										01/30 - Monthly	VI - VISUAL
									C - No												

					Value NODI				Discharge											
84165	**Discharge event observation [Visual Monitoring]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.		Req Mon 30DA AVG			FP - fail=0;pass=1		Req Mon 30DA ARI					4K - #/mo		01/30 - Monthly	CA - CALCTD
					Value NODI		C - No Discharge					C - No Discharge								

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:41 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	003 External Outfall	**Discharge:**	**003-Q** Quarterly Monitoring for 003A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
70295	**Solids, total dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
81020	**Sulfate**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:42 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	003 External Outfall	**Discharge:**	**003-W** Acute WET Testing for 003A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

See I.D.1 details of test procedure. Report LC50 - Statistical point estimate which is lethal to 50% of test organisms (LC50) and attach acute toxicity test report form to DMR.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
TAM3B	**LC50 Static Renewal 48Hr Acute Ceriodaphnia dubia**	1 - Effluent Gross	0	--	Sample															
					Permit Req.							Req Mon MN VALUE					23 - %		01/90 - Quarterly	GR - GRAB
					Value NODI							C - No Discharge								
TAN6C	**LC50 Statre 96Hr Acute Pimephales**	1 - Effluent Gross	0	--	Sample															
					Permit Req.							Req Mon MN VALUE					23 - %		01/90 - Quarterly	GR - GRAB
					Value NODI							C - No Discharge								

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:42 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	006 External Outfall	**Discharge:**	**006-A** Rail Loop/Wilson Creek		
Report Dates & Status					
Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Alternate limitations for TR iron and settleable solids - see pg 10. Oil and grease - see I.C.1.b, pp 5-6. Report SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00094	**Conductivity**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			7B - dS/m		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge						
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		01/30 - Monthly	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00440	**Bicarbonate ion- [as HCO3]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00918	**Calcium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00921	**Magnesium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00923	**Sodium, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00931	**Sodium adsorption ratio**	EG - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI									C - No Discharge		C - No Discharge				
00931	**Sodium adsorption ratio**	P - See Comments	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI									C - No Discharge		C - No Discharge				

00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.									<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01304	**Silver, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
03582	**Oil and grease**	1 - Effluent Gross	0	--	Sample																
					Permit Req.											<=	10.0 INST MAX	19 - mg/L		77/77 - Contingent	GR - GRAB
					Value NODI												C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample																
					Permit Req.	<=	0.32 30DA AVG		Req Mon DAILY MX	03 - MGD										01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge												
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample																
					Permit Req.										Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI										C - No Discharge						
84066	**Oil and grease visual**	1 - Effluent Gross	0	--	Sample																
					Permit Req.				Req Mon INST MAX	AB - abst=0;prst=1										01/30 - Monthly	VI - VISUAL
									C - No												

					Value NODI				Discharge										
84165	**Discharge event observation [Visual Monitoring]**	1 - Effluent Gross	0	--	Sample														
					Permit Req.		Req Mon 30DA AVG			FP - fail=0;pass=1				Req Mon 30DA AVG			4K - #/mo		01/30 - Monthly	CA - CALCTD
					Value NODI		C - No Discharge							C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:42 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	006 External Outfall	**Discharge:**	**006-Q** Quarterly Monitoring for 006A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
70295	**Solids, total dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
81020	**Sulfate**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:42 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	006 External Outfall	**Discharge:**	**006-W** Acute WET Testing for 006A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

See I.D.1 for details of test procedure. Report LC50 - Statistical point estimate which is lethal to 50% of test organisms (LC50) and attach acute toxicity test report form to DMR.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
TAM3B	**LC50 Static Renewal 48Hr Acute Ceriodaphnia dubia**	1 - Effluent Gross	0	--	Sample															
					Permit Req.							Req Mon MN VALUE					23 - %		01/90 - Quarterly	GR - GRAB
					Value NODI							C - No Discharge								
TAN6C	**LC50 Statre 96Hr Acute Pimephales**	1 - Effluent Gross	0	--	Sample															
					Permit Req.							Req Mon MN VALUE					23 - %		01/90 - Quarterly	GR - GRAB
					Value NODI							C - No Discharge								

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:43 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	010 External Outfall	**Discharge:**	**010-A** East Taylor Pond to Taylor Creek		
Report Dates & Status					
Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Alternate limitations for TR iron and settleable solids - see pg 12. Oil and grease - see I.C.1.b, pp 5-6. Report SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00094	**Conductivity**	1 - Effluent Gross	0	--	Sample								=	4.6			7B - dS/m	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			7B - dS/m		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00400	**pH**	1 - Effluent Gross	0	--	Sample						=	8.14			=	8.22	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		01/30 - Monthly	GR - GRAB
					Value NODI															
00440	**Bicarbonate ion- [as HCO3]**	1 - Effluent Gross	0	--	Sample								=	1185.0	=	1200.0	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample								<	5.0	<	5.0	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00918	**Calcium, total recoverable**	1 - Effluent Gross	0	--	Sample								=	150.0	=	171.0	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00921	**Magnesium, total recoverable**	1 - Effluent Gross	0	--	Sample								=	136.0	=	152.0	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00923	**Sodium, total recoverable**	1 - Effluent Gross	0	--	Sample								=	1067.0	=	1210.0	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00931	**Sodium adsorption ratio**	EG - Effluent Gross	0	--	Sample								=	15.2	=	16.2	1U - Ratio	0	02/30 - Twice Per Month	CA - CALCTD
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI															
00931	**Sodium adsorption ratio**	P - See Comments	0	--	Sample								=	18.5	=	19.9	1U - Ratio	0	02/30 - Twice Per Month	CA - CALCTD
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	1U - Ratio		02/30 - Twice Per Month	CA - CALCTD
					Value NODI															

00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample								=	2.0			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample								=	55.0	=	70.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample								<	10.0	<	10.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01304	**Silver, potentially dissolved**	1 - Effluent Gross	0	--	Sample								<	0.5	<	0.5	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample								=	6.0	=	7.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	0.5	<	0.5	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	20.0			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								=	104.0	=	120.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								=	1.0	=	1.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
03582	**Oil and grease**	1 - Effluent Gross	0	--	Sample															
					Permit Req.										<=	10.0 INST MAX	19 - mg/L		77/77 - Contingent	GR - GRAB
					Value NODI											9 - Conditional Monitoring - Not Required This Period				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample								<	20.0	<	20.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample	=	0.142	=	0.155	03 - MGD									02/30 - Twice Per Month	IN - INSTAN
					Permit Req.	<=	1.5 30DA AVG		Req Mon DAILY MX	03 - MGD								0	01/30 - Monthly	IN - INSTAN
					Value NODI															
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample								<	0.001			28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
84066	**Oil and grease visual**	1 - Effluent Gross	0	--	Sample			=	0.0	AB - abst=0;prst=1									02/30 - Twice Per Month	VI - VISUAL
					Permit Req.				Req Mon INST MAX	AB - abst=0;prst=1								0	01/30 - Monthly	VI - VISUAL

Value NODI

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:43 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	010 External Outfall	**Discharge:**	**010-Q** Quarterly Monitoring for 010A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
70295	**Solids, total dissolved**	1 - Effluent Gross	0	--	Sample								=	2490.0			19 - mg/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA GM			19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	AAALBERS@TRISTATEGT.ORG
Name:	Angela Aalbers
E-Mail:	aaalbers@tristategt.org
Date/Time:	2020-05-27 08:21 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	010 External Outfall	**Discharge:**	**010-X** Chronic WET Testing at 010A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

See I.D.1 for details of test procedure. Report NOEC using test code "S". Report IC25 using test code "P". Beginning 7-1-20, report highest number between "P" and "S" at "T" for each parameter. IWC=100%.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
TKP3B	**Static Renewal 7 Day Chronic Ceriodaphnia dubia**	P - See Comments	0	--	Sample						=	41.4					2G - tox chronic	0	01/90 - Quarterly	G3 - GRAB-3
					Permit Req.							Req Mon SINGSAMP					2G - tox chronic		01/90 - Quarterly	G3 - GRAB-3
					Value NODI															
TKP3B	**Static Renewal 7 Day Chronic Ceriodaphnia dubia**	S - See Comments	0	--	Sample						=	40.0					2G - tox chronic	0	01/90 - Quarterly	G3 - GRAB-3
					Permit Req.							Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	G3 - GRAB-3
					Value NODI															
TKP6C	**Static Renewal 7 Day Chronic Pimephales promelas**	P - See Comments	0	--	Sample						>	100.0					2G - tox chronic	0	01/90 - Quarterly	G3 - GRAB-3
					Permit Req.							Req Mon SINGSAMP					2G - tox chronic		01/90 - Quarterly	G3 - GRAB-3
					Value NODI															
TKP6C	**Static Renewal 7 Day Chronic Pimephales promelas**	S - See Comments	0	--	Sample						=	100.0					2G - tox chronic	0	01/90 - Quarterly	G3 - GRAB-3
					Permit Req.							Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	G3 - GRAB-3
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

See attached

Attachments

Name	Type	Size
200720_Colowyo_WET_Notification_Walz_to_Dyste.pdf	pdf	8818989.0
Colowyo_CDPS_CO0045161_Outfall010_WETresults_June_2020_COC.pdf	pdf	1356999.0
200722_Colowyo_June_DMR_Comment_Outfall_010X_Walz_to_CDPHE.pdf	pdf	346833.0
Re_UPDATE_Colowyo_Notification_of_Chronic_WET_Results-3Q19_&_Waiver_Request_for_TIE.pdf	pdf	75478.0

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:43 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	013 External Outfall	**Discharge:**	**013-A** Section 25 Pond to Little Collom Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 13-14. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample						=	6.8			=	8.59	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample								=	12.0	=	17.0	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample								=	165.0	=	220.0	28 - ug/L	0	02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample	=	0.165	=	0.226	03 - MGD								0	02/30 - Twice Per Month	IN - INSTAN
					Permit Req.	<=	0.61 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:44 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	013 External Outfall	**Discharge:**	**013-Q** Quarterly Monitoring for 013A		
Report Dates & Status					
Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Quarterly monitoring - see Appendix B, 21, pg 53.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample								<	1.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
00981	**Selenium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	5.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01074	**Nickel, total recoverable**	1 - Effluent Gross	0	--	Sample								<	10.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01094	**Zinc, total recoverable**	1 - Effluent Gross	0	--	Sample								=	110.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01113	**Cadmium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	2.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01118	**Chromium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	20.0	<	20.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01119	**Copper, total recoverable**	1 - Effluent Gross	0	--	Sample								<	10.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample								=	50.0	=	50.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample								=	4.0	=	4.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	0.5	<	0.5	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	20.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								=	7.0	=	7.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01322	**Nickel, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	10.0	<	10.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															

01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	**Sample**							=	3.0	=	3.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI														
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	**Sample**							<	20.0	<	20.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI														
11123	**Manganese, total recoverable**	1 - Effluent Gross	0	--	**Sample**							<	20.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI														
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	**Sample**							=	0.0017			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.								Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI														

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:44 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	014 External Outfall	**Discharge:**	**014-A** Section 26 Pond to Collom Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 15. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Quality or Concentration Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
X 00400	**pH**	1 - Effluent Gross	0	--	Sample						=	9.4			=	9.4	12 - SU	1	DL/DS - Daily When Discharging	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample								=	7.0	=	7.0	19 - mg/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample								=	190.0	=	190.0	28 - ug/L	0	DL/DS - Daily When Discharging	GR - GRAB
					Permit Req.								<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI															
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample	=	0.103	=	0.103	03 - MGD								0	DL/DS - Daily When Discharging	IN - INSTAN
					Permit Req.	<=	0.43 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter Code	Parameter Name	Monitoring Location	Field	Type	Description	Acknowledge
00400	pH	1 - Effluent Gross	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct. (Error Code: 1)	Yes

Comments

See attached

Attachments

Name	Type	Size
200722_Colowyo_DMR_Comment_June_Outfall_014A_Walz_to_CDPHE.pdf	pdf	472200.0

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:44 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	014 External Outfall	**Discharge:**	**014-Q** Quarterly Monitoring for 014A		
Report Dates & Status					
Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Quarterly monitoring - see Appendix B, 21, pg 53.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample								<	3.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
00981	**Selenium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	5.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01094	**Zinc, total recoverable**	1 - Effluent Gross	0	--	Sample								=	20.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01113	**Cadmium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	2.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01118	**Chromium, total recoverable**	1 - Effluent Gross	0	--	Sample								<	20.0	<	20.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01119	**Copper, total recoverable**	1 - Effluent Gross	0	--	Sample								<	10.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample								=	40.0	=	40.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample								=	5.0	=	5.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	0.5	<	0.5	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								<	20.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								=	44.0	=	44.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample								=	3.0	=	3.0	28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample								<	20.0	<	20.0	19 - mg/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	GR - GRAB
					Value NODI															

11123	**Manganese, total recoverable**	1 - Effluent Gross	0	--	**Sample**								<	20.0			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	**Sample**								=	0.0038			28 - ug/L	0	01/90 - Quarterly	GR - GRAB
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:44 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit					
Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	021 External Outfall	**Discharge:**	**021-A** Sump 1 to Taylor Creek		
Report Dates & Status					
Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Alternate limitations for TR iron and settleable solids - see pp 15. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.					
Principal Executive Officer					
First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	3000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample															
					Permit Req.	<=	1.3 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:45 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	021 External Outfall	**Discharge:**	**021-Q** Quarterly Monitoring for 021A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User: dcrosby@tristategt.org

Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:45 (Time Zone: -06:00)
Report Last Signed By	
User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	022 External Outfall	**Discharge:**	**022-A** Sump 2 to Taylor Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 17-18. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	3000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample															
					Permit Req.	<=	0.63 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:45 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	022 External Outfall	**Discharge:**	**022-Q** Quarterly Monitoring for 022A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User: dcrosby@tristategt.org

Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:46 (Time Zone: -06:00)
Report Last Signed By	
User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	023 External Outfall	**Discharge:**	**023-A** Sump 3 to Taylor Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 19-20. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	3000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample															
					Permit Req.	<=	1.14 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:41 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	023 External Outfall	**Discharge:**	**023-Q** Quarterly Monitoring for 023A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User: dcrosby@tristategt.org

Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:46 (Time Zone: -06:00)
Report Last Signed By	
User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	024 External Outfall	**Discharge:**	**024-A** Sump 4 to Taylor Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 20-21. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	3000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample															
					Permit Req.	<=	0.12 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:47 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	024 External Outfall	**Discharge:**	**024-Q** Quarterly Monitoring for 024A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User: dcrosby@tristategt.org

Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:47 (Time Zone: -06:00)
Report Last Signed By	
User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	025 External Outfall	**Discharge:**	**025-A** Sump 5 to Taylor Creek		

Report Dates & Status

Monitoring Period:	**From 06/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Alternate limitations for TR iron and settleable solids - see pp 21-22. Oil and grease - see I.C.1.b, pp 5-6. Reports SAR calculated limit at MLOC=EG; adjusted SAR effluent at MLOC=P.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	**pH**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	**Solids, total suspended**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 DAILY MX	19 - mg/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
00980	**Iron, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.								<=	3000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample															
					Permit Req.	<=	2.16 30DA AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User:	dcrosby@tristategt.org
Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:47 (Time Zone: -06:00)

Report Last Signed By

User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:	**CO0045161**	**Permittee:**	Colowyo Coal Co LP	**Facility:**	COLOWYO MINE
Major:	No	**Permittee Address:**	PO Box 33695 Denver, CO 80233-0695	**Facility Location:**	5731 SOUTH HIGHWAY 13 MOFFAT COUNTY, CO 81641
Permitted Feature:	025 External Outfall	**Discharge:**	**025-Q** Quarterly Monitoring for 025A		

Report Dates & Status

Monitoring Period:	**From 04/01/20 to 06/30/20**	**DMR Due Date:**	**07/28/20**	**Status:**	**NetDMR Validated**

Considerations for Form Completion

Quarterly monitoring - see Appendix B, 21, pg 53.

Principal Executive Officer

First Name:	Barbara	**Title:**	SVP, Policy and Compliance, CCO	**Telephone:**	303-452-6111
Last Name:	Walz				

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00978	**Arsenic, total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01303	**Zinc, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01306	**Copper, potentially dissolved**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01313	**Cadmium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01314	**Chromium, trivalent, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						
01319	**Manganese, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
01323	**Selenium, potentially dissolvd**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
04262	**Chromium, trivalent total recoverable**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge		C - No Discharge				
50286	**Mercury, total [low level]**	1 - Effluent Gross	0	--	Sample															
					Permit Req.									Req Mon 30DA AVG			28 - ug/L		01/90 - Quarterly	GR - GRAB
					Value NODI									C - No Discharge						

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Colowyo Coal Co LP

User: dcrosby@tristategt.org

Name:	Darlene Crosby
E-Mail:	dcrosby@tristategt.org
Date/Time:	2020-07-23 10:47 (Time Zone: -06:00)
Report Last Signed By	
User:	BARBARAWALZ1
Name:	Barbara Walz
E-Mail:	bwalz@tristategt.org
Date/Time:	2020-07-27 08:52 (Time Zone: -06:00)

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TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

July 20, 2020

Submitted via email jacob.dyste@state.co.us.

Mr. Jacob Dyste
Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

RE: CDPS Permit #CO-0045161
Colowyo Mine, Outfall 010
Notification of Chronic WET Results – 2Q 2020

Dear Mr. Dyste:

On June 29, 2019, the third party laboratory, The SeaCrest Group, provided the enclosed analytical report containing the second quarter 2020 Whole Effluent Toxicity (WET) test results for Outfall 010 at the Colowyo Coal Company, LP (Colowyo) Colowyo Mine (CDPS Permit #CO-0045161). Tri-State Generation and Transmission Association (Tri-State) is the parent of Colowyo. Therefore, we are providing the required notification of WET results, in accordance with Part I.D.1.b. of the permit.

Outfall	Species	Reproduction/Growth Results		IWC
		NOEC*	IC25**	
010	*Ceriodaphnia dubia*	40%	41.4%	100%

*NOEC means "no observed effect concentration" at which concentration there are no observable adverse effects on the organisms.
**IC25 means inhibition concentration causing a 25% reduction in the biological measurement.

The facility's Colorado Discharge Permit System (CDPS) permit was recently amended on May 29, 2020 to remove the automatic compliance responses (Toxicity Identification Evaluation and Toxicity Reduction Evaluation). Therefore, we will be continuing the progress on addressing site conditions by the 2023 deadline.

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If you have any questions on this submittal, please contact Chantell Johnson at 303-254-3185 (cjohnson@tristategt.org) or Chris Gilbreath at 303-254-3291 (cgilbreath@tristategt.org).

Sincerely,

DocuSigned by:
Barbara Walz
A5D5C24494CD4A7...

Barbara A. Walz
Senior Vice President
Policy and Compliance
Chief Compliance Officer

BAW:CJ:der

Enclosure

cc: Chris Gilbreath (via email)
Chantell Johnson (via email)
File G471-11.3(10)a-5

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SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

June 29, 2020

Angela Aalbers
Colowyo Coal Company
5731 State Highway 13
Meeker, CO 81641

Dear Angela:

Enclosed is the report for chronic biomonitoring tests performed for Colowyo Coal Company on effluent from the 010A discharge. There was statistically significant toxicity to the both test species at multiple effluent concentrations. The effluent fails WET (Whole Effluent Toxicity) testing requirements for this sampling period.

If you have any questions or concerns, please do not hesitate to contact me at (303) 661-9324.

Best regards,

Taylor Couillard-Rodak
WET Laboratory Manager
Enclosure(s): Invoice
Report

500 S. Arthur Avenue, Unit 450 • Louisville, CO 80027 • 303.661.9324 • 303.661.9325 fax • www.seacrestgroup.com

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RESULTS OF CHRONIC BIOMONITORING TESTS CONDUCTED FOR COLOWYO COAL COMPANY ON EFFLUENT FROM THE 010A OUTFALL

Prepared for:

Angela Aalbers
Colowyo Coal Company
5731 State Hwy 13
Meeker, CO 81641

Prepared by:

SeaCrest Group
500 S Arthur Ave. Suite 450
Louisville, Colorado 80027-3065
(303) 661-9324

June 29, 2020

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

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Chronic Toxicity Test Summary

Test:
- 7-day static renewal using *Ceriodaphnia dubia.*
- 7-day static renewal using fathead minnow *(Pimephales Promelas).*

Client: Colowyo Coal Company

Test Procedure Followed:
- *Ceriodaphnia dubia*: EPA/821/R-02-013. Method 1002.0 (2002)
- Fathead minnow: EPA/821/R-02-013. Method 1545.0 (2002)

Sample Number: 420265.B

Sample	Time of Collection	Date of Collection	Time of Receipt	Date of Receipt
Effluent 1	0830	06-15-2020	1713	06-15-2020
Effluent 2	0730	06-17-2020	0850	06-18-2020
Effluent 3	0750	06-19-2020	0847	06-20-2020

	Ceriodaphnia dubia	Fathead minnow
Test Initiation Time	1300	1225
Test Initiation Date	06-16-2020	06-16-2020
Test Completion Time	1200	1240
Test Completion Date	06-22-2020	06-23-2020

Dilution Water:
- Moderately hard laboratory reconstituted water

Test Organism Source:
- *Ceriodaphnia dubia*
  SeaCrest Group
- Fathead minnow
  SeaCrest Group

Reference Toxicant:
- Sodium Chloride

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Abstract of Results

Test Concentrations:	Control (0%), 20%, 40%, 60%, 80%, 100%
Number of Organisms/Concentration:	10 for *Ceriodaphnia dubia* 40 for fathead minnow
Replicates at each Concentration:	10 for *Ceriodaphnia dubia* 4 for fathead minnow

	Ceriodaphnia dubia	**Fathead minnow**
Test vessel size	30ml	500ml
Exposure volume	15ml	250ml
Pass/Fail Status	**FAIL**	**PASS**
Temperature Range (°C)	24.1 – 25.9	24.4 – 25.9
Dissolved Oxygen Range (mg/L)	6.5 – 8.0	3.0 – 7.8
pH Range	7.9 – 8.3	7.7 – 8.3

	CONTROL (*Cerio*/FHM)	**100%**
Hardness (mg/L as $CaCO_3$)	84/88	802/786/872
Alkalinity (mg/L as $CaCO_3$)	61/57	950/890/1155
Total residual chlorine (mg/L)	<0.01	0.01/<0.01/<0.01
Total ammonia (mg/L as NH_3)	<0.03	0.14/0.11/.30

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INTRODUCTION

Biomonitoring provides an effective means by which the toxicity of discharges from municipal, industrial, and mining operations can be tested. Among the advantages of biomonitoring is the ability to test complex effluents containing a broad range of contaminants. Biomonitoring, when used in conjunction with chemical analyses, can generate data capable of identifying a much wider range of contaminants.

The Colorado Water Quality Control Division requires certain NPDES permittees to perform acute and/or chronic biomonitoring tests. The chronic test measures significant differences in lethality and in reproduction (*Ceriodaphnia dubia*) or growth (fathead minnow – *Pimephales promelas*) between control and exposed organisms.

The present report discusses the results of chronic biomonitoring tests conducted on effluent from the Colowyo Coal Company 010A discharge. These tests were conducted in accordance with EPA and State of Colorado procedures in June 2020.

MATERIALS AND METHODS

Sample Collection

Two or three gallons of the effluent were collected on three separate dates. Samples were delivered chilled to the SeaCrest lab where they were held at 0-6°C. Chain of custody forms showing sample collection and laboratory arrival times are included (Appendix 1).

Dilution Water

Laboratory reconstituted water was used as both the dilution water source and the control for the tests. Reconstituted water for the *Ceriodaphnia dubia* test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, potassium chloride, and sodium selenate to deionized water. Reconstituted water for the fathead minnow test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, and potassium chloride to deionized water.

Test Organisms

The biomonitoring test used *Ceriodaphnia dubia,* cultured in the SeaCrest laboratory. The organisms are cultured in brood culture boards from which individual females are monitored for survival and reproduction for periods of up to two weeks. Neonates less than 24-hours old, released from third or subsequent broods of eight or more within an 8-hour period, are collected from the brood chambers and used in tests. The animals are fed daily with a mixture of Yeast, Cereal Leaves, and Trout Chow (YCT), produced in-house. This is supplemented with an equal volume of cultured green algae *(Selenastrum capricornutum)* provided by Aquatic Biosystems.

Less than one-day-old fathead minnow, cultured in the laboratory, were also used in the test. Adult fish are maintained in 10-gallon aquaria where females deposit their eggs on the under-surface of split PVC pipe sections. The eggs are collected daily and transferred to aerated containers where they hatch after three to four days. The larval fish are fed newly hatched Brine shrimp *(Artemia* sp.), cultured in-house, at least twice per day.

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In-house organisms are tested at least monthly in a reference toxicant test using sodium chloride to monitor overall health and test reproducibility (Appendix 4).

Test Procedures

Upon receipt at the lab, samples are analyzed for alkalinity, hardness, conductivity, dissolved oxygen, ammonia, chlorine, and pH.

Methods used in chemical analysis

Alkalinity	EPA 310.2	Hach 8203	I-2030-85.2
Ammonia	SM4500-NH_3, C-E1997	ASTM D1426-08	
Chlorine	SM4500-Cl D	Hach 10026	
Conductivity	SM2510		
Dissolved Oxygen	SM4500-O	Electrode: G-2001	Winkler (QC): B-F-2001
Hardness	SM2340 B or C	Hach 8213	
pH	SM4500-H+ B-2000		

The test followed procedures in EPA[3] and CDPHE[4] guidelines. Exposure concentrations included control (0%), 20%, 40%, 60%, 80%, and 100% mixtures, diluted with moderately hard laboratory reconstituted water.

Individual *Ceriodaphnia dubia* were placed in 30ml plastic containers containing approximately 15ml of exposure medium. Ten replicates at each concentration were used. The animals were fed daily with the YCT mixture and an equal volume of the green algae *(Selenastrum capricornutum)*. The exposure medium was changed daily in each container and the number of young released overnight were counted and recorded. Young were removed from the containers daily and discarded. Routine measurements were made each day of temperature, dissolved oxygen, and pH before and after the water changes.

Fathead minnow were exposed in 500ml plastic cups to which 250ml of media was replaced daily. Four replicates were used at each concentration. Ten fish, less than 24-hours old, were placed in each cup. The fish were monitored daily for survival and fed live Brine shrimp at least twice per day. After seven days, the fish were removed from the cups, euthanized with isopropyl alcohol, and then placed in aluminum pans and dried in an oven for a minimum of six hours at 100°C. The pans were then weighed on a five-place analytical balance to determine the average dry weight of the fish from each replicate.

Data Analysis

Data from the test(s) were analyzed on a personal computer using the CETIS program developed by Tidepool Scientific Software. Statistical tests used in the analyses are shown in Table 1. Test acceptability was determined using control survival and reproduction/growth criteria, concentration-response relationships, and percent minimum significant differences (USEPA [5,6]).

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Table 1. Statistical methods used in testing for significant differences in test parameters.

Variance	Distribution
Bartlett Equality of Variance Test	Shapiro-Wilk W Normality Test

Statistical Difference				
	Survival	Growth	Reproduction	IC_{25}
Ceriodaphnia dubia	Fisher Exact/Bonferroni-Holm Test	N/A	Steel Many-One Rank Sum Test	ICp
Fathead minnow	Dunnett Multiple Comparison Test	Dunnett Multiple Comparison Test	N/A	ICp

RESULTS

Ceriodaphnia dubia Test Results

Test results for the *Ceriodaphnia dubia* are summarized in Table 2 and provided on the data sheets located in Appendix 2. Survival was 0% in the 100% effluent and ranged from 30% - 100% in the remaining effluent concentrations. Control survival was 100%. Statistically significant lethality was measured in the 60%, 80%, and 100% effluent concentrations when compared to the control. The NOEL (No Observed Effect Level) for lethality was 40% and the LC_{25} (Lethal Concentration 25) for lethality was 50%.

Average number of neonates was 0.0 in the 100% effluent concentration and ranged from 1.1 – 17.1 in the remaining effluent concentrations. Average number of neonates in the control was 19.4 for statistical analyses and test acceptability criteria. Statistically significant differences in the number of neonates were found between the control and the 60%, 80%, and 100% effluent concentrations. The NOEL for reproduction was 40% and the IC_{25} (Inhibition Concentration 25) for reproduction was 41.4%.

Table 2. Summary of *Ceriodaphnia dubia* test results. An asterisk (*) denotes a statistically significant difference from the control.

Concentration	No. Surviving	Mean Births	Min.	Max.	Significant Difference	
					Lethality	Reprod.
Control (0%)	10	19.4	8	38		
20%	10	17.1	6	34		
40%	10	15.3	7	33		
60%	5	4.7	0	9	*	*
80%	3	1.1	0	7	*	*
100%	0	0.0	0	0	*	*

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Fathead minnow Test Results

Fathead minnow results are summarized in Table 3 and are provided on data sheets in Appendix 3. Survival was 70% in the 100% effluent concentration and ranged from 68% - 98% in the remaining effluent concentrations. Control survival was 95%. Statistically significant lethality was measured in the 80% and 100% effluent concentrations when compared to the control. The NOEL for lethality was 60% and the LC_{25} for lethality was 77.5%.

Average weight in the 100% effluent concentration was 0.349mg and ranged from 0.378mg - 0.469mg per individual in the remaining effluent concentrations. Average weight for the control fish was 0.325mg for statistical analyses and test acceptability criteria. No statistically significant differences for growth were measured in any effluent concentration when compared to the control. The NOEL for growth was 100% and the IC_{25} for growth was >100%.

Table 3. Summary of fathead minnow test results. An asterisk (*) denotes a statistically significant difference from the control.

Concentration	No. Alive	Avg. Wt. (mg)	Min.	Max.	Significant Difference	
					Lethality	Growth
Control (0%)	38	0.325	0.295	0.348		
20%	38	0.378	0.356	0.390		
40%	39	0.469	0.435	0.501		
60%	39	0.437	0.333	0.553		
80%	27	0.394	0.302	0.472	*	
100%	28	0.349	0.284	0.398	*	

Test Acceptability

Acceptable control survival was achieved in both tests. Similarly, *Ceriodaphnia dubia* reproduction and fathead minnow growth in control organisms met required levels. PMSD was within the required limits for an acceptable test (Table 4).

Table 4. PMSD for chronic test parameters.

	Survival		Growth		Reproduction	
	Ceriodaphnia dubia	Fathead Minnow	Lower bound	Upper bound	Lower bound	Upper bound
PMSD (% Minimum significant difference)	N/A	N/A	12	30	13	47
			29.4		39.8	

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DISCUSSION

A failed test for this discharge occurs when there is an NOEL or IC_{25} less than the IWC (Instream Waste Concentration) of 100%. The NOEL represents the highest effluent concentration at which no statistically significant effect is observed. The IC_{25} represents an estimate of the effluent concentration that would cause a 25 percent reduction of a non-quantal biological measurement. A violation for this discharge occurs when both the NOEL and the IC_{25} are less than the IWC. Since the *Ceriodaphnia dubia* test species demonstrated statistically significant differences meeting these criteria, the discharge fails WET testing requirements for this sampling period.

REFERENCES

1. **Hach Chemical Company.** 2008. *Hach's Water Analysis Handbook.* Fifth Edition. Hach Chemical Company, Loveland, Colorado. Digital Medium.
2. **APHA/AWWA/WEF.** 1998. *Standard Methods for the Examination of Water and Wastewater.* 20th Edition. American Public Health Association, Washington, D.C.
3. **USEPA.** 2002. *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.* EPA-821-R-02-013. 335 pp.
4. **CDPHE (Colorado Department of Public Health and Environment).** 1998. *Laboratory Guidelines for Conducting Whole Effluent Toxicity Tests.* Water Quality Control Division.
5. **USEPA.** 2000. *Method of Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR Part 136). EPA/821/B-00/004.
6. **USEPA**. 2000. *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the National Pollutant Discharge Elimination System Program.* EPA/833/R-00/003.

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Appendix 1 – Chain of Custody with Sample Receipt Forms

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: Pond 010A
Contact: Angela Aalbers
Address: 5731 Hwy 13 Meeker Co 81641
Phone # 970 824 1219 E-Mail: AAALBERS@TRCSTATEGT.ORG
Fax # Sampler: AA/TF
Report By: ☐ Mail ☑ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)		Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
010A	6.15.2020	0830	G	420265IBH1		✓															3	G

Turnaround Requirements (Analytical Testing Only)

_____ Standard (10 days) _____ 6-9 Day
_____ 3-5 Day _____ 1-2 Day
Requested Report Date:

Test Species: ☑ Fathead Minnow ☑ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature	Date/Time 6.15.2020 1713	Signature	Date/Time 061520 1713	Signature	Date/Time	Signature	Date/Time

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: December 2008

Project #: **420** 2651B
Sample #: 1
Date: 061520
Initials: TJR

Samples Were:

1. Shipped Hand Delivered Messengered (circle one)
   Notes:

2. Chilled to Ship — Ambient Chilled (circle one)
   Notes:
   Wet Ice Blue Ice (circle one)

3. Cooler Received Broken or Leaking — Y N NA
   Notes:

4. Sample Received Broken or Leaking — Y N NA
   Notes:

5. Received Within Holding Times — Y N
   Notes:

6. Aeration necessary — Y N NA
   Notes:

7. Sample Received at Temperature between 0-6° C . — Y N NA
   Notes: same day sample

8. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):
   effluent: pale yellow, some PM
   Receiving N/A
   Presence of native species — Y N

	Temp	DO (mg/L)	DO (%Sat)	pH	Cond	Aeration Time	Aeration DO (mg/L)	Aeration DO (%Sat)	Aeration pH
	20.3	6.6	79.9	8.1	3640				

Custody Seals:

1. Present on Outer Package — Y N
2. Unbroken on Outer Package — Y N NA
3. Present on Sample — Y N
4. Unbroken on Sample — Y N NA

Custody Documentation:

1. Present Upon Receipt of Sample — Y N

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: 270871
Contact: Angela Aalbers
Address: 5731 State HWY 13 Meeker CO 81641
Phone # 970-824-1219 E-Mail: aaalbers@tristateg.org
Fax # Sampler: Angela Aalbers
Report By: ☐ Mail ☒ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)		Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
OIOA	6/17/20	07:30	~~G~~ G	ava #2 420265.B		X															2	gal

Turnaround Requirements (Analytical Testing Only)

X Standard (10 days) ____ 6-9 Day
____ 3-5 Day ____ 1-2 Day
Requested Report Date:

Test Species: ☒ Fathead Minnow ☒ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature: Angela Aalbers	Date/Time: 6/17/20 11:30	Signature: UPS	Date/Time:	Signature: UPS	Date/Time:	Signature: [illegible]	Date/Time: 061820 850

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: December 2008

Project #: 420 265.B
Sample #: 2
Date: 061820
Initials: ML

Samples Were:

1. Shipped Hand Delivered Messengered (circle one)
   Notes: UPS

2. Chilled to Ship — Ambient / Chilled
   Notes: — Wet Ice / Blue Ice

3. Cooler Received Broken or Leaking — Y / N / NA
   Notes:

4. Sample Received Broken or Leaking — Y / N / NA
   Notes:

5. Received Within Holding Times — Y / N
   Notes:

6. Aeration necessary — Y / N / NA
   Notes:

7. Sample Received at Temperature between 0-6° C . — Y / N / NA
   Notes: 5.9

8. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):
   effluent: Slightly yellow, Some PM
   Receiving
   Presence of native species — Y / N

	Temp	DO (mg/L)	DO (%Sat)	pH	Cond	Aeration Time	Aeration DO (mg/L)	Aeration DO (%Sat)	Aeration pH
	5.9	8.0	116	8.1	4070				

Custody Seals:

1. Present on Outer Package — Y / N
2. Unbroken on Outer Package — Y / N / NA
3. Present on Sample — Y / N
4. Unbroken on Sample — Y / N / NA

Custody Documentation:

1. Present Upon Receipt of Sample — Y / N

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: 270871
Contact: Angela Aalbers
Address: 5731 State Hwy 13 Meeker, CO 81641
Phone # 970-824-1219 E-Mail: aaalbers@trisstateg.org
Fax # Sampler: Angela Aalbers
Report By: ☐ Mail ☒ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)		Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
010A	6/19/20	07:50	G	420265B#3		X															2	2

Turnaround Requirements (Analytical Testing Only)

X Standard (10 days) ____ 6-9 Day
____ 3-5 Day ____ 1-2 Day

Requested Report Date:

Test Species: ☒ Fathead Minnow ☒ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Angela Aalbers	6/19/20 11:30	UPS		UPS		D. Thornton	6/20/20 8:47

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SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: December 2008

Project #: **420** 265.3 Sample #: 3
Date: 062020 Initials: DT
Samples Were:
1. Shipped Hand Delivered Messengered (circle one)
Notes: UPS

2. Chilled to Ship — Ambient Chilled
Notes: — Wet Ice Blue Ice

3. Cooler Received Broken or Leaking — Y N NA
Notes:

4. Sample Received Broken or Leaking — Y N NA
Notes:

5. Received Within Holding Times — Y N
Notes:

6. Aeration necessary — Y N NA
Notes:

7. Sample Received at Temperature between 0-6° C . — Y N NA
Notes:

8. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):
effluent: clear, moderate pm
Receiving
Presence of native species — Y N

	Temp	DO (mg/L)	DO (%Sat)	pH	Cond	Aeration Time	Aeration DO (mg/L)	Aeration DO (%Sat)	Aeration pH
	5.5	6.8	102	8.1	4110				

Custody Seals:
1. Present on Outer Package — Y N
2. Unbroken on Outer Package — Y N NA
3. Present on Sample — Y N
4. Unbroken on Sample — Y N NA

Custody Documentation:
1. Present Upon Receipt of Sample — Y N

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Appendix 2 – Data Sheets for the *Ceriodaphnia dubia* Test

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WET TEST REPORT FORM – CHRONIC

Permittee: Colowyo Coal Company **Outfall:** 010A
Permit No.: CO-0045161

Test Type: Routine ☒ Accelerated ☐ Screen ☐
Test Species: *Ceriodaphnia dubia* **IWC:** 100%

Test Start Time	Test Start Date	Test End Time	Test End Date
1300	06-16-2020	1200	06-22-2020

Test Results	Lethality/TCP3B	Reproduction/TKP3B
S code: NOEL	40%	40%
	FAIL	**FAIL**
P code: LC_{25}/IC_{25}	50%	41.4%
	FAIL	**FAIL**
T code:	50%	41.4%

Dilution(s) - % Effluent

Measurements	Control (0%)	20%	40%	60%	80%	100%
% Survival for day 1	100	100	100	100	100	80
% Survival for day 2	100	100	100	70	60	50
% Survival for day 3	100	100	100	70	40	30
% Survival for day 4	100	100	100	60	30	10
% Survival for day 5	100	100	100	50	30	10
% Survival for day 6	100	100	100	50	30	0
Mean 3 Brood Total	19.4	17.1	15.3	4.7	1.1	0.0

Hardness (mg/L) – Receiving Water: N/A Effluent: 802/786/872 Recon Water: 84
Alkalinity (mg/L) – Receiving Water: N/A Effluent: 950/890/1155 Recon Water: 61
Chlorine (mg/L) – Effluent: <0.01 pH (initial/final) – Control: 8.3/7.9 100%: 8.1/8.1
Total Ammonia as NH_3 (mg/L) - Effluent: 0.14/0.11/.30

Were all Test Conditions in Conformance with Division Guidelines? YES ☒ NO ☐
If **NO**, list deviations from test specifications:

Laboratory: SeaCrest Group
Comments:
Analyst's Name: Sarah Adler and Margie Glenn

Signature *Date* 29 June 2020

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

SeaCrest Group
Louisville, CO

Ceriodaphnia Chronic Benchsheet

Form #: 101a
Effective: January 2009

Permittee: Colowyo Lab #: 420 265.B Site: 010A
IWC %: 100 Template #: 5 Dilution Water: MH20-012 Sample Date: 061520
Age & Source: cerio 061620 1065 Test Start: 061620 1300 Test End: 062220 1200
Test Conditions:

	0	1	2	3	4	5	6	7	8	Total
(C)	0	0	0	0	4	6	12			22
	0	0	0	0	4	7	9			20
0	0	0	0	6	0	11	7			24
	0	0	0	6	0	11	17			34
	0	0	0	0	4	7	4			15
	0	0	0	0	4	5	0			9
	0	0	0	0	6	12	18			38
	0	0	0	0	0	6	10			16
	0	0	0	0	4	4	0			8
	0	0	0	0	3	5	0			8
DO	6.8	6.8 / 6.8	6.9 / 7.0	6.8	6.8 / 6.8	6.9 / 7.0	7.0			19.4
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2	24.2 / 25.0	25.9 / 25.0	24.1 / 25.3			
pH	8.3	8.1 / 8.3	8.1 / 8.3	8.2	8.3 / 8.1	8.3 / 8.2	8.3 / 7.9			
Cond	299	319	318	319	322	319				
(1)	0	0	0	6	0	13	15			34
	0	0	0	0	4	6	7			17
20	0	0	0	5	0	9	14			28
	0	0	0	6	0	11	13			30
	0	0	0	0	4	2	0			6
	0	0	0	0	3	4	0			7
	0	0	0	0	7	7	0			14
	0	0	0	0	4	0	4			14
	0	0	0	0	4	7	0			11
	0	0	0	0	4	5 +1	0			10
DO	6.8	6.8 / 6.8	6.8 / 7.2	6.8	6.9 / 6.8	6.8 / 6.9	7.1 / 7.0			17.1
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2	24.2 / 25.0	25.9 / 25.0	24.1 / 25.3			
pH	8.3	8.1 / 8.3	8.1 / 8.3	8.2	8.3 / 8.1	8.3 / 8.2	8.2 / 7.9			
Cond	1111	1170	1155	1174	1214	1256				
	0	1	2	3	4	5	6	7	8	Total
(2)	0	0	0	6	0	10	8			24
	0	0	0	0	4	6	4			14
40	0	0	0	5	0	10	8			23
	0	0	0	5	0	12	16			33
	0	0	0	0	4	0	5			9
	0	0	0	0	4	4	6			14
	0	0	0	0	4	4	4			12
	0	0	0	0	0	3	6			9
	0	0	0	0	2	5	0			7
	0	0	0	0	3	5	0			8
DO	6.9	6.7 / 6.8	6.7 / 7.4	6.7	7.0 / 6.8	6.8 / 6.9	7.3 / 7.0			15.3
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2	24.2 / 25.0	25.9 / 25.0	24.1 / 25.2			
pH	8.3	8.1 / 8.3	8.1 / 8.2	8.2	8.2 / 8.1	8.2 / 8.2	8.1 / 8.0			
Cond	1761	1887	1878	1848	1853	1890				
(3)	0	0	0 D							0 D
	0	0	0	0	4	4	0			8
60	0	0	0	3 +2	0 D					5 D
	0	0	0 D							0 D
	0	0	0	0	0	6 D				6 D
	0	0	0	0	3	4	0			7
	0	0	0 D							0 D
	0	0	0	0	0	4	5			9
	0	0	0	0	2	5	0			7
	0	0	0	0	1	2	2			5
DO	6.9	6.7 / 6.8	6.7 / 7.6	6.7	7.1 / 6.8	6.8 / 6.8	7.4 / 6.5			4.7
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2	24.2 / 25.0	25.9 / 25.0	24.1 / 25.3			
pH	8.3	8.1 / 8.3	8.2 / 8.2	8.3	8.2 / 8.1	8.2 / 8.3	8.1 / 8.0			
Cond	2530	2720	2740	2670	2730	2670				

TJR

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SeaCrest Group
Louisville, CO

Ceriodaphnia Chronic Benchsheet

Form #: 101a
Effective: January 2009

	0	1	2	3	4	5	6	7	8	Total	
(4)	0	0	0	0	2	1	0			3	
	0	0	0 D							0	D
80	0	0	0 D							0	D
	0	0	0 D							0	D
	0	0	0 D.							0	D
	0	0	0	0	0	3	4			7	
	0	0	0	0 D						0	D
	0	0	0	0	0 D					0	D
	0	0	0	0 D						0	D
	0	0	0	0	0	1	0			1	
DO	7.0	6.6 / 6.8	6.6 / 7.8	6.6 / 7.2	6.8 / 6.8	6.7 / 7.6	6.0			1.1	
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2 / 24.2	25.0 / 25.9	25.0 / 24.1	23.3				
pH	8.2	8.1 / 8.2	8.2 / 8.2	8.3 / 8.2	8.1 / 8.1	8.2 / 8.1	8.1				
Cond	3170	3410	3370	3340	3420	3250					
(5)	0	0 D	0							0	D
	0	0	0 D							0	D
100	0	0	0	0	0 D					0	D
	0	0	0 D							0	D
	0	0	0	0 D						0	D
	0	0 D	0							0	D
	0	0	0	0 D						0	D
	0	0	0	0	0 D					0	D
	0	0	0	0	0	0	0 D			0	D
	0	0	0 D							0	D
DO	7.0	6.6 / 6.8	6.5 / 8.0	6.6 / 7.3	6.8 / 6.8	6.7 / 7.7	6.8			0.0	
Temp	25.6	25.5 / 25.0	25.1 / 24.8	25.2 / 24.2	25.0 / 25.9	25.0 / 24.1	23.3				
pH	8.1	8.1 / 8.2	8.2 / 8.1	8.3 / 8.2	8.1 / 8.1	8.3 / 8.0	8.1				
Cond	3820	4070	4070	4080	4110	4090					
Algae	ABS	ABS	ABS	ABS	ABS	ABS					
YCT	2003	2003	2003	2003	2003	2003					
H_2O	1	1	2	1	3	3					
Initials	SA	SA	SA	SA	SA	MK	MK				

	Eff #1	Eff #2	Eff #3	Rec'g #1	Rec'g #2	Rec'g #3	Recon #1	Recon #2	Recon #3
Hardness	802	786	872				84		
Alkalinity	950	890	1155				61		
Chlorine	0.01	<0.01	<0.01				<0.01		
Ammonia	0.14	0.11	0.30				<0.03		

1. Exposure Chamber
   Total Capacity: 30 ml — Test Solution Volume: 15 ml
   Test Solution Surface Area: _____ cm^2 — Water Depth (constant): _____ cm
   (cyclic): _____ to _____ cm
2. Feeding Schedule
   Not fed: _____ — Fed Daily: X
   Fed Irregularly: _____ — Food Used: YCT, algae
3. Aeration
   #1 None: _____ — Before Use: _____ (_____ minutes @ ~100 bubbles/min)
   #2 None: _____ — Before Use: _____ (_____ minutes @ ~100 bubbles/min)
   #3 None: _____ — Before Use: _____ (_____ minutes @ ~100 bubbles/min)
4. Screened Animal Enclosers
   Not Used: X — Used: _____ cm diameter
5. Condition/appearance of surviving organisms at end of test (i.e., alive but immobile; loss of orientation; erratic movement; etc,): Active + mobile

6. Comments:

x:y:z = board #:row:column

1	2	3	4	5	6	7	8	9	10
D6	A6	A7	A8	B2	B5	B8	B9	C6	C7

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CETIS Analytical Report

Report Date:	22 Jun-20 13:41 (p 1 of 1)
Test Code/ID:	420265cd / 05-8855-3832

Ceriodaphnia 7-d Survival and Reproduction Test — **SeaCrest Group**

Analysis ID:	05-9913-8829	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.9.6
Analyzed:	22 Jun-20 13:41	**Analysis:**	STP 2xK Contingency Tables	**Status Level:**	1

Batch ID:	09-8312-9039	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Lab Tech		
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	22 Jun-20	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable		
Test Length:	6d 0h	**Taxon:**	Branchiopoda	**Source:**	In-House Culture	**Age:**	

Sample ID:	06-7801-5273	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	16 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	22 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	n/a	**Client:**	Colowyo		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU
Untransformed	C > T	40	60	48.99	2.5

Fisher Exact/Bonferroni-Holm Test

Control vs	Group	Test Stat	P-Type	P-Value	Decision(α:5%)
Dilution Water	20	1.0000	Exact	1.0000	Non-Significant Effect
	40	1.0000	Exact	1.0000	Non-Significant Effect
	60*	0.0163	Exact	0.0488	Significant Effect
	80*	0.0015	Exact	0.0062	Significant Effect
	100*	0.0000	Exact	2.7E-05	Significant Effect

Data Summary

Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	D	10	0	10	1	0	0.0%
20		10	0	10	1	0	0.0%
40		10	0	10	1	0	0.0%
60		5	5	10	0.5	0.5	50.0%
80		3	7	10	0.3	0.7	70.0%
100		0	10	10	0	1	100.0%

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CETIS Analytical Report

Test Code/ID: 420265cd / 05-8855-3832

Ceriodaphnia 7-d Survival and Reproduction Test — **SeaCrest Group**

Analysis ID:	02-1548-0731	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.9.6
Analyzed:	22 Jun-20 13:41	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1

Batch ID:	09-8312-9039	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Lab Tech		
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	22 Jun-20	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable		
Test Length:	6d 0h	**Taxon:**	Branchiopoda	**Source:**	In-House Culture	**Age:**	

Sample ID:	06-7801-5273	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	16 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	22 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	n/a	**Client:**	Colowyo		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	1958276	1000	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
LC5	42	41.25	45	2.381	2.222	2.424
LC10	44	42.5	50	2.273	2	2.353
LC15	46	43.75	55	2.174	1.818	2.286
LC20	48	45	60	2.083	1.667	2.222
LC25	50	46.25	63.33	2	1.579	2.162
LC40	56	50	73.33	1.786	1.364	2
LC50	60	52.5	81.82	1.667	1.222	1.905

7d Survival Rate Summary

			Calculated Variate(A/B)							Isotonic Variate	
Conc-%	**Code**	**Count**	**Mean**	**Min**	**Max**	**Std Dev**	**CV%**	**%Effect**	**A/B**	**Mean**	**%Effect**
0	D	10	1.0000	1.0000	1.0000	0.0000	0.00%	0.0%	10/10	1	0.0%
20		10	1.0000	1.0000	1.0000	0.0000	0.00%	0.0%	10/10	1	0.0%
40		10	1.0000	1.0000	1.0000	0.0000	0.00%	0.0%	10/10	1	0.0%
60		10	0.5000	0.0000	1.0000	0.5270	105.40%	50.0%	5/10	0.5	50.0%
80		10	0.3000	0.0000	1.0000	0.4830	161.00%	70.0%	3/10	0.3	70.0%
100		10	0.0000	0.0000	0.0000	0.0000		100.0%	0/10	0	100.0%

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CETIS Analytical Report

Report Date:	22 Jun-20 13:41 (p 1 of 1)
Test Code/ID:	420265cd / 05-8855-3832

Ceriodaphnia 7-d Survival and Reproduction Test — **SeaCrest Group**

Analysis ID:	14-7465-5841	**Endpoint:**	Reproduction	**CETIS Version:**	CETISv1.9.6
Analyzed:	22 Jun-20 13:41	**Analysis:**	Nonparametric-Control vs Treatments	**Status Level:**	1

Batch ID:	09-8312-9039	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Lab Tech		
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	22 Jun-20	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable		
Test Length:	6d 0h	**Taxon:**	Branchiopoda	**Source:**	In-House Culture	**Age:**	

Sample ID:	06-7801-5273	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	16 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	22 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	n/a	**Client:**	Colowyo		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Untransformed	C > T	40	60	48.99	2.5	39.75%

Steel Many-One Rank Sum Test

Control vs	Conc-%	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Dilution Water	20	96.5	76	1	18	CDF	0.5362	Non-Significant Effect
	40	92.5	76	3	18	CDF	0.3976	Non-Significant Effect
	60*	58.5	76	2	18	CDF	8.5E-04	Significant Effect
	80*	55	76	0	18	CDF	3.1E-04	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	2626.08	656.52	4	10.91	2.9E-06	Significant Effect
Error	2708.4	60.1867	45			
Total	5334.48		49			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	23.65	13.28	9.4E-05	Unequal Variances
Distribution	Shapiro-Wilk W Normality Test	0.933	0.9367	0.0072	Non-Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	10	19.4	11.91	26.89	18	8	38	3.311	53.96%	0.00%
20		10	17.1	9.935	24.27	14	6	34	3.167	58.57%	11.86%
40		10	15.3	9.155	21.44	13	7	33	2.716	56.14%	21.13%
60		10	4.7	2.221	7.179	5.5	0	9	1.096	73.74%	75.77%
80		10	1.1	-0.533	2.733	0	0	7	0.7219	207.53%	94.33%
100		10	0	0	0	0	0	0	0		100.00%

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CETIS Analytical Report

Ceriodaphnia 7-d Survival and Reproduction Test — **SeaCrest Group**

Analysis ID:	06-0427-8596	**Endpoint:**	Reproduction	**CETIS Version:**	CETISv1.9.6
Analyzed:	22 Jun-20 13:41	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1

Batch ID:	09-8312-9039	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Lab Tech		
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	22 Jun-20	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable		
Test Length:	6d 0h	**Taxon:**	Branchiopoda	**Source:**	In-House Culture	**Age:**	

Sample ID:	06-7801-5273	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	16 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	22 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	n/a	**Client:**	Colowyo		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	399088	1000	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
IC5	8.435	2.422	41.48	11.86	2.411	41.29
IC10	16.87	4.844	42.95	5.928	2.328	20.64
IC15	26.78	7.266	44.43	3.734	2.251	13.76
IC20	37.56	9.688	45.91	2.663	2.178	10.32
IC25	41.42	12.11	47.4	2.415	2.11	8.257
IC40	46.91	19.38	52.07	2.132	1.921	5.161
IC50	50.57	39.21	55.39	1.978	1.805	2.55

Reproduction Summary

			Calculated Variate						Isotonic Variate	
Conc-%	Code	Count	Mean	Min	Max	Std Dev	CV%	%Effect	Mean	%Effect
0	D	10	19.4	8	38	10.47	53.96%	0.0%	19.4	0.0%
20		10	17.1	6	34	10.02	58.57%	11.86%	17.1	11.86%
40		10	15.3	7	33	8.59	56.14%	21.13%	15.3	21.13%
60		10	4.7	0	9	3.466	73.74%	75.77%	4.7	75.77%
80		10	1.1	0	7	2.283	207.50%	94.33%	1.1	94.33%
100		10	0	0	0	0		100.0%	0	100.0%

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Appendix 3 – Data Sheets for Fathead Minnow Test

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WET TEST REPORT FORM – CHRONIC

Permittee: Colowyo Coal Company **Outfall:** 010A
Permit No.: CO-0045161

Test Type: Routine ☒ Accelerated ☐ Screen ☐
Test Species: Fathead minnow **IWC:** 100%

Test Start Time	Test Start Date	Test End Time	Test End Date
1225	06-16-2020	1240	06-23-2020

Test Results	Lethality/TCP6C	Growth/TKP6C
S code: NOEL	60%	100%
	FAIL	**PASS**
P code: LC_{25}/IC_{25}	77.5%	>100%
	FAIL	**PASS**
T code:	77.5%	>100%

Dilution(s) - % Effluent

Measurements	Control (0%)	20%	40%	60%	80%	100%
% Survival for day 1	100	100	100	100	100	100
% Survival for day 2	98	100	100	100	100	85
% Survival for day 3	95	100	100	100	93	75
% Survival for day 4	95	98	100	98	85	73
% Survival for day 5	95	95	98	98	80	73
% Survival for day 6	95	95	98	98	73	73
% Survival for day 7	95	95	98	98	68	70
Mean Dry Wt. (mg)	0.325	0.378	0.469	0.437	0.394	0.349

Hardness (mg/L) – Receiving Water: N/A Effluent: 802/786/872 Recon Water: 88
Alkalinity (mg/L) – Receiving Water: N/A Effluent: 950/890/1155 Recon Water: 57
Chlorine (mg/L) – Effluent: <0.01 pH (initial/final) – Control: 8.3/7.9 100%: 8.1/8.1
Total Ammonia as NH_3 (mg/L) - Effluent: 0.14/0.11/.30

Were all Test Conditions in Conformance with Division Guidelines? YES ☐ NO ☒
If **NO**, list deviations from test specifications: DO fell below 4.0 mg/L in overnight test chambers.

Laboratory: SeaCrest Group
Comments:
Analyst's Name: Sean Rainey, Sarah Adler, and Daniel Hillenburg

Signature *Date* 29 June 2020

SeaCrest Group
Louisville, CO

Fathead Minnow Chronic Benchsheet

Form #: 103a
Effective: January 2009

Client Colowyo | Site 010 A | Lab # 420 265.8 | Sample Date 061520 | IWC 100 | Dilution H_2O MH20 - 025

Test Start 061820 - 1225 | Test End 062320-1240 | Species Info IMFHM- 0616 | Template | Test Conditions

Conc	Read	0	1		2		3		4		5		6		7	0	1	2	3	4	5	6	7	#	Fish & Tare	Tare	Fish Wt mg	Ave wt
C	DO	6.8	6.0	6.9	5.9	7.0	4.0	7.1	4.0	6.8	5.3	6.9	4.9	6.9	5.6	10	10	10	10	10	10	10	10	#1	1.14761	1.14466	0.295	0.325
	Temp	24.9	25.9	25.6	25.0	24.5	25.1	24.6	24.8	24.4	25.3	25.0	25.4	25.0	25.6	10	10	10	9	9	9	9	9	#2	1.14196	1.13879	0.317	
	pH	8.3	8.0	8.3	8.0	8.3	7.9	8.3	7.7	8.3	8.0	8.3	7.9	8.3	7.9	10	10	10	10	10	10	10	10	#3	1.13382	1.13034	0.348	
	Cond	295	300		300		293		299		298		316			10	10	9	9	9	9	9	9	#4	1.14394	1.14056	0.338	
20	DO	6.8	6.0	7.0	5.9	7.1	4.0	7.1	4.0	6.8	5.0	6.7	4.6	7.0	5.4	10	10	10	10	10	10	10	10	#5	1.15449	1.15064	0.385	0.378
	Temp	25.1	25.9	25.6	25.2	24.5	25.3	24.6	24.8	24.5	25.4	25.1	25.4	25.0	25.4	10	10	10	10	10	10	10	10	#6	1.14603	1.14221	0.382	
	pH	8.3	8.0	8.3	8.0	8.2	7.9	8.3	7.8	8.3	8.0	8.3	7.9	8.3	7.9	10	10	10	10	9	9	9	9	#7	1.13485	1.13095	0.390	
	Cond	1053	1175		1147		1154		1086		1079		1022			10	10	10	10	10	9	9	9	#8	1.13665	1.13309	0.356	
40	DO	6.7	6.0	7.1	5.8	7.2	4.0	7.2	4.0	6.9	4.7	7.3	4.2	7.1	5.2	10	10	10	10	10	10	10	10	#9	1.13737	1.13261	0.476	0.469
	Temp	25.2	25.8	25.5	25.4	24.6	25.5	24.5	25.0	24.6	25.5	25.2	25.4	25.0	25.3	10	10	10	10	10	10	10	10	#10	1.13776	1.13275	0.501	
	pH	8.2	8.0	8.2	8.1	8.2	8.0	8.2	7.9	8.2	8.0	8.2	7.9	8.2	8.0	10	10	10	10	10	10	10	10	#11	1.13119	1.12684	0.435	
	Cond	1737	1796		1662		1483		1359		1320		1884			10	10	10	10	10	9	9	9	#12	1.13501	1.13036	0.465	
60	DO	6.7	6.1	7.2	5.8	7.4	4.0	7.2	4.0	6.9	4.6	7.5	3.8	7.3	5.0	10	10	10	10	10	10	10	10	#13	1.14094	1.13611	0.483	0.437
	Temp	25.3	25.8	25.5	25.6	24.8	25.6	24.5	25.0	24.7	25.6	25.3	25.4	25.0	25.2	10	10	10	10	9	9	9	9	#14	1.13275	1.12898	0.377	
	pH	8.2	8.0	8.2	8.1	8.2	8.0	8.2	7.9	8.2	8.0	8.1	7.9	8.2	8.0	10	10	10	10	10	10	10	10	#15	1.13547	1.13214	0.333	
	Cond	1995	2660		1835		1622		1478		1446		2760			10	10	10	10	10	10	10	10	#16	1.13753	1.13200	0.553	
80	DO	6.6	6.1	7.3	5.7	7.5	4.0	7.3	4.0	7.0	4.3	7.7	3.4	7.4	4.8	10	10	10	10	9	8	8	7	#17	1.13928	1.13537	0.391	0.394
	Temp	25.4	25.7	25.4	25.7	24.9	25.8	24.4	25.3	24.9	25.5	25.4	25.4	25.0	25.1	10	10	10	9	8	8	7	7	#18	1.13823	1.13413	0.410	
	pH	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.0	8.2	8.0	8.1	7.9	8.1	8.1	10	10	10	9	8	7	6	5	#19	1.14991	1.14689	0.302	
	Cond	3050	3350		1966		1745		1586		1555		3400			10	10	10	9	9	9	8	8	#20	1.13929	1.13457	0.472	
100	DO	6.6	6.1	7.4	5.7	7.6	4.0	7.3	4.0	7.0	4.0	7.8	3.0	7.5	4.6	10	10	10	7	6	6	6	6	#21	1.14683	1.14399	0.284	0.349
	Temp	25.5	25.7	25.4	25.9	24.9	25.9	24.4	25.3	25.1	25.9	25.5	25.4	25.0	25.0	10	10	6	5	5	5	5	5	#22	1.15301	1.14956	0.345	
	pH	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.0	8.1	7.9	8.1	8.1	10	10	10	10	10	10	10	10	#23	1.15422	1.15024	0.398	
	Cond	3640	4000		3920		1828		1650		1610		4070			10	10	8	8	8	8	8	7	#24	1.14564	1.14197	0.367	
	DO															10												
	Temp															10												
	pH															10												
	Cond															10												
Initials		DH	DH		SR		SR		SR		SR		SA		SR									pretest	#25	1.12336	1.12327	
Water #		1	1		2		2		2		3		3															
CO_2																												

	Eff 1	Eff 2	Eff 3	Rcv 1	Rcv 2	Rcv 3	Recon	Recon
Hard	802	786	872				88	
Alk	950	890	1155				57	
Chlor	0.01	<0.01	<0.01				<0.01	
NH_3	0.14	0.11	0.30				<0.03	
NH_3								

Exposure Chamber

Total Capacity:	500	mL
Test Solution Volume:	250	mL
Test Solution Surface Area:	50.24	cm
Water Depth (constant):	6.5	cm
(cyclic):	to	cm

Condition/appearance of surviving organisms and Comments

· mobile + active

Screened Animal Enclosures

Not Used: x
Used: _____ cm Diameter

Feeding	0	1	2	3	4	5	6	7
AM		✓	✓	✓	✓	✓	✓	✓
Initials		SR	SR	SR	SR	SR	SA	SR
PM	✓	✓	✓	✓	✓	✓	✓	
Initials	DH	SR	SR	SR	SR	SR	SA	

Feeding Schedule

Not Fed:
Fed Daily: 2x/day
Fed Irregularly:
(describe):
Food Used: <24hr Artemia

Aeration:

None: _____
@ ~ 100 bubbles/min
Before Use #1: (_____ minutes
Before Use #2: (_____ minutes
Before Use #3: (_____ minutes

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CETIS Analytical Report

Fathead Minnow 7-d Larval Survival and Growth Test — **SeaCrest Group**

Analysis ID:	20-4896-5747	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.9.6
Analyzed:	24 Jun-20 13:40	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1

Batch ID:	08-7881-6458	**Test Type:**	Growth-Survival (7d)	**Analyst:**			
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	23 Jun-20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable		
Test Length:	7d 0h	**Taxon:**	Actinopterygii	**Source:**	In-House Culture	**Age:**	

Sample ID:	11-4028-7000	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	15 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	15 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	24h	**Client:**	Colowyo		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Angular (Corrected)	C > T	60	80	69.28	1.667	17.67%

Dunnett Multiple Comparison Test

Control vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Dilution Water	20	0	2.407	0.245	6	CDF	0.8333	Non-Significant Effect
	40	-0.3996	2.407	0.245	6	CDF	0.9244	Non-Significant Effect
	60	-0.3996	2.407	0.245	6	CDF	0.9244	Non-Significant Effect
	80*	3.549	2.407	0.245	6	CDF	0.0048	Significant Effect
	100*	3.059	2.407	0.245	6	CDF	0.0136	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.692171	0.138434	5	6.659	0.0011	Significant Effect
Error	0.374209	0.0207894	18			
Total	1.06638		23			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	7.554	15.09	0.1826	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.9052	0.884	0.0278	Normal Distribution

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	0.9500	0.8581	1.0000	0.9500	0.9000	1.0000	0.0289	6.08%	0.00%
20		4	0.9500	0.8581	1.0000	0.9500	0.9000	1.0000	0.0289	6.08%	0.00%
40		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	-2.63%
60		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	-2.63%
80		4	0.6750	0.4748	0.8752	0.7000	0.5000	0.8000	0.0629	18.64%	28.95%
100		4	0.7000	0.3563	1.0000	0.6500	0.5000	1.0000	0.1080	30.86%	26.32%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	1.331	1.181	1.48	1.331	1.249	1.412	0.04705	7.07%	0.00%
20		4	1.331	1.181	1.48	1.331	1.249	1.412	0.04705	7.07%	0.00%
40		4	1.371	1.242	1.501	1.412	1.249	1.412	0.04074	5.94%	-3.06%
60		4	1.371	1.242	1.501	1.412	1.249	1.412	0.04074	5.94%	-3.06%
80		4	0.9687	0.7557	1.182	0.9912	0.7854	1.107	0.06694	13.82%	27.19%
100		4	1.019	0.5805	1.457	0.9386	0.7854	1.412	0.1377	27.03%	23.44%

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CETIS Analytical Report

Fathead Minnow 7-d Larval Survival and Growth Test — **SeaCrest Group**

Analysis ID:	00-4930-3878	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.9.6
Analyzed:	24 Jun-20 13:41	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1

Batch ID:	08-7881-6458	**Test Type:**	Growth-Survival (7d)	**Analyst:**			
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	23 Jun-20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable		
Test Length:	7d 0h	**Taxon:**	Actinopterygii	**Source:**	In-House Culture	**Age:**	

Sample ID:	11-4028-7000	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	15 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	15 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	24h	**Client:**	Colowyo		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	2017168	1000	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
LC5	63.5	57.9	66.7	1.575	1.499	1.727
LC10	67	62.2	73.93	1.493	1.353	1.608
LC15	70.5	65.15	80.9	1.418	1.236	1.535
LC20	74	67.72	n/a	1.351	n/a	1.477
LC25	77.5	70.03	n/a	1.29	n/a	1.428
LC40	>100	n/a	n/a	<1	n/a	n/a
LC50	>100	n/a	n/a	<1	n/a	n/a

7d Survival Rate Summary

			Calculated Variate(A/B)							Isotonic Variate	
Conc-%	**Code**	**Count**	**Mean**	**Min**	**Max**	**Std Dev**	**CV%**	**%Effect**	**A/B**	**Mean**	**%Effect**
0	D	4	0.9500	0.9000	1.0000	0.0577	6.08%	0.0%	38/40	0.9625	0.0%
20		4	0.9500	0.9000	1.0000	0.0577	6.08%	0.0%	38/40	0.9625	0.0%
40		4	0.9750	0.9000	1.0000	0.0500	5.13%	-2.63%	39/40	0.9625	0.0%
60		4	0.9750	0.9000	1.0000	0.0500	5.13%	-2.63%	39/40	0.9625	0.0%
80		4	0.6750	0.5000	0.8000	0.1258	18.64%	28.95%	27/40	0.6875	28.57%
100		4	0.7000	0.5000	1.0000	0.2160	30.86%	26.32%	28/40	0.6875	28.57%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	1.0000	0.9000	1.0000	0.9000
20		1.0000	1.0000	0.9000	0.9000
40		1.0000	1.0000	1.0000	0.9000
60		1.0000	0.9000	1.0000	1.0000
80		0.7000	0.7000	0.5000	0.8000
100		0.6000	0.5000	1.0000	0.7000

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CETIS Analytical Report

Report Date:	24 Jun-20 13:55 (p 1 of 1)
Test Code/ID:	420265.FHM / 20-5826-8350

Fathead Minnow 7-d Larval Survival and Growth Test — **SeaCrest Group**

Analysis ID:	11-6444-1511	**Endpoint:**	Mean Dry Biomass-mg	**CETIS Version:**	CETISv1.9.6
Analyzed:	24 Jun-20 13:54	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1

Batch ID:	08-7881-6458	**Test Type:**	Growth-Survival (7d)	**Analyst:**			
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	23 Jun-20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable		
Test Length:	7d 0h	**Taxon:**	Actinopterygii	**Source:**	In-House Culture	**Age:**	

Sample ID:	11-4028-7000	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	15 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	15 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	24h	**Client:**	Colowyo		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Untransformed	C > T	100	>100	n/a	1	29.35%

Dunnett Multiple Comparison Test

Control vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Dilution Water	20	-1.359	2.407	0.095	6	CDF	0.9937	Non-Significant Effect
	40	-3.658	2.407	0.095	6	CDF	1.0000	Non-Significant Effect
	60	-2.831	2.407	0.095	6	CDF	0.9999	Non-Significant Effect
	80	-1.75	2.407	0.095	6	CDF	0.9981	Non-Significant Effect
	100	-0.6067	2.407	0.095	6	CDF	0.9529	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0583564	0.0116713	5	3.727	0.0172	Significant Effect
Error	0.0563657	0.0031314	18			
Total	0.114722		23			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	11.83	15.09	0.0372	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.966	0.884	0.5708	Normal Distribution

Mean Dry Biomass-mg Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	0.3245	0.2871	0.3619	0.3275	0.295	0.348	0.01177	7.25%	0.00%
20		4	0.3783	0.3541	0.4024	0.3835	0.356	0.39	0.007597	4.02%	-16.57%
40		4	0.4693	0.4257	0.5128	0.4705	0.435	0.501	0.01368	5.83%	-44.61%
60		4	0.4365	0.2774	0.5956	0.43	0.333	0.553	0.04999	22.90%	-34.52%
80		4	0.3938	0.2819	0.5056	0.4005	0.302	0.472	0.03514	17.85%	-21.34%
100		4	0.3485	0.2718	0.4252	0.356	0.284	0.398	0.02409	13.83%	-7.40%

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	0.295	0.317	0.348	0.338
20		0.385	0.382	0.39	0.356
40		0.476	0.501	0.435	0.465
60		0.483	0.377	0.333	0.553
80		0.391	0.41	0.302	0.472
100		0.284	0.345	0.398	0.367

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CETIS Analytical Report

Report Date:	24 Jun-20 13:55 (p 1 of 1)
Test Code/ID:	420265.FHM / 20-5826-8350

Fathead Minnow 7-d Larval Survival and Growth Test — **SeaCrest Group**

Analysis ID:	07-9894-3642	**Endpoint:**	Mean Dry Biomass-mg	**CETIS Version:**	CETISv1.9.6
Analyzed:	24 Jun-20 13:54	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1

Batch ID:	08-7881-6458	**Test Type:**	Growth-Survival (7d)	**Analyst:**			
Start Date:	16 Jun-20	**Protocol:**	EPA/821/R-02-013 (2002)	**Diluent:**	Reconstituted Water		
Ending Date:	23 Jun-20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable		
Test Length:	7d 0h	**Taxon:**	Actinopterygii	**Source:**	In-House Culture	**Age:**	

Sample ID:	11-4028-7000	**Code:**	420265.B	**Project:**	WET Quarterly Compliance Test (2Q)
Sample Date:	15 Jun-20	**Material:**	POTW Effluent	**Source:**	NPDES Permit # (XX99999999)
Receipt Date:	15 Jun-20	**CAS (PC):**		**Station:**	010A
Sample Age:	24h	**Client:**	Colowyo		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	418389	1000	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL
IC5	85.19	48.17	n/a	1.174	n/a	2.076
IC10	94.07	57.83	n/a	1.063	n/a	1.729
IC15	>100	n/a	n/a	<1	n/a	n/a
IC20	>100	n/a	n/a	<1	n/a	n/a
IC25	>100	n/a	n/a	<1	n/a	n/a
IC40	>100	n/a	n/a	<1	n/a	n/a
IC50	>100	n/a	n/a	<1	n/a	n/a

Mean Dry Biomass-mg Summary

			Calculated Variate						Isotonic Variate	
Conc-%	Code	Count	Mean	Min	Max	Std Dev	CV%	%Effect	Mean	%Effect
0	D	4	0.3245	0.295	0.348	0.02353	7.25%	0.0%	0.4021	0.0%
20		4	0.3783	0.356	0.39	0.01519	4.02%	-16.57%	0.4021	0.0%
40		4	0.4693	0.435	0.501	0.02736	5.83%	-44.61%	0.4021	0.0%
60		4	0.4365	0.333	0.553	0.09998	22.90%	-34.52%	0.4021	0.0%
80		4	0.3938	0.302	0.472	0.07027	17.85%	-21.34%	0.3938	2.08%
100		4	0.3485	0.284	0.398	0.04819	13.83%	-7.4%	0.3485	13.34%

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	0.295	0.317	0.348	0.338
20		0.385	0.382	0.39	0.356
40		0.476	0.501	0.435	0.465
60		0.483	0.377	0.333	0.553
80		0.391	0.41	0.302	0.472
100		0.284	0.345	0.398	0.367

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Appendix 4 – QA/QC and Reference Toxicant Test Charts

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SeaCrest Group

Quality Assurance Check List – Chronic Whole Effluent Toxicity Test

Client: Colowyo Coal Company **SeaCrest Sample No.:** 420265.B

Species Tested: *Ceriodaphnia dubia* and fathead minnow

Start Date of Test (*Ceriodaphnia dubia*)	Start Date of Test (Fathead minnow)
06-16-2020	06-16-2020

Sample received in lab properly preserved (0-6°C)?	**N***
Sample received at laboratory within 36 hours of collection?	**Y**
Sample delivered on ice or equivalent?	**Y**
Test initiated within 36-hours of collection?	**Y**
Test protocol conforms to CDPHE guidelines (*Ceriodaphnia dubia)*?	**Y**
Test protocol conforms to CDPHE guidelines (fathead minnow)?	**Y**
Average test temp. ±1°C (*Ceriodaphnia dubia*)?	**Y**
Average test temp. ±1°C (fathead minnow)?	**Y**
DO level ≥4.0mg/L; no super-saturation (*Ceriodaphnia dubia*)?	**Y**
DO level ≥4.0mg/L; no super-saturation (fathead minnow)?	**N****
Survival in control ≥90%, ≥80% for chronic (*Ceriodaphnia dubia*)?	**Y**
Survival in control ≥90%, ≥80% for chronic (fathead minnow)?	**Y**
Ceriodaphnia dubia neonates <24-hours old?	**Y**
Fathead minnow larvae <24-hours old?	**Y**
Appropriate reference toxicity test conducted?	**Y**
Lab. Ref. Tox. test results within the confidence limits for the lab?	**Y**

* Sample #1 was received at 20.3°C on the same day as sampling.

** DO fell below 4.0 mg/L in overnight test chambers.

Signature *Date* 29 June 2020
Position: WET Laboratory Manager

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

METHOD QC

Method	Analyte	Date	LCS (rec)	%REC	%RPD	QC LIMITS
2320 B	Alkalinity - Total	5/5/2020	100.00%	96.85%	-3.92%	± 5.00%
2320 B	Alkalinity - Total	5/14/2020	104.80%	101.30%	1.83%	± 5.00%
2320 B	Alkalinity - Total	5/20/2020	103.20%	97.80%	1.36%	± 5.00%
2320 B	Alkalinity - Total	5/26/2020	103.20%	98.12%	1.04%	± 5.00%
4500 NH_3 D	Ammonia	5/7/2020	103.00%	98.20%	-4.18%	± 10.00%
4500 NH_3 D	Ammonia	5/14/2020	103.00%	99.26%	-6.12%	± 10.00%
4500 NH_3 D	Ammonia	5/21/2020	103.00%	101.00%	3.32%	± 10.00%
4500 NH_3 D	Ammonia	5/28/2020	103.00%	101.60%	0.92%	± 10.00%
4500 Cl D	Chlorine	5/30/2020	96.88%	96.88%	0.00%	± 5.00, ± 20.00%
2340 B	Hardness - Total	5/4/2020	101.75%	98.69%	1.38%	± 5.00%
2340 B	Hardness - Total	5/12/2020	98.20%	101.00%	-1.23%	± 5.00%
2340 B	Hardness - Total	5/22/2020	100.00%	101.00%	-1.54%	± 5.00%
2340 B	Hardness - Total	5/26/2020	98.25%	102.37%	0.66%	± 5.00%

		Date	LCS (rec)	%REC M1	%REC M2	QC Limits
4500 O	DO - Winkler	5/4/2020	N/A	98.51%	97.06%	± 5.00%
4500 O	DO - Winkler	5/11/2020	N/A	97.06%	95.59%	± 5.00%
4500 O	DO - Winkler	5/22/2020	N/A	100.00%	97.33%	± 5.00%
4500 O	DO - Winkler	5/30/2020	N/A	97.18%	98.57%	± 5.00%

		Date	Blank	%RPD	%REC MRS	QC Limits
2540 C	Dissolved Solids (TTL)	5/19/2020	99.99622%	1.05%	106.12%	±20%, ± 15%
2540 D	Suspended Solids (TTL)	5/19/2020	100.27024%	0.00%	99.70%	±20%, ± 15%

Signature: Kara Olivia

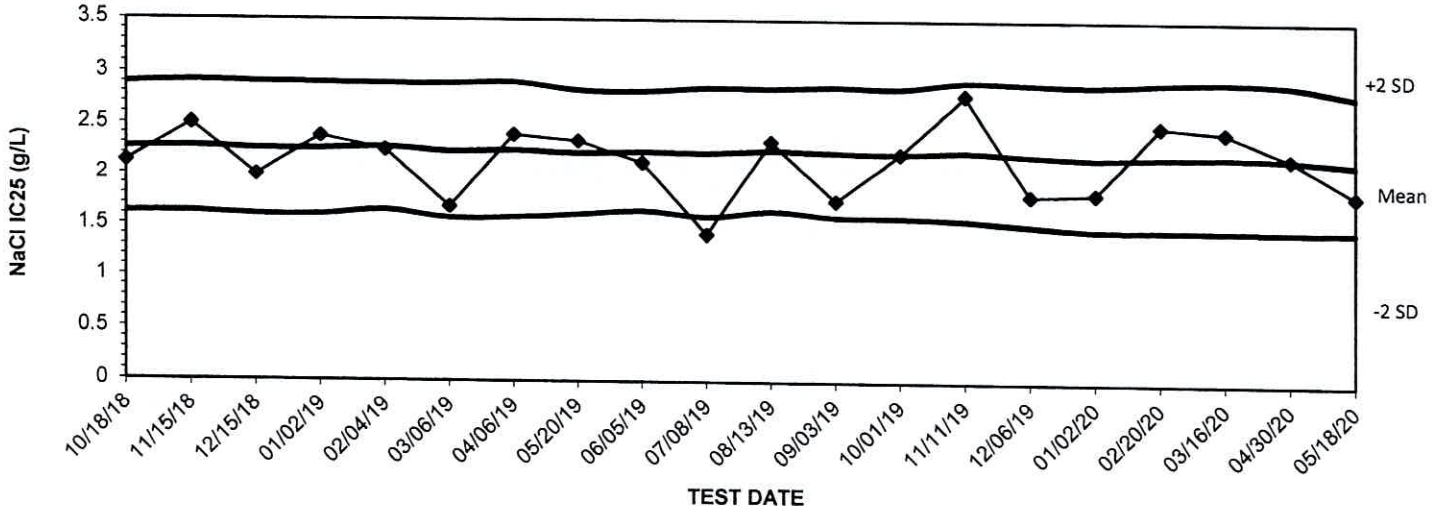
Date: 6/1/2020

Signature:

Date: 1 June 2020

DocuSign Envelope ID: 69E218CE-5D2C-4590-95F6-C5D990147BA2

CERIODAPHNIA SURVIVAL IC25 NaCl REFTOX



Date	IC25	Mean	-2 SD	+2 SD
10/18/18	2.1250	2.2599	1.6218	2.8979
11/15/18	2.5000	2.2725	1.6261	2.9188
12/15/18	1.9924	2.2520	1.5983	2.9057
01/02/19	2.3745	2.2498	1.5982	2.9014
02/04/19	2.2423	2.2693	1.6462	2.8924
03/06/19	1.6792	2.2302	1.5662	2.8942
04/06/19	2.3947	2.2431	1.5772	2.9089
05/20/19	2.3330	2.2195	1.6078	2.8311
06/05/19	2.1250	2.2334	1.6457	2.8210
07/08/19	1.4167	2.2234	1.5876	2.8592
08/13/19	2.3333	2.2495	1.6450	2.8541
09/03/19	1.7500	2.2317	1.5906	2.8727
10/01/19	2.2190	2.2220	1.5869	2.8572
11/11/19	2.7910	2.2438	1.5629	2.9248
12/06/19	1.8120	2.2111	1.5158	2.9063
01/02/20	1.8330	2.1831	1.4761	2.8900
02/20/20	2.5000	2.1987	1.4784	2.9190
03/16/20	2.4480	2.2072	1.4792	2.9352
04/30/20	2.2000	2.1929	1.4774	2.9085
05/18/20	1.8330	2.1441	1.4811	2.8072

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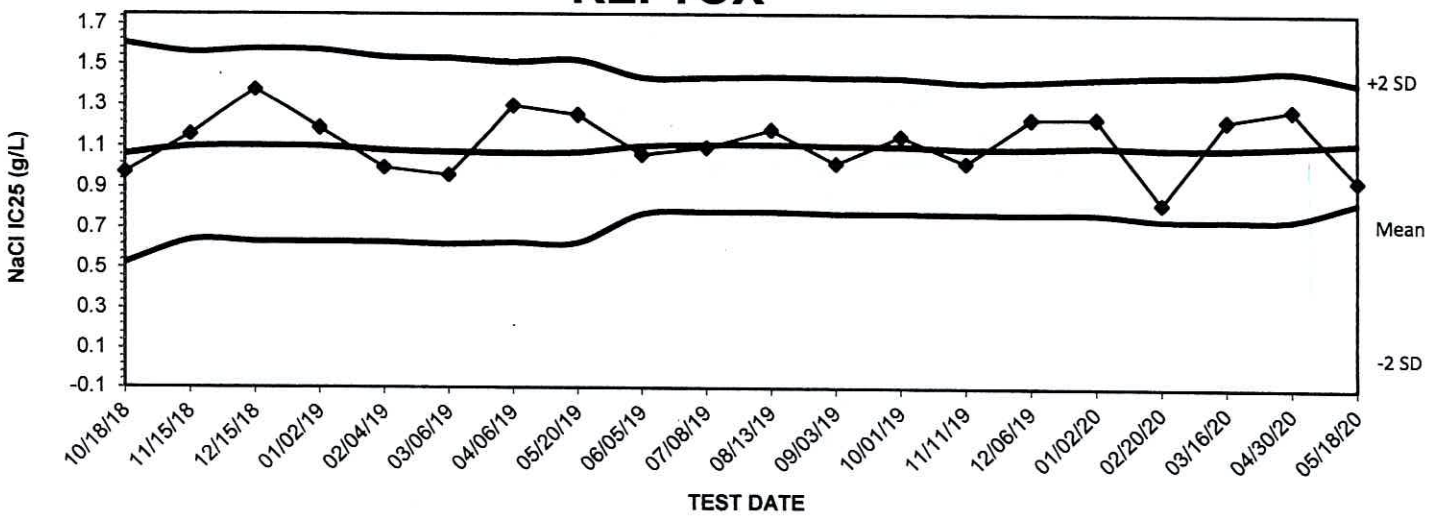
CERIODAPHNIA REPRODUCTION IC25 NaCl
REFTOX



Date	IC25	Mean	-2 SD	+2 SD
10/18/18	0.9733	1.0632	0.5239	1.6026
11/15/18	1.1578	1.0979	0.6375	1.5584
12/15/18	1.3741	1.1028	0.6324	1.5733
01/02/19	1.1897	1.1007	0.6324	1.5690
02/04/19	0.9971	1.0817	0.6299	1.5335
03/06/19	0.9597	1.0739	0.6192	1.5286
04/06/19	1.2943	1.0687	0.6275	1.5098
05/20/19	1.2523	1.0731	0.6262	1.5200
06/05/19	1.0625	1.1043	0.7718	1.4369
07/08/19	1.0976	1.1102	0.7829	1.4376
08/13/19	1.1825	1.1125	0.7837	1.4412
09/03/19	1.0209	1.1060	0.7752	1.4367
10/01/19	1.1530	1.1050	0.7750	1.4351
11/11/19	1.0220	1.0921	0.7709	1.4132
12/06/19	1.2340	1.0938	0.7698	1.4178
01/02/20	1.2370	1.1021	0.7722	1.4321
02/20/20	0.8240	1.0926	0.7418	1.4435
03/16/20	1.2270	1.0946	0.7411	1.4481
04/30/20	1.2790	1.1073	0.7462	1.4684
05/18/20	0.9375	1.1238	0.8360	1.4115

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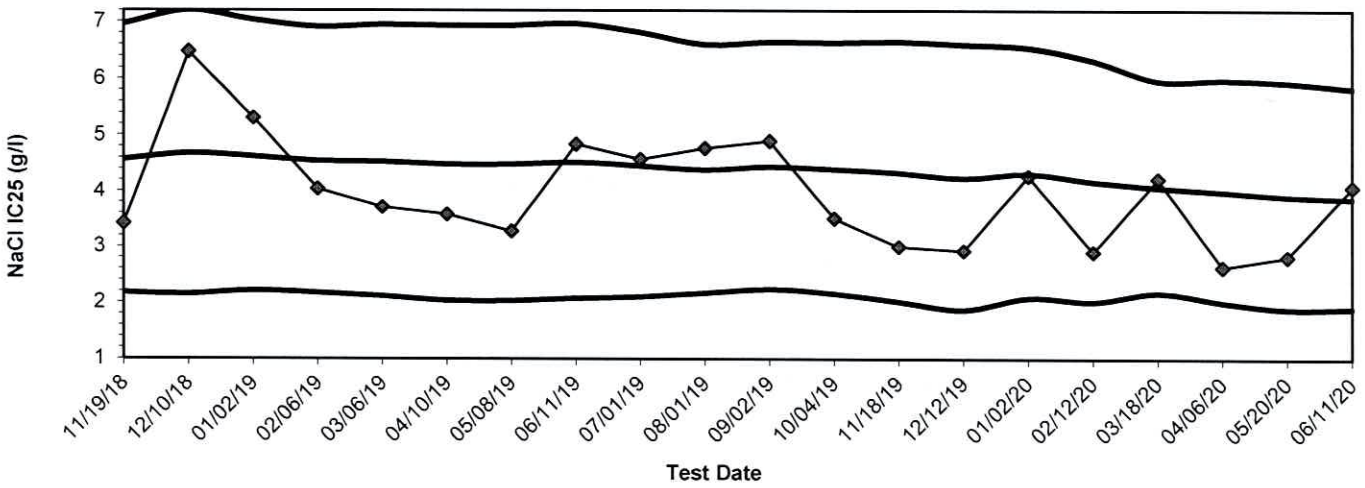
FHM SURVIVAL IC25 NaCl REFTOX



Date	IC25	Mean	-2 SD	+2 SD
11/19/18	3.4074	4.5641	2.1716	6.9566
12/10/18	6.4714	4.6726	2.1478	7.1974
01/02/19	5.3000	4.6168	2.2099	7.0237
02/06/19	4.0378	4.5386	2.1704	6.9069
03/06/19	3.7006	4.5270	2.1107	6.9432
04/10/19	3.5725	4.4785	2.0291	6.9279
05/08/19	3.2727	4.4779	2.0273	6.9286
06/11/19	4.8330	4.5167	2.0721	6.9613
07/01/19	4.5714	4.4518	2.0981	6.8055
08/01/19	4.7632	4.3831	2.1680	6.5982
09/02/19	4.8920	4.4388	2.2377	6.6400
10/04/19	3.5000	4.3948	2.1577	6.6319
11/18/19	3.0000	4.3304	2.0157	6.6451
12/12/19	2.9230	4.2327	1.8683	6.5972
01/02/20	4.2730	4.3146	2.0847	6.5445
02/12/20	2.9000	4.1690	2.0112	6.3269
03/18/20	4.2190	4.0659	2.1719	5.9599
04/06/20	2.6330	3.9908	2.0044	5.9771
05/20/20	2.8120	3.9065	1.8832	5.9297
06/11/20	4.0740	3.8642	1.8990	5.8293

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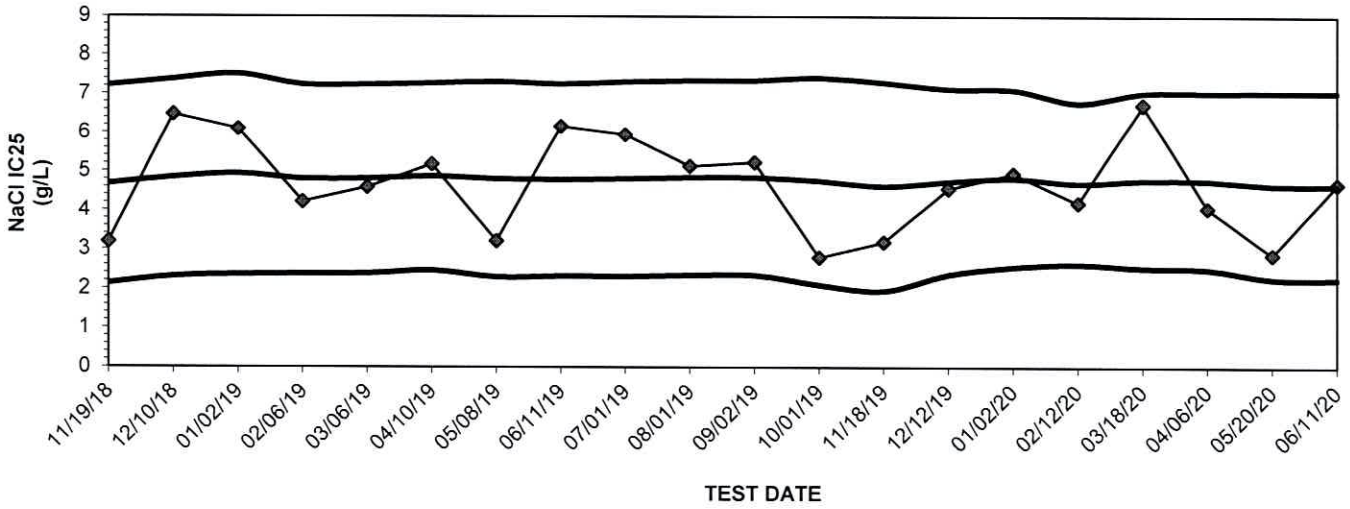
FHM GROWTH IC25 NaCl REFTOX



Date	IC25	Mean	-2 SD	+2 SD
11/19/18	3.1832	4.6770	2.1291	7.2249
12/10/18	6.4714	4.8436	2.3063	7.3809
01/02/19	6.0965	4.9313	2.3525	7.5101
02/06/19	4.2083	4.8042	2.3693	7.2390
03/06/19	4.5795	4.8091	2.3766	7.2416
04/10/19	5.1689	4.8637	2.4540	7.2734
05/08/19	3.1977	4.8012	2.2871	7.3152
06/11/19	6.1639	4.7836	2.3157	7.2516
07/01/19	5.9415	4.8088	2.3034	7.3142
08/01/19	5.1270	4.8424	2.3399	7.3449
09/02/19	5.2270	4.8440	2.3405	7.3474
10/01/19	2.7880	4.7576	2.0987	7.4165
11/18/19	3.1860	4.6211	1.9471	7.2950
12/12/19	4.5530	4.7439	2.3593	7.1285
01/02/20	4.9410	4.8270	2.5500	7.1041
02/12/20	4.1900	4.6963	2.6215	6.7710
03/18/20	6.7190	4.7754	2.5236	7.0271
04/06/20	4.0590	4.7630	2.4979	7.0281
05/20/20	2.8660	4.6469	2.2521	7.0417
06/11/20	4.6820	4.6419	2.2479	7.0360

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TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

July 22, 2020

Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

RE: Colowyo Mine CDPS Permit #CO-0045161
March 2020 DMR Submittal Comments Outfall 014A

Dear CDPHE Representative:

On June 2, 2020, a field pH measurement of 9.4 at Outfall 014 was recorded during a discharge of stormwater. The effluent limit for pH at this outfall is 6.5 to 9.0. At the time of the measurement, the facility was discharging stormwater from the associated sediment control pond from previous rain or snow melt events as part of a drainage study. The drainage study was conducted to meet Water Quality Control Commission requirements from the 2019 Regulation 37 rulemaking hearing to investigate discharges to Little Collom Gulch, and to address the application of downstream water quality standards on both Collom and Little Collom gulches. The discharge occurred after the stormwater had undergone all treatment in the mine's system, including final settling in the sediment pond. The discharge occurred through a suspended (floating) hose and an out-of-pond pump to discharge through the outfall structure to simulate a natural discharge event. Samples were collected during the discharge (as required by permit). The discharge event lasted approximately four hours. The drainage study found that no measureable flow from the discharge reached Collom Gulch.

In order to prevent furture recurrence of this event, Tri-State Colowyo Mine has updated SOPs for the operation of permitted ponds to include the requirement to sample the water prior to any routine maintenance, study, or other circumstance requiring a scheduled manual discharge of regulated water. Compliance with permitted water quality limits will be verified prior to any such discharge. In addition, training will be provided to Colwoyo Mine staff in order to ensure that these new SOPs are implemented and followed.

If you have any questions about these comments, please contact Chantell Johnson at 303-254-3185 or Darlene Crosby at 303-254-3055.

Sincerely,

DocuSigned by:
Barbara Walz
A5D5C24494CD4A7...

Barbara A. Walz
Senior Vice President
Policy and Compliance
Chief Compliance Officer

DocuSign Envelope ID: 528C77C4-6F79-4662-B8FD-D9ACA27858F8

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

BAW:DC:

Enclosures

cc: Chantell Johnson, via email
Darlene Crosby, via email
File: G471-11.3(10)a-9a

DocuSign Envelope ID: D0801B81-7549-4C41-8817-1434B331B38C

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

July 22, 2020

Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

RE: Colowyo Mine CDPS Permit #CO-0045161
June 2020 DMR Submittal Comments Outfall 010X

Dear CDPHE Representative:

Based on ongoing TIE/TRE assessments for Outfall 010 and demonstration that the water quality has been consistent, Tri-State received written confirmation (via email from Eric Mink--attached) indicating that the current ongoing TIE/TRE work will suffice as the automatic compliance response, and no further action is needed from Tri-State. In addition, on 5/29/20 a permit modification was issued (effective on 7/1/20) that removes the automatic compliance response requirements until 2023 when the compliance schedule ends (based on ongoing studies to resolve the toxicity issue).

If you have any questions about these comments, please contact Chantell Johnson at 303-254-3185 or Darlene Crosby at 303-254-3055.

Sincerely,

DocuSigned by:
Barbara Walz
A5D5C24494CD4A7...

Barbara A. Walz
Senior Vice President
Policy and Compliance
Chief Compliance Officer

BAW:DC:der

Enclosures

cc: Chantell Johnson, via email
Darlene Crosby, via email
File: G471-11.3(10)a-9a

WET TEST REPORT FORM – CHRONIC

Permittee: Colowyo Coal Company **Outfall:** 010A
Permit No.: CO-0045161

Test Type: Routine ☒ Accelerated ☐ Screen ☐
Test Species: *Ceriodaphnia dubia* **IWC:** 100%

Test Start Time	Test Start Date	Test End Time	Test End Date
1300	06-16-2020	1200	06-22-2020

Test Results	Lethality/TCP3B	Reproduction/TKP3B
S code: NOEL	40%	40%
	FAIL	**FAIL**
P code: LC_{25}/IC_{25}	50%	41.4%
	FAIL	**FAIL**
T code:	50%	41.4%

Dilution(s) - % Effluent

Measurements	Control (0%)	20%	40%	60%	80%	100%
% Survival for day 1	100	100	100	100	100	80
% Survival for day 2	100	100	100	70	60	50
% Survival for day 3	100	100	100	70	40	30
% Survival for day 4	100	100	100	60	30	10
% Survival for day 5	100	100	100	50	30	10
% Survival for day 6	100	100	100	50	30	0
Mean 3 Brood Total	19.4	17.1	15.3	4.7	1.1	0.0

Hardness (mg/L) – Receiving Water: N/A Effluent: 802/786/872 Recon Water: 84
Alkalinity (mg/L) – Receiving Water: N/A Effluent: 950/890/1155 Recon Water: 61
Chlorine (mg/L) – Effluent: <0.01 pH (initial/final) – Control: 8.3/7.9 100%: 8.1/8.1
Total Ammonia as NH_3 (mg/L) - Effluent: 0.14/0.11/.30

Were all Test Conditions in Conformance with Division Guidelines? YES ☒ NO ☐
If **NO**, list deviations from test specifications:

Laboratory: SeaCrest Group
Comments:
Analyst's Name: Sarah Adler and Margie Glenn

Signature *Date* 29 June 2020

WET TEST REPORT FORM – CHRONIC

Permittee: Colowyo Coal Company **Outfall:** 010A
Permit No.: CO-0045161

Test Type: Routine ☒ Accelerated ☐ Screen ☐
Test Species: Fathead minnow **IWC:** 100%

Test Start Time	Test Start Date	Test End Time	Test End Date
1225	06-16-2020	1240	06-23-2020

Test Results	Lethality/TCP6C	Growth/TKP6C
S code: NOEL	60%	100%
	FAIL	**PASS**
P code: LC_{25}/IC_{25}	77.5%	>100%
	FAIL	**PASS**
T code:	77.5%	>100%

Dilution(s) - % Effluent

Measurements	Control (0%)	20%	40%	60%	80%	100%
% Survival for day 1	100	100	100	100	100	100
% Survival for day 2	98	100	100	100	100	85
% Survival for day 3	95	100	100	100	93	75
% Survival for day 4	95	98	100	98	85	73
% Survival for day 5	95	95	98	98	80	73
% Survival for day 6	95	95	98	98	73	73
% Survival for day 7	95	95	98	98	68	70
Mean Dry Wt. (mg)	0.325	0.378	0.469	0.437	0.394	0.349

Hardness (mg/L) – Receiving Water: N/A Effluent: 802/786/872 Recon Water: 88
Alkalinity (mg/L) – Receiving Water: N/A Effluent: 950/890/1155 Recon Water: 57
Chlorine (mg/L) – Effluent: <0.01 pH (initial/final) – Control: 8.3/7.9 100%: 8.1/8.1
Total Ammonia as NH_3 (mg/L) - Effluent: 0.14/0.11/.30

Were all Test Conditions in Conformance with Division Guidelines? YES ☐ NO ☒
If **NO**, list deviations from test specifications: DO fell below 4.0 mg/L in overnight test chambers.

Laboratory: SeaCrest Group
Comments:
Analyst's Name: Sean Rainey, Sarah Adler, and Daniel Hillenburg

Signature *Date* 29 June 2020

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: Pond 010A
Contact: Angela Aalbers
Address: 5731 Hwy 13 Meeker Co 81641
Phone # 970 824 1219 E-Mail: AAALBERS@TRCSTATEGT.ORG
Fax # Sampler: AA/TF
Report By: ☐ Mail ☑ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)		Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
010A	6.15.2020	0830	G	420265IBH1		✓															3	G

Turnaround Requirements (Analytical Testing Only)

_____ Standard (10 days) _____ 6-9 Day
_____ 3-5 Day _____ 1-2 Day
Requested Report Date:

Test Species: ☑ Fathead Minnow ☑ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature	Date/Time 6.15.2020 1713	Signature	Date/Time 061520 1713	Signature	Date/Time	Signature	Date/Time

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: 270871
Contact: Angela Aalbers
Address: 5731 State HWY 13 Meeker CO 81641
Phone # 970-824-1219 E-Mail: aaalbers@tristateg.org
Fax # Sampler: Angela Aalbers
Report By: ☐ Mail ☒ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)		Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
OIOA	6/17/20	07:30	~~G~~ G	420265.B #2		X															2	gal

Turnaround Requirements (Analytical Testing Only)

X Standard (10 days) ____ 6-9 Day
____ 3-5 Day ____ 1-2 Day
Requested Report Date:

Test Species: ☒ Fathead Minnow ☒ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature: Angela Aalbers	Date/Time: 6/17/20 11:30	Signature: UPS	Date/Time:	Signature: UPS	Date/Time:	Signature: [illegible]	Date/Time: 061820 850

SeaCrestGroup
AN ENVIRONMENTAL SERVICES COMPANY

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: Colowyo Coal Company
P. O./Project Number: 270871
Contact: Angela Aalbers
Address: 5731 State Hwy 13 Meeker, CO 81641
Phone # 970-824-1219 E-Mail: aaalbers@trisstateg.org
Fax # Sampler: Angela Aalbers
Report By: ☐ Mail ☒ PDF ☐ FAX

Analysis (Check all applicable)

Sample Location or ID	Date	Time	Grab/ Comp	Lab ID (LAB Use Only)	WET: Acute (Indicate Below)	WET: Chronic (Indicate Below)	WET: Accelerated (Indicate Below)	WET: PTI/TIE/TRE (Indicate Below)	Metals (List Below)	Solids (TS/TDS/TSS) (Circle)	Anions (List Below)	Chromium III/VI (Circle)	Oil and Grease	Coliform (Total/Fecal/E-Coli) (Circle)	BOD/COD (Circle)	Other Analysis (List Below)				Number of Containers	Total Volume
010A	6/19/20	07:50	G	4202653#3		X														2	2

Turnaround Requirements (Analytical Testing Only)

X Standard (10 days) ____ 6-9 Day
____ 3-5 Day ____ 1-2 Day

Requested Report Date:

Test Species: ☒ Fathead Minnow ☒ Cerio daphnia ☐ Daphnia magna ☐ Daphnia pulex ☐ Other (List Below)

Special Instructions/Comments:

Relinquished By (1)		Received By (1)		Relinquished By (2)		Received By (2)	
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Angela Aalbers	6/19/20 11:30	UPS		UPS		D. Thornton	6/20/20 8:47

From:	Envs Reports
To:	Johnson, Chantell; Crosby, Darlene; Gilbreath, Chris
Subject:	FW: [EXTERNAL] Re: UPDATE: Colowyo Notification of Chronic WET Results - 3Q19 & Waiver Request for TIE
Date:	Friday, October 4, 2019 9:10:22 AM

From: Mink - CDPHE, Eric <eric.mink@state.co.us>
Sent: Friday, October 4, 2019 8:57 AM
To: Robinson, Diane <drobinson@tristategt.org>
Cc: Gilbreath, Chris <cgilbreath@tristategt.org>; Johnson, Chantell <cjohnson@tristategt.org>
Subject: [EXTERNAL] Re: UPDATE: Colowyo Notification of Chronic WET Results - 3Q19 & Waiver Request for TIE

The work being done on the TIE/TRE will suffice as the automatic compliance so no further action is needed.

Thank you

On Wed, Oct 2, 2019 at 3:11 PM Robinson, Diane <drobinson@tristategt.org> wrote:

> Eric –
>
> Please find the updated attached letter for Colowyo Mine. Please disregard the prior report that was sent earlier today as it was missing some pages. We apologize for any inconvenience. If you have any questions on this submittal, please contact me directly.
>
> Thanks,
> ***Chantell Johnson***
> *Tri-State Generation and Transmission Association, Inc.*
> *Environmental Services*
> Direct 303-254-3185
> cjohnson@tristategt.org

--
Eric Mink
Unit Lead
Clean Water Enforcement Unit

P 303.692.2312
4300 Cherry Creek Drive South, Denver, CO 80246-1530
eric.mink@state.co.us | www.colorado.gov/cdphe/wqcd
24-hour Environmental Release/Incident Report Line: 1.877.518.5608