



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

April 30, 2020

VIA Electronic Mail: janet.binns@state.co.us

Ms. Janet Binns
Division of Reclamation, Mining, & Safety
Coal Program Support Staff
1313 Sherman Street, RM 215
Denver, Colorado 80203

RE: March 2020 Discharge Monitoring Report Submittal
CDPS Permit #CO-0000213
Elk Ridge Mining and Reclamation, New Horizon Mine
DRMS Mine Permit #C-1981-008

Dear Ms. Binns:

Enclosed are the Discharge Monitoring Reports (DMR) for the Elk Ridge Mining and Reclamation, LLC, New Horizon Mine CDPS Permit No. CO-0000213 for March 2020. Tri-State Generation and Transmission Association, Inc. (Tri-State) is the parent to Elk Ridge Mining and Reclamation. The enclosed March 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:

Enclosures

cc: Darlene Crosby (via email)
Jason Carver (via email)
Chantell Johnson (via email)
File G474-11.3(10)a-9a

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

A Touchstone Energy® Cooperative 

CRAIG STATION
P.O. BOX 1307
CRAIG, CO 81626-1307
970-824-4411

ESCALANTE STATION
P.O. BOX 577
PREWITT, NM 87045
505-972-5200

NUCLA STATION
P.O. BOX 698
NUCLA, CO 81424-0698
970-864-7316

From: netdmr-notification@epa.gov
To: [Crosby, Darlene](#); [Johnson, Chantell](#); [Walz, Barbara](#)
Subject: [EXTERNAL] NetDMR DMR(s) Submittal Passed for: CO0000213
Date: Monday, April 27, 2020 10:31:59 AM

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

The following signed 7 DMR(s) were submitted to EPA and were successfully processed:

CDX Transaction ID: _7eb227ca-90ac-4156-8127-a4aca9d74d5b
User ID: BARBARAWALZ1
Timestamp: 04/27/2020 11:29:21

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 012
Discharge: A - SR and Mine Drainage to Tuttle Draw
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 012
Discharge: Q - Quarterly Monitoring for 012A
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 013
Discharge: A - SR & Mine Drainage to Tuttle Draw
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 013
Discharge: Q - Quarterly Monitoring for 013A
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 013
Discharge: X - CHRONIC WET TESTING FOR 013A
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213
Permitted Feature: 016
Discharge: A - SR & Mine Drainage Tributary to Tuttle Draw
Monitoring Period End Date: 03/31/20

Permitted Facility Name: NEW HORIZON MINE
Permit ID: CO0000213

Permitted Feature: 016
Discharge: Q - Quarterly Monitoring for 016A
Monitoring Period End Date: 03/31/20

Thank you.

OFFICIAL NOTIFICATION -- message sent AUTOMATICALLY by Production-NetDMR the official discharge monitoring report (DMR) data reporting environment used for compliance with both the Federal Clean Water Act and the Colorado Pollutant Discharge Elimination permit requirements to submit discharge data electronically

DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

012
External Outfall

Discharge:

012-A
SR and Mine Drainage to Tuttle Draw

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

TSS & Fe limits will be waived & settleable solids limit applied for 10YR/24HR precip event - see pp 8-9 for requirements.

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-254-6111

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														02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU			
					Value NODI							C - No Discharge				C - No Discharge				
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	35.0 30DA AVG	<=	70.0 MX 7D AV	19 - mg/L			
					Value NODI									C - No Discharge		C - No Discharge				
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	1000.0 30DA AVG	<=	6000.0 DAILY MX	28 - ug/L			
					Value NODI									C - No Discharge		C - No Discharge				
03582	Oil and grease	1 - Effluent Gross	0	--	Sample														77/77 - Contingent	GR - GRAB
					Permit Req.										<=	10.0 INST MAX	19 - mg/L			
					Value NODI											C - No Discharge				
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	IN - INSTAN
					Permit Req.	<=	1.09 30DA AVG		Req Mon DAILY MX	03 - MGD										
					Value NODI		C - No Discharge		C - No Discharge											
84066	Oil and grease visual	1 - Effluent Gross	0	--	Sample														01/07 - Weekly	VI - VISUAL
					Permit Req.				Req Mon INST MAX	9P - N=0;Y=1										
					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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-01 13:09 (Time Zone: -06:00)

Report Last Signed By

User:

BARBARAWALZ1

Name:

Barbara Walz

E-Mail:

bwalz@tristategt.org

Date/Time:

2020-04-27 09:29 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

012
External Outfall

Discharge:

012-Q
Quarterly Monitoring for 012A

Report Dates & Status

Monitoring Period:

From 01/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

Quarterly monitoring - see Appendix B, #29, pg 43.

Principal Executive Officer

First Name:

Barara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-254-6111

No Data Indicator (NODI)

Form 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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-01 13:10 (Time Zone: -06:00)

Report Last Signed By

User:

BARBARAWALZ1

Name:

Barbara Walz

E-Mail:

bwalz@tristategt.org

Date/Time:

2020-04-27 09:29 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

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Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

013
External Outfall

Discharge:

013-A
SR & Mine Drainage to Tuttle Draw

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

TSS & Fe limits will be waived & settleable solids limit applied for 10YR/24HR precip event - see pg 7 for requirements.

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-452-6111

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						=	7.2			=	7.3	12 - SU		02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU	0	02/30 - Twice Per Month	GR - GRAB
					Value NODI															
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample								<	1.0			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								=	652.0	=	682.0	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															
01319	Manganese, potentially dissolvd	1 - Effluent Gross	0	--	Sample								=	460.0	=	460.0	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	2618.0 30DA AVG	<=	4738.0 DAILY MX	28 - ug/L	0	01/30 - Monthly	GR - GRAB
					Value NODI															
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample								<	0.3	<	0.3	28 - ug/L		02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	2.3 30DA AVG	<=	18.0 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				
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	0.345	=	1.302	03 - MGD									01/01 - Daily	IN - INSTAN
					Permit Req.	<=	1.44 30DA AVG			Req Mon DAILY MX 03 - MGD								0	01/30 - Monthly	IN - INSTAN
					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	02/30 - Twice Per Month	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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

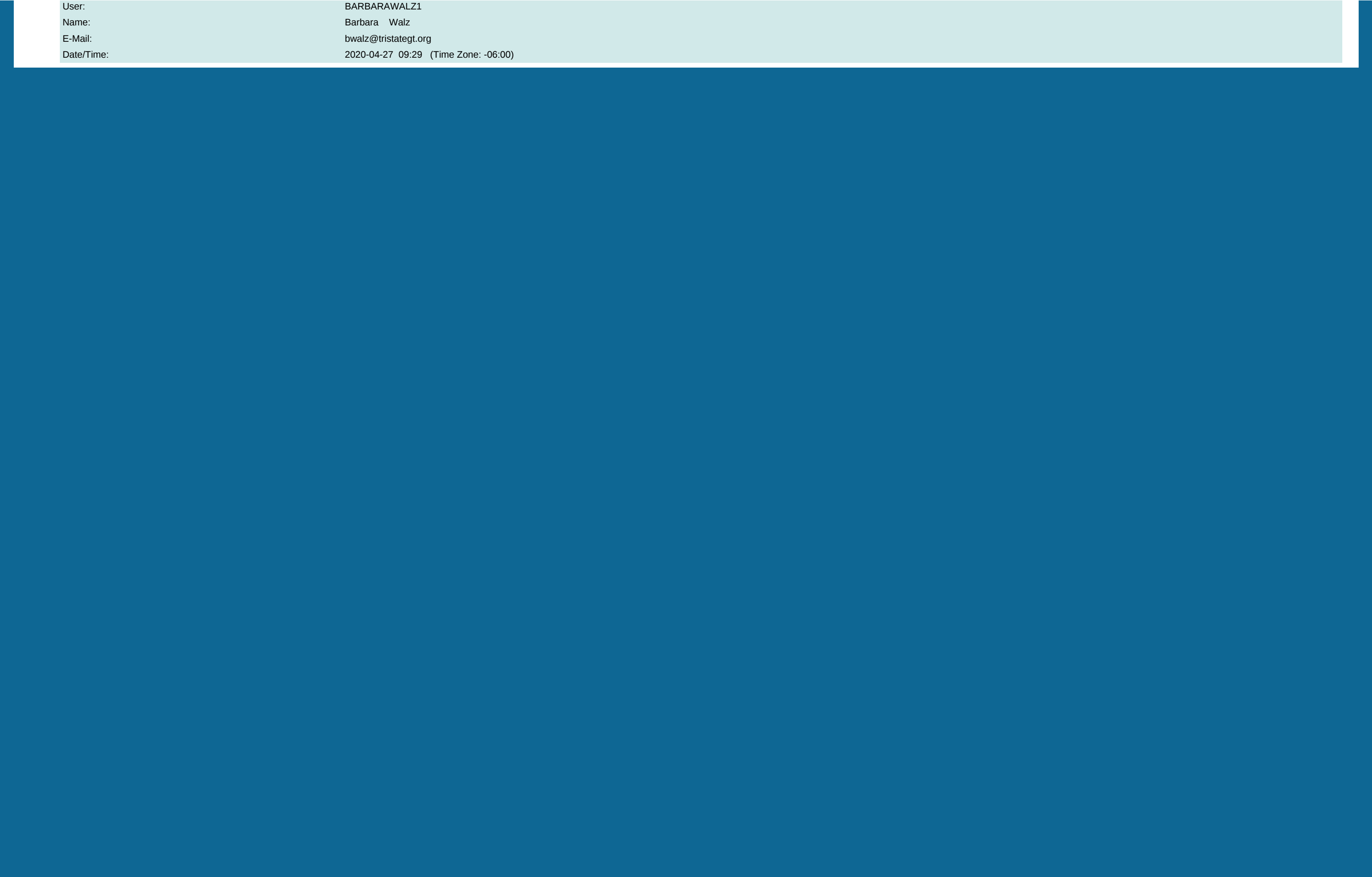
E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-16 10:29 (Time Zone: -06:00)

Report Last Signed By



DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

013
External Outfall

Discharge:

013-Q
Quarterly Monitoring for 013A

Report Dates & Status

Monitoring Period:

From 01/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

Quarterly Monitoring - see Appendix B, #29, pg 43

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-452-6111

No Data Indicator (NODI)

Form 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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-16 10:52 (Time Zone: -06:00)

Report Last Signed By

BARBARAWALZ1

User:

BARBARAWALZ1

Name:

Barbara Walz

E-Mail:

bwalz@tristategt.org

Date/Time:

2020-04-27 09:29 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

013
External Outfall

Discharge:

013-X
CHRONIC WET TESTING FOR 013A

Report Dates & Status

Monitoring Period:

From 01/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

See Part I.D.1 of permit for details of test procedure. Report NOEC using test code "S". Report IC25 using test code "P". Report highest number between "P" and "S" at "T" for each parameter. IWC=100%.

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-452-6111

No Data Indicator (NODI)

Form 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

Name	Type	Size
200424_New_Horizon_March_DMR_Comment_Outfall_013X_Walz_to_CDPHE.pdf	pdf	207976.0
NH2_CDPS_CO0000213_Outfall013_WETresults_March2020_COC.pdf	pdf	594237.0
190911_email_approval_WQCD_Re_New_Horizon_Q2_2019_TIE_Waiver.pdf	pdf	18120.0
200316_New_Horizon_Q1_2020WET_notification_Walz_to_Mink_CDPHE.doc	doc	1074176.0

Report Last Saved By

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-24 10:10 (Time Zone: -06:00)

Report Last Signed By

User:

BARBARAWALZ1

Name:

Barbara Walz



DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

016
External Outfall

Discharge:

016-A
SR & Mine Drainage Tributary to Tuttle Draw

Report Dates & Status

Monitoring Period:

From 03/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

TSS & Fe limits will be waived & settleable solids limits applied for 10YR/24HR precip event - see pp 8-9 for requirements.

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-452-6111

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														02/30 - Twice Per Month	GR - GRAB
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU			
					Value NODI							C - No Discharge				C - No Discharge				
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	35.0 5 DA AVG	<=	70.0 MX 7D AV	19 - mg/L			
					Value NODI									C - No Discharge		C - No Discharge				
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	GR - GRAB
					Permit Req.								<=	1000.0 30DA AVG	<=	2000.0 DAILY MX	28 - ug/L			
					Value NODI									C - No Discharge		C - No Discharge				
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	IN - INSTAN
					Permit Req.	<=	3.123 30DA AVG		Req Mon DAILY MX	03 - MGD										
					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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-06 16:08 (Time Zone: -06:00)

Report Last Signed By

BARBARAWALZ1

User:

BARBARAWALZ1

Name:

Barbara Walz

E-Mail:

bwalz@tristategt.org

Date/Time:

2020-04-27 09:29 (Time Zone: -06:00)

DMR Copy of Record

Permit

Permit #:

CO0000213

Major:

No

Permittee:

Elk Ridge Mining and Reclamation LLC

Permittee Address:

PO Box 33695
Denver, CO 80233-0695

Facility:

NEW HORIZON MINE

Facility Location:

27646 W 5 AVE
NUCLA, CO 81424

Permitted Feature:

016
External Outfall

Discharge:

016-Q
Quarterly Monitoring for 016A

Report Dates & Status

Monitoring Period:

From 01/01/20 to 03/31/20

DMR Due Date:

04/28/20

Status:

NetDMR Validated

Considerations for Form Completion

Quarterly monitoring - see Appendix B, #29, pg 43.

Principal Executive Officer

First Name:

Barbara

Last Name:

Walz

Title:

SVP, Policy and Compliance, CCO

Telephone:

303-452-6111

No Data Indicator (NODI)

Form 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

Elk Ridge Mining and Reclamation LLC

User:

dcrosby@tristategt.org

Name:

Darlene Crosby

E-Mail:

dcrosby@tristategt.org

Date/Time:

2020-04-06 16:09 (Time Zone: -06:00)

Report Last Signed By

BARBARAWALZ1

User:

BARBARAWALZ1

Name:

Barbara Walz

E-Mail:

bwalz@tristategt.org

Date/Time:

2020-04-27 09:29 (Time Zone: -06:00)

4.0 Results

4.1 *Ceriodaphnia dubia* Chronic Toxicity Test

TEST: 7- day chronic with *Ceriodaphnia dubia*

OPERATORS: BK, MG, CL, AW, KG

Start: 2/5/20 11:30

End: 2/11/20 10:30

Test Substance: Outfall 013 Effluent

Client/Project: Tri-State Generation and Transmission – New Horizon Mine

Table 7: Summary results of *C. dubia* chronic toxicity test.

Treatment % Effluent	0	20	40	60	80	100
#alive/#exposed	10/10	9/10	10/10	10/10	9/10	10/10
% survival	100	90	100	100	90	100
Normalized repro / # females exposed $\pm$ SD	39.0 $\pm$ 3.4	35.7 $\pm$ 14.4	34.0 $\pm$ 10.1	35.0 $\pm$ 7.5	29.7 $\pm$ 10.8	29.1 $\pm$ 5.4
Dissolved O ₂ range (mg/L)	<u>6.8</u> 6.5	<u>6.7</u> 6.5	<u>6.8</u> 6.6	<u>6.8</u> 6.6	<u>6.9</u> 6.6	<u>7.0</u> 6.7
pH range (SU)	<u>8.4</u> 8.1	<u>8.6</u> 8.5	<u>8.4</u> 8.3	<u>8.3</u> 8.2	<u>8.2</u> 8.2	<u>8.2</u> 8.1
Conductivity range (μ mho/cm)	<u>383</u> 340	<u>1130</u> 983	<u>1740</u> 1567	<u>2205</u> 1935	<u>2685</u> 2408	<u>3180</u> 2818
Temperature range (°C)	<u>25.9</u> 22.4	<u>25.0</u> 23.3	<u>26.3</u> 23.7	<u>25.8</u> 23.3	<u>25.2</u> 24.1	<u>25.2</u> 24.2

Statistical Analysis:

Survival:

NOEC (Fisher Exact/Bonferroni-Holm) = 100% Effluent

IC₂₅ (ICp Method) = >100% Effluent (95% C.I. unavailable)

Normalized Reproduction:

NOEC (Steel Many-One Rank Sum) = 60% Effluent

IC₂₅ (ICp Method) = 95.0% Effluent (95% C.I. unavailable)

4.2 *Pimephales promelas* Chronic Toxicity Test

TEST: 7-day chronic with *Pimephales promelas*

OPERATORS: BK, MG, KG, CL, AW

Start: 2/5/20 12:45

End: 2/12/20 13:10

Test Substance: Outfall 013 Effluent

Client/Project: Tri-State Generation and Transmission – New Horizon Mine

Table 8: Summary results of *P. promelas* chronic toxicity test.

Treatment % Effluent	0	20	40	60	80	100
#alive/#exposed	38/40	33/40	34/40	25/40	23/40	12/40
% survival	95	82.5	85	62.5	57.5	30
Dry weight (mean wt. (mg)/ #exposed $\pm$ SD)	0.535 $\pm$ 0.036	0.471 $\pm$ 0.130	0.456 $\pm$ 0.085	0.389 $\pm$ 0.108	0.352 $\pm$ 0.081	0.263 $\pm$ 0.110
Dissolved O ₂ range (mg/L)	<u>5.9</u> 5.3	<u>5.6</u> 4.9	<u>5.6</u> 5.0	<u>5.7</u> 5.2	<u>5.6</u> 4.9	<u>5.9</u> 5.3
pH range (SU)	<u>7.9</u> 7.8	<u>8.2</u> 8.1	<u>8.2</u> 8.1	<u>8.1</u> 8.0	<u>8.0</u> 7.9	<u>7.9</u> 7.8
Conductivity range (μ mho/cm)	<u>390</u> 347	<u>1187</u> 1047	<u>1845</u> 1623	<u>2400</u> 2116	<u>2947</u> 2579	<u>3480</u> 3080
Temperature range (°C)	<u>26.1</u> 22.5	<u>26.3</u> 22.9	<u>26.5</u> 22.5	<u>26.5</u> 22.5	<u>26.6</u> 22.4	<u>26.5</u> 22.6

Statistical Analysis:

Survival:

NOEC (Dunnett Multiple Comparison) = 80% Effluent

IC₂₅ (ICp Method) = 51.8% Effluent (95% C.I. unavailable)

Growth:

NOEC (Dunnett Multiple Comparison) = 60% Effluent

IC₂₅ (ICp Method) = 56.2% Effluent (95% C.I. unavailable)

GEI Consultants, Inc./Ecological Division

4601 DTC BLVD., SUITE L100

DENVER, CO 80237

Main: (303) 662-0100 Lab: (303) 264-1120

(GEI Use) Log Number

NH220-1

BIOASSAY LABORATORY CHAIN-OF-CUSTODY

Monday 1 of 1

CLIENT/PROJECT <u>ERM/R/NPDES 013</u>		ADDRESS <u>27646 W. 5TH</u>		CITY <u>NUCLA</u> STATE <u>CO</u> ZIP <u>81424</u>		PHONE # <u>970-864-7316</u> EXT. <u>1109</u>		PROJ. MANAGER <u>C. JOHNSON</u> SAMPLER <u>J. CARVER</u>			
TOTAL NUMBER OF CONTAINERS: <u>3</u>		TEMPERATURE (°C): <u>3.5</u>		TEMPERATURE IN RANGE (0-6°C): YES ☒ NO ☐		IF NOT IN RANGE, SAMPLED SAME DAY, TEMP OK?: YES ☐ NO ☐		LABORATORY RECEIVED BY: <u>[Signature]</u>		DATE/TIME: <u>2-15-20 0916</u>	
COMMENTS: <u>AT COLLECTION,</u>		PHSU: <u>7.67</u> TEMP °C: <u>6.1°</u> COND MS/cm: <u>3.17</u>		LABORATORY RECEIVED BY: <u>[Signature]</u>		DATE/TIME: <u>2/15/20 715</u>		LABORATORY RECEIVED BY: <u>[Signature]</u>		DATE/TIME: <u>2/15/20 715</u>	

GEI Consultants, Inc./Ecological Division
4601 DTC BLVD., SUITE L100
DENVER, CO 80237
Main: (303) 662-0100 Lab: (303) 264-1120

(GEI Use) Log Number NH330-2

BIOASSAY LABORATORY CHAIN-OF-CUSTODY

CLIENT/PROJECT				TESTS REQUIRED				CHLORINE		COMMENTS:
ADDRESS				ACUTE		CHRONIC		Measured by: Client ☐ Lab ☒		
CITY				TR		F				
CLIENT/PROJECT <u>ERM/R/NPDES 013</u> ADDRESS <u>27646 W. 5TH</u> CITY <u>NUCLA</u> STATE <u>CO</u> ZIP <u>81424</u> PHONE # <u>970-864-7316 EXT. 1109</u> PROJ. MANAGER <u>C. JOHNSON</u> SAMPLER <u>J. CARVER</u>				☐ ACUTE ☐ CHRONIC		☐ ACUTE ☐ CHRONIC		Measured by: Client ☐ Lab ☒		
SAMPLE TYPE/SITE <u>OUTFALL 013 EFFLUENT</u> <u>GRAB</u>				☐ Composite ☒ Grab		☐ Date Collected ☒ Time Collected				
PROJECT INFORMATION CLIENT DROP OFF: ☐ COURIER: UPS ☐ FEDEX ☒ OTHER ☐				LABORATORY RECEIVING INFORMATION CONDITION OF SAMPLE ON RECEIPT: <u>7 good</u> CUSTODY SEAL INTACT?: YES ☒ NO ☐ N/A ☐				CLIENT RELINQUISHED BY: <u>Jason Carver</u> DATE/TIME: <u>2/6/20 0904</u>		COMMENTS:
TOTAL NUMBER OF CONTAINERS: <u>2</u> <u>2- 1 GALLON CUBES</u>				TEMPERATURE (°C): <u>2.0</u> TEMPERATURE IN RANGE (0-6°C): YES ☒ NO ☐ IF NOT IN RANGE, SAMPLED SAME DAY, TEMP OK?: YES ☐ NO ☐				LABORATORY RECEIVED BY: <u>Ben Kline</u> DATE/TIME: <u>2/6/20 217120 740</u>		
COMMENTS: <u>AT COLLECTION,</u> <u>Phsu: 7.52 Temp°C: 5.6 Cond. µs/cm: 3,104</u>										

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Main: (303) 662-0100 Lab: (303) 264-1120

(GEI Use) Log Number NH220-3

BIOASSAY LABORATORY CHAIN-OF-CUSTODY

Updated 2019

GEI Consultants, Inc./Ecological Division

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Main: (303) 662-0100 Lab: (303) 264-1120

(GEI Use) Log Number NH220-3

BIOASSAY LABORATORY CHAIN-OF-CUSTODY

[illegible]

From: [Mink - CDPHE, Eric](#)
To: [Envs Reports](#)
Cc: [Gilbreath, Chris](#); [Johnson, Chantell](#)
Subject: [EXTERNAL] Re: New Horizon Q2 2019 TIE Waiver
Date: Wednesday, September 11, 2019 10:38:38 AM

Thank you for the submission. Updates via the TRE requirements will be acceptable to cover the TIE reporting requirements.

Let me know if you have any other questions.

Thank you

On Mon, Sep 9, 2019 at 10:12 AM Envs Reports <Envs@tristategt.org> wrote:

Eric –

Please find the attached update letter and report for New Horizon Mine. 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](tel:18775185608)



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

April 23, 2020

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

RE: New Horizon Mine CDPS Permit #CO-0000213
March 2020 DMR Submittal Comments Outfall 013X

Dear CDPHE Representative:

Tri-State notified WQCD on March 16, 2020 of the results of the First Quarter 2020 WET testing. Tri-State requested a waiver from typical TIE automatic compliance responses, based on ongoing TIE/TRE studies for this Outfall and demonstration that the water quality has been consistent. WQCD previously provided this type of waiver (9/11/2019 enclosed) and is anticipated to approve the Q1 2020 requested waiver.

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

Sincerely,

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

BAW:DC:

Enclosures

cc: Chantell Johnson, via email
Darlene Crosby, via email
File: G474-11.3(10)a-9a



March 16, 2020

Submitted via email eric.mink@state.co.us

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

RE: CDPS Permit #CO-0000213
New Horizon Mine (Outfall 013)
Notification of Q1 2020 Chronic WET Results and Waiver Request for TIE

Dear Mr. Mink:

On March 5, 2020, the third party laboratory GEI Consultants provided the enclosed analytical report to Tri-State Generation and Transmission Association (Tri-State) containing the first quarter (Q1) Whole Effluent Toxicity (WET) testing results for Outfall 013 at the Elk Ridge Mining and Reclamation, LLC (Elk Ridge) New Horizon Mine (CDPS Permit #CO-0000213). Tri-State is the parent of Elk Ridge. Therefore, we are providing the required notification of WET results, in accordance with Part I.D.1b of the permit.

Outfall	Species	Reproduction/Growth Results		IWC
		NOEC*	IC25**	
013	<i>Ceriodaphnia dubia</i>	60%	95.0%	100%
013	<i>Pimephales promelas</i>	60%	56.2%	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 fourth and first quarter WET testing are “report only” at Outfall 013 until September 30, 2020 (delayed effective date). As discussed in earlier submittals and in accordance with the automatic compliance response requirements of the permit, the facility has conducted multiple Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluation (TRE) for this outfall location. Based on the continued water quality conditions and the comprehensive treatment investigations that were proposed in the permit modification request for this outfall, we request a waiver from further TIEs (and TREs).

We will also be submitting the initial WET test summary and chains of custody with the March 2020 Discharge Monitoring Report (DMR) by April 28, 2020.



Mr. Eric Mink, WQCD
March 16, 2020
Page 2

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,

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

BAW:CJ

Enclosure

cc: Chris Gilbreath (via email)
Chantell Johnson (via email)
File G474-11.3(10)a-5



bcc: Dan Casiraro (via email)
Jason Carver (via email)
Darlene Crosby (via email)
Frank Ferris (via email)
Mindy Sickels (via email)
Tony Tennyson (via email)

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