

## BOARD OF ENVIRONMENTAL REVIEW DECEMBER 10, 2021

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# BOARD OF ENVIRONMENTAL REVIEW December 10, 2021, 9:00 AM DEQ ZOOM CONFERENCE

#### -----

**NOTE**: Board members, the Board attorney, and secretary will be participating electronically. Interested persons, members of the public, and the media are welcome to attend via Zoom or telephonically. The Board will make reasonable accommodations for persons with disabilities who wish to participate in this meeting. Please contact the Board Secretary by e-mail at <u>deqbersecretary@mt.gov</u>, no less than 24 hours prior to the meeting to advise her of the nature of the accommodation needed.

## <u>9:00 AM</u>

## I. ADMINISTRATIVE ITEMS

- A. REVIEW AND APPROVE MINUTES
  - 1. The Board will vote on adopting October 8 and October 29 meeting minutes.

Public Comment.

B. Progress of the study to determine bases if any to reduce time to process appeals before the Board.

Public Comment

C. The Board will determine the schedule of its meetings in 2022.

#### **II. BRIEFING ITEMS**

- A. CONTESTED CASE UPDATES
  - 1. Enforcement cases assigned to the Hearing Examiner
    - a. In the matter of violations of the Water Quality Act by Reflections at Copper Ridge, LLC, at Reflections at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105376), BER 2015-01 WQ and In the matter of violations of the Water Quality Act by Copper Ridge Development Corporation at Copper Ridge Subdivision, Billings, Yellowstone County (MTR105377), BER 2015-02 WQ.

On April 17, 2015, Copper Ridge Development Corporation and Reflections at Copper Ridge, LLC, filed a Notice of Appeal and Request for hearing with the Board.

i. District Court Case: This matter is before the District Court on judicial review following an intermediate agency ruling. DEQ began separate enforcement actions against Copper Ridge Development Corp. and Reflections at Copper Ridge, LLC, for violations of the Montana Water Quality Act. The enforcement actions were followed by separate administrative appeals. The cases were consolidated before a hearing examiner at Petitioners' request. Following an evidentiary ruling that would allow for the admission of certain photographs, Petitioners moved to separate the cases again because the evidence to be admitted pertained to only one Petitioner. The motion was denied. The hearing examiner also denied Petitioners' subsequent motion in limine. Petitioners then filed a petition for judicial review of the hearing examiner's intermediate rulings and named the BER and DEQ as Respondents. BER filed a motion to dismiss on the grounds that BER should not have been named in the petition since it was not a party to the underlying contested case hearing. The motion was briefed and argued on October 7, 2020. On March 17, 2021, Judge Harada denied BER's motion to dismiss. She determined that while BER is not a required party, it may be named as a party on judicial review. She has not yet issued a decision on the underlying petition for judicial review.

b. In the matter of the notice of appeal by Duane Murray regarding the notice of violations and administrative compliance and penalty order (Docket No. SUB-18-01; ES#36-93-L1-78; FID 2568), BER 2020-01 OC.

At its April 2021 meeting, the Board remanded this matter back to Hearing Examiner Lindsey Simon for further proceedings. On May 17, 2021, Hearing Examiner Simon issued an Order on Remand setting the remaining procedural deadlines in this case. On May 28, 2021, DEQ filed a "Motion to Amend the Scheduling Order and to Reopen Discovery for a Limited Purpose." On June 1, 2021, William Holahan took responsibility of this matter as a hearing examiner and on June 4, 2021, issued an Order granting DEQ's Motion to Amend. Hearing Examiner Holahan also issued an Amended Scheduling Order that same day. Discovery closed on August 3, 2021. On August 25, 2021, DEQ filed another unopposed motion to amend the scheduling order; the Hearing Examiner granted the motion and issued a new schedule. Dispositive motions were due September 29, 2021; if no such motions were filed, the parties would propose dates for an evidentiary hearing by October 13, 2021. On September 13, 2021, Aislinn Brown took responsibility of this matter as a hearing examiner. On September 30, 2021, DEQ filed a motion for summary judgment. Mr. Murray did not respond by the deadline of October 21. On November 30, 2021, the Hearing Examiner ordered oral argument on the limited question of how to interpret the Certificate of Subdivision Plat Approval, to take place on December 9 at 9am.

# c. In the Matter of Sidney Sugars Incorporated Appeal of Montana Pollutant Discharge Elimination System Permit No. MT0000248, BER 2021-07 WQ

On September 30, 2021, Sidney Sugars Incorporated filed a Notice of Appeal concerning appeal of portions of MPDES Renewal Permit. No. MT 0000248 which was issued by DEQ to Sidney Sugars Incorporated on August 31, 2021. On October 8, 2021, the Board assigned this case to ALS. This case has been assigned to Aislinn Brown who will be conducting a conference with the parties to establish a schedule for pre-hearing and hearing matters. On November 30, 2021, the Hearing Examiner issued a prehearing order to the parties.

- 2. Non-enforcement cases assigned to the Hearings Examiner
  - a. In the matter of the Notice of Appeal and Request for Hearing by Alpine Pacific Utilities Regarding Issuance of MPDES Permit No. MTX000164, BER 2019-06 WQ.

At the Board's October 9, 2020, meeting it voted to adopt the parties Stipulation and Request for Retention of Board Jurisdiction. On May 3, 2021, the parties filed an update with Hearing Examiner Lindsey Simon stating that pursuant to the Stipulation, Alpine had submitted the monitoring well plan to DEQ, that DEQ has approved the monitoring well installation plan, and that the monitoring well has been installed. On June 11, 2021, William Holahan took responsibility for this matter as a hearing examiner. On August 2, 2021, the parties filed a Joint Status Report with the Hearing Examiner. Alpine Pacific Utilities has not exercised its discretion under the Stipulation that would trigger reporting of additional activities at this time to the Board. The Board retains jurisdiction in the case that the stipulated terms are not implemented and approved by DEQ. Status reports are due every three months. The Board's jurisdiction extends at the latest to July, 2024. The parties submitted a joint status report to Hearing Officer Doud on November 1, 2021, advising of the progress they have made in this matter.

b. In the matter of Westmoreland Resources, Inc.'s, appeal of final MPDES permit No. MT0021229 issued by DEQ for the Absaloka Mine in Hardin, Big Horn County, MT, BER 2015-06 WQ.

On September 25, 2015, Westmoreland Resources, Inc. filed a notice of appeal and request for hearing. ALS was assigned as Hearing Examiner. The case was stayed pending a Montana Supreme Court decision, which was issued in September 2019. On April 24, 2020, the parties filed a Joint Motion for Stay indicating that they are working toward settlement of the case. That motion was granted on April 28, 2020, and the case was stayed until July 24, 2020. The parties filed a Joint Motion to Continue Stay on July 24, 2020, and September 9, 2020, which was granted on July 29, 2020, and September 9, 2020. On September 30, 2020, the parties filed a "Joint Motion to Remand and Suspension of Proceedings." The BER granted that Motion on October 9, 2020, and issued its Order granting remand on November 16, 2020. The parties filed a joint status report on June 30, 2021, stating that they continue to work through the settlement agreement provisions and update to the permit renewal information.

c. In the Matter of the Notice of Appeal and Request for Hearing by Spring Creek Coal, LLC Regarding Issuance of MPDES Permit No. MT0024619, BER 2019-02 WQ.

On April 12, 2019, the BER appointed ALS to preside over this contested case. On May 8, 2020, the parties filed a Joint Motion to Substitute, requesting that Navajo Transitional Energy Company, LLC replace Spring Creek Coal as a party, as it had replaced Spring Creek Coal as the permit holder. The motion to substitute was granted on May 13, 2020, and an Amended Scheduling Order was issued on May 12, 2020. On January 21, 2021, Hearing Examiner Andrew Cziok took responsibility for this matter as a hearing officer of this contested case. The parties filed a Joint Motion for Remand of permit and Suspension of Proceedings on March 17, 2021. Hearing Examiner Cziok granted that Motion, and the parties filed a status report on June 30, 2021, stating DEQ had noticed the draft modification of permit to the public on June 14, 2021. The public was able to comment on the draft permit modification through July 15, 2021. DEQ will respond to the public comments. d. In the Matter of the Notice of Appeal by the Rippling Woods Homeowners Association, et al., Regarding Approval of Opencut Mining Permit No. 2949, Moudy Pit Site, Ravalli County, MT, BER 2019-08 through 21 OC.

Between November 8, 2019, and November 29, 2019, the Board received fourteen appeals from various parties regarding the approval of Opencut Mining Permit No. 2949. On December 13, 2019, the Board consolidated for procedural purposes BER 2019-08 through 21 OC. Several parties were dismissed from the appeals and a Scheduling Order was issued on January 31, 2020. DEQ filed a Partial Motion for Summary Judgment on September 29, 2020. The remaining appellants filed a response on October 21, 2020, and DEQ filed a reply on November 4, 2020. Former Hearing Examiner Eckstein held Oral argument on DEQ's Partial Motion for Summary Judgment on February 11, 2021. Hearing Examiner Snowberger issued a "Notice of Substitution" on March 12, 2021. On April 12, 2021, Ms. Snowberger issued a Disclosure and Status Conference stating that she had a potential conflict and set a status conference for April 15, 2021. Ms. Snowberger issued a Notice of Recusal on May 13, 2021, and Hearing Examiner Caitlin Buzzas issued a Notice of Substitution that same day. On August 26, 2021, Appellants' issued Notice of Issue and Motion for Summary Judgment. On September 15, 2021, DEQ made a Motion to Strike the Appellants' Motion for summary judgment as untimely and requested that if motion is denied, that the Hearing Examiner set a briefing schedule for responses and reply. On September 24, 2021, the Plaintiffs issued their Response. On November 10, 2021, a scheduling conference was held with the parties. An Order was issued giving DEQ until January 18, 2022, to file their response and Appellants have until January 25, 2022, to file their reply.

e. In the Matter of Notice of Appeal and Request for Hearing by Western Energy Company Regarding Approval of Surface Mining Permit No. C2011003F, BER 2019-05 OC.

On May 31, 2019, the BER appointed ALS to preside over the contested case for procedural purposes only. At the Board's August meeting, it voted to assign the case in its entirety to ALS. The parties cross moved for partial summary judgment, and Westmoreland also filed a Motion to Dismiss. On November 24, 2020, former Hearing Officer Clerget issued an order denying Westmoreland's Motion to Dismiss, denving Conservation Groups' Motion for Partial Summary Judgment, and granting Westmoreland's and DEQ's Motions for Partial Summary Judgment. Ms. Clerget held a status conference on December 4, 2020, at which all parties could not agree to bring the motions decision before the Board. Therefore, the case proceeded to a hearing on the one remaining issue. Former Hearing Examiner Clerget issued an Amended Scheduling Order on January 14, 2021. Hearing Examiner Jeffrey Doud took responsibility for this matter as a hearing officer as of January 20, 2021. A four-day hearing took place on June 2-4 and 21, 2021. The parties sought an extension of time to file their respective proposed finding of fact and conclusions of law which was granted. The parties were due to file their respective FOFCOLS on October 8, 2021, and their response briefs on November 12, 2021. Thereafter, DEQ sought an 80-day extension to file their response brief following Mr. Lucas' withdrawal from the matter and assignment of a new DEQ attorney. Petitioners opposed the extension. Hearing Examiner Doud granted DEQ's request for an extension. The parties' response briefs are now due on January 31, 2022.

f. In the Matter of Contest and Request for Hearing by Talen Montana, LLC Regarding the Selection of a Remedy and Setting of Financial Assurance for the Colstrip Steam Electric Station Units 1 & 2 by the Montana Department of Environmental Quality, BER 2020-07 MFSA/WQA.

On December 17, 2020, Talen Montana LLC filed a Request for Hearing and Protective Notice of Contest. The parties requested the proceeding be stayed pending completion of dispute resolution. That request was granted by former Board Chair Deveny on December 18, 2020. The Board assigned this matter to ALS as Hearing Examiner. Katherine Orr was assigned as Hearing Examiner for this matter and issued an Order to Set Scheduling Conference on March 9, 2021. The parties filed a Joint Request to Continue Stay of BER Proceedings on March 18, 2021. Ms. Orr signed an Order Continuing Stay and Delaying Scheduling Conference Until Expiration of Stay Order on March 19, 2021. The parties filed a Joint Status Report on October 28, 2021, in which they indicated that on October 18, 2021, the parties reached a settlement agreement that was signed by the MDEQ Director and a representative for Talen Montana. The Parties deemed the dispute resolution complete and the matters underlying Talen Montana's Notice of Contest resolved. The parties filed a Stipulation for Dismissal without an order pursuant to Rule 41 (a)(1)(A)(ii), M.R.C.P., on November 8, 2021.

g. In the matter of notice of appeal and request for hearing by the Western Sugar Cooperative regarding its Montana Pollutant Discharge Elimination System Permit No. MT0000281 issued October 29, 2020, BER 2020-05 WQ.

On November 24, 2020, the Board received a Notice of Appeal from Western Sugar Cooperative. At its December meeting, the Board assigned this matter to ALS as Hearing Examiner and former Hearing Officer Clerget was assigned. Ms. Clerget issued a Prehearing Order on January 4, 2021. Hearing Examiner Andrew Cziok took responsibility for this matter as a hearing officer on January 21, 2021. Mr. Cziok issued a Scheduling Order on March 16, 2021. On June 28, 2021, Western Sugar Cooperative filed a Motion for Declaratory Ruling. The motion was denied on August 24, 2021. Western Sugar Cooperative refiled its motion as a motion for summary judgment and DEQ filed its response brief. DEQ requested a hearing on the motion for summary judgment. An oral argument was held on November 9, 2021. The Hearing Examiner issued an order seeking proposed orders on the motion for summary judgment to be filed by December 17, 2021.

- 3. Contested Cases not assigned to a Hearing Examiner
  - a. An appeal in the matter of amendment application AM3, Signal Peak Energy LLC's Bull Mountain Coal Mine #1 Permit No. C1993017, BER 2016-07 SM.

On August 18-21, 2020, the parties participated in a contested case hearing. The parties filed their Proposed Findings of Fact and Conclusions of Law on December 18, 2020. As of March 31, 2021, Hearing officer Caitlin Buzzas took responsibility for this matter. On May 27, 2021, Signal Peak filed a Motion for the Board to Reclaim Jurisdiction. Ms. Buzzas denied the Motion on July 30, 2021. She issued proposed findings of fact and conclusions of law on July 30, 2021The proposed findings of fact and conclusions of law were provided to the Board for action at its August 13, 2021, meeting thereby placing responsibility on the Board to render a final decision after exceptions were filed. The parties filed their exceptions and responses to exceptions. On October 25, 2021, DEQ filed a Motion for Clarification and Request for Stay of Oral Argument pending Appearance of successor counsel. On November 11, 2021, MEIC responded to DEQ's Motion and stated it does not oppose DEQ's request to set the date for oral argument on exceptions before the Board. The Board under Chair Ruffatto's signature issued an Order dated November 23, 2021, in which oral argument on the exceptions and responses to exceptions will be held at the first regularly scheduled Board meeting of 2022.

b. Montana Environmental Information Center, and Sierra Club v. Montana Department of Environmental Quality, Montana Board of Environmental Review, and Western Energy Co. (DV-2019-34, Rosebud County) (District Court).

In July 2019, MEIC and the Sierra Club filed a petition for judicial review of BER's decision to approve a permit to expand the Rosebud Mine. BER filed a motion to dismiss on the grounds that BER should not have been named in the petition since it was the deciding agency, not a party to the underlying contested case proceeding. Judge Bidegaray denied the motion on March 12, 2020. The Montana Supreme Court denied our petition for writ of supervisory control to have the Order reviewed before the case was fully decided by the District Court and remanded the case.

The petition for judicial review has been fully briefed, and the parties presented oral argument on December 16, 2020. Petitioners recently submitted supplemental authority, and the Respondents (other than BER) responded. The matter was fully submitted, and Judge Bidegaray issued a decision in favor of MEIC. Since then, DEQ and the intervenors (mining companies) have asked for some clarification on the Order and a stay pending appeal to the Montana Supreme Court. If a judgement is entered and appeals are begun, the Board will need to decide whether to appeal denial of its motion to dismiss it as a party to the case.

# **III. ACTION ITEMS**

# a. In the matter of: Notice of Appeal and Request for Hearing by Oreo's Refining Regarding Solid Waste License Expiration (License #574).

On August 28, 2021, the Board issued Prehearing Order requesting that the parties attempt settlement of the appeal by September 9, 2021. On September 10, 2021, the parties filed a Joint Status Report and Unopposed Motion for Stay of Proceedings the Board Chairman has signed an Order granting a continuance until October 12, 2021, for the parties to attempt to reach settlement. On November 3, 2021, the parties filed a Joint Status Report and reported that they cannot reach a settlement. They are requesting this matter move forward with the contested case procedures under Title 2, chapter 4, part 6, MCA. The Board may determine to hear the case itself or to assign a hearing examiner for all or a portion of the case.

b. In the matter of the notice of appeal and request for hearing by Western Energy Company (WECO) regarding its MPDES Permit No. MT0023965 issued for WECO's Rosebud Mine in Colstrip, BER 2012-12 WQ.

This matter has been stayed pending resolution of Montana Environmental Information Center and Sierra Club v. Montana DEQ and Western Energy <u>Company</u> (now on remand to the First Judicial District Court as Cause No. CDV 2012-1075). On September 10, 2019, the Montana Supreme Court reversed the First Judicial District Court on decisions of law and determined that DEQ properly interpreted rules implementing the Montana Water Quality Act (specifically ARM 17.30.637(4)). The Court recognized that DEQ has the flexibility to exempt ephemeral waters from certain water quality standards applicable to Class C-3 waters without BER reclassifying the waters. The Court also determined that DEQ lawfully permitted representative sampling of outfalls under Western Energy Company's MPDES permit. The Montana Supreme Court remanded the case back to the District Court for further proceedings to determine certain issues of material fact, specifically whether DEQ acted properly regarding a stretch of East Fork Armells Creek that is potentially impaired and intermittent, whether it is necessary for DEQ to adopt a TMDL for impaired segments of East Fork Armells Creek, and whether the representative monitoring selected by DEQ is factually supported. On July 6, 2021. First Judicial District Court Judge Abbott granted DEQ's and Westmoreland Rosebud Mining, LLC's (formerly WECo) joint motion to stay the litigation due to the fact that a renewed version of MT0023965 took effect on August 1, 2021. On or before August 15, 2021, the parties are to either move to dismiss First Judicial District Court Cause No. CDV 2012-1075 or move for a status conference to determine future proceeding in the case. On November 10, 2021, the parties jointly filed an unopposed motion to dismiss with the Board.

c. In the matter of the notice of appeal and request for hearing by Westmoreland and Rosebud Mining LLC regarding issuance of MPDES Permit No. MT 0023965 (BER 2021-05 WQ).

Westmoreland Rosebud Mining LLC appealed the issuance of MPDES Permit MT 0023965. The Appeal is limited to the electrical conductivity effluent limitation for discharges into Lee Coulee. The Board assigned this matter in its entirety to ALS as Hearing Examiner. Hearing Examiner Drew Cziok has been assigned as hearing examiner in this case. The parties filed a Stipulation for Final Agency Decision on November 23, 2021 together with a Proposed Board Order for Final Agency Decision.

#### **IV. RULE REVIEW**

# a. In the Matter of Adoption of New Rule I pertaining to Selenium Standards for Lake Koocanusa, BER 2021-04 WQ.

On June 30, 2021, and July 1, 2021, the Board received a request from Teck Coal Limited for the Board to review Montana Administrative Rule 17.30.632 to determine whether it is more stringent than the comparable federal guideline in violation of the Montana Water Quality Act. The Board issued a Public Notice on August 27, 2021, inviting comment on the process to evaluate the stringency of the rule. Comments were due on September 24, 2021. The Public Notice also invited response to the comments suggesting a process by September 28, 2021. The Board analyzed the comments and responses to comments at the special meeting on October 29, 2021. On October 29, 2021, the Board determined that a scheduling notice would be issued for submission of public comments and that the review will not be in a contested case format. On November 23, 2021, the scheduling notice was posted on the Board website. The record on the rule proceedings from 2020 will be posted on December 15, 2021.

# V. BOARD COUNSEL UPDATE

Counsel for the Board will report on general Board business, procedural matters, and questions from Board Members.

# VI. GENERAL PUBLIC COMMENT

Under this item, members of the public may comment on any public matter within the jurisdiction of the Board that is not otherwise on the agenda for the meeting. Individual contested case proceedings are not public matters on which the public may comment.

# VII. ADJOURNMENT



# BOARD OF ENVIRONMENTAL REVIEW MEETING MINUTES

# **OCTOBER 8, 2021**

## Call to Order

Chairperson Ruffatto called the meeting to order at 9:00 a.m.

#### <u>Attendance</u>

# **Board Members Present**

By Zoom: Chairman Ruffatto; Board Members Joseph Smith, David Lehnherr, Jon Reiten In Person: Board Member David Simpson

A quorum of the Board was present.

#### Board Attorney(s) Present

Katherine Orr, Attorney General's Office, Department of Justice

#### **DEQ Personnel Present**

Acting Board Liaison: Chad Anderson Board Secretary: Regan Sidner DEQ Legal: Kirsten Bowers, Nick Whitaker, Catherine Armstrong, Aaron Pettis, Sarah Clerget, Angela Colamaria, Kurt Moser Public Policy: Rebecca Harbage, Moira Davin Water Quality: Amy Steinmetz, Darrin Kron, Jon Kenning Mining: Chris Cronin

#### Other Parties Present

Laurie Crutcher, Laurie Crutcher Court Reporting Shiloh Hernandez Vicki Marquis **Clayton Elliott** Aaron Bolton Catherine Laughner Murry Warhank Diana Hupp Wayne Petryshen Alexis Adams Jeremy Craft Caitlin Buzzas Andrew Cziok Lauren Sullivan Aislinn Brown Derf Johnson Andy Janes Emily Qui Jon Metropoulos Ellie Hudson-Heck Eric Regensburger Jason Gildea SR Yemington Andrew Gorder John Martin

# I. ADMINISTRATIVE MATERIALS

# A. REVIEW AND APPROVE MINUTES

# A.1. The Board will vote on adopting the August 13, 2021 meeting Minutes

There was no board discussion and no public comment.

Board member Smith moved to approve the August 13, 2021 meeting minutes with the amendment that Dave Simpson's name be corrected in the attendance; Board member Lehnherr seconded. The motion passed unanimously.

# II. BRIEFING ITEMS

# A. CONTESTED CASE UPDATES

II.A.2.I. In the matter of: Notice of Appeal and Request for Hearing by Oreo's Refining Regarding Solid Waste License Expiration (License #574). Katherine provided an update to the Board. Chair Ruffatto has signed a motion for extension in case.

# III. ACTION ITEMS

III.1. An appeal in the matter of amendment application AM3, Signal Peak Energy LLC's Bull Mountain Coal Mine #1 Permit No. C1993017, BER 2016-07 SM. Oral argument between the parties was on the agenda for the meeting. An Order Granting Joint Motion for Extension of Time to File Exceptions to Findings of Facts and Conclusions of Law and Response Briefs was signed by Hearing Examiner Buzzas on August 11, extending the deadline for exceptions to be filed by the parties from September 15 to October 15, 2021. Oral argument did not proceed, as the Board had not reclaimed jurisdiction over the case at the time of the Board Meeting with the extension in place.

# IV. NEW CONTESTED CASES

IV.1. In the matter of Sidney Sugars Incorporated Appeal of Montana Pollutant Discharge Elimination System Permit No. MTOOOO248, BER 2021-07 WQ. The Board discussed the merits of retaining the case over assigning to a hearing examiner. Board Member Reiten moved that the Board assign the case to a hearing examiner in its entirety; Board Member Lehnherr seconded. The motion passed unanimously.

# V. RULE REVIEW

Chair Ruffatto thanked all interested parties who provided comment or responses comments. The Board discussed the merits of accepting and considering the petition.

Board Member Simpson moved to accept and consider the petition with regard to MCA 17.30.632; Chair Ruffatto seconded. The motion was not carried with Chair Ruffatto and Board Members Smith and Simpson assenting and Board Members Lehnherr and Reiten dissenting.

Board Member Reiten moved to dismiss the petition; Board Member Lehnherr seconded. The motion was not carried with Board Members Reiten and Lehnherr assenting and Chair Ruffatto and Board Members Smith and Simpson dissenting.

Chair Ruffatto moved to schedule a Special Meeting of the Board to address this agenda item; Board Member Simpson seconded. The motion passed unanimously.

## VI. BOARD COUNSEL UPDATE

Board Members discussed with Board Counsel Orr the possibility of providing documents to the Board Secretary to be noticed to the Board and the public for review more than seven days prior to Board Meetings.

## VII. GENERAL PUBLIC COMMENT

No public comment was given.

# VII. ADJOURNMENT

Board Member Simpson moved to adjourn; Chair Ruffatto seconded. The motion passed unanimously. The meeting adjourned at 10:34 AM.

Board of Environmental Review October 8, 2021, minutes approved:

<u>\_/s/</u> STEVEN RUFFATTO CHAIRMAN BOARD OF ENVIRONMENTAL REVIEW

DATE



# BOARD OF ENVIRONMENTAL REVIEW MEETING MINUTES

# OCTOBER 29, 2021

# <u>Call to Order</u>

Chairperson Ruffatto called the meeting to order at 9:00 a.m.

# <u>Attendance</u>

#### **Board Members Present**

By Zoom: Chairman Ruffatto; Board Members Joseph Smith, David Lehnherr, Jon Reiten David Simpson, Julia Altemus, Stacy Aguirre

A quorum of the Board was present.

## Board Attorney(s) Present

Katherine Orr, Attorney General's Office, Department of Justice

## **DEQ Personnel Present**

Board Liaison: George Mathieus Board Secretary: Lauren Anderson DEQ Legal: Angela Colamaria, Kirsten Bowers Public Policy: Kevin Stone Water Quality: Amy Steinmetz, Lauren Sullivan, Myla Kelly

## **Other Parties Present**

Laurie Crutcher, Laurie Crutcher Court Reporting Andy Janes C Pepino Derf Johnson Ellie Hudson-Heck Erin Sexton Jason Gildea Murry Warhank Steven Fifer Tonya Fish Wyatt Petrychen Vicki Marquis Josh Letcher Peggy Trenk

# I. RULE REVIEW

# 1.1. In the matter of adoption of new rule I pertaining to selenium standards for Lake Koocanusa, BER 2021-04 WQ / BER 2021-08 WQ.

The Special Meeting of the Board was convened to discussed the petitions of Teck Coal Limited and the Board of County Commissioners of Lincoln County, Montana, regarding the adoption of new rule I pertaining to selenium standards for Lake Koocanusa.

Board member Smith moved to combine the petition from Teck Coal and the Petition from the Lincoln County Commissioners; Board Member Lehnherr seconded. The motion passed unanimously.

Board member Lehnherr moved to dismissed the petitions immediately; board member Reiten seconded. The motion was not carried with Board Members Reiten and Lehnherr assenting and Chair Ruffatto and Board Members Smith, Altemus, Aguirre and Simpson dissenting.

Chair Ruffatto moved that the Board adopt a process to consider the petitions of Teck Coal and Lincoln County; Board Member Simpson seconded. The motion passed with board members Lehnherr and Reiten dissenting.

Chair Ruffatto moved that the board follow the non-contested case, less formal, more streamlined process, as proposed by Teck Coal; Board Member Simpson seconded. The motion passed with board members Lehnherr and Reiten dissenting.

Board Member Simpson moved to proceed in the consolidated matter of the petitions of Teck Coal and Lincoln County Commissioners based upon the date of the filing of the Lincoln County Commissioners' petition; Board Member Altemus seconded. The motion passed unanimously. The Lincoln County Commissioners' petition was filed October 14.

Chair Ruffatto moved that the Board Delegate to Katherine Orr the responsibility of compiling the record, placing it on the website, and in doing so, she can consult with whoever she, in her discretion, feels it would be appropriate to compile that record accurately; Board Member Smith seconded. The motion passed unanimously.

Chair Ruffatto moved that BER counsel prepare a scheduling order for the Chairman's signature which establishes a process by which interested parties may comment in writing and orally in a public meeting on BER's stringency review of ARM 17.30.632(17)(a) under Mont. Code Ann. Section 75-5-203 pursuant to the petitions of Teck Coal Limited and the Board of County Commissioners of Lincoln County, Montana, including an opportunity for responsive written comments. Such scheduling order shall be consistent with the determinations and discussions of this Board previously in this meeting and shall provide for the comments to be submittal to the Board as soon as reasonably possible but no later than January 31, 2022; Board Member Aguirre seconded. The motion passed unanimously.

Chair Ruffatto moved to deny the DEQ's motion to intervene; Board Member Simpson seconded. The motion passed with Board Member Lehnherr absenting.

# VI. BOARD COUNSEL UPDATE

No update from Board Counsel was provided.

# VII. GENERAL PUBLIC COMMENT

No public comment was given.

#### VII. ADJOURNMENT

Chair Ruffatto moved to adjourn; Board Member Lehnherr seconded. The motion passed unanimously. The meeting adjourned at 10:54 AM.

Board of Environmental Review October 29, 2021, minutes approved:

<u>/s/</u> STEVEN RUFFATTO CHAIRMAN BOARD OF ENVIRONMENTAL REVIEW

DATE

## BOARD OF ENVIRONMENTAL REVIEW AGENDA ITEM EXECUTIVE SUMMARY FOR SETTING OF THE 2022 MEETING SCHEDULE

# AGENDA # I.C

#### AGENDA ITEM SUMMARY - Setting of 2022 Meeting Schedule

**AFFECTED PARTIES SUMMARY -** Board members, Department personnel, and members of the public who appear before the Board will be affected.

**BACKGROUND** - Establishment of a 2022 Board meeting schedule at this meeting will enable Board members, the Department, and the public to plan and schedule matters that involve the Board and other activities far enough in advance to minimize scheduling conflicts and the need for emergency meetings.

HEARING INFORMATION - No hearing is necessary.

**BOARD OPTIONS -** The Board has authority to set whatever schedule it wishes to set. It is advisable for the Board to schedule meetings approximately two months apart. This provides adequate time for compilation of public comments and preparation of notices and hearing officer reports. Renoticing is required if notice of adoption is not published within six months of the notice of initiation.

Considering the factors listed above and recent input from Board members regarding their 2022 schedules, the Department has developed a tentative meeting schedule for the Board's consideration. It is:

February 25 April 8 June 10 August 12 October 14 December 9

**DEQ RECOMMENDATION -** The Department recommends that the Board consider the matter and set an appropriate schedule.

0016

KATHERINE M. BIDEGARAY District Judge, Department 2 Seventh Judicial District 300 12th Ave. NW, Suite # 2 Sidney, Montana 59270

# MONTANA SIXTEENTH JUDICIAL DISTRICT COURT ROSEBUD COUNTY

MONTANA ENVIRONMENTAL			
INFORMATION CENTER, and SIERRA			
CLUB,			

Petitioners,

VS.

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY; MONTANA BOARD OF ENVIRONMENTAL REVIEW; WESTERN ENERGY CO.; NATURAL RESOURCE PARTNERS, L.P.; INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 400; and NORTHERN CHEYENNE COAL MINERS ASSOCIATION, Case No. DV 19-34

ORDER DENYING RESPONDENT MONTANA BOARD OF ENVIRONMENTAL REVIEW'S MOTION TO DISMISS

Respondents.

Before the Court is the motion to dismiss for failure to state a claim, filed by

Respondent Montana Board of Environmental Review (Board). Petitioners Montana

Environmental Information Center and Sierra Club (Conservation Groups) oppose this

motion. For the reasons stated below, the motion is denied.

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#### BACKGROUND

This case challenges the final decision on June 6, 2019, of the Board upholding the AM4 Amendment of the permit for Area B of the Rosebud Mine, a coal strip-mine located in Colstrip, Montana. Pet. for Rev. ¶¶ 64, 66, 68, 70, 72, 74. Respondent Department of Environmental Quality (DEQ) originally issued the permit in December 2015 to Respondent Westmoreland Mining, LLC (WRM). *Id.*, ¶ 3, 19, 21. The Conservation Groups appealed the permit to the Board pursuant to the Montana Strip and Underground Mine Reclamation Act (MSUMRA) and the Montana Administrative Procedure Act (MAPA). *Id.*, ¶ 59.

The Conservation Groups' permit appeal challenged, among other things, DEQ's analysis of the mine's impacts on aquatic life and the mine's impacts to a receiving stream, East Fork Armells Creek, that DEQ had previously deemed impaired for failing to meet applicable water quality standards. *Id.*, ¶¶ 74, 76. In its final decision in June 2019, the Board rejected the Conservation Groups' claims and upheld the permit.

In their petition for judicial review, the Conservation Groups contend that the Board committed various errors in limiting their claims and evidence, admitting inadmissible evidence from DEQ and WRM, and improperly altering the burden of proof. *Id.*, ¶¶ 66, 68, 70, 72. The Conservation Groups assert that the Board's decisions violated the Montana Constitution, MSUMRA, and MAPA. *Id.*, ¶¶ 66-76. The Conservation Groups seek relief against the Board and DEQ. *Id.*, ¶¶ A-E (request for relief).

#### STANDARD OF REVIEW

"In considering a motion to dismiss made pursuant to Rule 12(b)(6), M.R.Civ.P., a court must view the allegations in a light most favorable to the plaintiff, admitting and accepting as true all facts well-pleaded." *Knudsen v. Ereaux*, 275 Mont. 146, 150, 911 P.2d 835, 838 (1996). "A court should not dismiss a complaint for failing to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of hls or her claim which would entitle him or her to relief." *Id*.

## DISCUSSION

The issue at the heart of the Board's motion is whether an agency<sup>1</sup> that issues a final decision in a contested case under MAPA, like the Board here, *may* be a party to a case seeking judicial review of that decision. While it is true, as the Board explains, that the agency is not a *required* party under Rule 19 in the absence of which a petition for review may not proceed, it is equally true under Montana Supreme Court precedent the agency that decides a contested case under MAPA *may* be a party to a case seeking judicial review of that decision. This distinction is sufficient to resolve the Board's motion to dismiss.

The controlling case, is *Forsythe v. Great Falls Holding*, *LLC*, 2008 MT 384, 347 Mont. 676, 196 P.3d 1233, in which the Montana Supreme Court held that an agency that issues a final decision in a contested case—like the Board here—*may be a party* to a case seeking judicial review of that final decision. *Id.*, ¶ 34. In reaching this conclusion, the Court noted that on judicial review, "[t]he District Court could not

<sup>&</sup>lt;sup>1</sup> Mont. Code Ann. § 2-4-102(2)(a) (defining agency).

properly order the Department [of Revenue, which conducted the contested case] to take specific action regarding GFH's license transfer application unless the Department had been a party to that action." *Id.* That is, a district court cannot order a remedy against the agency that issued the final decision unless that agency is a party to the case seeking judicial review.

The case before this Court is analogous to *Forsythe*. The Conservation Groups have alleged specific errors committed by the Board, including improperly limiting Conservation Groups' claims, allowing the DEQ to present *post hoc* evidence, reversing the burden of proof, and allowing and relying on expert testimony from a non-expert. Pet. for Rev. ¶¶ 64, 66, 68, 70. The groups have specifically sought relief against the Board, as well as any other relief that may be just and proper. *Id.*, ¶¶ A, B, E. To obtain relief against the Board has not carried its burden to demonstrate "beyond doubt" that the groups can obtain all appropriate relief in the Board's absence. *Knudsen*, 275 Mont. at 150, 911 P.2d at 838.

On the other hand, the cases on which the Board relies are distinguishable. The question in Young v. Great Falls, 194 Mont. 513, 515-516, 632 P.2d 1111, 1112-13 (1981), was whether the agency that issued the final decision was *required* to be party to a petition for judicial review under Rule 19, not, as here, whether the agency *may* be a party. Noting the Court's long-standing preference for resolving cases on the merits rather than technicalities and the interest in "allowing parties to have their day in court," the Court held that the agency "need not be a party to proceedings for judicial review." *Id.* 191 Mont. at 516, 632 P.2d at 1113. But rejecting an argument that an agency *must* 

be a party does not resolve the issue of whether the agency *may* be a party. The Court in *Forsythe*, ¶ 34, resolved this latter question, holding an agency that issues a final decision *may* be a party to a case seeking judicial review of the final decision when the agency's conduct in the contested case (rather than that of a third party) is at issue.

The Court in *Forsythe* distinguished *Young* on the basis that the plaintiff in *Young* had "sought redress through the administrative process against another party for alleged improper conduct," whereas the plaintiff in *Forsythe* challenged the "Department's conduct" in issuing its final decision in the contested case. *Forsythe*, ¶¶ 30-31. The instant case is analogous to *Forsythe* because here the Conservation Groups specifically challenge aspects of the Board's conduct in issuing its final decision: namely, its erroneous evidentiary decisions and its erroneous reversal of the burden of proof. Pet. for Rev. ¶¶ 64, 66, 68, 70.<sup>2</sup>

The Court in *Forsythe*, ¶¶ 31-32, further explained that "[n]umerous cases" have allowed judicial review against agencies issuing final decisions in contested cases. Similarly, as the Conservation Groups point out here, the Montana Supreme Court has resolved numerous cases in which members of the public have sought judicial review against the Board. *Citizens Awareness Network v. Montana Board of Environmental Review*, 2010 MT 10, 355 Mont. 60, 227 P.3d 583; *Pennaco Energy, Inc. v. Montana Bd. of Envtl. Review*, 2008 MT 425, 347 Mont. 415, 199 P.3d 191 (judicial review against the Board); *Missoula City-Cty. Air Pollution Control Bd. v. Bd. of Envtl. Review*, 282 Mont. 255, 257, 937 P.2d 463, 465 (1997). Thus, both the reasoning in *Forsythe* 

<sup>&</sup>lt;sup>2</sup> For these same reasons, *Reinhardt v. Mont. Human Rights Bureau*, 2010 U.S. District LEXIS 133668 (D. Mont. Dec. 17, 2010), and *BNSF Ry. Co. v. Feit*, 2011 U.S. Dist. LEXIS 44130 (D. Mont. Apr. 25, 2011), are distinguishable.

and numerous prior decisions of the Montana Supreme Court make clear that the Board *may* be a party to a case seeking judicial review of the Board's action.

The Court, however, is not insensitive to the Board's concerns about avoiding the costs of litigation over its rulings in the underlying contested case. While the Board's concerns are not sufficient to deny the Conservation Groups' the opportunity to seek a complete remedy, they may be lessened by the Board's filing of a notice of non-participation, as it has done in other recent cases in which the Board has appeared as a party. The Court further notes that since the inception of this action, the Board's presence in this case has been helpful and informative.

#### CONCLUSION

For the foregoing reasons, the Board's motion to dismiss is DENIED.

DATED this states of March, 2020.



Hon, Katherine M. Bidegaray District Court Judge

cc: Derf Johnson/Shiloh Hernandez/Walton Morris John C. Martin/Samuel R. Yemington/Victoria Marquis Mark L. Lucas/Sarah Christopherson Amy D. Christensen

#### Certificate of Service

DATE October 28 CLERK OF DISTRICT C By: AL

KATHERINE M. BIDEGARY District Judge, Department 2 Seventh Judicial District 300 12<sup>th</sup> Avenue, N.W., Suite #2 Sidney, Montana 59270

# MONTANA SIXTEENTH JUDICIAL DISTRICT, ROSEBUD COUNTY

MONTANA ENVIRONMENTAL INFORMATION CENTER, and SIERRA CLUB, Petitioners,	Cause No.: DV 19-34 Judge Katherine M. Bidegaray
vs. MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY, MONTANA BOARD OF ENVIRONMENTAL REVIEW, WESTERN ENERGY CO., NATURAL RESOURCE PARTNERS, L.P., INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 400, and NORTHERN CHEYENNE COAL MINERS ASSOCIATION,	ORDER ON PETITION
Respondents.	

# I. INTRODUCTION

Pursuant to the Montana Administrative Procedure Act ("MAPA"), which provides for the judicial review of final agency action, the Montana Environmental Information Center and Sierra Club ("Conservation Groups") petitioned this Court, contending that the approval by the Montana Board of Environmental Review ("BER") of the AM4 permit expanding the Rosebud Mine was procedurally and substantively flawed and should be reversed and remanded to the Montana Department of Environmental Quality ("DEQ") to review the AM4 permit application consistent with applicable laws.

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The Conservation Groups assert that the BER committed procedural error by (1) erroneously applying administrative issue exhaustion to the Conservation Groups' permit appeal; (2) employing an unlawful double standard, limiting the Conservation Groups to evidence and issues raised in public comments prior to the permitting decision, while permitting DEQ and the permit applicant Westmoreland Rosebud Mining ("WRM") to present post-decisional evidence and argument; (3) allowing unqualified witnesses to present expert testimony on behalf of DEQ; and (4) by unlawfully reversing the burden of proof.

Substantively, the Conservation Groups assert that the BER unlawfully upheld a permit that relied upon evidence that the BER and DEQ both found unreliable, and which allowed WRM to cause material damage to a stream, the East Fork Armeils Creek, in violation of applicable legal standards.

Following the parties' submission of briefs, this matter came on for hearing before the Court on December 16, 2020. Having considered the briefs and the parties' wellpresented arguments, the Court is prepared to rule.

#### II. LEGAL FRAMEWORK

Resolution of this case involves consideration of the administrative record in conjunction with the rather complex legal framework, including the burden of proof. This case involves application of two federal laws—the Surface Mining Control and Reclamation Act, 30 U.S.C. §§ 1201-1328, and Clean Water Act, 33 U.S.C. §§ 1251-1387—and two state laws—the Montana Strip and Underground Mine Reclamation Act, §§ 82-4-201 to -254, MCA, and Montana Water Quality Act, §§ 75-5-101 to -1126, MCA.

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# A. The Surface Mining Control and Reclamation Act and the Montana Strip and Underground Mine Reclamation Act.

The federal Surface Mining Control and Reclamation Act ("SMCRA") and the state Montana Strip and Underground Mine Reclamation Act ("MSUMRA") regulate coal mining through a system of "cooperative federalism" that allows states to develop and administer regulatory programs that meet minimum federal standards. *Hodel v. Va. Surface Mining* & *Reclamation Ass'n*, 452 U.S. 264, 289 (1981); 30 U.S.C. § 1253(a). MSUMRA is Montana's federally approved program. 30 C.F.R. Part 926.

The fundamental purpose of SMCRA is to "protect society and the environment from the adverse effects of surface coal mining." 30 U.S.C. § 1202(a); *In re Bull Mountains*, No. BER 2016-03, at 59-63 (Mont. Bd. Of Envtl. Rev. Jan. 14, 2016) (detailing SMCRA's background) (in record at BER:141, Ex. 1). In enacting SMCRA, Congress stressed that citizen participation is essential for effective regulation of coal mining: "The success or failure of a national coal surface mining regulation program will depend, to a significant extent, on the role played by citizens in the regulatory process." S. Rep. No. 95-128, at 59 (1977).

Citing to Article II, § 3 and Article IX of the Montana Constitution, MSUMRA's stated intent is to "maintain and improve the state's clean and healthful environment for present and future generations" and to "protect the environmental life-support system from degradation." § 82-4-202(2)(a)(b), MCA. In *Park County Envtl. Council v. Dep't of Envtl. Quality*, 2020 MT 303, 402 Mont. 168, 477 P.3d 288 (decided December 8, 2020), the Montana Supreme Court explained that Montana laws that implement Montana's constitutional right to a clean and healthful environment must be interpreted consistently with that fundamental constitutional right, which was "intended ... to contain the strongest

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environmental protection provision found in any state." *Id.*, ¶ 61 (quoting *Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality (MEIC I)*, 1999 MT 248, ¶ 66, 296 Mont. 207, 988 P.3d 1236). The *Park County* Court also underscored that the right to a clean and healthful environment contains a precautionary principle: it is "anticipatory and preventive" and "do[es] not require that dead fish float on the surface of our state's rivers and streams before the [Montana Constitution's] farsighted environmental provisions can be invoked." *Id.*, ¶ 61 (quoting *MEIC I*, ¶ 77).

Under MSUMRA, DEQ is forbidden from issuing a mining permit unless and until the applicant "affirmatively demonstrates" and DEQ issues "written findings" that "confirm, based on information set forth in the application or information otherwise available that is compiled by [DEQ] that ... cumulative hydrologic impacts will not result in material damage to the hydrologic balance outside the permit area." ARM 17.24.405(6)(c); § 82-4-227(3)(a), MCA. "Cumulative hydrologic impacts" are the "total qualitative and quantitative direct and indirect effects of mining and reclamation operations." ARM 17.24.301(31). "Material damage" is defined as:

degradation or reduction by coal mining and reclamation operations of the quality or quantity of water outside the permit area in a manner or to an extent that land uses or beneficial uses are adversely affected, water quality standards are violated, or water rights are impacted. Violation of a water quality standard, whether or not an existing water use is affected, is material damage.

§ 82-4-203(31), MCA. MSUMRA places the "burden" of demonstrating that material damage will *not occur* on the "applicant." § 82-4-227 (1), (3), MCA; ARM 17.24.405(6)(c).

DEQ's analysis occurs in a document called the "cumulative hydrologic impact assessment" or "CHIA," which assesses the "cumulative hydrologic impacts" from "all previous, existing, and anticipated mining" and determines, in light of these cumulative impacts, whether the "proposed operation has been designed to prevent material damage." ARM 17.24.301(32), .314(5). "Anticipated mining" is defined to "include[], at a minimum ... all operations with pending applications." *Id.* 17.24.301(32).

Within 30 days of DEQ's permit decision, "any person ... adversely affected may submit a request for a hearing on the reasons for the final decision." *Id.* 17.24.425(1). DEQ's "reasons for the final decision" are only available to the public *after* the public comment period on the permit application. *Id.* 17.24.404(3), .405(6). Failure to submit public comments "in no way vitiates" or limits the right of an affected person to request a hearing. 56 Fed. Reg. 2,139, 2,141 (Jan. 22, 1991). The requested hearing occurs before the BER pursuant to the Montana Administrative Procedure Act (MAPA). § 82-4-206(1)-(2), MCA; §§ 2-4-601 to -631, MCA.

#### **B.** The Clean Water Act and the Montana Water Quality Act.

As noted, MSUMRA defines "material damage" (the key standard in this case) to include any "[v]iolation of a water quality standard" or "advers[e] [e]ffect[s]" to any "beneficial uses of water." § 82-4-203(31), MCA. Water quality standards are set by the federal Clean Water Act ("CWA") and the state Montana Water Quality Act ("MWQA"). These laws likewise establish a "system of cooperative federalism" in which states implement programs that meet minimum federal standards. *Mont. Envtl. Info. Ctr. v. Mont. Dept' of Envtl. Quality (MEIC III)*, 2019 MT 213, ¶ 29, 397 Mont. 161, 451 P.3d 493. Water quality standards are "[p]rovisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses." 40 C.F.R. § 130.2(d). "Montana's water quality standards are set forth in [ARM] 17.30.601 through 17.30.670 ...." *MEIC III*, ¶ 33.

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A water body that "is failing to achieve compliance with applicable water quality standards" is called an "[i]mpaired water body." § 75-5-103(14), MCA. When a water body reaches its "[i]oading capacity" for a pollutant, additional pollution will result in a "violation of water quality standards." *Id.*; § 75-5-103(18), MCA.

Under MSUMRA, a CHIA that fails to address "applicable water quality standards" in assessing material damage is unlawful. *In re Bull Mountains*, at 64.

#### III. BACKGROUND AND PRIOR PROCEEDINGS<sup>1</sup>

#### A. The Rosebud Mine and East Fork Armells Creek

The Rosebud Mine is a 25,752-acre coal strip-mine located near Colstrip. BER:152 at 9. It has five permit areas, Areas A, B, C, D, and E. *Id.* at 10. East Fork Armells Creek ("EFAC") is a prairie stream, whose headwaters are surrounded by the mine. *Id.* at 18. EFAC is outside the permit area. *Id.* The mine "dominates the potential anthropogenic pollutant sources in" the EFAC headwaters. *Id.* at 20.

Narrative water quality standards for EFAC require the stream "to be maintained suitable for ... growth and propagation of non-salmonid [i.e., warm water] fishes and associated aquatic life." ARM 17.30.629(1); BER:152 at 18. Since 2006, DEQ has designated and identified EFAC as an impaired water body, failing to achieve water quality standards for supporting the growth and propagation of aquatic life. BER:152 at 24; BER:95, Exs. DEQ-9, DEQ-10. DEQ identified excessive salinity, measured by total dissolved solids (TDS) and specific conductivity (SC), as a cause of the impairment, identified coal mining as an unconfirmed source of the excessive salt, and found that a

<sup>&</sup>lt;sup>1</sup> Throughout this Order, citations to the administrative record will use the following format: for documents, "BER:[docket entry number] at [page]," and for exhibits, "BER:[folder number], Ex.[exhibit number in folder], at [page]."

"40% increase in TDS in the alluvial aquifer upstream of Colstrip appears to be directly associated with mining activity." BER:152 at 28; BER:95 Ex. DEQ-9 at 7; BER:95, Ex. DEQ-10 at 19. DEQ has not completed a plan "to correct the water quality violations" in EFAC. BER:152 at 25.

#### **B.** The AM4 expansion of Area B of the Rosebud Mine

In 2009, WRM applied for the AM4 amendment to its Area B permit. BER:152 at 13. The existing Area B permit covers 6,182 acres. *Id.* at 10. AM4 adds 12.1 million tons of coal from 306 acres to Area B. *Id.* After six years of back and forth with WRM, in July 2015, DEQ allowed 26 days for public comment on WRM's voluminous application. *Id.* at 14. The Conservation Groups submitted comments, addressing, *inter alia*, the existing impairment of EFAC and impacts of increased salinity and harm to aquatic life. BER:95, Ex. DEQ-4 at 2-7. The comments included and incorporated a letter raising concerns about cumulative hydrologic impacts from anticipated mining in proposed Area F, a 6,500-acre expansion for which WRM had applied in 2011. BER:95, Ex. DEQ-4 at 1; BER:95, Ex. DEQ-4L at 17. The comments also raised concerns about WRM's apparent dewatering of an intermittent reach of EFAC. BER:95, Ex. DEQ-4 at 2-3.

## C. DEQ's Cumulative Hydrologic Impact Assessment

After the close of the public comment, DEQ issued its CHIA, response to comments, and written findings approving the AM4 expansion. BER:152 at 14-15. DEQ responded to the Conservation Groups' concerns about salinity, stating that "the 13% increase in TDS [salinity] ... in EFAC" would not adversely affect aquatic life or violate water quality standards. BER:95, Ex. DEQ-1 at 11. Regarding aquatic life, DEQ asserted that a survey of macroinvertebrates in EFAC by WRM proved the stream "currently meets"

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the narrative [water quality] standard of providing a beneficial use for aquatic life." BER:95, Ex. DEQ-1A at 9-8; BER:95, Ex. DEQ 1 at 8-9. Regarding dewatering, DEQ stated it could not determine whether mining had dewatered a portion of EFAC, so "material damage to this section cannot be determined." BER:95, Ex. DEQ-1 at 9; BER:95, Ex. DEQ 1-A at 9-10.

DEQ'S CHIA did not directly address the Conservation Groups' concerns about anticipated mining in Area F. However, the CHIA included a legal definition of "anticipated mining" that is inconsistent with applicable regulations. Whereas the regulations define "anticipated mining" to include "operations with *pending applications*," ARM 17.24.301(32) (emphasis added), the CHIA narrowed the definition to "*permitted operations*." BER:95, Ex. DEQ-1A at 5-1 (emphasis added). Based on this narrow definition, DEQ excluded Area F (the application for which was *pending*, but not *permitted*) from analysis. BER:100, Exs. 19-22.

The Conservation Groups timely sought administrative review, claiming DEQ's analysis in the CHIA failed to adequately assess material damage to EFAC in light of the stream's status as an impaired water body. BER:1 at 3-4. The Conservation Groups also challenged the CHIA's unlawfully narrowed definition of "anticipated mining" and its reversal of the burden of proof regarding material damage. *Id.* at 2-3; BER:97 at 2. WRM intervened and the case went to a contested case hearing before the BER's hearing examiner. BER:4, 115-18.

#### **D. Motions in Limine**

Prior to the hearing, DEQ and WRM objected to a number of the Conservation Groups' claims based on "administrative issue exhaustion" (or "waiver"), contending that

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the claims were not raised in their public comments. BER:73; BER:74. The Conservation Groups opposed the motions, contending that issue exhaustion does not apply to administrative review of permitting decisions under MSUMRA and that because they were not allowed to review any draft of DEQ's CHIA prior to submitting comments, they could not have been expected to foresee DEQ's legal errors in the CHIA. BER:84 at 3-15. The BER, however, applied issue exhaustion and, accordingly, dismissed multiple claims, including claims related to anticipated mining and dewatering. BER:152 at 77. The BER also barred the Conservation Groups from citing or discussing evidence from DEQ's permitting record if the evidence was not also referenced in their comments. *E.g.*, BER:152 at 77 ((precluding references to dissolved oxygen (which affects aquatic life)).

The Conservation Groups complain here that, while the BER strictly limited the Conservation Groups to issues and evidence identified in their comments, the BER expansively permitted DEQ and WRM to present post-decisional evidence that was not included or evaluated in DEQ's CHIA or permitting record. *E.g.*, BER:152 at 37-39, 64 (relying on "probabilistic" and "statistical" analysis proffered by WRM in contested case); *cf.* BER:118 at 33:4-20 (parties stipulating that statistical analysis was not in permit record).

The Conservation Groups, for their part, moved in limine to prevent DEQ's hydrologist, Emily Hinz, Ph.D., from presenting testimony about aquatic life in EFAC. BER:76 at 5-7. The parties and the BER's hearing examiner "all agree[d] that she's [Dr. Hinz] not an expert in aquatic life of any kind." BER:117 at 86:20-21. However, based on Montana Rule of Evidence 703, the BER permitted and later relied upon opinion testimony

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by Dr. Hinz about aquatic life health in EFAC. BER:152 at 48-50; BER:116 at 215:18 to 219:4.

#### E. The BER's Final Order

The BER upheld the AM4 permit. BER:152 at 85-86. Regarding the burden of proof, the BER held, over dissent,<sup>2</sup> that the Conservation Groups failed to demonstrate that material damage would likely result. BER:152 at 84 (Conservation Groups "failed to present evidence necessary to establish the existence of any water quality standard violations"); *accord id.* at 72, 76.

Regarding water quality standards, the BER recognized that DEQ's CHIA "must assess whether the action at issue will cause a violation of water quality standards." BER:152 at 75. The BER further recognized that under the "relevant water quality standard," EFAC must be "maintained to support ... growth and propagation of ... aquatic life." *Id.* at 18, *quoting* ARM 17.30.629(1). DEQ testified it does not use analysis of aquatic macroinvertebrates to assess this water quality standard because, as the BER found, such analysis "does not provide an accepted or reliable indicator of aquatic life support." *Id.* at 46-47. The BER nevertheless relied on DEQ's survey of macroinvertebrates to conclude that DEQ's CHIA adequately assessed the narrative water quality standard for growth and propagation of aquatic life. *Id.* at 85.

<sup>&</sup>lt;sup>2</sup> One BER member objected that the BER was impermissibly placing the burden on the Conservation Groups to prove that material damage *would occur*, given MSUMRA's provision placing the burden on WRM and DEQ to prove that material damage *would not occur*. BER:151 at 204:18-22 ("[I] don't think we can flip and require the Petitioner to prove with certainty that damage will occur ...."); *accord* at 214:18-23; *cf. Park Cnty.*, ¶ 61 (explaining that state constitution "do[es] not require that dead fish float on the surface of our state's rivers and streams before the [Montana Constitution's] farsighted environmental provisions can be invoked," *quoting MEIC I*, ¶ 77).

Regarding salinity, the BER found that EFAC is impaired and not meeting water quality standards for growth and propagation of aquatic life due to excessive salinity (that is, existing salinity concentrations are adversely affecting growth and propagation of aquatic life in EFAC). *Id.* at 28. The BER further found that existing mining operations are expected to increase salinity cumulatively in EFAC by 13%. *Id.* at 39 (noting "anticipated 13% increase in the concentration of TDS [salinity] in EFAC"); BER:95, Ex. DEQ-1 at 11 (noting "the 13% increase in TDS ... in EFAC"); DEQ-1A at 9-9 (noting that "[b]aseflow in EFAC ... is predicted to experience a postmine increase in TDS of 13%, elevating the average concentration of TDS to almost 2,600 mg/L"). However, adopting an argument of DEQ that did not appear in the CHIA, the BER concluded it should consider salinity pollution from AM4 in isolation from the predicted cumulative salinity increase of 13% from other mining operations. *Id.* 63-64. The BER then reasoned that because AM4—viewed in isolation—would only extend the *duration* of elevated salinity concentrations (up to "tens to hundreds of years") but would not, on its own, increase the salinity *concentration*, it would not cause material damage. *Id.* at 62-72.

The Conservation Groups timely appealed the BER's decision.

#### IV. STANDARD OF REVIEW

Under MAPA, a district court may "reverse or modify" an agency decision in a contested case if "(a) the administrative findings, inferences, conclusions, or decisions are: (i) in violation of constitutional or statutory provisions ... (iii) made upon unlawful procedure ... [or] (vi) arbitrary and capricious," resulting in prejudice to the substantial rights of a party. § 2-4-704(2), MCA.

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DEQ and WMR dispute that the arbitrary and capricious standard applies to judicial review of contested cases under MAPA. DEQ Br. at 3; WMR Br. at 2 n.3. The Montana Supreme Court, however, recently clarified that it does. *Vote Solar v. Mont. Dep't of Pub. Serv. Regulation*, 2020 MT 213A, ¶¶ 35-37, 401 Mont. 85, 473 P.3d 963. Legal conclusions are reviewed for correctness, not abuse of discretion. *Id.*, ¶ 35; *cf.* DEQ Br. at 3 (citing *Harris v. Bauer*, 230 Mont. 207, 212, 749 P.2d 1068 (1988)); *Steer, Inc. v. Dep't of Revenue*, 245 Mont. 470, 474, 803 P.2d 601, 603 (1990) (abrogating "abuse of discretion" standard for review of conclusions of law); *see also N. Cheyenne Tribe v. DEQ*, 2010 MT 111, ¶ 19, 356 Mont. 296, 234 P.3d 51.

"[I]nternally inconsistent analysis signals arbitrary and capricious action." *MEIC v. DEQ (MEIC III)*, 2019 MT 213, ¶ 26, 397 Mont. 161, 451 P.3d 493 (quoting *NPCA v. EPA*, 788 F.3d 1134, 1141 (9th Cir. 2015)). "Montana courts do not defer to incorrect or unlawful agency decisions ....." *Id.*, ¶ 22.

"The goal of statutory interpretation is to give effect to the purpose of the statute. A statute will not be interpreted to defeat its object or purpose, and the objects to be achieved by the legislature are of prime consideration in interpreting it." *Dover Ranch v. Cnty. of Yellowstone*, 187 Mont. 276, 283, 609 P.2d 711, 715 (1980) (internal citations omitted). In reviewing agency decisions that impact the environment, the Montana Supreme Court "remain[s] mindful that Montanans have a constitutional right to a clean and healthful environment." *Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality (MEIC IV)*, 2020 MT 288, ¶ 26, 402 Mont. 128, 476 P.3d 32 (quoting *Upper Mo. Waterkeeper v. Mont. Dep't of Envtl. Quality*, 2019 MT 81, ¶ 41, 395 Mont. 263, 438 P.3d 792). Montana

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courts afford "much less" deference to agency interpretations of statutes. *MEIC III*, ¶ 24 n.9.

#### V. DISCUSSION

# A. Whether the BER erred by applying administrative issue exhaustion to preclude consideration of issues raised by the Conservation Groups.

In support of the BER on this issue, DEQ and WRM contend that issue exhaustion at the permit appeal stage is required by the *text* of MSUMRA, "rules, and the BER's *Signal Peak* [*Bull Mountains*] ruling." DEQ Br. at 8; *see also* WRM Br. at 7. A review of statutory text, however, does not support this contention. DEQ cites only one statutory provision—§ 82-4-231(8)(e)-(f), MCA, DEQ Br. at 8, 9, 11—but that provision says nothing about issue exhaustion. Instead, it provides that, after DEQ deems an application acceptable, it must provide public notice and a brief comment period during which an interested person "*may* file a written objection." § 82-4-231(8)(e), MCA (emphasis added). DEQ must then prepare written findings. *Id.* § 82-4-231(8)(f). There is no textual issue exhaustion requirement. DEQ also cites ARM 17.24.405(5)-(6), but these provisions are also devoid of any express written issue exhaustion requirement. Similarly, the *In re Bull Mountains* decision, also cited by DEQ, says nothing about administrative issue exhaustion.

The Court finds relevant here the *text* of § 82-4-206(1), MCA, which provides the sole requirements for seeking administrative review of a permit decision under MSUMRA; namely, (1) that the person seeking administrative review be adversely affected (undisputed here); and (2) that the request be timely (also, undisputed here). *Accord* ARM 17.24.425(1). Notably, the relevant *texts* do not impose *any* exhaustion requirement. The

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Court further notes that the U.S. Department of Interior explained that the parallel federal provision for public comment on permit applications "in no way" limits the rights of affected members of the public from seeking administrative review. 56 Fed. Reg. 2,139, 2,141 (Jan. 22, 1991); *Save Our Cumberland Mountains v. OSM*, NX 97-3-PR at 16-17 (Dep't of Interior July 30, 1998) (in record as BER:141, Ex. 4). These interpretations of the parallel federal provisions are compelling because Montana, like other states with approved regulatory programs under SMCRA, must "interpret, administer, enforce, and maintain [them] in accordance with the Act [SMCRA], this chapter [SMCRA's federal implementing regulations], and the provisions of the approved State program." 30 C.F.R. § 733.11.<sup>3</sup>

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Based on the absence of any exhaustion requirement in MSUMRA and its implementing regulations, and because MSUMRA must protect and encourage public participation to the same degree as SMCRA, 30 U.S.C. § 1253(a), the Court concludes that the BER erred in engrafting an extra-statutory exhaustion requirement onto MSUMRA.<sup>4</sup> See also S. Rep. No. 95-128, at 59 (1977) (expressing congressional intent that public play a significant role in administration of SMCRA).

Similarly, MAPA does not require issue exhaustion in contested cases, but instead allows parties to raise new issues revealed during administrative review. *Citizens Awareness Network v. BER*, 2010 MT 10, ¶¶ 23-30, 355 Mont. 60, 227 P.3d 583. See

<sup>&</sup>lt;sup>3</sup> DEQ attempts to minimize the importance of this on-point federal authority, by noting the cooperativefederalism structure of SMCRA and MSUMRA. DEQ Br. at 8, n.8. However, as noted, because MSUMRA is a delegated program under SMCRA, it must be "in accordance with" and "consistent with" SMCRA and its implementing "rules and regulations." 30 U.S.C. § 1253(a)(1), (7); 30 C.F.R. § 733.11. Thus, MSUMRA may not be interpreted to be less protective of public participation than SMCRA.
§ 2-4-702(1)(b), MCA (issue exhaustion applies *after* contested case). Simply stated, the Court finds no authority for DEQ's and WRM's proposal to limit the public to issues raised *before* DEQ lays its cards on the table. *See Vote Solar*, ¶ 49 (exhaustion does not require party to identify error before it occurs).

This conclusion is buttressed by the Montana Constitution's rights to know and to participate, which entitle the public to review government analyses *before* objecting to government decisions. *Bryan v. Yellowstone Cnty.*, 2002 MT 264, ¶¶ 32-46, 312 Mont. 257, 60 P.3d 381; Mont. Const. art. II, §§ 8-9. As the *Bryan* Court noted, for these rights to be more than a "paper tiger," the public must have a "reasonable opportunity to know the claims of the opposing party [the government] and to meet them." *Bryan*, ¶¶ 44, 46.

Here, DEQ seeks to impute sufficient knowledge of the deficiencies which the Conservation Groups later complained of, asserting that WRM as part of its AM4 application submitted a Probable Hydrologic Consequences ("PHC") report, which should have tipped off the Conservation Groups as to the deficiencies that it complains of in DEQ's CHIA. DEQ misses the point. It is <u>agency</u> action (or inaction) that is at the heart of the review sought by the Conservation Groups. Under MSUMRA, the public only sees *DEQ's CHIA* when *the agency* approves or denies the permit, well *after* the comment period on WMR's application had closed. ARM 17.24.404(3)(a), 17.24.405(5)-(6). Administrative review thus is the first opportunity the public must contest *DEQ's* "reasons for the final decision." ARM 17.24.425(1). Application of issue exhaustion to limit the Conservation Groups to issues raised in comments made *before* ever seeing DEQ's CHIA and "final decision" would render public participation a "hollow right" and violate applicable statutory and constitutional rights. *Bryan*, **¶** 44.

In reaching the contrary conclusion, the BER cited one authority, its prior ruling in *In re Bull Mountains*. BER:103 at 5; BER:152 at 77. That decision is inapposite because it never addressed issue exhaustion in any respect. *See In re Bull Mountains*, at 56-59.

Even if it were applicable, issue exhaustion would not bar the Conservation Groups' claims here for two reasons. First, the Conservation Groups' comments identified the need to assess cumulative impacts to water from Area F and concerns about dewatering EFAC. See BER:95, Ex. DEQ-4L at 17 (noting that "Area B [i.e., AM4] and Area F" "will have cumulatively significant impacts on ... surface waters"); BER:95, Ex. DEQ-4 at 2-3 (noting dewatering); see also Conservation Groups' Br., at Argument 1.B. WRM criticizes the precision with which the Conservation Groups' comments discussed Area F and dewatering. WRM Br. at 15. Nevertheless, at the very least, DEQ was alerted "in general terms" that these issues would be "fully sifted" in the ensuing administrative review and "the groups' theories for challenging the permit would not be confined to those presented in the original affidavit." See Lands Council v. McNair, 629 F.3d 1070, 1076 (9th Cir. 2010); Citizens Awareness Network, ¶ 23.

Second, the record shows that DEQ also had actual knowledge of these issues. Discovery revealed that DEQ debated analyzing cumulative impacts from Area F but declined to do so based on an incorrect definition of "anticipated mining." BER:100, Ex. 19 (defining "anticipated mining" incorrectly as "approved—but not mined" and noting "proposed Area F and additional mining in Area A—not included" as a result); *id.* Exs. 20-22 (discussions resulting in exclusion of anticipated mining based on incorrect definition); BER:95, Ex. DEQ-1A at 5-1 (erroneous definition of "anticipated mining"); *cf.* ARM 17.24.301(32) (correct definition). DEQ also had actual knowledge of the Conservation

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Groups' concerns about dewatering EFAC because it addressed them in the CHIA and response to comments. BER:95, Ex. DEQ-1 at 9-10 (stating DEQ could not determine whether mining had dewatered the stream and concluding "material damage to this section cannot be made"); *id.* Ex. DEQ 1-A at 9-10. Because the Conservation Groups raised these issues and DEQ knew about and addressed them (albeit erroneously), issue exhaustion does not apply. *Barnes v. U.S. Dep't of Transp.*, 655 F.3d 1124, 1132-34 (9th Cir. 2011) (explaining that there is "no need" for public to raise issue that agency already had knowledge of); *NRDC v. EPA*, 824 F.2d 1146, 1151 (D.C. Cir. 1987) ("This court has excused the exhaustion requirements for a particular issue when the agency has in fact considered the issue."); *see also State v. Baze*, 2011 MT 52, ¶ 11, 359 Mont. 411, 251 P.3d 122 (related doctrine of waiver inapplicable where parties raised and district court addressed issue).

In sum, issue exhaustion does not apply to administrative review of permits under MSUMRA. The BER erroneously required the Conservation Groups to exhaust issues which arose only upon publication of DEQ's analysis after the close of the public comment period. Further, even if issue exhaustion applied, DEQ's actual knowledge of the Conservation Groups' concerns foreclosed its application. The BER erred in dismissing the Conservation Groups' claims concerning DEQ's erroneous definition of "anticipated mining" and dewatering EFAC based on issue exhaustion. Moreover, the error was prejudicial because it precluded a merits-based ruling on the Conservation Groups' claims. *Organized Vill. of Kake v. U.S. Dep't of Agric.*, 795 F.3d 956, 969 (9th Cir. 2015) (explaining that "the required demonstration of prejudice is not a particularly onerous requirement").

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#### B. Whether the Conservation Groups' brief met the requirements of § 2-4-621(1), MCA.

Under MAPA, after a hearing examiner issues proposed findings and conclusions, each party that is adversely affected must be given an "opportunity ... to file exceptions and present briefs and oral arguments to the officials [here, the BER] who are to render the decision." § 2-4-621(1), MCA. Accordingly, after issuance of the proposed findings and conclusions, the BER issued an order stating: "Any party adversely affected by the Proposed Order may file Exceptions to the proposed order on or before May 10, 2019." BER:135 at 2.

In response, each party filed a brief objecting to portions of the proposed findings and conclusions. BER:139; BER:140; BER:141. WRM and DEQ captioned their briefs "Exceptions," BER:139; BER:140. The Conservation Groups captioned their brief "Objections." BER:141. The Conservation Groups' brief, like those of WRM and DEQ, Identified specific portions of the proposed findings to which the Conservation Groups' objected. *E.g.*, BER:141 at 7, 12, 24, 31, 47, 48, 52, 53. Previously, the Conservation Groups had submitted 55 pages of proposed findings, and 76 pages of objections to the proposed findings of DEQ and WRM. BER:123; BER:131.

Citing Flowers v. BER of Personnel Appeals, 2020 MT 150, 400 Mont. 238, 465 P.3d 210, WRM—now for the first time before this Court <sup>5</sup> —contends that the Conservation Groups' brief failed to meet the requirements of § 2-4-621(1), MCA, because it was denominated "objections" rather than "exceptions." WRM Br. at 6. WRM's argument is without merit. The Montana Supreme Court has long refused to interpret

<sup>&</sup>lt;sup>5</sup> Notably, WRM did not raise this issue before the BER, though it had the opportunity to do so.

MAPA in such a hyper-technical fashion. *State ex rel. Mont. Wilderness Ass'n v. Bd. of Natural Res. & Conservation*, 200 Mont. 11, 39-40, 648 P.2d 734, 749 (1982) (refusing to "exalt form over substance" and not requiring agency to rule on each proposed finding offered by parties as provided in § 2-4-623(4), MCA); *see also* § 1-3-219, MCA. Thus, the Court "encourages a liberal interpretation of procedural rules governing judicial review of an administrative BER" and has "avoid[ed] an over-technical approach" to MAPA to "allow[] the parties to have their day in court." *In re Young v. Great Falls*, 194 Mont. 513, 516, 632 P.2d 1111, 1113 (1981). And the Montana Supreme Court has long-ago held "it is the substance of a document that controls, not its caption." *Carr v. Bett*, 1998 MT 266, P1, 291 Mont. 326, 329, 970 P.2d 1017, 1018, 1998 Mont. LEXIS 243, \*1, 55 Mont. St. Rep. 1098, *quoting* Miller v. Herbert, 272 Mont. 132, 135-36, 900 P.2d 273, 275 (1995).

Here, contrary to WRM's argument, the Conservation Groups' brief objecting to the proposed findings and conclusions identified and cited specific findings and conclusions to which it objected and provided detailed analysis explaining the asserted errors. BER:141 at 7, 12, 23, 31, 47, 48, 52, 53. Thus, caption notwithstanding,<sup>6</sup> the Conservation Groups' brief was no different than those filed by WRM and DEQ. While it is true that the Conservation Groups' objections challenged the legal conclusions of the proposed ruling rather than the factual findings, *see generally* BER:141; BER:151 at 99, there is no requirement that parties challenge proposed factual findings. *Cf.* § 2-4-621(3), MCA (providing that BER may reject proposed legal conclusions *or* proposed factual findings). WRM is also mistaken in its suggestion that MAPA requires objections to

<sup>&</sup>lt;sup>6</sup> "Exceptions" and "objections" are synonymous. See Black's Law Dictionary at 603 (8th ed. 2007).

include "modifying language for each exception." WRM Br. at 6. MAPA contains no such requirement. § 2-4-621(1), MCA. Nor did the BER's order on exceptions. BER:135 at 2,

Finally, *Flowers* is not to the contrary. There, Flowers did *not* file exceptions and the Court therefore held that,

Flowers did *not* pursue to their conclusion "all administrative remedies available" before seeking judicial review. Art, ¶ 17; § 2-4-702(1)(a), MCA. Hearing Officer Holien's recommended order directed him to file exceptions with BOPA if he was unsatisfied with her decision. That her recommendation became a final order of the BER twenty days later did not obviate the requirement to file exceptions in order to completely exhaust the "available" administrative remedies.

*Flowers,* ¶ 13 (emphasis added). Here, unlike in *Flowers*, the Conservation Groups filed extensive exceptions (denominated "objections") to the hearing examiner's proposed findings and conclusions. BER:141. Nothing more was required.

#### C. Whether the BER erred by permitting DEQ and WRM to present postdecisional evidence and analysis.

Under MSUMRA, DEQ's permitting decisions must be based on "information set forth in the application or information otherwise available that is compiled by [DEQ]." ARM 17.24.405(6); § 82-4-227(3), MCA. Under these provisions, "[t]he relevant analysis and the agency action at issue is that contained within the four corners of the Written Findings and CHIA." BER:152 at 76; *In re Bull Mountains*, at 56-59 ("What the agency may not do is present newly developed evidence that was not before the agency at the time of its decision or analysis that was not contained within the CHIA."). This is consistent with the bedrock rule of administrative law that "an agency's action must be upheld, if at all, on the basis articulated by the agency itself." *Park Cnty.*, ¶ 36 (quoting *Motor Vehicle Mirs. v. State Farm*, 463 U.S. 29, 50 (1983)); *accord MTSUN*, *LLC v. Mont. Dep't of Pub. Serv. Regulation*, 2020 MT 238, ¶ 51, 401 Mont. 324, 472 P.3d 1154 (explaining that an agency's "decision must be judged on the grounds and reasons set forth in the challenge order(s); no other grounds should be considered"); *Kiely Constr., L.L.C. v. Red Lodge*, 2002 MT 241, ¶¶ 92-97, 312 Mont. 52, 57 P.3d 836 ("after-the-fact opinions" cannot support decisions).

Here, over objection by the Conservation Groups, the BER admitted and then relied heavily on testimony by WRM's expert William Schafer, Ph.D., about a post-decisional "statistical" and "probabilistic" analysis in which he concluded that the projected 13% salinity increase in EFAC "would not be statistically significantly measurable." BER:152 at 38; *id.* at 37, 39, 64 (relying on "statistical" analysis); *see also id.* at 84 (incorporating prior discussion including "statistical" analysis). However, all parties stipulated and the BER's hearing examiner agreed that this "probabilistic" analysis was post-decisional and not included in the information "compiled" by DEQ to support its decision. BER:118 at 33:4-20.

WRM now argues that the BER's admission of *post hoc* testimony from Dr. Schafer was harmless, asserting that it was not "relevant to the BER's directed verdict." WRM Br. at 16. WRM is mistaken, placing form over substance. While the BER framed its ruling as granting a "directed verdict," BER:152 at 85, the BER's analysis shows that this was a misnomer. A directed verdict is only appropriate if there is no weighing of evidence, and all evidence and inferences are viewed in the light most favorable to the non-moving party. *Massee v. Thompson*, 2004 MT 121, ¶ 25, 321 Mont. 210, 90 P.3d 394. The BER, however, rejected the Conservation Groups' expert testimony and, instead, credited testimony of witnesses from DEQ and WRM (some of whom denied any expertise). *E.g.*, BER:152 at 34-36, 51-53, 67, 72.

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Thus, contrary to WRM's assertion, the fact that the BER denominated its ruling as a "directed verdict" does not establish that its erroneous admission of *post hoc* testimony from Dr. Schafer was harmless. To the contrary, the record indicates that the BER relied on Dr. Schafer's *post hoc* "statistical" analysis to discount the significance of the projected 13% increase in salinity in base flow in EFAC from the cumulative impacts of mining. BER:152 at 64-65; *see also id.* at 37-38. Because this testimony was crucial to the BER's decision, it was prejudicial and not harmless. *In re Thompson*, 270 Mont. 419, 430-35, 893 P.2d 301, 307-310 (1995) (improper admission of crucial expert testimony warranted reversal of agency decision); *see also Murray v. Talmage*, 2006 MT 340, ¶ 18, 335 Mont. 155, 151 P.3d 49 (finding improper admission of "critical evidence" prejudicial).

Similarly, regarding salinity, the CHIA's material damage assessment and determination were premised on a projected 13% cumulative increase in salinity in EFAC. BER:95, Ex. DEQ-1A at 9-9 (noting that "[b]aseflow in EFAC ... is predicted to experience a postmine increase in TDS of 13%"); BER:95, Ex. DEQ-1 at 11 (evaluating material damage with respect to "the 13% increase in TDS ... in EFAC"). However, at hearing, DEQ made the *post hoc* argument, which the BER accepted, that its material damage assessment was based not on the 13% cumulative increase in salinity predicted in the CHIA, but on the additional salinity from the AM4 expansion considered in isolation (which the BER found would extend the <u>duration</u> of elevated salinity by decades or centuries, without itself increasing the salt <u>concentration</u> at any one time). BER:152 at 63-65; *see also infra* Part V.G (discussing the claim of substantive error of "extended duration").

The Court finds that the BER's decision to admit and rely on post-decisional evidence and analysis from DEQ and WRM violates ARM 17.24.405(6)(c) and the BER's

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own rule that "[w]hat the agency may not do is present newly developed evidence that was not before the agency at the time of its decision or analysis that was not contained within the CHIA." *In re Bull Mountains*, at 59; BER:152 at 76 (relevant analysis is in "four corners" of CHIA); *see also MEIC III*, ¶ 26 (inconsistent rulings are arbitrary). As the BER itself previously cautioned: "The public's ability to rely on DEQ's express written findings and analysis supporting its permitting decision is for naught if at the contested case stage, the agency is permitted to present extra-record evidence and manufacture novel analysis and argument." *In re Bull Mountains*, at 49.

In sum, the Court finds unlawful the BER's decision to allow DEQ and WRM to present post-decisional evidence and analysis. The BER's decision is at the same time impermissibly arbitrary and capricious because, as noted above, the BER simultaneously limited the Conservation Groups to evidence and argument contained in their *pre-decisional* comments. *See supra* Part III.D. This decision created an uneven playing field, which was plainly prejudicial. *Organized Vill. of Kake*, 795 F.3d at 969.

# D. Whether the BER erroneously allowed DEQ's hydrology expert to present expert testimony about aquatic life.

The Conservation Groups moved *in limine* to exclude expert testimony about aquatic life by Dr. Hinz, who is a hydrologist, on the basis that she has no expertise in aquatic life or aquatic blology. BER:76 at 5-7. At hearing, the parties and the BER's hearing examiner "all agree[d] that she's [Dr. Hinz] not an expert in aquatic life of any kind." BER:117 at 86:20-21. The BER, however, permitted and relied on testimony by Dr. Hinz about aquatic life health in EFAC. BER:152 at 48-50.

Contested cases before BER are subject to "common law and statutory rules of evidence." § 2-4-612(2), MCA. If a witness lacks expertise in a given field, she may not

give expert testimony in that field, even if she possesses expertise in another field. *State v. Russette*, 2002 MT 200, ¶¶ 13-14, 311 Mont. 188, 53 P.3d 1256, *abrogated on other grounds by State v. Stout*, 2010 MT 137, 356 Mont. 468, 237 P.3d 37; Mont. R. Evid. 702.<sup>7</sup> Admission of improper expert testimony in a contested case constitutes reversible error. *In re Thompson*, 270 Mont. 419, 429-30, 435, 893 P.2d 301, 307, 310 (1995).

The apparent basis of the BER's decision was that Dr. Hinz's testimony was permissible under Montana Rule of Evidence 703. *See* BER:116 at 215:18 to 219:4. As clear from arguments advanced at hearing before this Court, both DEQ and WMR now rely on Rule 703 in defending BER's decision. However, Rule 703 merely addresses the "bases" on which expert opinion testimony may rest. Mont. R. Evid. 703. Rule 703 does not expand Rule 702, and it does not permit an expert to give testimony that is beyond her field of expertise, as Dr. Hinz did here with respect to aquatic life. *State v. Hardman*, 2012 MT 70, ¶¶ 27-28, 364 Mont. 361, 276 P.3d 839; *Weber v. BNSF Ry. Co.*, 2011 MT 223, ¶ 38, 362 Mont. 53, 261 P.3d 984.

WRM asserts that the admission of Dr. Hinz's testimony about aquatic life was harmless. WRM Br. at 16. However, Dr. Hinz was DEQ's only witness who offered testimony about aquatic life in EFAC, and the BER's finding and decision regarding aquatic life relied almost exclusively on Dr. Hinz's testimony. BER:152 at 44-50, 85. The BER relied on Dr. Hinz's testimony to discount the testimony of the Conservation Groups' aquatic life expert Mr. Sullivan. BER:152 at 51-52. The BER's analysis of aquatic life cited only one other expert—WRM's expert Ms. Hunter—but conceded that, while Ms. Hunter sampled aquatic life in EFAC, she was not requested to analyze aquatic life health in the

<sup>&</sup>lt;sup>7</sup> Accord, e.g., Dura Auto. Sys. v. CTS Corp., 285 F.3d 609, 612-14 (7th Cir. 2002).

stream, BER:152 at 45. And, in fact, DEQ directed Ms. Hunter to "collect, *but not analyze*" aquatic life in the stream. BER:152 at 46 (emphasis added).<sup>8</sup> Thus, Dr. Hinz's testimony was critical to the BER's findings and conclusions with respect to aquatic life and, therefore, its admission was prejudicial and not harmless. *In re Thompson*, 270 Mont. at 430-35, 893 P.2d at 307-310; *Murray*, ¶ 18.

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In sum, the BER's admission and reliance on opinion testimony by Dr. Hinz about aquatic life in EFAC—an area admittedly beyond her field of expertise—was reversible error. *Russette*, ¶¶ 13-14; *Weber*, ¶¶ 36-39; *In re Thompson*, 270 Mont. at 429-30, 435, 893 P.2d at 307, 310.

# E. Whether the BER imposed a burden of proof that erroneously required the Conservation Groups to prove that the mine would cause material damage.

MSUMRA places the "burden" of demonstrating that material damage will *not occur* on the permit applicant and the regulatory authority, here WRM and DEQ. § 82-4-227(1), (3)(a), MCA; ARM 17.24.405(6)(c). Where a statute imposes the burden to show the "lack of adverse impact" on a permit applicant, as here, that burden remains with the applicant throughout administrative review of the permit. *Bostwick Props., Inc. v. DNRC*, 2013 MT 48, ¶¶ 1, 10-14, 36, 369 Mont. 150, 296 P.3d 1154; *accord* S. Rep. No. 95-128, at 80 (1977) (legislative history of SMCRA stating that permit applicant retains burden of showing lack of environmental effects in contested hearing) (in record at BER:141, Ex. 2).

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<sup>&</sup>lt;sup>a</sup> Indeed, as explained at the hearing, DEQ management seems to have arbitrarily prevented *anyone* with expertise in aquatic life from reviewing data on aquatic life in EFAC. See BER:117 at 183:25 to 184:8 (DEQ explaining that it instructed its expert in aquatic life, David Feldman, from analyzing data from EFAC); BER 100, Ex. MEIC 15; see also BER:152 at 46 (DEQ also prohibited WRM's aquatic life expert from analyzing data).

Here, in violation of the statutory text of MSUMRA, a divided BER placed the burden on the Conservation Groups to "present evidence necessary to establish the existence of any water quality standard violations." BER:152 at 84. Elsewhere, the BER stated the burden differently but maintained that the Conservation Groups had to show "more-likely-than-not" that material damage would or "could" occur. *Id.* at 72 (concluding "burden of proof ... falls to Conservation Groups to present a more-likely-than-not probability that a water quality standard could be violated by the proposed action"); *id.* at 76 (concluding Conservation Groups "have the burden to show, by a preponderance ... that DEQ had information available to it at the time of issuing the permit that indicated that the project is not designed" to prevent material damage).

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As the dissenting BER member aptly explained, this "burden of proof ... impermissibly read out of the statute the agency's regulation," BER:151 at 214:18-23; that is, the BER ignored its own requirement that the applicant "affirmatively demonstrates" and DEQ "confirm[s]" that the "cumulative hydrologic impacts will not result in material damage." ARM 17.24.405(6)(c); § 82-4-227(1), (3)(a), MCA ("The applicant ... has the burden" of establishing compliance with MSUMRA's requirements); BER:151 at 204:5-25. This allocation of the burden of proof is consistent with the precautionary principles of MSUMRA, § 82-4-227(1), (3), and Montana's right to a clean and healthful environment, which imposes "anticipatory and preventive" protections. *Park Cnty.*, ¶ 61. It is, thus, not the responsibility of the public to demonstrate that environmental harm will occur, but, instead, the duty of the applicant (WRM) and the agency (DEQ) to demonstrate that environmental harm will not occur.

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The BER based its erroneous allocation of the burden on *Montana Environmental Information Center v. Montana Department of Environmental Quality (MEIC II)*, 2005 MT 96, 326 Mont. 502, 112 P.3d 964, a case on which both DEQ and WMR rely here.<sup>9</sup> However, as the Conservation Groups point out, that case is inapposite because, unlike MSUMRA, the Clean Air Act of Montana, at issue there, has no provision allocating the burden of proof to the permit applicant. *Compare MEIC* (2005), ¶ 13, *with* § 82-4-227(1), (3)(a), MCA.

Further, even in *MEIC II*, the Supreme Court did not burden the public with affirmatively demonstrating that environmental harm would occur. Instead, there, after the Supreme Court stated that the Clean Air Act permit challengers had the general burden of proof, the Court emphasized that the challengers did not have to prove that environmental harm would occur—as WRM contends and the BER held, here. Instead, the Supreme Court explained that, during the contested case, the dispositive question was whether the permit *applicant* had "established" that environmental *harm would not occur*.

Thus, on remand the BER shall enter [findings and conclusions] determining whether, based on the evidence presented, Bull Mountain [the permit applicant] established that emissions from its proposed project will not cause or contribute to [environmental harms] ....

*MEIC II*, ¶ 38; *accord id.*, ¶ 36.

Thus, in any event, WRM's and the BER's asserted requirement that the Conservation Groups affirmatively demonstrate that material damage *would* occur was

<sup>&</sup>lt;sup>9</sup> WRM also cites the Court to ARM 17.24.425(7), but that provision refers to cases where a party seeks to "reverse the decision of the BER," not, as here, where the Conservation Groups sought to reverse DEQ's permit. Further, to the degree that the provision is ambiguous, the clear statutory test of § 82-4-227(1), MCA, which places the burden on the applicant, controls.

error. Where, as here, the underlying statute (MSUMRA) expressly places the burden to demonstrate the lack of adverse environmental impacts, the applicant and agency retain their assigned burdens in administrative review of the permit. *Bostwick*, ¶ 36; § 82-4-227(1), (3); ARM 17.24.405(6)(c). The BER's decision to the contrary was error.

Reversal of the burden of proof was plainly prejudicial error. See Organized Vill. of Kake, 795 F.3d at 969 ("If prejudice is obvious to the court, the party challenging agency action need not demonstrate anything further."). Further, here, the Conservation Groups' presented testimony that WRM and DEQ had failed to demonstrate that material damage would not occur. BER:115 at 297:6-15 (aquatic life survey does not show that water quality standard is met); *id.* at 298:1-8 (same). This Court cannot conclude that the BER's reversal of the burden of proof had "no bearing on the procedure used or the substance of the decision reached." *Nw. Res. Info. Ctr., Inc. v. Nw. Power & Conservation Council,* 730 F.3d 1008, 1019-20 (9th Cir. 2013).

# F. Whether the BER arbitrarily approved and relied on DEQ's and WRM's assessment of aquatic life health.

The BER properly recognized that, to confirm that the cumulative hydrologic impacts will not result in material damage (which, as noted, includes any violation of a water quality standard), DEQ must assess applicable water quality standards. BER:152 at 75; *In re Bull Mountains*, at 87; ARM 17.24.405(6); §§ 82-4-203(31), 227(3)(a), MCA. The BER further recognized that the narrative water quality standard for EFAC requires that the creek "be maintained suitable for … growth and propagation of non-salmonid fishes and associated aquatic life." ARM 17.30.629 (1); BER:152 at 18.

However, as confirmed by the record of the BER's decision, the BER relied on WRM's survey of macroinvertebrates to conclude that the CHIA adequately assessed the

water quality standard for growth and propagation of aquatic life. Id. at 85. The problem with this analysis is that it is demonstrably inconsistent with DEQ's explanation and the BER's finding that "analyzing macroinvertebrate data ... would not provide an accepted or reliable indicator of aquatic life support" for assessing water quality standards in eastern Montana streams. Id. at 46 (emphasis added); see also id. at 47-48. It was irrational and arbitrary for the DEQ and the BER to rely on an analysis that both entities expressly found to be *unacceptable* and *unreliable* for assessing applicable water quality standards. MEIC III, ¶26 ("an internally inconsistent analysis signals arbitrary and capricious action"); § 2-4-704(2)(vi), MCA. While agencies have a degree of discretion in determining what evidence to rely upon, an agency may not rely on evidence that the agency itself deems inadequate. E.g., Idaho Conservation League v. Guzman, 766 F. Supp. 2d 1056, 1077 (D. Idaho 2011) ("If an agency fails to make a reasoned decision based on an evaluation of the evidence, the Court must conclude that the agency has acted arbitrarily and capriciously."; MEIC IV, ¶26 (Court declined to defer to agency analysis that was not a "reasoned decision" because it "sidestep[ed]" environmental protections).

WRM misapprehends the gravamen of the Conservation Groups' challenge, which is *not* to the BER's factual findings with respect to DEQ's assessment of water quality standards for aquatic life support. *Cf.* WRM Br. at 18. The Conservation Groups' argument is that it was inconsistent and arbitrary (i.e., unlawful) for the BER to *rely* on a metric that the BER and DEQ both find *unreliable* to assess water quality standards for aquatic life support.

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Both WRM and DEQ argue a distinction between the CWA and MSUMRA in their attempt to excuse DEQ's assessment of water quality standards for aquatic life support. See, e.g., WRM Br. at 18, and arguments at hearing. The argument fails because MSUMRA adopts and incorporates "water quality standards" from the CWA as criteria for assessing material damage. § 82-4-203(31), MCA; see also Conservation Groups' Reply to DEQ, at Argument Part V. Thus, DEQ's CHIA purported to assess the narrative water quality standard for growth and propagation of aquatic life by relying on the (admittedly unreliable) macroinvertebrate survey: "the survey demonstrated that a diverse community of macroinvertebrates was using the stream reach. Therefore, the reach currently meets the narrative [water quality] standard of providing a beneficial use for aquatic life." BER:95, Ex. DEQ-1A at 9-8 (emphasis added); ARM 17.30.629(1) (narrative standardstream must "be maintained suitable for ... growth and propagation of non-salmonid fishes and associated aquatic life"). The BER, similarly, used the assessment of macroinvertebrates to support its conclusion about water quality standards in EFAC. BER:152 at 48-49. Accordingly, DEQ's and WRM's effort to excuse the BER's inconsistent and arbitrary assessment of water quality standards for aquatic life fails.

Finally, WRM's harmless error argument also fails. Despite generalized assertions about "multiple lines of evidence," the unreliable macroinvertebrate survey was the *only* specific evidence on which the BER and DEQ relied to reach their conclusion about potential violations of the narrative water quality standard for growth and propagation of aquatic life. BER:152 at 82 (citing macroinvertebrate survey (the "ARCADIS report")); *id.* at 48-50 (basing analysis on Dr. Hinz's inexpert assessment of macroinvertebrate survey—but citing no other specific evidence); BER:95, Ex. DEQ-1A at 9-8 (basing

-30-

assessment of narrative water quality standard for aquatic life exclusively on macroinvertebrate survey). As such, the BER's arbitrary and capricious reliance on DEQ's inexpert analysis of this unreliable survey was prejudicial, not harmless. *In re Thompson*, 270 Mont. at 430-35, 893 P.2d at 307-310; *Murray*, ¶ 18; *Organized Vill. of Kake*, 795 F.3d at 969.

# G. Whether the BER arbitrarily concluded that adding more salt to a stream impaired for salt will not cause additional impairment.

The BER found that EFAC is an impaired water and not meeting narrative water quality standards for supporting growth and propagation of aquatic life due to, among other things, excessive salinity pollution. BER:152 at 24-25. WRM disputes that EFAC is impaired—i.e., not meeting water quality standards—due to salinity. WRM Br. at 20-22. However, the record indicates that DEQ's official CWA assessment concluded: "Salinity/TDS/chlorides will remain a cause of impairment." BER:95, Ex. 10 at 17. While, as the BER noted, DEQ's level of *certainty* in this conclusion was low and not confirmed, BER:95, Ex. 10 at 17, *cited in* BER:152 at 28, it nevertheless remains DEQ's official impairment determination with respect to EFAC.

The BER further found that existing mining operations will cause a 13% increase In salinity in EFAC, and AM4 will extend the duration of these increased salinity levels for up to "tens to hundreds of years." *Id.* at 32, 39, 63, 68-69 n.4.<sup>10</sup> The BER nevertheless determined that this increased salinity would not result in a violation of water quality standards for growth and propagation of aquatic life or adversely affect that beneficial use

<sup>&</sup>lt;sup>10</sup> Accord BER:95, Ex. DEQ-1 at 11 (DEQ findings noting "the 13% increase in TDS ... in EFAC"); DEQ-1A at 9-9 (DEQ CHIA noting that "[b]aseflow in EFAC ... is predicted to experience a postmine increase in TDS of 13%, elevating the average concentration of TDS to almost 2,600 mg/L").

of EFAC. *Id.* at 61-72. The BER's determination was reached by considering the Increased salinity from AM4 in Isolation from the cumulative impacts of existing mining. BER:152 at 63-65 (stating that "AM4 specifically ... is all this case concerns" and declining to consider cumulative salinity pollution from the total mine operation). However, as pointed out by the Conservation Groups, MSUMRA requires DEQ and the BER to analyze the impacts of a proposed mining operation in light of the "*cumulative* hydrologic impacts" of *all* past, existing, and anticipated mining. § 82-4-227(3)(a), MCA (emphasis added); ARM 17.24.301(31)-(32), .405(6)(c). "Cumulative" means "increasing by successive additions." Merriam-Webster Dictionary, www.merriam-webster.com. Thus, if pollution from "successive" mining operations will cause violations of water quality standards, DEQ must remedy those violations *before* permitting more mining. See 48 Fed. Reg. 43,956, 43,972-73 (Sept. 26, 1983) (material damage must be considered in light of "cumulative" impacts from "any preceding operations"). As the Supreme Court of Alaska explained in interpreting its SMCRA program, regulators must

consider the probable cumulative impact of all anticipated activities which will be part of a 'surface coal mining operation,' whether or not the activities are part of the permit under review. If [the regulatory authority] determines that the cumulative impact is problematic, the problems must be resolved before the initial permit is approved.

Trustees for Alaska v. Gorsuch, 835 P.2d 1239, 1246 (Alaska 1992).

Thus, the BER's conclusion, reached by considering the increased salinity from AM4 in isolation from the cumulative impacts of existing mining, was error. If a stream, like EFAC, is not meeting water quality standards due to excessive pollution—that is, it is beyond its loading capacity, § 75-5-103(14), MCA—release of additional amounts of pollution that increase the concentration of that pollution will violate water quality

standards. *Id.*; § 75-5-103(18), MCA; *accord Friends of Pinto Creek v. EPA*, 504 F.3d 1007, 1011-12 (9th Cir. 2007) (discharge of additional copper into stream impaired by copper would violate water quality standards). Similarly, if existing salinity concentrations are adversely affecting growth and propagation of aquatic life (as here), then increasing salinity concentrations or extending the duration of the increased concentrations will also adversely affect growth and propagation of aquatic life. *See* § 82-4-203(31), MCA (adversely affecting beneficial uses or violating water quality standards is material damage). To conclude otherwise is unreasonable and arbitrary.

WRM attempts further reliance on Dr. Schafer's "statistical" analysis to assert that the projected increase in salinity would not be "statistically significant." WRM Br. at 22. However, as noted, Dr. Schafer's *post hoc* "statistical" analysis was not properly before the BER. *See supra*, Part V.C. In any event, Dr. Schafer's "statistical" argument (which the BER adopted) misses the point. As noted above, if the creek is impaired and, therefore, not meeting water quality standards, it cannot be maintained that a greaterthan 10% increase in salt in the creek will not result in a further violation of water quality standards. ARM 17.24.405(6)(c) ((applicant and DEQ must demonstrate that material damage (i.e., a violation of a water quality standard) "will not result")); § 75-5-103(18), MCA (when water body has reached its loading capacity for a pollutant—as EFAC has for salinity—additional pollution causes a "violation of water quality standards"); *Friends of Pinto Creek*, 504 F.3d at 1011-12 (adding more pollution to impaired stream will cause or contribute to violation of water quality standard).

To the point here, violations of water quality standards are measured on a *daily* basis—each additional day of elevated pollution levels is an additional violation. § 75-5-

-33-

611(9)(a), MCA; *Id.*; § 82-4-254(1)(a), MCA. Thus, extending the 13% increase in salinity in already-impaired EFAC for decades or centuries would result in additional violations. Plainly, this is not a demonstration that AM4 "will *not* result in" a "violation of water quality standards." ARM 17.24.405(6)(c); § 82-4-203(31), MCA (emphasis added); *Id.*; § 82-4-202(2)(a)-(b), MCA (MSUMRA purpose is environmental protection and implementation of the Montana Constitution's right to a clean and healthful environment); *Park Cnty.*, ¶ 61; *Dover Ranch*, 187 Mont. at 283, 609 P.2d at 715 (statutory goal paramount).

Thus, the BER's conclusion that the cumulative impacts of AM4 will not result in material damage was arbitrary and capricious. It was, therefore, unlawful.

#### H. DEQ's and WRM's Motion to Strike was granted.

DEQ and WRM moved to strike two exhibits proffered by the Conservation Groups during briefing, purportedly containing admissions by DEQ and DEQ's former counsel, which contradict an argument DEQ presented to this Court in its answer brief. In an order filed separately, the Court granted DEQ's and WRM's Motion to Strike. The Court has not relied upon the challenged exhibits in reaching its decision.

#### **VI. CONCLUSION**

For the foregoing reasons, this Court reverses the BER and remands to DEQ to review the AM4 permit application consistent with this decision and applicable laws.

DATED this 27th day of October, 2021.

Bidea Katherine M. Bidegaray **District Court Judge** 



-34-

By\_

Clerk/Deputy Clerk



Board of Environmental Review



- TO: Katherine Orr, Hearing Examiner Board of Environmental Review
- FROM: Regan Sidner, Board Secretary P.O. Box 200901 Helena, MT 59620-0901

DATE: July 29, 2021

SUBJECT: Board of Environmental Review Case No. BER 2021-06 SWP

BEFORE THE BOARD OF ENVI	RONMENTAL REVIEW
OF THE STATE OF	MONTANA
IN THE MATTER OF: NOTICE OF APPEAL	
AND REQUEST FOR HEARING BY OREO'S	
REFINING REGARDING SOLID WASTE	Case No. BER 2021-06 SWP
LICENSE EXPIRATION (LICENSE #574)	

On July 29, 2021, the BER received the attached request for hearing via email. Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Angela Colamaria Chief Legal Counsel Department of Environmental Quality P.O. Box 200901 Helena, MT 59620-0901 Angela.Colamaria@mt.gov

Attachments

#### Sidner, Regan

From:	Shelly Mitchell <oreosrefining@gmail.com></oreosrefining@gmail.com>
Sent:	Thursday, July 29, 2021 3:01 PM
То:	Sidner, Regan
Subject:	[EXTERNAL] Hearing Request
Attachments:	Letter from DEQ.JPG

Good afternoon,

I am writing to request a hearing with the Board of Environmental Review on the grounds that two individuals within the DEQ acted against me as a business owner.

I was granted permission by Missoula County and the DEQ to operate a mobile business and I have done so for almost three years. At the end of October of 2018 I was granted permission to have my e-waste recycling business become mobile. Meaning, I can dismantle e-waste in a trailer at various locations. Operating a mobile business has saved me money because I do not have to pay for a commercial space and allows me to service a greater demographic of clients.

On July 16th 2021, I received a letter from the DEQ revoking my recycling license due to an address discrepancy. Prior to July 16, I had received no warning or notification before having my recycling license revoked. Upon receiving the letter I called Andrea Staley because she had sent the letter. I reached out to Rick Thompson to identify steps to remedy this situation on July 21st and then again July 23rd 2021. I received no response. Because Rick Thompson and Dusti Johnson have refused to communicate with me I believe this action was taken with malice and intent to destroy a sustainable business. I offered alternatives, which they have ignored and when I have tried to reach out to fix this issue, they have been unwilling to communicate with me. No one informed me that I had a right to request a hearing in front of the Board of Environmental Review, again my rights are being withheld.

Since Montana Law Annotated gives the DEQ permission to modify a recycling license I believed I was in compliance since the DEQ granted me permission to make my business mobile. Now I am trying to remedy this situation and receiving zero communication From Dusti and Rick. My business contributes value to the community it serves. Individuals are able to conveniently and safely recycle electronics which would otherwise end up in the landfill. My business poses no danger to public health or safety and causes no adverse environmental effects. So to have this harsh action taken seems completely unreasonable. Losing my business will put me into severe financial hardship. Due to the lack of response from the DEQ I am struggling to make timely payments on my vehicle which is an integral part of my business.

To summarize what will be in the documentation:

- I was approved to be mobile at the end of October 2018.
- One year ago( 2020) Dusti contacted me for an inspection but never did one.
- Two years later (2021)the DEQ decides there is a problem and they do not share that with me.
- July of this year (2021) I got a letter terminating my license.
- Rick Thompson and Dusti Johnson have not communicated or shown any signs of good faith to fix this issue.

Sincerely,

Shelly Oreo's Refining July 29, 2021



July 16, 2021

Shelly Mitchell OREO'S REFINING P.O. Box 1195 Missoula, MT 59806

# RE: FY 2021 LICENSE EXPIRATION AND UPDATED ADDRESS REQUEST

Dear Shelly:

The current solid waste license #574 for Orco's Refining is expired.

A solid waste license is issued for 12 months. The license is valid on July 1 and expires on June 30. We received your renewal application on May 17, 2021.

On June 17, 2021, Dusti Johnson visited 2206 Missoula Avenue in Missoula to conduct an inspection. This address is on your renewal application and is the address we have on file. The residents of that address noted that no such business was conducted there.

Please provide the Solid Waste Program the permanent address where you are conducting business immediately. We are withholding your license until we receive your new address.

Until then, you may not operate. If you are operating without a FY 2022 license, you are doing so in violation of § 75-10-221(1), Montana Code Annotated, which could result in enforcement action.

Sincerely,

andrea Daley

Andrea Staley Waste and Underground Tank Management Bureau Solid Waste Section Phone: 406-444-3493

Greg Granforte, Governor I Chris Domington, Director I P.O. Box 200901 I Helena, MT 59620-0901 I (406) 444-2544 I www.deg.mt.gov

Nicholas Whitaker Staff Attorney Montana Department of Environmental Quality Legal Unit, Metcalf Building P.O. Box 200901 Helena, MT 59620-0901 (406) 444-5690 Nicholas.Whitaker@mt.gov

Attorney for Respondent DEQ

## **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA**

IN THE MATTER OF: THE	
NOTICE OF APPEAL AND	
<b>REQUEST FOR HEARING BY</b>	CASE NO. BER 2021-06 SWP
<b>OREO'S REFINING REGARDING</b>	
SOLID WASTE LICENSE	
EXPIRATION (LICENSE #574)	

## JOINT STATUS REPORT

Pursuant to the Board of Environmental Review's ("BER") Order issued on October 21, 2021, the Department of Environmental Quality ("DEQ") and Oreo's Refining (collectively, "Parties") submit this Joint Status Report providing an update regarding the status of settlement negotiations. Because initial discussions between the Parties have concluded without settlement, the Parties are requesting this matter move forward with the contested case procedures under Title 2, chapter 4, part 6, MCA.

In its August 24, 2021, Prehearing Order, the BER directed the Parties to confer and attempt to resolve this matter and, on or before September 10, 2021, file a joint report concerning whether a resolution has been reached. On September 10, 2021, the Parties jointly reported that they were continuing to work towards a mutual resolution to this matter and requested a stay of the proceedings until October 12, 2021, to continue to explore settlement options. On October 12, 2021, the Parties jointly requested the stay continue for an additional 30 days to continue settlement negotiations. On October 21, 2021, the BER entered an Order continuing the stay in this matter until November 12, 2021. The BER directed the Parties to jointly file a status report on or before that date providing an update regarding the status of settlement negotiations.

Through this status report, the Parties are notifying the BER that initial discussions have concluded without settlement. The Parties are requesting this matter move forward with the contested case procedures under Title 2, chapter 4, part 6, MCA.

At its meeting on August 13, 2021, the BER determined "to retain jurisdiction of this appeal at least for the present time." Prehearing Order, p. 1. The BER may need to take up this matter at its next meeting to determine whether to assign a hearing examiner for procedural issues in this case, hear the case itself, or assign a hearing examiner for all or a portion of this case.

Joint Status Report - 2

## Respectfully submitted this 3rd day of November 2021.

# DEPARTMENT OF ENVIRONMENTAL QUALITY

#### BY: <u>/s/ Nicholas Whitaker</u> Nicholas Whitaker

Attorney for Montana Dept. of Environmental Quality BY: <u>/s/ Shelly Mitchell</u> Shelly Mitchell Oreo's Refining P.O. Box 1195 Missoula, MT 59806-1195 Oreosrefining@gmail.com

Pro Se Litigant

**OREO'S REFINING** 

## **Certificate of Service**

I hereby certify that on the 3rd day of November 2021, I caused a true and accurate copy of the foregoing to be emailed to:

Regan Sidner BER Secretary Department of Environmental Quality P.O. Box 200901 Helena, MT 59620-0901 deqbersecretary@mt.gov

Katherine Orr BER Attorney Montana Department of Justice 1712 Ninth Avenue Post Office Box 201440 Helena, Montana 59620-1440 KOrr@mt.gov EHagen2@mt.gov

Shelly Mitchell Oreo's Refining P.O. Box 1195 Missoula, MT 59806-1195 Oreosrefining@gmail.com

> BY: <u>/s/ Nicholas A. Whitaker</u> Nicholas A. Whitaker *Attorney for DEQ*

## **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA**

IN THE MATTER OF:	CAUSE NO. BER 2012-12 WQ
THE NOTICE OF APPEAL AND REQUEST FOR HEARING BY WESTERN ENERGY COMPANY (WECO) REGARDING ITS MPDES PERMIT NO. MT0023965 ISSUED FOR WECO'S ROSEBUD MINE IN COLSTRIP	ORDER GRANTING JOINT UNOPPOSED MOTION TO DISMISS

Upon the Joint Unopposed Motion to Dismiss filed by Appellant

Westmoreland Rosebud Mining LLC, formerly known as Western Energy

Company, and the Montana Department of Environmental Quality,

IT IS HEREBY ORDERED that this appeal is dismissed as moot.

DATED this \_\_\_\_\_ day of December, 2021.

Steven Ruffatto, Chair Board of Environmental Review 1712 Ninth Avenue P.O. Box 201440 Helena, MT 59620-1440 I hereby certify that on the \_\_\_\_\_ day of December, 2021, I caused a true and accurate copy of the foregoing to be emailed to:

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Board of Environmental Review	[X] Electronic Mail
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Sarah C. Bordelon Holland & Hart LLP 5441 Kietzke Lane, Suite 200 Reno, NV 89511 Telephone: (775) 327-3011 E-mail: SCBordelon@hollandhart.com

ATTORNEYS FOR WESTMORELAND ROSEBUD MINING LLC Kirsten H. Bowers Montana Department of Environmental Quality 1520 East Sixth Avenue P.O. Box 200901 Helena, MT 59620-0901 Telephone: (406) 444-4222 Email: kbowers@mt.gov

ATTORNEY FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY

# **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA**

IN THE MATTER OF:	CAUSE NO. BER 2012-12 WQ
THE NOTICE OF APPEAL AND REQUEST FOR HEARING BY WESTERN ENERGY COMPANY (WECO) REGARDING ITS MPDES PERMIT NO. MT0023965 ISSUED FOR WECO'S ROSEBUD MINE IN COLSTRIP	JOINT UNOPPOSED MOTION TO DISMISS

Appellant Westmoreland Rosebud Mining LLC, formerly known as Western Energy Company, ("Westmoreland") and the Montana Department of Environmental Quality ("DEQ") jointly move to dismiss this appeal as moot. Counsel for Intervenors was contacted and indicated they do not oppose this motion.

#### **HISTORY OF THE CASE**

#### A. Administrative Litigation Before the Board

In 2012, Westmoreland appealed DEQ's decision on its 2012 MPDES Permit No. MT0023965 (the "2012 Permit") governing discharges of water from the Rosebud Mine. Montana Environmental Information Center and the Sierra Club (collectively, "Intervenors") filed a motion to intervene, which was granted by Hearing Examiner Orr on July 31, 2013.

On February 21, 2014, Westmoreland and DEQ reached a settlement agreement in the case. The settlement agreement included requirements for Westmoreland to submit to DEQ an application to modify the 2012 Permit, timelines by which DEQ would review the application and prepare a draft modified permit and then make a final decision on the modified permit after receipt of public comments. On March 3, 2014, DEQ and Westmoreland jointly moved the Board to stay the proceedings and remand the 2012 Permit, in part, to DEQ for consideration of Westmoreland's modification application. Intervenors did not oppose the motion.

On April 9, 2014, Hearing Examiner Orr granted the joint unopposed motion and remanded the 2012 Permit, in part, to DEQ and stayed the Board proceedings "until resolution by the Department and Western Energy of permit modifications, finalization of the permit and resolution of any other pending administrative or judicial proceedings concerning a final permit decision following this remand."

Hearing Examiner Orr's Order also requested a status report due on May 14, 2014. DEQ timely filed the requested status report and noted that Westmoreland had timely filed a request for modification of the 2012 Permit and that DEQ was preparing a draft modified permit and planning to provide for public comment on it on or before June 9, 2014. On June 11, 2014, Hearing Examiner Reed assumed jurisdiction of this case.

#### **B.** Permitting Actions

The 2012 Permit was modified on September 8, 2014 and again on January 27, 2016. Westmoreland timely applied to renew the permit prior to its October 31, 2017 expiration date. The permit was administratively extended, Westmoreland provided updated renewal application materials on December 3, 2019, and DEQ ultimately issued a final permit on June 7, 2021 (the "2021

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Permit"). The 2021 Permit, except a discreet issue related to salinity limitations that Westmoreland timely appealed, took effect on August 1, 2021.

#### C. Judicial Litigation

By separate action, on December 12, 2012, Intervenors filed a Verified Complaint and Application for Writ of Mandate and Declaratory Relief in Lewis and Clark County challenging the 2012 Permit. That litigation proceeded through motions practice, oral argument and a summary judgment decision at the district court, which was appealed to the Montana Supreme Court. On September 10, 2019, the Montana Supreme Court reversed the District Court's summary judgment ruling and remanded to the District Court. *Mont. Envtl. Info. Ctr. v. Mont. Dep't of Envtl. Quality*, 2019 MT 213, 3397 Mont. 161, 451 P.3d 493. The parties engaged in discovery and summary judgment briefing. Ultimately, in light of the 2021 Permit, the judicial case was dismissed as moot on November 5, 2021. **Exhibit A**, attached.

#### **DISMISSAL OF THE 2012 APPEAL**

DEQ and Westmoreland now move the Board to dismiss this 2012 appeal because the conditions specified in Hearing Examiner Orr's 2014 stay have been satisfied with dismissal of the judicial action and because the 2012 Permit, 2014 Modification and 2016 Modification have been replaced by the 2021 Permit, making this 2012 appeal moot.

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Westmoreland's appeal of a discreet issue of the 2021 Permit (salinity limitations for outfalls discharging to tributaries of Lee Coulee) is Case No. 2021-05 WQ on the Board's docket, but involves an issue not raised in and unrelated to either the 2012 administrative or 2012 judicial litigation. The 2021 appeal further demonstrates the mootness of the 2012 appeal and need for dismissal.

DATED this 10th day of November, 2021.

<u>/s/Victoria A. Marquis</u> Victoria A. Marquis Holland & Hart LLP 401 North 31st Street, Suite 1500 P.O. Box 639 Billings, Montana 59103-0639

John C. Martin Holland & Hart LLP 901 K Street NW, Suite 850 Washington, DC 20001

Sarah C. Bordelon Holland & Hart LLP 5441 Kietzke Lane, Suite 200 Reno, NV 89511

ATTORNEYS FOR WESTMORELAND ROSEBUD MINING LLC /s/ Kirsten H. Bowers

Kirsten H. Bowers Montana Department of Environmental Quality 1520 East Sixth Avenue P.O. Box 200901 Helena, MT 59620-0901

ATTORNEY FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY

# CERTIFICATE OF SERVICE

I hereby certify that on the 10th day of November, 2021, I caused a true and

accurate copy of the foregoing to be emailed to:

Regan Sidner, Board Secretary	U.S. Mail, postage prepaid
Board of Environmental Review	[X] Electronic Mail
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deqbersecretary@mt.gov	
Katherine Orr, Board Attorney	[ ] U.S. Mail, postage prepaid
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shernandez@earthjustice.org	

/s/ Arlene S. Forney

Arlene S. Forney Legal Assistant for Holland & Hart

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1	MONTANA ENVIRONMENTAL	Cause No.: DDV-2012-1075
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3	Plaintiffs,	ORDER ON MOTION TO DISMISS
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8	Defendant.	
9	and	
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1	WESTMORELAND ROSEBUD	
22	ENERGY COMPANY,	
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	Defendant-Intervenor.	
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EXHIBIT A
Before the Court is the motion of Defendant Department of Environmental Quality (DEQ) and Defendant-Intervenor Westmoreland Rosebud Mining, LLC (Westmoreland) to dismiss this matter with prejudice. Plaintiff Montana Environmental Information Center (MEIC) does not oppose dismissal of the matter but maintains the matter should be dismissed without prejudice. The motion is fully briefed, and the Court heard brief argument at the status hearing held on November 4, 2021. At the hearing, DEQ was represented by Kirsten H. Bowers, Westmoreland was represented by Victoria A. Marquis, and MEIC was represented by Shiloh Hernandez. For the reasons stated at the hearing, the Court concludes that it should simply order that the matter be dismissed for lack of jurisdiction as moot. Accordingly,

### **IT IS ORDERED:**

This matter is **DISMISSED** for lack of jurisdiction as moot. DATED this  $\int_{-\infty}^{+\infty} day$  of November 2021.

CHRISTOPHER D. ABBOTT District Court Judge

cc: Shiloh Hernandez, (via email to: hernandez@westernlaw.org /
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EXHIBIT A

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ATTORNEY FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY

## **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA**

IN THE MATTER OF:	CAUSE NO. BER 2021-05 WQ
THE NOTICE OF APPEAL AND REQUEST FOR HEARING BY WESTMORELAND ROSEBUD MINING LLC REGARDING ISSUANCE OF MPDES PERMIT NO. MT0023965	STIPULATION FOR FINAL AGENCY DECISION

Appellant Westmoreland Rosebud Mining LLC ("Westmoreland") and the Montana Department of Environmental Quality ("DEQ"), collectively ("Parties"), hereby stipulate and agree as follows:

1. Pursuant to Mont. Code Ann. § 75-5-403, the Board of Environmental Review ("Board") has authority to hear contested case appeals of DEQ's Montana Pollutant Discharge Elimination System ("MPDES") permitting decisions, such that the Board may affirm, modify, or reverse a permitting action of DEQ.

DEQ is a department of the executive branch of state government,
 duly created and existing under the authority of Mont. Code Ann.§ 2-15-3501.
 DEQ has statutory authority to administer Montana's water quality statutes,
 including the review and issuance of MPDES Permits under Mont. Code Ann.§ 75 5-402 and ARM 17.30.1301.

3. Westmoreland is a limited liability company registered to do business in Montana.

Westmoreland owns the Rosebud Mine, which is an MPDES permitted facility. Westmoreland has been issued MPDES Permit No.
 MT0023965 for the facility.

5. MPDES Permit No. MT0023965 was renewed on June 7, 2021 and became effective August 1, 2021 (the "2021 Renewal").

6. On July 7, 2021, Westmoreland timely filed with the Board a Notice of Appeal and Request for Hearing, appealing only the electrical conductivity ("EC") effluent limitations for discharges to tributaries of and into Lee Coulee. *See* Notice of Appeal (July 7, 2021).

7. On August 5, 2021, pursuant to Admin. R. Mont. 17.30.1379, DEQ noted that all provisions of the 2021 Renewal were in effect, except for the EC effluent limitations for outfalls discharging to tributaries to Lee Coulee, which were stayed. During the pendency of the appeal, the EC effluent limitations for Lee Coulee from the previous version of MPDES Permit No. MT0023965 (the "2012 Renewal") remain in effect.

8. On August 6, 2021, in accordance with Admin. R. Mont. 17.30.1362, DEQ issued a minor modification to the 2021 Renewal correcting typographical and other minor errors (the "2021 Minor Mod"). The 2021 Minor Modification corrects descriptions of the receiving waters, including tributaries to Lee Coulee, but does not materially affect this Appeal.

9. Admin. R. Mont. 17.30.670(4) provides "[f]or all tributaries and other surface waters in the Rosebud Creek, Tongue, Powder, and Little Powder river watersheds, the monthly average numeric water quality standard for EC is 500  $\mu$ S/cm and no sample may exceed an EC value of 500  $\mu$ S/cm." Lee Coulee is a tributary to Rosebud Creek.

10. As outlined in DEQ's white paper titled <u>A Review of the Rationale for</u> <u>EC and SAR Standards</u>, "[w]hen the natural EC values exceed the proposed EC standards, the provisions of 75-5-306, MCA would apply" directing that "[i]t is not necessary that wastes be treated to a purer condition than the natural condition of the receiving stream as long as the minimum treatment requirements" are met. DEQ "will determine the natural condition of the stream at any given point in time through monitoring, interpretation of historic data, and modeling to ensure that water quality is not diminished." <u>Rationale</u>, Sec. 6.0, p. 15. Neither DEQ nor Westmoreland has yet determined the natural condition of EC in Lee Coulee and its unnamed tributaries for purposes of surface water quality regulation.

11. The 2021 Renewal included electrical conductivity limitations for Lee Coulee as follows:

Final Effluent Limitations:	Average Monthly limit of 249 μS/cm Maximum Daily limit of 500 μS/cm
Alternate Effluent Limitation:	Maximum Daily limit of 500 µS/cm
12. The immediately preced	ing version of MPDES Permit No.
MT0023965 (the "2012 Renewal") in	cluded electrical conductivity limitations for
Lee Coulee as follows:	

Final Effluent Limitations:	Average Monthly limit of 500 μS/cm Maximum Daily limit of 500 μS/cm
Alternate Effluent Limitation:	Maximum Daily limit of 500 µS/cm

13. The 2021 Renewal, like the 2012 Renewal, provides seven outfalls that are permitted to discharge to unnamed ephemeral tributaries to Lee Coulee: Outfalls 130, 131, 132, 134, 130A, 130B, and 131A. *See* 2021 Minor Mod, Table 1. There were no discharges from any of those seven outfalls during the previous period of record for MPDES Permit No. MT0023965. *See* 2021 Fact Sheet, p. 90.

14. Lee Coulee meets the definition of a hydrologically ephemeral stream where it receives discharges from the Rosebud Mine. *See* ARM
17.30.602(10), 2021 Fact Sheet, p. 10, 31.

15. Lee Coulee has water quality that "is highly variable due to a mixture of runoff dominated flows and some reaches with groundwater dominated baseflows." Amendment AM4 Cumulative Hydrologic Impact Assessment (CHIA), p. 9-11. Total Dissolved Solids ("TDS") measurements in the Lee Coulee, which are roughly analogous to EC measurements, ranged from 220 mg/L to 4,330 mg/L with a median measurement of 2,700 mg/L. *Id*.

16. Groundwater samples from monitoring wells near the head of Lee Coulee revealed TDS levels ranging from 436 mg/L to 3,630 mg/L, with an average of 1,956 mg/L and a median of 1,840 mg/L. CHIA, p. 8-10. Alluvial groundwater is classified as Class III groundwater, which by definition has

Specific Conductance between  $2,500 - 15,000 \mu$ S/cm. Specific Conductance is roughly analogous to EC. CHIA, p. 8-7, ARM 17.30.1006(3).

17. The Reasonable Potential Analysis for EC in Lee Coulee provided in the 2021 Renewal Fact Sheet did not account for the natural condition of surface water in Lee Coulee and its unnamed ephemeral tributaries.

18. DEQ and Westmoreland agree that, for the term of the 2021 Renewal, Westmoreland's planned discharges that are subject to the final effluent limitations provided in Table 7 of the 2021 Renewal, will be governed as before, in the 2012 Renewal, at the following levels, which are set equal to the water quality standard provided in Admin. R. Mont. 17.30.670(4):

Final Effluent Limitations:Average Monthly limit of 500 μS/cmMaximum Daily limit of 500 μS/cm

19. In accordance with ARM 17.24.639 and Westmoreland's surface mining permit (SMP C1984003B), Westmoreland has constructed and is required to maintain sedimentation ponds upgradient of each of the Lee Coulee outfalls (Outfalls 130, 131, 132, 134, 130A, 130B, and 131A). These sedimentation ponds are designed and constructed to capture and detain stormwater runoff from, at a minimum, the theoretical 10-year, 24-hour storm event. The sedimentation ponds are part of "the facilities and systems of treatment and control" that Westmoreland "shall at all times properly operate and maintain" in accordance with ARM 17.30.1342(5) and the 2021 Renewal.

20. Westmoreland agrees to dismiss its appeal as it applies to the alternate effluent limitations in Table 12 of the 2021 Renewal.

21. Neither DEQ nor Westmoreland waives the right to assert any obligations, challenges or defenses in the future based on the natural condition of EC in Lee Coulee and its unnamed tributaries.

22. Westmoreland does not admit that Admin. R. Mont. 17.30.670(4) governs the discharges to unnamed ephemeral tributaries of Lee Coulee in terms of EC and SAR and Westmoreland maintains that the provisions of Mont. Code Ann. § 75-5-306, MCA govern.

23. The singular issue identified in Westmoreland's Notice of Appeal and Request for Hearing may be completely resolved under the terms of this Stipulation, should the Board adopt a final agency decision as specified herein and as further set forth in the Modified Permit attached as **Exhibit A**.

24. Should the Board accept this Stipulation and approve the Proposed Board Order for Final Agency Decision, Westmoreland will dismiss this contested case in its entirety.

25. Nothing in this Stipulation shall prohibit DEQ or Westmoreland from exercising any rights or authority under the Water Quality Act.

26. The Modified Permit attached as Exhibit A appropriately incorporates modifications to the appealed 2021 Renewal as contemplated in this Stipulation.

27. **Exhibit B**, a track changes/redline version of the Modified Permit, has been attached to this Stipulation to better highlight the Parties' proposed changes to the 2021 Renewal.

28. The Parties request the Board adopt, as the final agency decision concerning Westmoreland's Notice of Appeal, the Modified Permit attached as Exhibit A as well as the attached (Proposed) Board Order for Final Agency Decision, pursuant to its authority to hear contested case appeals of MPDES Permits under Mont. Code Ann.§ 75-5-403(2).

29. Each of the signatories to this Stipulation represents that he or she is authorized to enter this Stipulation and to bind the Parties represented by him or her to the terms of this Stipulation.

30. Westmoreland's Notice of Appeal has been fully and finally compromised and settled by agreement of the Parties and the Parties stipulate to and respectfully request the Board's entry of a final agency decision as set forth in this Stipulation.

31. All conditions of the Modified Permit, attached hereto as Exhibit A, will be fully effective and enforceable on October 31, 2021.

32. The Parties shall each pay their own attorney fees and costs.

33. The Board's Decision as to Westmoreland's Notice of Appeal shall

represent the FINAL AGENCY DECISION for purposes of the Montana

Administrative Procedure Act, Section 2-4-623, MCA.

DATED this 23rd day of November, 2021.

/s/ Victoria A. Marquis

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ATTORNEYS FOR WESTMORELAND ROSEBUD MINING LLC /s/ Kirsten H. Bowers

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ATTORNEY FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY

# CERTIFICATE OF SERVICE

I hereby certify that on the 23rd day of November, 2021, I caused a true and

accurate copy of the foregoing to be emailed to:

Regan Sidner, Board Secretary	[ ] U.S. Mail, postage prepaid
Board of Environmental Review	[X] Electronic Mail
1520 E. Sixth Avenue	[ ] Facsimile Transmission
P.O. Box 200901	[ ] Personal Delivery
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Board of Environmental Review	[X] Electronic Mail
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Kirsten H. Bowers	[ ] U.S. Mail, postage prepaid
Department of Environmental Quality	[X] Electronic Mail
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Catherine.Armstrong2@mt.gov	

# /s/ Lynette D. Sawatzke

Lynette D. Sawatzke Legal Assistant for Holland & Hart

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# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

#### AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 et seq.,

#### WESTMORELAND ROSEBUD MINING LLC (the Permittee)

is authorized to discharge from its **ROSEBUD MINE** 

located at CASTLE ROCK ROAD, COLSTRIP, MT

#### to receiving waters named: EAST FORK ARMELLS CREEK, STOCKER CREEK, LEE COULEE, WEST FORK ARMELLS CREEK, BLACK HANK CREEK, DONLEY CREEK, COW CREEK, SPRING CREEK, AND PONY CREEK

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: August 1, 2021.

This permit and the authorization to discharge shall expire at midnight, July 31, 2026.

FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

| S | Jon Kenning

Jon Kenning, Chief Water Protection Bureau Water Quality Division

Modified Pursuant to Board Order on:

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#### I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

#### A. <u>Description of Discharge Points and Mixing Zone(s)</u>

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Montana Water Quality Act, 75-5-Part 6, Montana Code Annotated (MCA).

**Table 1** below provides a description of the discharge points and mixing zones for each outfall associated with active mining. Treatment consists of the use of sediment ponds, with a 10-year, 24-hour (or larger) design capacity, to remove suspended solids from commingled storm water and pit water or coal plant wash down water. **Table 2** provides a description of the discharge points and mixing zones for each outfall assigned Western Alkaline Standards.

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
023	45°51'39"N	106°40'22"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
024	45°51'36"N	106°40'50"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
025	45°51'16"N	106°41'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
026	45°51'7"N	106°41'37"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
043	45°51'24"N	106°41'25"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)

 Table 1. Description of Discharge Points, Monitoring Locations and Mixing Zones for Active Mining

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
044	45°51'16"N	106°41'39"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
046	45°51'27"N	106°42'12"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
048	45°51'1"N	106°42'21"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
049	45°51'11"N	106°42'55"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
051	45°51'6"N	106°43'17"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
052	45°50'57"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
054	45°50'52"N	106°43'47"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
056	45°50'42"N	106°44'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
058	45°50'51"N	106°44'24"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
059	45°50'49"N	106°44'48"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Ephemeral	
060	45°50'40"N	106°45'45"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
061	45°50'35"N	106°45'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
063	45°50'46"N	106°46'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
064	45°50'59"N	106°46'33"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
127	45°50'39"N	106°46'49"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Enhemeral	(2)
128	45°50'32"N	106°45'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
129	45°50'38"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
133	45°50'37"N	106°43'50"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
136	45°50'38"N	106°43'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
137	45°50'52"N	106°42'53"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Ephemeral	
139	45°50'60"N	106°42'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128A	45°50'34"N	106°45'38"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128B	45°50'35"N	106°45'46"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128C	45°50'39"N	106°45'54"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128D	45°50'48"N	106°46'23"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
59A	45°50'41"N	106°45'16"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
009	45°52'32"N	106°37'43"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
010	45°52'12"N	106°37'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
011	45°52'6"N	106°37'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
012	45°52'1"N	106°38'3"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
013	45°52'13"N	106°38'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
014	45°51'57"N	106°38'46"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
015	45°51'51"N	106°38'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
016	45°51'52"N	106°38'58"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
018	45°51'36"N	106°39'12''W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
019	45°51'42"N	106°39'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
020	45°51'30"N	106°39'44''W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
021	45°51'30"N	106°39'54''W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
022	45°51'31"N	106°39'56"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
075	45°53'33"N	106°39'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
194	45°53'5"N	106°36'28"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
010A	45°52'30"N	106°36'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Intermittent	
13A	45°52'8"N	106°38'19"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
16A	45°51'42"N	106°39'26"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
08D	45°55'8"N	106°35'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
09A	45°52'20"N	106°37'55"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
095	45°53'14"N	106°51'31"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
100	45°53'4"N	106°51'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
101	45°52'56"N	106°50'57"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
103	45°52'49"N	106°50'41"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
104	45°52'46"N	106°50'30"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
105	45°52'31"N	106°49'56"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
106	45°52'33"N	106°49'42''W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
107	45°52'30"N	106°49'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
108	45°52'33"N	106°49'27"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
109	45°52'28"N	106°48'52"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	(2)
104A	45°52'41"N	106°47'40''W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
95A	45°53'20"N	106°51'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
096	45°53'17"N	106°52'31"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Black Hank Creek	(2)
098	45°53'30"N	106°51'56"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Donley Creek	(2)
030	45°52'37"N	106°46'6"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
032	45°52'19"N	106°45'47"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
033	45°52'32"N	106°45'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
034	45°52'32"N	106°45'8"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
035	45°52'21"N	106°44'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
069	45°52'52"N	106°42'9"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
070	45°53'6"N	106°41'58"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
071	45°53'22"N	106°41'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
072	45°53'45"N	106°40'5"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
71C	45°53'31"N	106°40'51"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
130	45°49'56"N	106°45'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
131	45°49'56"N	106°44'2"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
132	45°49'56"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
134	45°49'56"N	106°43'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
130A	45°49'56"N	106°44'32"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone	
130B	45°49'56"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)	
131A	45°49'56"N	106°43'54"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)	
Footnotes: (1) Outfall locations define monitoring locations						

(1) Outfall locations define monitoring locations.(2) No acute, chronic or human health mixing zone allowed for this discharge.

Table 2.	<b>Description of Discharge Points,</b>	<b>Monitoring Locations</b>	and Mixing Zones for Outfa	lls
Assigned	Western Alkaline Standards			

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
042	45°51'54"N	106°41'31"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
007	45°54'15"N	106°36'48"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
077	45°55'7"N	106°36'36"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
079	45°55'13"N	106°36'8"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
141	45°54'53"N	106°36'51"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
142	45°54'41"N	106°36'43"W	Precipitation event runoff	Unnamed ephemeral tributary to East	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Fork Armells Creek –	
				Intermittent	
143	45°54'33"N	106°36'46''W	Precipitation event runoff	Unnamed ephemeral tributary to East	(2)
	15 5 155 1	100 50 10 10		Fork Armells Creek – Intermittent	
144	45°54'3"N	106°36'46"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek –	(2)
				Intermittent	
195	45°53'5"N	106°36'14"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
112	45°53'24"N	106°48'15"'W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
113	45°53'26"N	106°47'31"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
112A	45°53'24"N	106°47'24"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
112B	45°53'31"N	106°47'8"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
036	45°52'31"N	106°43'26"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
037	45°52'32"N	106°43'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
038	45°52'31"N	106°42'52"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
039	45°52'29"N	106°42'21"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
040	45°52'25"N	106°42'12"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
041	45°52'21"N	106°42'7"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
073	45°53'43"N	106°39'48"W	Precipitation event runoff	Stocker Creek	(2)
074	45°53'41"N	106°39'28"W	Precipitation event runoff	Stocker Creek	(2)
116	45°53'36"N	106°46'34"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
119	45°53'8"N	106°45'49"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
121	45°52'44"N	106°46'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
113D	45°52'37"N	106°46'53"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
116A	45°53'32"N	106°46'19"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
120A	45°52'47"N	106°46'36"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
121A	45°52'53"N	106°46'2"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028-1A	45°52'35"N	106°47'47"W	Precipitation event runoff	Unnamed ephemeral	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				tributary to Stocker Creek	
028-2A	45°52'33"N	106°48'2"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028A	45°52'40"N	106°47'30"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028B	45°52'37"N	106°47'35"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
073A	45°53'41"N	106°39'45"W	Precipitation event runoff	Stocker Creek	(2)
006	45°53'48"N	106°35'10"W	Precipitation event runoff	Cow Creek	(2)
090	45°53'52"N	106°34'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
091	45°53'51"N	106°34'26"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
092	45°53'50"N	106°34'38"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
093	45°53'29"N	106°35'6"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
151	45°52'56"N	106°35'32"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
152	45°52'52"N	106°35'21"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
153	45°53'7"N	106°35'22"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
154	45°53'14"N	106°35'14"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
155	45°53'23"N	106°35'11"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
173	45°53'58"N	106°32'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
175	45°53'50"N	106°32'36"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
176	45°53'54"N	106°33'4"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
177	45°53'52"N	106°35'18"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
178	45°53'50"N	106°33'30"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
179	45°53'51"N	106°33'53"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
165	45°54'45"N	106°32'59"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
166	45°54'45"N	106°33'4"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
167	45°54'45"N	106°33'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
168	45°54'45"N	106°33'20"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
169	45°54'37"N	106°33'25"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
170	45°54'19"N	106°33'6"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
171	45°54'14"N	106°32'58"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
172	45°54'15"N	106°32'39"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)
169A	45°54'30"N	106°33'25"W	Precipitation event runoff	Pony Creek	(2)
080	45°55'19"N	106°35'37"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
082	45°55'22"N	106°35'8"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
083	45°55'18"N	106°34'52"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
084	45°55'6"N	106°34'21"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
085	45°55'2"N	106°34'12"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
086	45°55'7"N	106°34'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
161	45°55'7"N	106°33'29"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
162	45°55'8"N	106°33'25"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
163	45°55'7"N	106°33'1"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
164	45°55'3"N	106°32'56"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
160A	45°55'8"N	106°33'42"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
160B	45°55'8"N	106°33'48"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
161A	45°55'8"N	106°33'34"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
Footnotes:	locations define	monitoring logatio	20		

Outfall locations define monitoring locations.
 No south abrania or human health mixing zone allowed for

(2) No acute, chronic or human health mixing zone allowed for this discharge.

#### B. Final Effluent Limitations and Monitoring Requirements

# 1. Numeric Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of the permit, the quality of effluent discharged at all outfalls shall, at a minimum, meet the limitations set forth in **Tables 3 through 7.** 

Table 3. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek – Ephemeral
and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral

Banamatan	Effluent 1		Limitations	
Farameter	Units	Average Monthly	Maximum Daily	
Boron, total a B	mg/L	0.7	1.1	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
рН	s.u.	Between 6.0 and 9.0 at all times		
Sulfate	mg/L	2050	3075	
Total dissolved solids (TDS)	mg/L	3000	4500	
Total suspended solids	mg/L	35	70	
Outfalls discharging to East Fork Armells Creek – Ephemeral: 025, 044, 048, 056, 061, 063, 128, 136, 139,				
128A, 128B, 128C, 128D, 059A				
Outfalls discharging to unnamed	l ephemera	al tributaries to East Fork Armells	<u>Creek – Ephemeral</u> : 023, 024, 026,	
043, 046, 049, 051, 052, 054, 05	8,059,06	0,064,127,133,137		

 Table 4. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek - Intermittent

 and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Danamatan	Unita	Effluent	Limitations	
Farameter	Units	Average Monthly	Maximum Daily	
Aluminum, dissolved as $Al^{(1)(2)}$	μg/L	71.24	142.91	
Boron, total as B	mg/L	0.7	1.1	
Iron, total as Fe <sup>(1)(2)</sup>	mg/L	0.7	1.8	
Mercury, total recoverable <sup>(1)</sup>	μg/L	0.05	0.05	
Nitrogen, Ammonia as N <sup>(1)</sup>	mg/L	2.31	4.64	
Oil and grease	mg/L		10	
pН	s.u.	Between 6.0 and 9.0 at all times		
Selenium, total as Se <sup>(1)</sup>	µg/L	4.1	8.2	
Silver, total recoverable <sup>(1)</sup>	μg/L	0.14	0.27	
Sulfate	mg/L	2050	3075	
Total dissolved solids (TDS)	mg/L	3000	4500	
Total suspended solids	mg/L	35	70	

Danamatan	I.I.e.:4a	Effluent Limitations		
Parameter	Units	Average Monthly	Maximum Daily	
Outfalls discharging to East Forl	k Armells	Creek - Intermittent: 009, 010, 012	2, 013, 019, 022, 010A, 13A, 16A,	
09A, 075				
Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent: 011, 014, 015,				
016, 018, 020, 021, 194, 08D	0, 021, 194, 08D			
Footnotes:				
(1) Limits for these parameters will become effective three (3) years from the effective date of the permit.				

(1) Limits for these parameters will be retained from the previous permit until three years from the effective date of the permit. Dissolved aluminum is 87 μg/L AML and 750 μg/L MDL. Total iron is 1.0 mg/L AML and 7.0 mg/L MDL.

# Table 5. Summary of Final Numeric Effluent Limitations – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, and unnamed ephemeral tributaries to Donley Creek

Danamatan	Unita	Effluent	Limitations		
rarameter	Units	Average Monthly	Maximum Daily		
Boron, total as B	mg/L	0.4	0.6		
Iron, total as Fe	mg/L	3.5	7		
Oil and grease	mg/L		10		
pН	s.u.	Between 6.0 and 9.0 at all times			
Sulfate	mg/L	1500	2250		
Total dissolved solids (TDS)	mg/L	2600	3900		
Total suspended solidsmg/L3570					
Outfalls discharging to West Fork Armells Creek: 109 Outfalls discharging to unnamed ephemeral tributaries to West Fork Armells Creek: 095, 100, 101, 103, 104, 105, 106, 107, 108, 104A, 95A					

Outfalls discharging to unnamed ephemeral tributaries to Black Hank Creek: 096

Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098

# Table 6. Summary of Final Numeric Effluent Limitations – Stocker Creek and unnamed ephemeral tributaries to Stocker Creek

Banamatan	Unita	Effluent Limitations		
Farameter	Units	Average Monthly	Maximum Daily	
Boron, total as B	mg/L	1	1.5	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
рН	s.u.	Between 6.0 and 9.0 at all times		
Sulfate	mg/L	2400	3600	

Danamatan	Unita	Effluent Limitations		
rarameter	Units	Average Monthly	Maximum Daily	
Total dissolved solids (TDS)	mg/L	3950	5925	
Total suspended solids	mg/L	35	70	
Outfalls discharging to Stocker Creek: 030 Outfalls discharging to unnamed ephemeral tributaries to Stocker Creek: 032, 033, 034, 035, 069, 070, 071, 71C, 072				

Table 7. Summary of Final Numeric Effluent Limitations –	- Unnamed ephemeral tributaries to Lee
Coulee	-

Danamatan	Unita	Effluent Limitations		
Farameter	Units	Average Monthly	Maximum Daily	
Boron, total as B	mg/L	0.4	0.6	
Electrical Conductivity (EC)	µS/cm	500	500	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
рН	s.u.	Between 6.0 and 9.0 at all times		
Sulfate	mg/L	1500	2250	
Total suspended solids	mg/L	35	70	
Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A				

#### 2. Narrative Effluent Limitations:

#### a. "Free From" Standards

- There shall be no discharge from any outfall listed in **Table 1** that reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving water or upon adjoining shorelines.
- There shall be no discharge from any outfall listed in **Table 1** of floating debris, scum, a visible oil film or globules of grease or other floating materials.
- There shall be no discharge from any outfall listed in **Table 1** that produce odors, colors, or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible.
- There shall be no discharge from any outfall listed in **Table 1** that create concentrations or combinations of material which are toxic or harmful to human, animal, plant or aquatic life.
- There shall be no discharge from any outfall listed in **Table 1** that create conditions which produce undesirable aquatic life.

b. East Fork Armells Creek – Ephemeral and Unnamed Ephemeral Tributaries to East Fork Armells Creek – Ephemeral

All planned discharges to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries of East Fork Armells Creek – Ephemeral will be managed in such a way that effluent infiltrates prior to reaching East Fork Armells Creek – Intermittent. This includes all outfalls on East Fork Armells which are upstream of the in-channel dam located between outfalls 022 and 023. Planned discharges to East Fork Armells – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral shall adhere to the following requirements:

- a) Planned discharges must be designed in such a way as to prevent erosion of the channel at the point of discharge and immediately downstream;
- b) Planned discharges must be managed in such a way to ensure effluent infiltrates prior to reaching the dam or any water ponded behind the dam;
- c) The site conditions for all planned discharges to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral must be recorded and retained onsite. These records are to include the start and stop day and time of discharge, outfall, reason for the planned discharge, total volume discharged, maximum distance effluent reaches downstream of the outfall, weather conditions, and observations of the channel conditions; and
- d) The permittee must submit a report to DEQ within one month following each planned discharge to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral which contains a summary of the event as described in item "c" above.

#### 3. Alternate Numeric Effluent Limitations

Beginning on the effective date and lasting through the term of this permit, the quality of precipitation-driven effluent discharged at all active outfalls per Table 1 shall, at a minimum, meet the alternate limitations set forth in **Tables 8 through 12**.

Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral	able 8. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – East Fo	rk
Ephemeral	rmells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek –	
	phemeral	

		Effluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily
Boron, total as $B^{(1)(2)}$	mg/L		1.1
Oil and grease <sup>(1)(2)</sup>	mg/L		10
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all times	
Settleable solids <sup>(1)</sup>	ml/L		0.5
Sulfate <sup>(1)(2)</sup>	mg/L		3075
Total dissolved solids (TDS) (1)(2)	mg/L		4500

		Effluent Limitations		
Parameter	Units	Average	Maximum	
		Monthly	Daily	
Outfalls discharging to East Fork	Armells Cro	eek – Ephemeral:	025, 044, 048, 056,	
061, 063, 128, 136, 139, 128A, 12	8B, 128C,	128D, 059A		
Outfalls discharging to unnamed e	phemeral t	ributaries to East I	Fork Armells Creek	
- Ephemeral: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127,				
133, 137				
Footnotes:				
(1) Applicable to discharges or increases in the volume of discharges caused by				
precipitation within any 24-hour period less than or equal to the 10-yr, 24-hr				
precipitation event (or snowmelt of equivalent volume) of 2.4 inches.				
(2) Applicable to discharges or in	creases in t	he volume of disc	harges caused by	
precipitation within any 24-ho	our period g	reater than the 10-	-yr, 24-hr	
precipitation event (or snowm	elt of equiv	alent volume) of 2	2.4 inches.	

#### Table 9. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

		Effluent	ffluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily	
Aluminum, dissolved as $Al^{(1)(2)(3)(4)}$	μg/L		143	
Boron, total as B <sup>(1)(2)</sup>	mg/L		1.1	
Iron, total as $Fe^{(1)(2)(3)(4)}$	mg/L		1.8	
Mercury, total recoverable <sup>(1)(2)(3)</sup>	μg/L		0.05	
Nitrogen, Ammonia as $N^{(1)(2)(3)}$	mg/L		4.64	
Oil and grease <sup>(1)(2)</sup>	mg/L		10	
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 at	nd 9.0 at all times	
Selenium, total as Se <sup>(1)(2)(3)</sup>	μg/L		8.2	
Settleable solids <sup>(1)</sup>	ml/L		0.5	
Silver, total recoverable <sup>(1)(2)(3)</sup>	μg/L		0.27	
Sulfate <sup>(1)(2)</sup>	mg/L		3075	
Total dissolved solids (TDS) (1)(2)	mg/L		4500	

		Effluent	Limitations
Parameter	Units	Average	Maximum
		Monthly	Daily
Outfalls discharging to East Fork	Armells Cr	eek – Intermittent:	009, 010, 012, 013,
019, 022, 010A, 13A, 16A, 09A, 0	)75		
Outfalls discharging to unnamed e	phemeral t	ributaries to East F	Fork Armells Creek
<u>- Intermittent</u> : 011, 014, 015, 016	, 018, 020,	021, 194, 08D	
Footnotes:			
<ol> <li>Applicable to discharges or in precipitation within any 24-h precipitation event (or snown</li> </ol>	creases in t our period nelt of equi	he volume of disc less than or equal valent volume) of	harges caused by to the 10-yr, 24-hr 2.4 inches.
(2) Applicable to discharges or in precipitation within any 24-h precipitation event (or snown	creases in to our period nelt of equi	the volume of disc greater than the 1( valent volume) of	harges caused by )-yr, 24-hr 2.4 inches.
(3) Limits for these parameters w effective date of the permit.	ill become	effective three (3)	years from the
<ul> <li>(4) Limits for these parameters w three years from the effective μg/L MDL. Total iron is 7.0</li> </ul>	ill be retair e date of the mg/L MDI	ed from the previous permit. Dissolved	ous permit until d aluminum is 750

Table 10. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, and unnamed ephemeral tributaries to Donley Creek

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum		
		wionthiy	Daily		
Boron, total as B <sup>(1)(2)</sup>	mg/L		0.6		
Oil and grease <sup>(1)(2)</sup>	mg/L		10		
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all times			
Settleable solids <sup>(1)</sup>	ml/L		0.5		
Sulfate <sup>(1)(2)</sup>	mg/L		2250		
Total dissolved solids (TDS) (1)(2)	mg/L		3900		
Outfalls discharging to West Fork Armells Creek: 109					
Outfalls discharging to unnamed ephemeral tributaries to West Fork Armells					
Creek: 095, 100, 101, 103, 104, 105, 106, 107, 108, 104A, 95A					
Outfalls discharging to unnamed e	phemeral ti	ributaries to Black	Hank Creek: 096		
Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098					
Footnotes:					
(1) Applicable to discharges or increases in the volume of discharges caused by					
precipitation within any 24-hour period less than or equal to the 10-yr, 24-hr					
precipitation event (or snowmelt of equivalent volume) of 2.4 inches.					
(2) Applicable to discharges or increases in the volume of discharges caused by					
precipitation within any 24-hour period greater than the 10-yr, 24-hr					
precipitation event (or snowmelt of equivalent volume) of 2.4 inches.					

Table 11. Summary of Alternate Numeric Effluent Limitations for Precipitation Events	– Stocker
Creek and unnamed ephemeral tributaries to Stocker Creek	

Parameter	Units	Effluent Limitations			
		Average	Maximum		
		Monthly	Daily		
Boron, total as $B^{(1)(2)}$	mg/L		1.5		
Oil and grease <sup>(1)(2)</sup>	mg/L		10		
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all times			
Settleable solids <sup>(1)</sup>	ml/L		0.5		
Sulfate <sup>(1)(2)</sup>	mg/L		3600		
Total dissolved solids (TDS) (1)(2)	mg/L		5925		
Outfalls discharging to Stocker Creek: 030, 072					
Outfalls discharging to unnamed ephemeral tributaries to Stocker Creek: 032, 033,					
034, 035, 069, 070, 071, 71C					
Footnotes:					
(1) Applicable to discharges or increases in the volume of discharges caused by					
precipitation within any 24-hour period less than or equal to the 10-yr, 24-hr					
precipitation event (or snowmelt of equivalent volume) of 2.4 inches.					
(2) Applicable to discharges or increases in the volume of discharges caused by					
precipitation within any 24-hour period greater than the 10-yr, 24-hr					
precipitation event (or snowmelt of equivalent volume) of 2.4 inches.					

 Table 12. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – Unnamed

 ephemeral tributaries to Lee Coulee

		Effluent Limitations			
Parameter	Units	Average	Maximum		
		Monthly	Daily		
Boron, total as $B^{(1)(2)}$	mg/L		0.6		
Electrical Conductivity <sup>(1)(2)</sup>	µS/cm		500		
Oil and grease <sup>(1)(2)</sup>	mg/L		10		
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all times			
Settleable solids <sup>(1)</sup>	ml/L		0.5		
Sulfate <sup>(1)(2)</sup>	mg/L		2250		
Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A					
<ul> <li><u>Footnotes</u>:</li> <li>(1) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.</li> <li>(2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.</li> </ul>					

#### 4. Western Alkaline Standards

Beginning on the effective date and lasting through the term of this permit, the permittee may discharge runoff from outfalls listed in Table 2 to their corresponding receiving waters. The identified outfalls meet the definitions set forth in 40 CFR 434(A) for reclamation areas and 40 CFR 434(H) for brushing and grubbing areas, topsoil stockpiling areas, and regraded areas and the entire contributing watershed has been released from Phase II bonding in the Rosebud Mine strip mine permits (SMP) C1986003A, C1984003B, C1985003C, and C1986003D. Effluent sampling and flow measurement are not required and numeric effluent limitations do not apply to discharges from those outfalls listed in Table 2 of the permit. Such discharges shall be limited and monitored by the Permittee as detailed in 40 CFR 434(H) and summarized below.

- (a) The operator must submit a site-specific Sediment Control Plan to DEQ that is designed to prevent an increase in the annual average sediment yield from premined conditions. The approved sediment control plan is incorporated into the MPDES permit as an effluent limitation. The Sediment Control Plan identifies best management practices (BMPs) or best technology currently available (BTCA), must describe design specifications, construction specifications, maintenance schedules, inspection criteria, and the expected performance and longevity of the BMPs/BTCA practices.
- (b) Using watershed models, the operator must demonstrate that the implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The operator must use the same watershed model that was used to acquire SMPs C1986003A, C1984003B, C1985003C, and C1986003D under Montana Strip and Underground Mine Reclamation Act (ARM 17.24.313; 17.24.314; 17.24.634).
- (c) The operator must design, implement, and maintain BMPs and BCTA in the manner specified in the Sediment Control Plan, consistent with the requirements of SMP C1986003A, C1984003B, C1985003C, and C1986003D.

The approved SCP is applicable until the facility receives final, Phase IV, bond release.

#### C. General Monitoring and Reporting Requirements

Self-monitoring of effluent shall be conducted after final treatment and prior to combining with receiving waters. Samples or measurements shall be representative of the volume and nature of the monitored discharge as specified. If no discharge occurs during the entire reporting period, it shall be stated on the Discharge Monitoring Report that no discharge occurred.

Reports of data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.
#### 1. Monitoring Locations

The permittee shall establish monitoring locations at each outfall to demonstrate compliance with the effluent limitations and other requirements in Section I of this permit. Appropriate monitoring locations include: at the overflow structure where the effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water. **Tables 1 and 2** outline all outfall locations and monitoring locations. Acute WET testing is required at Outfalls 043, 194, 016A, and 009A.

The permittee shall monitor effluent at the specific monitoring location during discharge. The location of each outfall regulated by this permit shall be permanently identified in the field.

#### 2. Sample Methods

Required analysis must be conducted by methods approved under 40 CFR 136 sufficiently sensitive to detect the pollutant, reach the Required Reporting Value (RRV), or achieve the lowest water quality standard in Circular DEQ-7, unless the Department approves an alternate reporting level for a specific parameter, in writing. For pollutants without an RRV, the detection limit of the lab analysis is used. The permittee shall use the procedure described in 40 CFR 434.64 for measurement of settleable solids, with a method detection limit of 0.4 mL/L.

#### 3. Effluent Monitoring Requirements

The permittee shall collect a grab sample within the first 30 minutes of any discharge from any permitted outfall. **Tables 13 through 16** contain required monitoring frequencies for each parameter following the initial sample.

As an alternative to a single grab sample, the permittee may take a flow-weighted composite of either the entire discharge or for the first three hours of the discharge. For a flow-weighted composite, only one analysis of the composited aliquots is required. Flow weighted composite samples are not allowed for pH or oil and grease.

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

#### Table 13. Summary of Monitoring Requirements – East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Aluminum, dissolved as Al	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

<u>Outfalls discharging to East Fork Armells Creek – Ephemeral:</u> 025, 044, 048, 056, 061, 063, 128, 136, 139, 128A, 128B, 128C, 128D, 059A

<u>Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral</u>: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137

Footnotes:

- (1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (2) Requires recording device or totalizer.
- (3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

#### Table 14. Summary of Monitoring Requirements – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02

Parameter	Units	Sample Type	MonitoringReportingFrequencyRequirement		RRV (1)
Mercury, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrogen, total as N	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Phosphorus, total as P	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	3
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek – Intermittent: 009, 010, 012, 013, 019, 022, 010A, 13A, 16A, 09A, 075

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent: 011, 014, 015, 016, 018, 020, 021, 194, 08D

Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.

(2) Requires recording device or totalizer.

(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$ 

(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 15. Summary of Monitoring Requirements – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Parameter	Units	Sample Type	MonitoringReportingFrequencyRequirement		RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
рН	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Outfalls discharging to West Fork	Armells Creek	<u>k</u> : 109			
Outfalls discharging to unnamed er	hemeral tribu	taries to West Forl	<u> Armells Creek</u> : 0	95, 100, 101, 103, 1	104, 105,
106, 107, 108, 104A, 95A					
Outfalls discharging to unnamed ephemeral tributaries to Black Hank Creek: 096					
Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098					
Outfalls discharging to Stocker Cre	<u>ek:</u> 030,072	-			
Outfalls discharging to unnamed er	hemeral tribu	taries to Stocker C	reek: 032, 033, 034	4, 035, 069, 070, 07	/1, 71C
Footnotes:					
(1) Required reporting values (RR	V) for parame	eters listed in Circi	ılar DEQ-7 Monta	na Numeric Water	Quality
Standard are current as of the	June 2019 ed	ition.	-		
(2) Requires recording device or to	otalizer.				
(3) Monitoring for SAR shall cons	ist of monitor	ring for dissolved s	odium, calcium an	d magnesium with	a ML of
1.0 mg/L; calculated as SAR =	$= [Na + ]/\sqrt{(0)}$	$0.5 * ([Ca^{2+}] + [M])$	$a^{2+}$ )	-	
(4) Metals include: arsenic, cadmi	um, chromiun	n, copper, lead, me	rcury, nickel, silve	er, and zinc as total	

recoverable.
(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 10. Summary of Monitor	ing Require	ments – Onnam	cu epitemerar ti	Ibutailes to Lee	Coulee
Parameter	Units	Sample Type	Monitoring	Reporting	RRV
I al ameter	Units	Sample Type	Frequency	Requirement	(1)
Flow	and	(2)	Continuous	Daily Max.	NΛ
TIOW	gpu		Continuous	& Mo. Avg.	INA
лЦ	SII	Instantaneous	Daily	Daily	NΛ
pm	5.0.	or Grab	Dally	Max./Min.	INA
Total suspended solids	mg/I	Grab	Daily	Daily Max.	NΛ
	mg/L	Giab	Dally	& Mo. Avg.	INA
Iron total as Fe	mg/I	Grab	Weekly	Daily Max.	0.02
	mg/L	Giab	WCCKIy	& Mo. Avg.	0.02
Oil and grease	mg/I	Grah	Weekly	Daily Max.	NΔ
	iiig/ L	Giab	Weekiy	& Mo. Avg.	1 17 1
Aluminum dissolved as Al	ug/I	Grah	Monthly	Daily Max.	9
Auminum, dissolved as Ai	μg/L	Giao	Wollding	& Mo. Avg.	,
Boron total as B	mg/L	Grah	Monthly	Daily Max.	NΔ
Boron, total as B	iiig/ L	Giub	wommy	& Mo. Avg.	1171
Chloride (as Cl)	mg/L	Grah	Monthly	Daily Max.	NA
	iiig, E	Giuo	wionuny	& Mo. Avg.	1111
Electrical conductivity	uS/cm	Grab	Monthly	Daily Max.	NA
	μω, em	0100	ivioniuny	& Mo. Avg.	1111
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max.	0.02
	8			& Mo. Avg.	
Selenium, total as Se	ug/L	Grab	Monthly	Daily Max.	1
	1.9 -			& Mo. Avg.	
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max.	NA
1			5	& Mo. Avg.	
Sulfate	mg/L	Grab	Monthly	Daily Max.	NA
	0		5	& Mo. Avg.	
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Grab Annually Daily	Daily Max.	(4)
<i>,</i>	1.0	1	5	& Mo. Avg.	

Table 16. Summar	y of Monitoring	Req	uirements –	Unnamed e	phemeral	l tributaries	to Le	ee Cou	ilee
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Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA
Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A					31A
<ul> <li><u>Footnotes</u>:</li> <li>(1) Required reporting values (RR <i>Standard</i> are current as of the</li> <li>(2) Requires recording device or to</li> <li>(3) Monitoring for SAR shall constant 1.0 mg/L; calculated as SAR =</li> <li>(4) Metals include: arsenic, cadmin recoverable.</li> </ul>	V) for parame June 2019 ed otalizer. sist of monitor = [Na +]/√(0 um, chromium	eters listed in <i>Circu</i> ition. ing for dissolved s $.5 * ([Ca^{2+}] + [M_{2}])$ n, copper, lead, me	<i>ılar DEQ-7 Monta</i> odium, calcium an g <sup>2+</sup> ]) rcury, nickel, silve	na Numeric Water ( d magnesium with a r, and zinc as total	<i>Quality</i> a ML of

 (5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Alternate monitoring requirements for discharges caused by precipitation events are summarized in **Tables 17 through 24**. The permittee is required to monitor precipitation in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek basins, as described in Section I.C.7 below. The permittee shall have the burden of proof that any discharge was a result of a precipitation events, and that these alternate monitoring requirements are applicable.

Table 17. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek - Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	0.4
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek – Ephemeral: 025, 044, 048, 056, 061, 063, 128, 136, 139, 128A, 128B, 128C, 128D, 059A

<u>Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral</u>: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137

Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$ 

- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 18. Summary of Monitoring Requirements for Large Precipitation-Driven Events <sup>(1)</sup> – East
Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek
– Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	and	(3)	Continuous	Daily Max.	NA
110 W	gpu		Continuous	& Mo. Avg.	
лЦ	C 11	Instantaneous	Daily	Monthly Max.	NΛ
pm	s.u.	or Grab	Dally	Monthly Min.	INA
Aluminum dissolved as Al	u a/I	Croh	Waakhy	Daily Max.	0
Aluminum, dissolved as Al	μg/L	Giao	weekiy	& Mo. Avg.	9
Poron total as P	ma/I	Croh	Waakhy	Daily Max.	NIA
Boron, total as B	mg/L	Glab	weekiy	& Mo. Avg.	INA
Chlorida (as Cl)	ma/I	Grah	Wookhy	Daily Max.	NΛ
Childred (as CI)	mg/L	Ulab	WEEKIY	& Mo. Avg.	INA
Electrical conductivity	u S/am	Grah	Waakhy	Daily Max.	NIA
Electrical conductivity	µ5/cm	Giab	weekiy	& Mo. Avg.	INA
Irran total as Es	m a/I	Crah	Waalthy	Daily Max.	0.02
fron, total as re	mg/L	Grab	weekiy	& Mo. Avg.	0.02

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA
Outfalls discharging to East Fork	Armells Creek	– Ephemeral: 02	5,044,048,056,	061, 063, 128, 136	, 139,

128A, 128B, 128C, 128D, 059A

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137 Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$ 

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

## Table 19. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek - Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9

Parameter	Units	Sample	Monitoring	Reporting	RRV
		Туре	Frequency	Requirement	(2)
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrogen, total as N	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Phosphorus, total as P	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	3
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

D (	<b>T</b> T •4	Sample	Monitoring	Reporting	RRV			
Parameter	Units	Туре	Frequency	Requirement	(2)			
Outfalls discharging to East Fork	Outfalls discharging to East Fork Armells Creek – Intermittent: 009, 010, 012, 013, 019, 022, 010A, 13A,							
16A, 09A, 075								
Outfalls discharging to unnamed e	phemeral trib	utaries to East For	k Armells Creek	- Intermittent: 011	1,014,			
015, 016, 018, 020, 021, 194, 08D								
Footnotes:								
(1) These monitoring requirement	ts apply to an	y discharges or inc	reases in volume	of discharges caus	ed by			
precipitation within any 24-h	our period <u>les</u>	s than or equal to	the 10-year, 24-h	our precipitation ev	vent (or			
snowmelt of equal volume) of	of 2.4 inches.							
(2) Required reporting values (RF	(V) for param	eters listed in Circ	cular DEQ-7 Moi	ntana Numeric Wai	ter			
Quality Standard are current	as of the June	e 2019 edition.						
(3) Requires recording device or t	totalizer.							
(4) Monitoring for SAR shall con	sist of monito	ring for dissolved	sodium, calcium	and magnesium w	ith a			
ML of 1.0 mg/L; calculated a	us SAR = [Na	$+]/\sqrt{(0.5 * ([Ca^2))^2)}$	$^{+}] + [Mg^{2+}])$					
(5) Metals include: arsenic, cadm	ium, chromiu	m, copper, lead, m	ercury, nickel, si	lver, and zinc as to	tal			
recoverable.								
(6) Whole effluent toxicity testing	g is required f	or outfalls associat	ted with Coal Pre	paration Plants and	l Coal			
Preparation Plant Associated	Areas: Outfa	lls 043, 194, 16A,	09A					

Table 20. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Flowgpd(3)ContinuousDaily Max. & Mo. Avg.NApHs.u.Instantaneous or GrabDailyMonthly Max. & Mo. Avg.NAAluminum, dissolved as Alμg/LGrabWeeklyDaily Max. & Monthly Max. & Mo. Avg.NABoron, total as Bmg/LGrabWeeklyDaily Max. & Mo. Avg.NAChloride (as Cl)mg/LGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAChoo Avg.MayMaxAvg.0.07Manda GrabWeeklyDaily Max. & Mo. Avg	Parameter	Units	Sample	Monitoring	Reporting	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Гуре	Frequency	Requirement	(=)
PHs.u.Instantaneous or GrabDailyMonthly Max. Monthly Max. Monthly Min.NAAluminum, dissolved as Alμg/LGrabWeeklyDaily Max. & Mo. Avg.9Boron, total as Bmg/LGrabWeeklyDaily Max. & Mo. Avg.9Chloride (as Cl)mg/LGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA	Flow	and	(3)	Continuous	Daily Max.	NA
pHs.u.Instantaneous or GrabDailyMonthly Max. Monthly Min.NAAluminum, dissolved as Alμg/LGrabWeeklyDaily Max. & Mo. Avg.9Boron, total as Bmg/LGrabWeeklyDaily Max. & Mo. Avg.NAChloride (as Cl)mg/LGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAMaxMg/LGrabWeeklyDaily Max. & Mo. Avg.NAMaxMg/LGrabWeeklyDaily Max. & Mo. Avg.NAMaxMg/LGrabWeekly<		89 -			& Mo. Avg.	
prins.d.or GrabDailyMonthly Min.INAAluminum, dissolved as Alμg/LGrabWeeklyDaily Max. & Mo. Avg.9Boron, total as Bmg/LGrabWeeklyDaily Max. & Mo. Avg.NAChloride (as Cl)mg/LGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.3	nH	S 11	Instantaneous	Daily	Monthly Max.	NΔ
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Adminium, dissolved as Alμg/LGrabWeekly& Mo. Avg.9Boron, total as Bmg/LGrabGrabWeeklyDaily Max. & Mo. Avg.NAChloride (as Cl)mg/LGrabGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07	Aluminum dissolved on Al		Crah	Waaldy	Daily Max.	0
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Boron, total as Bmg/LGrabWeekly& Mo. Avg.NAChloride (as Cl)mg/LGrabGrabWeeklyDaily Max. & Mo. Avg.NAElectrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.NAMercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.3		/T	0.1	XX7 11	Daily Max.	
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Chloride (as Cl)mg/LGrabWeekly& Mo. Avg.NAElectrical conductivityμS/cmGrabGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabGrabWeeklyDaily Max. & Mo. Avg.0.02Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA			G 1	XX7 11	Daily Max.	3.7.4
Electrical conductivityμS/cmGrabWeeklyDaily Max. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.3	Chloride (as Cl)	mg/L	Grab	Weekly	& Mo. Avg.	NA
Electrical conductivityμS/cmGrabWeekly& Mo. Avg. & Mo. Avg.NAIron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA		<i>a</i> /	<u> </u>		Daily Max.	3.7.4
Iron, total as Femg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.3	Electrical conductivity	μS/cm	Grab	Weekly	& Mo. Avg.	NA
Iron, total as Femg/LGrabWeekly& Mo. Avg.0.02Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07	1 E	17	<u> </u>		Daily Max.	
Mercury, total recoverableμg/LGrabWeeklyDaily Max. & Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA	Iron, total as Fe	mg/L	Grab	Weekly	& Mo. Avg.	0.02
Mercury, total recoverable $\mu g/L$ GrabWeekly& Mo. Avg.0.005Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as N $\mu g/L$ GrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA		17	<u> </u>		Daily Max.	0.00.
Nitrate + nitrite, total as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.02Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA	Mercury, total recoverable	μg/L	Grab	Weekly	& Mo. Avg.	0.005
Nitrate + nitrite, total as Nmg/LGrabWeeklyL My GAU0.02Nitrogen, total as Nµg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.245Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA		~	~ 1		Daily Max.	
Nitrogen, total as Nμg/LGrabWeeklyDaily Max. & Mo. Avg.245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Phosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA	Nitrate + nitrite, total as N	mg/L	Grab	Weekly	& Mo. Avg.	0.02
Nitrogen, total as N $\mu g/L$ GrabWeekly $a M y$ Grab245Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA		1-	~ 1		Daily Max.	
Nitrogen, Ammonia as Nmg/LGrabWeeklyDaily Max. & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA	Nitrogen, total as N	μg/L	Grab	Weekly	& Mo. Avg.	245
Nitrogen, Ammonia as Nmg/LGrabWeeklyD any Mark & Mo. Avg.0.07Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.NA			~ 1		Daily Max.	
Oil and greasemg/LGrabWeeklyDaily Max. & Mo. Avg.NAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo. Avg.3	Nitrogen, Ammonia as N	mg/L	Grab	Weekly	& Mo. Avg.	0.07
Oil and greasemg/LGrabWeeklyLNAPhosphorus, total as Pmg/LGrabWeeklyDaily Max. & Mo Avg.3		~	~ 1		Daily Max.	
Phosphorus, total as P     mg/L     Grab     Weekly     Daily Max. & Mo Avg     3	Oil and grease	mg/L	Grab	Weekly	& Mo. Avg.	NA
Phosphorus, total as P mg/L Grab Weekly & Mo Avg 3			~ 1		Daily Max.	
	Phosphorus, total as P	mg/L	Grab	Weekly	& Mo. Avg	3

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA
Outfalls disalansing to East East	A 11 C 1	T	0 010 012 012	010 022 0104 1	2.4

Outfalls discharging to East Fork Armells Creek – Intermittent: 009, 010, 012, 013, 019, 022, 010A, 13A, 16A, 09A, 075

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent: 011, 014, 015, 016, 018, 020, 021, 194, 08D

Footnotes:

- (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

# Table 21. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to West Fork Armells Creek: 109

Outfalls discharging to unnamed ephemeral tributaries to West Fork Armells Creek: 095, 100, 101, 103, 104, 105, 106, 107, 108, 104A, 95A

Outfalls discharging to unnamed ephemeral tributaries to Black Hank Creek: 096

Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098

Outfalls discharging to Stocker Creek: 030, 072

Outfalls discharging to unnamed ephemeral tributaries to Stocker Creek: 032, 033, 034, 035, 069, 070, 071,

71C Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

- (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 22. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Daramatar	Unite	Sample	Monitoring	Reporting	RRV
	Units	Туре	Frequency	Requirement	(2)
Flow	and	(3)	Continuous	Daily Max.	NA
110w	gpu		Continuous	& Mo. Avg.	
nH	S 11	Instantaneous	Daily	Monthly Max.	NΔ
	5.u.	or Grab	Daily	Monthly Min.	INA
Aluminum dissolved as Al	ug/I	Grah	Weekly	Daily Max.	9
	μg/L	Giuo	Weekiy	& Mo. Avg.	
Boron total as B	mg/L	Grah	Weekly	Daily Max.	NA
	ing/ L	Giuo	Weekiy	& Mo. Avg.	1471
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max.	NA
	ing/L	Giuo	Weekiy	& Mo. Avg.	1.11
Electrical conductivity	uS/cm	Grab	Weekly	Daily Max.	NA
	μο, em	Giuo	Weekiy	& Mo. Avg.	1.1.1
Iron total as Fe	mg/L	Grab	Weekly	Daily Max.	0.02
	ing/L	Giuo	Weekiy	& Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max.	0.02
				& Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max.	NA
				& Mo. Avg.	
Selenium, total as Se	ug/L	Grab	Weekly	Daily Max.	1
	P-8-2			& Mo. Avg.	-
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max.	NA
				& Mo. Avg.	
Sulfate	mg/L	Grab	Weekly	Daily Max.	NA
	0		5	& Mo. Avg.	
Total dissolved solids	mg/L	Grab	Weekly	Daily Max.	NA
	0			& Mo. Avg.	
Total suspended solids	mg/L	Grab	Weekly	Daily Max.	NA
1	0			& Mo. Avg.	
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max.	(5)
, ,	0/		5	& Mo. Avg.	
WET – Acute Two Species <sup>(6)</sup>	%	Grab	Annually	Pass/Fail	NA
1	Effluent		5		

Danamatan	Unite	Sample	Monitoring	Reporting	RRV		
rarameter	Units	Туре	Frequency	Requirement	(2)		
Outfalls discharging to West Fork Armells Creek: 109							
Outfalls discharging to unnamed e	phemeral trib	utaries to West Fo	rk Armells Creek	<u>x</u> : 095, 100, 101, 10	3, 104,		
105, 106, 107, 108, 104A, 95A							
Outfalls discharging to unnamed e	phemeral trib	utaries to Black H	ank Creek: 096				
Outfalls discharging to unnamed e	phemeral trib	utaries to Donley	<u>Creek</u> : 098				
Outfalls discharging to Stocker Cr	<u>eek: 030, 072</u>						
Outfalls discharging to unnamed e	phemeral trib	utaries to Stocker	Creek: 032, 033,	034, 035, 069, 070	, 071,		
71C							
Footnotes:							
(1) These monitoring requirement	ts apply to an	y discharges or inc	creases in volume	of discharges caus	ed by		
precipitation within any 24-h	our period gro	eater than the 10-y	ear, 24-hour prec	cipitation event (or			
snowmelt of equal volume) of	of 2.4 inches.						
(2) Required reporting values (RI	RV) for param	eters listed in Circ	cular DEQ-7 Mor	ntana Numeric Wat	er		
Quality Standard are current	as of the June	e 2019 edition.					
(3) Requires recording device or	totalizer.						
(4) Monitoring for SAR shall con	sist of monito	ring for dissolved	sodium, calcium	and magnesium wi	ith a		
ML of 1.0 mg/L; calculated a	as SAR = [Na	$+]/\sqrt{(0.5 * ([Ca^2))^2)^2}$	$[+] + [Mg^{2+}])$				
(5) Metals include: arsenic, cadm	ium, chromiu	m, copper, lead, m	ercury, nickel, si	lver, and zinc as to	tal		

recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

## Table 23. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – Unnamed ephemeral tributaries to Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A

#### Footnotes:

- (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

### Table 24. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – Unnamed ephemeral tributaries to Lee Coulee

Paramatar	Unite	Sample	Monitoring Reporting		RRV	
1 al allietei	Units	Туре	Frequency	Requirement	(2)	
Flow	1	(3)	C	Daily Max.	NA	
FIOW	gpa		Continuous	& Mo. Avg.		
all	s.u.	Instantaneous	Deily	Monthly Max.	NA	
рн		or Grab	Dally	Monthly Min.		
Aluminum dissolved as Al	u a/I	Grab	Weekly	Daily Max.	9	
Aluminum, dissolved as Al	μg/L			& Mo. Avg.		
Poren total of P	ma/I	Grah	Waakhy	Daily Max.	NA	
Boron, total as B	mg/L	Grad	weekly	& Mo. Avg.	INA	
Chlorida (ag Cl)	ma/I	Grah	Waakhy	Daily Max.	NA	
Chioride (as CI)	mg/L	Grab	weekiy	& Mo. Avg.	INA	
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max.	NA	
Electrical conductivity				& Mo. Avg.		
Iron total as Fa	mg/I	Grab	Weekly	Daily Max.	0.02	
lioli, total as re	mg/L			& Mo. Avg.		
Nitrata + nitrita, total as N	ma/I	Grah	Weekly	Daily Max.	0.02	
Nitrate + intrite, total as N	mg/L	Ulau	WEEKIY	& Mo. Avg.	0.02	
Oil and grasse	ma/I	Grah	Waakhy	Daily Max.	NA	
On and grease	mg/L	Grab	weekiy	& Mo. Avg.	INA	
Solonium total of So	u a/I	Grah	Waaldu	Daily Max.	1	
Selelliulli, total as Se	μg/L	Grad	WEEKIY	& Mo. Avg.	1	
Sodium adsorption ration	Patio	$Calculated^{(4)}$	Waaldu	Daily Max.	ΝA	
Sourum ausorption ration	Natio	Calculated	weekiy	& Mo. Avg.	INA	

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA
Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A					

Footnotes:

- (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$ 

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

#### 4. Whole Effluent Toxicity Testing

#### a. Acute Whole Effluent Toxicity Testing

Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas", and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located. As defined by the Permittee's application, this includes Outfalls 043, 194, 16A, and 09A.

#### i. Sampling and Dilution Series Requirements

Beginning in the calendar year in which this Permit becomes effective, and each calendar year thereafter, the Permittee shall conduct annual acute static toxicity tests on grab samples of the effluent discharged from Outfalls 043, 194, 16A, and 09A. Testing will employ two species per test and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of grab samples of moderately hard water, in accordance with WET Methods. If no discharges occur from Outfalls 043, 194, 16A, or 09A during the calendar year, this fact shall be reported in the annual report with a statement of no discharge. The report shall be submitted to DEQ as described in Section I.C.6 of the permit.

#### ii. Methods

Acute WET tests shall be conducted in general accordance with the procedures set out in *Methods of Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012 (or a subsequent edition) and the "Region VIII USEPA

NPDES Acute Test Conditions – Static Renewal Whole Effluent Toxicity Test" contained in the *Region VIII NPDES Whole Effluent Toxics Control Program, August 1997.* The Permittee must conduct a 48-hour static renewal acute toxicity test using *Ceriodaphnia dubia* (USEPA Method 2002.0) and a 96-hour static renewal acute toxicity test using *Pimephales promelas* (fathead minnow) (USEPA Method 2000.0). Acute toxicity is measured by determining the LC<sub>50</sub> (i.e., the percent of effluent that is lethal to 50 percent of the exposed test organisms) for each type of test.

#### iii. Test Validity

If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

#### iv. Accelerated Testing

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test or if a second sample cannot be collected, testing shall occur at each discharge event for the duration of the permit term. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Section III.A of this Permit.

#### 5. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in **Tables 13 through 24**.

#### 6. Discharge Monitoring Reports

Monitoring results must be reported within a Discharge Monitoring Report (DMR). Monitoring results must be submitted electronically (NetDMR web-based application) no later than the 28th day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, "No Discharge" must be reported within the respective DMR. All other reports must be signed and certified in accordance with Part III.G 'Signatory Requirements' of this permit and submitted to DEQ at the following address:

Montana Department of Environmental Quality Water Protection Bureau PO Box 200901 Helena, Montana 59620-0901

Whole Effluent Toxicity (WET) results from the laboratory shall be reported along with the DMR form. The format for the laboratory report shall be consistent with the latest revision of *Region VIII Guidance for Acute Whole Effluent Reporting and Chronic Whole Effluent Reporting* and shall include all chemical and physical data as specified.

#### 7. Other Monitoring Requirements

#### a. Precipitation Monitoring:

Precipitation shall be monitored and recorded using a precipitation gauge which meets the standards provided in the National Weather Service Instructional Bulletin 10-1302 (November 14, 2014), *Instrument Requirements and Standards for the NWS Surface Observing Programs (Land)* and provided in **Table 25**. Precipitation gauges will be maintained in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek.

Manual Daily Precipitation – Gauge Standard						
Parameter Requires		Seasonal	Range	Resolution	Measurement Accuracy	
Precipitation, Rain	Eight-Inch Diameter Collection Vessel with Tube and Measuring Stick	Funnel (All year except for snow or frozen precip events)	0 to 20 inches	0.01 inches	±0.02 inches	
	Four-Inch Diameter Collection Vessel with Tube	Funnel (All year except for snow or frozen precip events.)	0 to 10 inches	0.01 inches	±0.02 inches	
Precipitation, Frozen	Eight-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 24 inches of snow	0.01 inches melted	±0.04 inches melted	
(Liquid Equivalent)	Four-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 12 inches of snow	0.01 inches melted	±0.04 inches melted	
Snowfall / Snow Depth - Equipment Standard						
Snowfall / Snow Depth: 0.1 to 20 in.	Snow stick (marked) and Snow board		0 to 20 inches	0.1 inch	±0.1 inch	
Snowfall / Snow Depth: 20 to 40 in.	Snow stick (marked) and Snow board	Not applicable	0 to 40 inches	0.1 inch	±0.1 inch	
Snow Depth: 40 to 60 in.	Snow stake (marked)		0 to 60 inches	1 inch	$\pm 1$ inch	

#### **Table 25. Precipitation Gauge Performance Standards**

#### b. Flow Monitoring and Sampling Units

The permit requires the permittee to install and use flow monitoring and sampling equipment at each outfall. This requirement is necessary because precipitation events are often localized, high intensity, short duration thunderstorms, and watersheds often cover vast and isolated areas. Ponds may retain water from previous events. Likewise, weather conditions may prevent access to outfalls for monitoring whether an overflow discharge occurred or for discharge sampling. A crest gauge or equivalent equipment can measure flow at the crest, with the establishment of a ratings curve that shows the relationship between peak flow and gauge height. A remote sampling unit can sample a representative sample of the discharged effluent when discharge occurs. The discharge point and monitoring location shall be permanently marked and identified at the overflow structure.

#### **II. SPECIAL CONDITIONS**

#### A. Additional Monitoring and Special Studies

- 1. Ambient Monitoring Not Applicable.
- 2. Supplemental Monitoring and Studies Not Applicable.
- **3.** Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) The permittee shall submit to the Department and initiate implementation of a TIE/TRE plan within 45 days of detecting acute toxicity during any accelerated testing required under Section I.C.4. The TIE/TRE shall describe steps to be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity.

If implementation of the TIE/TRE establishes that the toxicity cannot be eliminated, the permittee shall submit a proposed compliance plan to the Department. The compliance plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control If the approach and schedule are acceptable of the Department, this permit may be reopened and modified.

If the TIE/TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with parameter-specific numeric limitations, the permittee may:

- a. Submit an alternative control program for compliance with the parameter-specific numeric effluent limitations,
- b. If necessary, provide a modified whole effluent testing protocol, which compensates for the pollutant(s) being controlled with parameter-specific numeric effluent limitations.

Based on the results of WET testing and a TIE/TRE conducted by the permittee, the Department may reopen and modify this permit in accordance with the provisions in Section II.C to incorporate any additional WET or parameter-specific numeric limitations, a modified compliance schedule if judged necessary by the Department, and/or a modified whole effluent toxicity protocol.

#### B. Western Alkaline Standards

The permittee shall submit a Sediment Control Plan, watershed model, and a schedule of BMP/BTCA implementation and maintenance meeting the requirements of 40 CFR 434 (H) to the department for approval prior to conversion of any permitted outfall to Western Alkaline Standards status. Outfalls are only eligible for conversion to Western Alkaline Standards effluent limitations described in Section I.B.4 of this permit when the entire contributing drainage of the outfall has been released from Phase II bonding under the Montana SMPs C1986003A, C1984003B, C1985003C, and C1986003D. Notification of intent to convert an outfall to Western Alkaline Standards status shall be provided by the applicant at the time of bond release application for C1986003A, C1984003B, C1985003C, and C1986003D. Notification of Phase II bond release by the Department shall be provided to the MPDES file and to the applicant within 30 days of successful Phase II bond release for an entire contributing watershed for an outfall. Following a minor modification to MT0023965, pursuant to ARM 17.30.1362, effluent limitations for an applicable outfall convert to Western Alkaline Standards as described in Section I.B.4 of this permit. Western Energy must design, implement and maintain Best Management Practices specified in the Sediment Control Plans.

#### C. <u>Reopener Provisions</u>

This permit shall be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

#### 1. Water Quality Standards

The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limitations than contained in this permit.

#### 2. Water Quality Standards are Exceeded

If water quality standards or Trigger Values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the effluent limitations or the water quality management plan. Trigger Values are used to determine if a given increase in the concentration of toxic parameters is significant or non-significant as per the non-degradation rules ARM 17.30.701 et seq. and are listed in Circular DEQ-7.

#### 3. TMDL or Wasteload Allocation

TMDL requirements or a wasteload allocation is developed and approved by the Department and/or USEPA for incorporation in this permit.

#### 4. Water Quality Management Plan

A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

#### **5. Toxic Pollutants**

A toxic standard or prohibition is established under Clean Water Act Section 307(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

#### 6. Toxicity Limitations – Not Applicable

#### D. <u>Compliance Schedules</u>

The permit imposes new WQBELs for ammonia, mercury, selenium, and silver and more stringent WQBELs for dissolved aluminum and total iron at outfalls discharging to East Fork Armells Creek – Intermittent.

The actions listed below must be completed on or before three years from the effective date of the permit. The completion of all actions or deliverables must be reported to DEQ at the address listed in Section I.C.6 of the permit and in accordance with the signatory requirements of Section III.C.6 of the permit.

The Permittee shall meet the new limits listed in Section I.B.1, Table 4, and Section I.B.3, Table 9, of this permit within three years of the effective date of the permit. During the compliance period, monitoring is required for ammonia, mercury, selenium, and silver in accordance with Section I.C.3 and there are no interim effluent limitations. During the compliance period, the effluent limitations for dissolved aluminum and total iron will be retained from the previous permit and monitoring is required in accordance with Section I.C.3.

The Permittee shall submit annual progress report to DEQ for actions taken to meet the future limits in the previous year and projected efforts for the upcoming year. The annual reports must include any water quality monitoring results and any planned alterations to the facility in accordance with Section II.B.2 and ARM 17.30.1342(12). Each annual report is due January 28<sup>th</sup> until the end of the compliance period, which is three years from the effective date of the permit.

The Permittee shall submit a final reporting on the efforts achieved in meeting the new limits within 14 days after the end of the compliance period.

The permit does not authorize the use of representative monitoring for precipitationdriven events. The Permittee will be granted a one-year compliance schedule from the date of permit issuance to facilitate procurement, installation, and commissioning of flow monitoring and effluent sampling devices at all outfalls requiring equipment. Until such equipment is installed, the Permittee must continue to monitor and sample effluent using non-automated methods. The Permittee shall submit a final reporting on the efforts achieved in installing monitoring equipment within 14 days after the end of the compliance period.

#### **III.STANDARD CONDITIONS**

#### A. <u>Monitoring, Recording, and Reporting</u>

- 1. **Representative Sampling:** Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [ARM 17.30.1342(10)(a)]
- 2. Monitoring and Reporting Procedures: Monitoring results must be reported on a Discharge Monitoring Report (DMR) form at the intervals specified in Section II of

this permit. Calculations for all limitations that require averaging of measurements must use an arithmetic mean unless otherwise specified by the Department in the permit [ARM 17.30.1342(12)(d)(i),(iii)]. Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal Regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit. [ARM 17.30.1342(10)(d)]

- **3. Penalties for Tampering:** The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than six months, or by both. [*MCA 75-5-633*]
- 4. Compliance Schedule Reporting: Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date. [ARM 17.30.1342(12)(e)]
- 5. Additional Monitoring by the Permittee: If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. [ARM 17.30.1342(12)(d)(ii)]
- 6. Records Contents [*ARM* 17.30.1342(10)(c)]: Records of monitoring information must include:
  - a) the date, exact place, and time of sampling or measurements;
  - b) the initials or name(s) of the individual(s) who performed the sampling or measurements;
  - c) the date(s) analyses were performed;
  - d) the initials or name(s) of individual(s) who performed the analyses;
  - e) the analytical techniques or methods used; and
  - f) the results of such analyses;
- 7. Retention of Records: The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. [*ARM 17.30.1342(10)(b)*]
- 8. Twenty-four Hour Notification [*ARM* 17.30.1342(12)(f)]: The permittee shall report any serious incident of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances.

#### a. Oral notification

The report shall be made orally to the Water Protection Bureau at (406) 444-5546 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents of noncompliance:

- i. Any noncompliance which might endanger health or the environment;
- ii. Any unanticipated bypass that exceeds any effluent limitation in the permit (See Section III.B.7 of this permit, "Bypass of Treatment Facilities");
- iii. Any upset which exceeds any effluent limitation in the permit (See Section III.B.8 of this permit, "Upset Conditions") or;
- iv. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in this permit to be reported within 24 hours.

#### b. Written notification

A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

- i. A description of the noncompliance and its cause;
- ii. The period of noncompliance, including exact dates and times;
- iii. The estimated time noncompliance is expected to continue if it has not been corrected; and
- iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

#### c. Waiver of written notification requirement

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546. Reports shall be submitted to the addresses in Section I.C.6 of this permit ("Discharge Monitoring Reports").

- **9.** Other Noncompliance Reporting: Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Section I.C.6 of this permit ("Discharge Monitoring Reports") are submitted. The reports shall contain the information listed in Section III.A.8.b of this permit ("Twenty-four Hour Notification"). [ARM 17.30.1342(12)(g)]
- **10. Inspection and Entry** [*ARM 17.30.1342(9)*]: The permittee shall allow the head of the Department, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location.

#### B. <u>Compliance Responsibilities</u>

- 1. Duty to Comply: The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [*ARM* 17.30.1342(1)]
- **2. Planned Changes:** The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source under ARM 17.30.1340(2); or
  - The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit, or to pollutants that are not subject to notification requirements under ARM 17.30.1343(1)(a).

The permittee shall give advance notice to the Department of any planned changes at the permitted facility or of an activity that could result in noncompliance with permit requirements. [ARM 17.30.1342(12)(b)]

#### 3. Penalties for Violations of Permit Conditions

- a. In an action initiated by the Department to collect civil penalties against a person who is found to have violated a permit condition, the person is subject to a civil penalty not to exceed \$25,000. Each day of violation constitutes a separate violation. [*MCA 75-5-631*], [*ARM 17.30.1342(1)(b)*].
- b. The Montana Water Quality Act provides that any person who willfully or negligently violates a prohibition or permit condition is subject, upon conviction, to criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. [MCA 75-5-632], [ARM 17.30.1342(1)(b)].
- c. MCA 75-5-611(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations.
- d. Except as provided in permit conditions on Section III.B.7 of this permit ("Bypass of Treatment Facilities") and Section III.B.8 of this permit ("Upset Conditions"), nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- 4. Need to Halt or Reduce Activity Not a Defense: It may not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [*ARM 17.30.1342(3)*]

- 5. Duty to Mitigate: The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. [*ARM 17.30.1342(4)*]
- 6. Proper Operation and Maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [*ARM 17.30.1342(5)*]

#### 7. Bypass of Treatment Facilities [ARM 17.30.1342(13)]

- **a.** *Bypass not exceeding limitations.* The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions under "Prohibition of bypass" and "Notice" (Sections III.B.7.b and c of this permit) below.
- **b.** *Prohibition of bypass.* Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
  - i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- iii. The permittee submitted notices as required under "Notice" below (Section III.B.7.c of this permit).
- **c.** *Notice*:
  - i. <u>Anticipated bypass</u>. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.
  - ii. <u>Unanticipated bypass</u>. The permittee shall submit notice of an unanticipated bypass as required under Section III.A.8 of this permit ("Twenty-four Hour Notification").
- **d.** *Approval of bypass under certain conditions.* The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above under "Prohibition of bypass" (Section III.B.7.b of this permit).
- 8. Upset Conditions [ARM 17.30.1342(14)]

- **a.** *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of Section III.B.8.b of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- **b.** *Conditions necessary for a demonstration of upset.* A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - ii. The permitted facility was at the time being properly operated;
- iii. The permittee submitted notice of the upset as required under Section III.A.8 of this permit ("Twenty-four Hour Notification"); and
- iv. The permittee complied with any remedial measures required under Section III.B.5 of this permit, ("Duty to Mitigate").
- **c.** *Burden of proof.* In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### C. General Requirements

- 1. Anticipated Noncompliance: The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements [*ARM* 17.30.1342(12)(b)].
- 2. Permit Actions: This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [*ARM* 17.30.1342(6)]
- **3.** Duty to Reapply: If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must first apply for and obtain a new permit. [*ARM 17.30.1342(2)*] In accordance with ARM 17.30.1322(4), the application must be submitted at least 180 days before the expiration date of this permit.
- 4. Duty to Provide Information: The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit. [*ARM 17.30.1342(8)*]
- 5. Other Information: Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information [ARM 17.30.1342(12)(h)].

#### 6. Signatory Requirements

- **a.** All applications, reports or information submitted to the Department shall be signed and certified. [*ARM* 17.30.1342(11)]
- **b.** All permit applications must be signed as follows:
  - i. For a corporation: By a responsible corporate officer, which means
    - 1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
    - 2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - ii. *For a partnership or sole proprietorship*: By a general partner or the proprietor, respectively.
- iii. *For a municipality, state, federal, or other public agency*: By either a principal executive officer or ranking elected official. A principal executive office of a federal agency includes:
  - 1) The chief executive officer of the agency; or
  - 2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency [ARM 17.30.1323(1)].
- **c.** *Authorized representatives*. All reports required by the permit and other information requested by the Department shall be signed by a person described above in Section III.C.6.b of this permit or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
  - i. The authorization is made in writing by a person described above in Section III.C.6.b and submitted to the Department; and
  - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (a duly authorized representative may thus be either a named individual or an individual occupying a named position) [ARM 17.30.1323(2)].
- **d.** *Changes to authorization.* If an authorization under Section III.C.6.c of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section III.C.6.c of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative [ARM 17.30.1323(3)].
- e. *Certification.* Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [ARM 17.30.1323(4)].

- 7. Penalties for Falsification of Reports: The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more that \$25,000 per violation, or by imprisonment for not more than six months per violation, or both. [MCA 75-5-633]
- 8. Property Rights: The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. [*ARM* 17.30.1342(7)]
- **9.** Severability: The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [*ARM* 17.30.1302]
- **10.** Transfers [*ARM* 17.30.1360(2)]: This permit may be automatically transferred to a new permittee if:
  - **a.** The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
  - **b.** The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
  - **c.** The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Section III.C.10.b of this permit; and
  - d. Required annual and application fees have been paid.
- **11. Fees** [*ARM 17.30.201(8)*]: The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:
  - **a.** Impose an additional assessment consisting of 20% of the fee plus interest on the required fee computed at the rate established under 15-1-216, MCA, or
  - **b.** Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all

outstanding fees, including all penalties, assessments and interest imposed under this subsection. Suspensions are limited to one year, after which the permit will be terminated.

#### D. Notification Levels

- 1. The permittee shall comply with effluent standards or prohibitions established under Clean Water Act Section 307(a) for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. [*ARM* 17.30.1342(1)(a)]
- 2. Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe [*ARM* 17.30.1343(1)(a)]:
  - **a.** That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. One hundred micrograms per liter (100  $\mu$ g/l);
    - ii. Two hundred micrograms per liter (200  $\mu$ g/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with ARM 17.30.1322(7)(g); or
  - iv. The level established by the Department in accordance with 40 CFR 122.44(f).
  - **b.** That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. Five hundred micrograms per liter (500  $\mu$ g/l);
    - ii. One milligram per liter (1 mg/l) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with ARM 17.30.1322(7)(g); or
  - iv. The level established by the Department in accordance with 40 CFR 122.44(f).

#### IV. DEFINITIONS AND ABBREVIATIONS

"1-year, 2-year, 10-year, and 25-year, 24-hour precipitation events" means the maximum 24-hour precipitation event with a probable recurrence interval of once in one, two, ten, and twenty-five years, respectively, as defined by the National Weather Service Technical Paper No. 40, *Rainfall Frequency Atlas of the U.S.*, May 1961, or equivalent regional or rainfall probability information developed therefrom.

"Act" means the Montana Water Quality Act, Title 75, chapter 5, MCA.

"Active mining area" means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas, and post-mining areas.

"Acute Toxicity" occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

"Administrator" means the administrator of the United States Environmental Protection Agency.

"Alkaline mine drainage" means mine drainage which, before any treatment, has a pH equal or greater than 6.0, and total iron concentration of less than 10 mg/L.

"Arithmetic Mean" or "Arithmetic Average" for any set of related values means the summation of the individual values divided by the number of individual values.

"Average monthly limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

"Average weekly limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

"Best Management Practices" (BMPs) mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States.

"Bond release" means the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed.

"Brushing and grubbing area" means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil being salvaged.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"CFR" means the Code of Federal Regulations.

"Chronic toxicity" occurs when, during a chronic toxicity test, the 25% inhibition concentration (IC<sub>25</sub>) for any tested species is less than or equal to 100% effluent (i.e., IC<sub>25</sub>  $\leq$  100% effluent).

"Clean Water Act" means the federal legislation at 33 USC 1251, et seq.

"Coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.

"Coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.

"Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

- a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
- b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
- c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,
- d. Continuous collection of sample, with sample collection rate proportional to flow rate.

"Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

"Department" means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.

"Director" means the Director of the Montana Department of Environmental Quality.

"Discharge" means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.

"Effluent Limitations Guidelines" (ELGs) mean regulations published by the Administrator under Section 304(b) of the CWA that establishes national technology-based effluent requirements for a specific industrial category. "EPA" or "USEPA" means the United States Environmental Protection Agency.

"GPM" means gallons per minute.

"Grab Sample" means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.

"Instantaneous Maximum Limit" means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

"Instantaneous Measurement", for monitoring requirements, means a single reading, observation, or measurement.

"Maximum Daily Limit" means the highest allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

"mg/L" means milligrams per liter.

"Mine drainage" means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area.

"Minimum Level" (ML) of quantitation means the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, as determined by the procedure set forth at 40 CFR 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) unless otherwise specified in the permit. (ARM 17.30.702(22))

"Mixing zone" means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

"ml/L" means milliliters per liter.

"MSUMRA" means the Montana Strip and Underground Mine Reclamation Act.

"Reclamation area" means the surface area of a coal mine which has been returned to required contour and on which re-vegetation (specifically, seeding or planting) work has commenced.

"Regraded area" means the surface area of a coal mine that has been returned to required contour.

"Regional Administrator" means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.

"Settleable solids" means that matter measured by the volumetric method specified in 40 CFR 434.64.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"SMCRA" means the Surface Mining Control and Reclamation Act.

"Storm water" means storm water runoff, snow melt runoff, and surface run-off and drainage in response to a precipitation event.

"TIE" means a toxicity identification evaluation.

"TMDL" means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

"Topsoil stockpiling area" means the area outside the mined-out area where topsoil is temporarily stored for use in reclamation, including containment berms.

"TRE" means a toxicity reduction evaluation.

"TSS" means the pollutant parameter total suspended solids.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#### MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

#### AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 et seq.,

#### WESTMORELAND ROSEBUD MINING LLC (the Permittee)

is authorized to discharge from its **ROSEBUD MINE** 

located at CASTLE ROCK ROAD, COLSTRIP, MT

#### to receiving waters named: EAST FORK ARMELLS CREEK, STOCKER CREEK, LEE COULEE, WEST FORK ARMELLS CREEK, BLACK HANK CREEK, DONLEY CREEK, COW CREEK, SPRING CREEK, AND PONY CREEK

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: August 1, 2021.

This permit and the authorization to discharge shall expire at midnight, July 31, 2026.

#### FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

| S | Jon Kenning

Jon Kenning, Chief Water Protection Bureau Water Quality Division

Modification Date: August 6. 2021 Modified Pursuant to Board Order on:

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#### I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

#### A. Description of Discharge Points and Mixing Zone(s)

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Montana Water Quality Act, 75-5-Part 6, Montana Code Annotated (MCA).

Table 1 below provides a description of the discharge points and mixing zones for each outfall associated with active mining. Treatment consists of the use of sediment ponds, with a 10-year, 24-hour (or larger) design capacity, to remove suspended solids from commingled storm water and pit water or coal plant wash down water. Table 2 provides a description of the discharge points and mixing zones for each outfall assigned Western Alkaline Standards.

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone	
023 45°51'39"N 106°40'22"W Precipitation event runoff and mine pit dewatering		Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)			
024	45°51'36"N	106°40'50"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)	
025	45°51'16"N	106°41'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)	
026	45°51'7"N	106°41'37"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)	
043	45°51'24"N	106°41'25"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)	

Table 1.	Description of Discharge Points, Monitoring Locations and Mixing Zones for Active				
Mining					
Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
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044	45°51'16"N	106°41'39"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
046	45°51'27"N	106°42'12"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
048	45°51'1"N	106°42′21"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
049	45°51'11"N	106°42'55"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
051	45°51'6"N	106°43'17"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
052	45°50'57"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
054	45°50'52"N	106°43'47"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
056	45°50'42"N	106°44'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
058	45°50'51"N	106°44'24"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
059	45°50'49"N	106°44'48"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Ephemeral	
060	45°50'40"N	106°45'45"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
061	45°50'35"N	106°45'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
063	45°50'46"N	106°46'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
064	45°50'59"N	106°46'33"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
127	45°50'39"N	106°46'49"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Enhemeral	(2)
128	45°50'32"N	106°45'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
129	45°50'38"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
133	45°50'37"N	106°43'50"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
136	45°50'38"N	106°43'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
137	45°50'52"N	106°42'53"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Ephemeral	
139	45°50'60"N	106°42'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128A	45°50'34"N	106°45'38"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128B	45°50'35"N	106°45'46"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128C	45°50'39"N	106°45'54"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
128D	45°50'48"N	106°46'23"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
59A	45°50'41"N	106°45'16"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	(2)
009	45°52'32"N	106°37'43"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
010	45°52'12"N	106°37'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
011	45°52'6"N	106°37'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
012	45°52'1"N	106°38'3"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
013	45°52'13"N	106°38'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
014	45°51'57"N	106°38'46"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
015	45°51'51"N	106°38'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
016	45°51'52"N	106°38'58"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
018	45°51'36"N	106°39'12"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
019	45°51'42"N	106°39'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
020	45°51'30"N	106°39'44"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
021	45°51'30"N	106°39'54"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
022	45°51'31"N	106°39'56"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
075	45°53'33"N	106°39'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
194	45°53'5"N	106°36'28"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
010A	45°52'30"N	106°36'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Creek – Intermittent	
13A	45°52'8"N	106°38'19"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	(2)
16A	45°51'42"N	106°39'26"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
08D	45°55'8"N	106°35'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
09A	45°52'20"N	106°37'55"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	(2)
095	45°53'14"N	106°51'31"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
100	45°53'4"N	106°51'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
101	45°52'56"N	106°50'57"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
103	45°52'49"N	106°50'41"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
104	45°52'46"N	106°50'30"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
105	45°52'31"N	106°49'56"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
106	45°52'33"N	106°49'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
107	45°52'30"N	106°49'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
108	45°52'33"N	106°49'27"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
109	45°52'28''N	106°48'52"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	(2)
104A	45°52'41"N	106°47'40"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
95A	45°53'20"N	106°51'35"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
096	45°53'17"N	106°52'31"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Black Hank Creek	(2)
098	45°53'30"N	106°51'56"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Donley Creek	(2)
030	45°52'37"N	106°46'6"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
032	45°52'19"N	106°45'47"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
033	45°52'32"N	106°45'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)

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Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
034	45°52'32"N	106°45'8"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
035	45°52'21"N	106°44'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
069	45°52'52"N	106°42'9"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
070	45°53'6"N	106°41'58"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
071	45°53'22"N	106°41'15"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
072	45°53'45"N	106°40'5"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
71C	45°53'31"N	106°40'51"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Stocker Creek	(2)
130	45°49'56"N	106°45'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
131	45°49'56"N	106°44'2"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
132	45°49'56"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
134	45°49'56"N	106°43'6"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
130A	45°49'56"N	106°44'32"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
130B	45°49'56"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)
131A	45°49'56"N	106°43'54"W	Precipitation event runoff and mine pit dewatering	Unnamed ephemeral tributary to Lee Coulee	(2)

(1) Outfall locations define monitoring locations.

(2) No acute, chronic or human health mixing zone allowed for this discharge.

Table 2.	<b>Description of Discharge Points</b> ,	Monitoring Locations and Mixing Zones for Outfalls
Assigned	Western Alkaline Standards	

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
042	45°51'54"N	106°41'31"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Ephemeral	(2)
007	45°54'15"N	106°36'48"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
077	45°55'7"N	106°36'36"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
079	45°55'13"N	106°36'8"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
141	45°54'53"N	106°36'51"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
142	45°54'41"N	106°36'43"W	Precipitation event runoff	Unnamed ephemeral tributary to East	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				Fork Armells Creek – Intermittent	
143	45°54'33"N	106°36'46"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
144	45°54'3"N	106°36'46"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
195	45°53'5"N	106°36'14"W	Precipitation event runoff	Unnamed ephemeral tributary to East Fork Armells Creek – Intermittent	(2)
112	45°53'24"N	106°48'15"'W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
113	45°53'26"N	106°47'31"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
112A	45°53'24"N	106°47'24"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
112B	45°53'31"N	106°47'8"W	Precipitation event runoff	Unnamed ephemeral tributary to West Fork Armells Creek	(2)
036	45°52'31"N	106°43'26''W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
037	45°52'32"N	106°43'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
038	45°52'31"N	106°42'52"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
039	45°52'29"N	106°42'21"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
040	45°52'25"N	106°42'12"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
041	45°52'21"N	106°42'7"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
073	45°53'43"N	106°39'48"W	Precipitation event runoff	Stocker Creek	(2)
074	45°53'41"N	106°39'28"W	Precipitation event runoff	Stocker Creek	(2)
116	45°53'36"N	106°46'34"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
119	45°53'8"N	106°45'49"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
121	45°52'44"N	106°46'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
113D	45°52'37"N	106°46'53"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
116A	45°53'32"N	106°46'19"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
120A	45°52'47"N	106°46'36"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
121A	45°52'53"N	106°46'2"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028-1A	45°52'35"N	106°47'47"W	Precipitation event runoff	Unnamed ephemeral	(2)

Outfall <sup>(1)</sup>	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
				tributary to Stocker Creek	
028-2A	45°52'33"N	106°48'2"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028A	45°52'40"N	106°47'30"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
028B	45°52'37"N	106°47'35"W	Precipitation event runoff	Unnamed ephemeral tributary to Stocker Creek	(2)
073A	45°53'41"N	106°39'45"W	Precipitation event runoff	Stocker Creek	(2)
006	45°53'48"N	106°35'10"W	Precipitation event runoff	Cow Creek	(2)
090	45°53'52"N	106°34'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
091	45°53'51"N	106°34'26"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
092	45°53'50"N	106°34'38"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
093	45°53'29''N	106°35'6''W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
151	45°52'56"N	106°35'32"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
152	45°52'52"N	106°35'21"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
153	45°53'7"N	106°35'22"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)
154	45°53'14"N	106°35'14"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)

Outfall <sup>(1)</sup> Latitude		Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone	
155	45°53'23"N	45°53'23"N 106°35'11"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)	
173	45°53'58''N	106°32'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)	
175	45°53'23"N       106°35'11"W         45°53'58"N       106°32'0"W         45°53'50"N       106°32'36"W         45°53'54"N       106°33'4"W         45°53'52"N       106°35'18"W         45°53'50"N       106°33'30"W         45°53'51"N       106°33'53"W         45°53'51"N       106°33'53"W         45°54'45"N       106°32'59"W		Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)	
176	6 45°53'54"N 106°33'4"W 7 45°53'52"N 106°35'18"W		5 45°53'54"N 106°33'4"W Precipitation event runoff		Unnamed ephemeral tributary to Cow Creek	(2)
177	45°53'52"N	106°35'18"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)	
178	45°53'50"N	106°33'30"W	0"W Precipitation event runoff Creek Creek Unnamed ephemeral tributary to Cow Creek		(2)	
179	45°53'51"N	106°33'53"W	Precipitation event runoff	Unnamed ephemeral tributary to Cow Creek	(2)	
165	45°54'45"N	106°32'59"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	- (2)	
166	45°54'45"N	106°33'4"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	
167	45°54'45"N	106°33'9"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	
168	45°54'45"N	106°33'20"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	
169	45°54'37"N	106°33'25"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	

Outfall <sup>(1)</sup> Latitude		Longitude	Outfall/Effluent Description	<b>Receiving Water</b>	Mixing Zone	
170	45°54'19"N 106°33'6"W		Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	
171	45°54'14"N	106°32'58"W	Precipitation event runoff	Unnamed ephemeral tributary to Pony Creek	(2)	
172	45°54'15"N	106°32'39"W	Precipitation event runoff Precipitation event runoff		(2)	
169A	45°54'30"N	106°33'25"W	Precipitation event runoff	Pony Creek	(2)	
080	45°54'30"N     106°33'25"W     Precipitation event runoff     Pony Cree       45°55'19"N     106°35'37"W     Precipitation event runoff     Unnamed ephemera tributary to Sp Creek		Unnamed ephemeral tributary to Spring Creek	(2)		
082	45°55'22"N	106°35'8"W	35'8"W Precipitation event runoff Creek B5'8"W Precipitation event runoff Creek Creek		(2)	
083	45°55'18"N	106°34'52"W	Precipitation event runoff Creek Precipitation event runoff Creek		(2)	
084	45°55'6"N	106°34'21"W	Precipitation event runoff Creek Unnamed ephemeral tributary to Spring Creek		(2)	
085	45°55'2''N	106°34'12"W	Precipitation event runoff	cipitation event runoff		
086	45°55'7"N	106°34'0"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)	
161	45°55'7"N	106°33'29"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)	
162	45°55'8"N	106°33'25"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)	
163	45°55'7"N	106°33'1"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)	

Outfall <sup>(1)</sup>	Latitude	tude Longitude Outfall/Effluent Description		<b>Receiving Water</b>	Mixing Zone
164	45°55'3"N	106°32'56"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
160A	45°55'8"N	106°33'42"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
160B	45°55'8"N	106°33'48"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)
161A	45°55'8"N	106°33'34"W	Precipitation event runoff	Unnamed ephemeral tributary to Spring Creek	(2)

(2) No acute, chronic or human health mixing zone allowed for this discharge.

## B. Final Effluent Limitations and Monitoring Requirements

## 1. Numeric Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of the permit, the quality of effluent discharged at all outfalls shall, at a minimum, meet the limitations set forth in **Tables 3 through 7.** 

Table 3. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek – Ephemeral	
and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral	

D	Tistes	Effluent Limitations		
Parameter	Units	Average Monthly	Maximum Daily	
Boron, total a B	mg/L	0.7	1.1	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L	44	10	
pН	s.u.	Between 6.0 ar	nd 9.0 at all times	
Sulfate	mg/L	2050	3075	
Total dissolved solids (TDS)	mg/L	3000	4500	
Total suspended solids	mg/L	35	70	
Outfalls discharging to East F 128A, 128B, 128C, 128D, 05 Outfalls discharging to unnan 043, 046, 049, 051, 052, 054,	Fork Armells Cr 9A ned ephemeral t 058, 059, 060,	eek – Ephemeral: 025, 044, 048, ributaries to East Fork Armells C 064, 127, 133, 137	056, 061, 063, 128, 136, 139, Creek – Ephemeral: 023, 024, 026,	

## Table 4. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek - Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

P	TT. 14.	Effluent Limitations			
Parameter	Units	Average Monthly	Maximum Daily		
Aluminum, dissolved as $AI^{(1)(2)}$	μg/L	71.24	142.91		
Boron, total as B	mg/L	0.7	1.1		
Iron, total as Fe <sup>(1)(2)</sup>	mg/L	0.7	1.8		
Mercury, total recoverable <sup>(1)</sup>	μg/L	0.05	0.05		
Nitrogen, Ammonia as N <sup>(1)</sup>	mg/L	2.31	4.64		
Oil and grease	mg/L		10		
pH	s.u.	Between 6.0 an	id 9.0 at all times		
Selenium, total as Se <sup>(1)</sup>	μg/L	4,1	8.2		
Silver, total recoverable <sup>(1)</sup>	µg/L	0.14	0.27		
Sulfate	mg/L	2050	3075		
Total dissolved solids (TDS)	mg/L	3000	4500		
Total suspended solids	mg/L	35	70		

Parameter	Thedde	Effluent	Limitations	
rarameter	Units	Average Monthly	Maximum Daily	
Outfalls discharging to East	Fork Armells C	reek - Intermittent: 009, 010, 012	2, 013, 019, 022, 010A, 13A, 16A,	
09A, 075				
Outfalls discharging to unna	amed ephemeral	tributaries to East Fork Armells (	Creek - Intermittent: 011, 014, 015,	
016, 018, 020, 021, 194, 08	D			
Footnotes:				

- (1) Limits for these parameters will become effective three (3) years from the effective date of the permit.
- (2) Limits for there parameters will be retained from the previous permit until three years from the effective date of the permit. Dissolved aluminum is 87 µg/L AML and 750 µg/L MDL. Total iron is 1.0 mg/L AML and 7.0 mg/L MDL.

Table 5. Summary of Final Numeric Effluent Limitations - West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, and unnamed ephemeral tributaries to Donley Creek

Parameter	Linite	Effluent	Effluent Limitations	
Farameter	Onns	Average Monthly	Maximum Daily	
Boron, total as B	mg/L	0.4	0.6	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
pH	s.u.	Between 6.0 ar	d 9.0 at all times	
Sulfate	mg/L	1500	2250	
Total dissolved solids (TDS)	mg/L	2600	3900	
Total suspended solids	mg/L	35	70	

105, 106, 107, 108, 104A, 95A

Outfalls discharging to unnamed ephemeral tributaries to Black Hank Creek: 096

Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098

#### Table 6. Summary of Final Numeric Effluent Limitations - Stocker Creek and unnamed ephemeral tributaries to Stocker Creek

Denometer	Thetes	Effluent Limitations		
Parameter	Units	Average Monthly	Maximum Daily	
Boron, total as B	mg/L	1	1.5	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
pН	s.u.	Between 6.0 and 9.0 at all times		
Sulfate	mg/L	2400	3600	

Demonster	Units	Effluent Limitations			
Parameter		Average Monthly	Maximum Daily		
Total dissolved solids (TDS)	mg/L	3950	5925		
Total suspended solids	mg/L	35	70		
Outfalls discharging to Stock Outfalls discharging to unnan 072	er Creek: 030 ned ephemeral t	ributaries to Stocker Creek: 032,	033, 034, 035, 069, 070, 071, 71C,		

Table 7. Summary	of Final Numeric	Effluent Li	mitations -	Unnamed	ephemeral	tributaries to	) Lee
Coulee							

Deveryoter	Thatta	Effluent	Limitations	
Parameter	Units	Average Monthly	Maximum Daily	
Boron, total as B	mg/L	0.4	0.6	
Electrical Conductivity (EC)	μS/cm	<del>249<u>500</u></del>	500	
Iron, total as Fe	mg/L	3.5	7	
Oil and grease	mg/L		10	
pН	s.u.	Between 6.0 ar	nd 9.0 at all times	
Sulfate	mg/L	1500	2250	
Total suspended solids	mg/L	35	70	

#### 2. Narrative Effluent Limitations:

#### a. "Free From" Standards

- There shall be no discharge from any outfall listed in **Table 1** that reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving water or upon adjoining shorelines.
- There shall be no discharge from any outfall listed in **Table 1** of floating debris, scum, a visible oil film or globules of grease or other floating materials.
- There shall be no discharge from any outfall listed in **Table 1** that produce odors, colors, or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible.
- There shall be no discharge from any outfall listed in **Table 1** that create concentrations or combinations of material which are toxic or harmful to human, animal, plant or aquatic life.
- There shall be no discharge from any outfall listed in **Table 1** that create conditions which produce undesirable aquatic life.

b. East Fork Armells Creek – Ephemeral and Unnamed Ephemeral Tributaries to East Fork Armells Creek – Ephemeral

All planned discharges to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries of East Fork Armells Creek – Ephemeral will be managed in such a way that effluent infiltrates prior to reaching East Fork Armells Creek – Intermittent. This includes all outfalls on East Fork Armells which are upstream of the in-channel dam located between outfalls 022 and 023. Planned discharges to East Fork Armells – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral shall adhere to the following requirements:

- a) Planned discharges must be designed in such a way as to prevent erosion of the channel at the point of discharge and immediately downstream;
- b) Planned discharges must be managed in such a way to ensure effluent infiltrates prior to reaching the dam or any water ponded behind the dam;
- c) The site conditions for all planned discharges to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral must be recorded and retained onsite. These records are to include the start and stop day and time of discharge, outfall, reason for the planned discharge, total volume discharged, maximum distance effluent reaches downstream of the outfall, weather conditions, and observations of the channel conditions; and
- d) The permittee must submit a report to DEQ within one month following each planned discharge to East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral which contains a summary of the event as described in item "c" above.

## 3. Alternate Numeric Effluent Limitations

Beginning on the effective date and lasting through the term of this permit, the quality of precipitation-driven effluent discharged at all active outfalls per Table 1 shall, at a minimum, meet the alternate limitations set forth in **Tables 8 through 12**.

Table 8. Summary of Alternate Numeric Effluent Limitations for Precipitation E-	vents - East Fork
Armells Creek - Ephemeral and unnamed ephemeral tributaries to East Fork Ar	mells Creek -
Ephemeral	<u> </u>

A ZURANEA	Units	Effluent Limitations	
Parameter		Average Monthly	Maximum Daily
Boron, total as B <sup>(1)(2)</sup>	mg/L		1.1
Oil and grease <sup>(1)(2)</sup>	mg/L	+	10
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all time	
Settleable solids <sup>(1)</sup>	ml/L	-	0.5
Sulfate <sup>(1)(2)</sup>	mg/L	-	3075
Total dissolved solids (TDS) (1)(2)	mg/L		4500

		Effluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily
Outfalls discharging to East Fo	rk Armells Cre	ek - Ephemeral:	025, 044, 048, 056,
061, 063, 128, 136, 139, 128A.	128B, 128C, 1	28D, 059A	
Outfalls discharging to unname	ed ephemeral tr	ibutaries to East I	Fork Armells Creek
- Ephemeral: 023, 024, 026, 04	13. 046. 049. 0.	51. 052. 054. 058.	059, 060, 064, 127,
133, 137			
Footnotes:			
<ol> <li>Applicable to discharges o precipitation within any 24 precipitation event (or snot (2) Applicable to discharges o</li> </ol>	r increases in tl l-hour period <u>le</u> wmelt of equiv r increases in tl	ne volume of disc ass than or equal to alent volume) of 2 ne volume of disc	harges caused by o the 10-yr, 24-hr 2.4 inches. harges caused by
precipitation within any 24 precipitation event (or sno	-hour period g wmelt of equiv	reater than the 10- alent volume) of 2	-yr, 24-hr 2.4 inches.

### Table 9. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

0. 13.01110	Units	Effluent Limitations		
Parameter		Average Monthly	Maximum Daily	
Aluminum, dissolved as $Al^{(1)(2)(3)(4)}$	μg/L		143	
Boron, total as B <sup>(1)(2)</sup>	mg/L	÷.	1.1	
Iron, total as Fe <sup>(1)(2)(3)(4)</sup>	mg/L	1.141	1.8	
Mercury, total recoverable <sup>(1)(2)(3)</sup>	μg/L	-	0.05	
Nitrogen, Ammonia as $N^{(1)(2)(3)}$	mg/L	÷:	4.64	
Oil and grease <sup>(1)(2)</sup>	mg/L		10	
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 and 9.0 at all times		
Selenium, total as Se <sup>(1)(2)(3)</sup>	μg/L	11 H 11	8.2	
Settleable solids <sup>(1)</sup>	ml/L		0.5	
Silver, total recoverable <sup>(1)(2)(3)</sup>	μg/L		0.27	
Sulfate <sup>(1)(2)</sup>	mg/L	(H)	3075	
Total dissolved solids (TDS) (1)(2)	mg/L	14	4500	

	目的なのでい	Effluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily
Outfalls discharging to East Fe	ork Armells Cre	ek - Intermittent:	009, 010, 012, 013
019, 022, 010A, 13A, 16A, 09 Outfalls discharging to unnam - Intermittent: 011, 014, 015,	A, 075 ed ephemeral tr 016, 018, 020,	ibutaries to East 1 021, 194, 08D	Fork Armells Creek
Footnotes: (1) Applicable to discharges of precipitation within any 2 precipitation event (or sn	or increases in t 24-hour period owmelt of equi	ne volume of disc ess than or equal valent volume) of	harges caused by to the 10-yr, 24-hr 2.4 inches.
(2) Applicable to discharges of precipitation within any 2 precipitation event (or sn	or increases in t 24-hour period ; owmelt of equi	ne volume of disc greater than the 10 valent volume) of	harges caused by )-yr, 24-hr 2.4 inches.
(3) Limits for these parameter effective date of the perm	rs will become on the second of the second	effective three (3)	years from the
(4) Limits for these parameter three years from the effect μg/L MDL. Total iron is	rs will be retain ctive date of the 7.0 mg/L MDL	ed from the previo permit. Dissolve	ous permit until d aluminum is 750

 Table 10. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – West

 Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed

 ephemeral tributaries to Black Hank Creek, and unnamed ephemeral tributaries to Donley Creek

	Units	Effluent Limitations		
Parameter		Average Monthly	Maximum Daily	
Boron, total as B <sup>(1)(2)</sup>	mg/L		0.6	
Oil and grease <sup>(1)(2)</sup>	mg/L		10	
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 a	nd 9.0 at all times	
Settleable solids <sup>(1)</sup>	ml/L	-	0.5	
Sulfate <sup>(1)(2)</sup>	mg/L	-	2250	
Total dissolved solids (TDS) (1)(2)	mg/L		3900	
Outfalls discharging to West Fork Outfalls discharging to unnamed of Creek: 095, 100, 101, 103, 104, 10 Outfalls discharging to unnamed of Outfalls discharging to unnamed of Outfalls discharging to unnamed of Footnotes: (1) Applicable to discharges or in precipitation within any 24-h precipitation within any 24-h precipitation within any 24-h precipitation within any 24-h precipitation within any 24-h	Armells C ephemeral t 05, 106, 10 ephemeral t ephemeral t noreases in nour period melt of equi nour period melt of equi	reek: 109 ributaries to West 1 7, 108, 104A, 95A ributaries to Black ributaries to Donle the volume of discles than or equal to ivalent volume) of the volume of discles greater than the 10 ivalent volume) of	Fork Armells Hank Creek: 096 y Creek: 098 harges caused by to the 10-yr, 24-hr 2,4 inches. harges caused by 9-yr, 24-hr 2 4 inches	

Table 11. Summary of Alternate Numeric Effluent Limitations for Precipitation Events	- Stocker
Creek and unnamed ephemeral tributaries to Stocker Creek	

		Effluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily
Boron, total as B <sup>(1)(2)</sup>	mg/L		1.5
Oil and grease <sup>(1)(2)</sup>	mg/L	11.249	10
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 a	nd 9.0 at all times
Settleable solids <sup>(1)</sup>	ml/L	÷.	0.5
Sulfate <sup>(1)(2)</sup>	mg/L	70	3600
Total dissolved solids (TDS) (1)(2)	mg/L	+	5925
Outfalls discharging to Stocker Cr Outfalls discharging to unnamed of 034, 035, 069, 070, 071, 71C Footnotes: (1) Applicable to discharges or in precipitation within any 24-l precipitation event (or snown (2) Applicable to discharges or in	reek: 030, 0 ephemeral t noreases in nour period melt of equ noreases in	72 ributaries to Stock the volume of disc less than or equal ivalent volume) of the volume of disc	er Creek: 032, 033, harges caused by to the 10-yr, 24-hr 2.4 inches. harges caused by

precipitation event (or snowmelt of equivalent volume) of 2.4 inches.

 Table 12. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – Unnamed

 ephemeral tributaries to Lee Coulee

	Units	Effluent Limitations		
Parameter		Average Monthly	Maximum Daily	
Boron, total as B <sup>(1)(2)</sup>	mg/L		0.6	
Electrical Conductivity <sup>(1)(2)</sup>	μS/cm		500	
Oil and grease <sup>(1)(2)</sup>	mg/L	-	10	
pH <sup>(1)(2)</sup>	s.u.	Between 6.0 a	nd 9.0 at all times	
Settleable solids <sup>(1)</sup>	ml/L		0.5	
Sulfate <sup>(1)(2)</sup>	mg/L	-	2250	
Outfalls discharging to unnamed 132, 134, 130A, 130B, 131A Footnotes: (1) Applicable to discharges or precipitation within any 24- precipitation event (or snow (2) Applicable to discharges or precipitation within any 24- precipitation within any 24- precipitation event (or snow	ephemeral t increases in hour period wmelt of equ increases in hour period wmelt of equ	the volume of disc less than or equal ivalent volume) of the volume of disc greater than the 10 ivalent volume) of	harges caused by to the 10-yr, 24-hr 2.4 inches. harges caused by D-yr, 24-hr 2.4 inches.	

#### 4. Western Alkaline Standards

Beginning on the effective date and lasting through the term of this permit, the permittee may discharge runoff from outfalls listed in Table 2 to their corresponding receiving waters. The identified outfalls meet the definitions set forth in 40 CFR 434(A) for reclamation areas and 40 CFR 434(H) for brushing and grubbing areas, topsoil stockpiling areas, and regraded areas and the entire contributing watershed has been released from Phase II bonding in the Rosebud Mine strip mine permits (SMP) C1986003A, C1984003B, C1985003C, and C1986003D. Effluent sampling and flow measurement are not required and numeric effluent limitations do not apply to discharges from those outfalls listed in Table 2 of the permit. Such discharges shall be limited and monitored by the Permittee as detailed in 40 CFR 434(H) and summarized below.

- (a) The operator must submit a site-specific Sediment Control Plan to DEQ that is designed to prevent an increase in the annual average sediment yield from premined conditions. The approved sediment control plan is incorporated into the MPDES permit as an effluent limitation. The Sediment Control Plan identifies best management practices (BMPs) or best technology currently available (BTCA), must describe design specifications, construction specifications, maintenance schedules, inspection criteria, and the expected performance and longevity of the BMPs/BTCA practices.
- (b) Using watershed models, the operator must demonstrate that the implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The operator must use the same watershed model that was used to acquire SMPs C1986003A, C1984003B, C1985003C, and C1986003D under Montana Strip and Underground Mine Reclamation Act (ARM 17.24.313; 17.24.314; 17.24.634).
- (c) The operator must design, implement, and maintain BMPs and BCTA in the manner specified in the Sediment Control Plan, consistent with the requirements of SMP C1986003A, C1984003B, C1985003C, and C1986003D.

The approved SCP is applicable until the facility receives final, Phase IV, bond release.

## C. General Monitoring and Reporting Requirements

Self-monitoring of effluent shall be conducted after final treatment and prior to combining with receiving waters. Samples or measurements shall be representative of the volume and nature of the monitored discharge as specified. If no discharge occurs during the entire reporting period, it shall be stated on the Discharge Monitoring Report that no discharge occurred.

Reports of data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.

### 1. Monitoring Locations

The permittee shall establish monitoring locations at each outfall to demonstrate compliance with the effluent limitations and other requirements in Section I of this permit. Appropriate monitoring locations include: at the overflow structure where the effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water. **Tables 1 and 2** outline all outfall locations and monitoring locations. Acute WET testing is required at Outfalls 043, 194, 016A, and 009A.

The permittee shall monitor effluent at the specific monitoring location during discharge. The location of each outfall regulated by this permit shall be permanently identified in the field.

### 2. Sample Methods

Required analysis must be conducted by methods approved under 40 CFR 136 sufficiently sensitive to detect the pollutant, reach the Required Reporting Value (RRV), or achieve the lowest water quality standard in Circular DEQ-7, unless the Department approves an alternate reporting level for a specific parameter, in writing. For pollutants without an RRV, the detection limit of the lab analysis is used. The permittee shall use the procedure described in 40 CFR 434.64 for measurement of settleable solids, with a method detection limit of 0.4 mL/L.

### 3. Effluent Monitoring Requirements

The permittee shall collect a grab sample within the first 30 minutes of any discharge from any permitted outfall. **Tables 13 through 16** contain required monitoring frequencies for each parameter following the initial sample.

As an alternative to a single grab sample, the permittee may take a flow-weighted composite of either the entire discharge or for the first three hours of the discharge. For a flow-weighted composite, only one analysis of the composited aliquots is required. Flow weighted composite samples are not allowed for pH or oil and grease.

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

## Table 13. Summary of Monitoring Requirements – East Fork Armells Creek – Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Aluminum, dissolved as Al	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0,02
Selenium, total as Se	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek – Ephemeral: 025, 044, 048, 056, 061, 063, 128, 136, 139, 128A, 128B, 128C, 128D, 059A

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137 Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality* Standard are current as of the June 2019 edition.

(2) Requires recording device or totalizer.

(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>]))

(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

#### Table 14. Summary of Monitoring Requirements – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02

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Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Mercury, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrogen, total as N	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Phosphorus, total as P	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	3
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek - Intermittent: 009, 010, 012, 013, 019, 022, 010A, 13A, 16A, 09A, 075

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek - Intermittent: 011, 014, 015, 016, 018, 020, 021, 194, 08D

Footnotes:

- (1) Required reporting values (RRV) for parameters listed in Circular DEQ-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.
- (2) Requires recording device or totalizer.
- (3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>]))
- (4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

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Table 15. Summary of Monitoring Requirements – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
рН	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
Outfalls discharging to West Fo	ork Armells Cree	<u>k</u> : 109	C 2012 - 201	1	
Outfalls discharging to unname	d ephemeral trib	utaries to West Fork	Armells Creek: 0	95, 100, 101, 103, 1	04, 105,
106, 107, 108, 104A, 95A					6.2.2.3
Outfalls discharging to unname	d ephemeral trib	utaries to Black Han	ik Creek: 096		
Outfalls discharging to unname	d ephemeral trib	utaries to Donley Cr	eek: 098		1000
Outfalls discharging to Stocker	Creek: 030, 072				A
Outfalls discharging to unname	d ephemeral trib	utaries to Stocker Ci	reek: 032, 033, 03	4, 035, 069, 070, 07	1,71C
Footnotes:					
<ol> <li>Required reporting values ( <i>Standard</i> are current as of</li> </ol>	(RRV) for param the June 2019 er	eters listed in <i>Circu</i> lition.	lar DEQ-7 Monta	na Numeric Water (	Quality
(2) Requires recording device	or totalizer.				
(3) Monitoring for SAR shall of 1.0 mg/L; calculated as SA	consist of monito AR = [Na +]/ $\sqrt{(1-1)^2}$	ring for dissolved so 0.5 * ([Ca <sup>2+</sup> ] + [Mg	odium, calcium ar g <sup>2+</sup> ])	d magnesium with a	a ML of
(4) Metals include: arsenic, cae recoverable.	dmium, chromiui	m, copper, lead, mei	rcury, nickel, silve	er, and zinc as total	
(5) Whole effluent toxicity test Preparation Plant Associat	ting is required for ted Areas: Outfal	or outfalls associated ls 043, 194, 16A, 09	d with Coal Prepa 9A	ration Plants and Co	bal

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	μg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(4)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)

Table 16. Summary of Monitoring Requirements - Unnamed ephemeral tributaries to Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (1)
WET – Acute Two Species <sup>(5)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA
Outfalls discharging to unnamed ep	ohemeral tribu	taries to Lee Coule	e: 130, 131, 132,	134, 130A, 130B, 1	31A
<ul> <li>Footnotes: <ul> <li>Required reporting values (RR Standard are current as of the</li> <li>Requires recording device or t</li> <li>Monitoring for SAR shall cons</li> <li>1.0 mg/L; calculated as SAR =</li> </ul> </li> <li>(4) Metals include: arsenic, cadmine recoverable.</li> <li>(5) Whole effluent toxicity testing Preparation Plant Associated</li> </ul>	(V) for parameters June 2019 ed otalizer. sist of moniton = [Na +]/√(0 um, chromium is required for Areas: Outfal	eters listed in <i>Circu</i> lition. ring for dissolved so $0.5 * ([Ca^{2+}] + [Mg])$ n, copper, lead, mer or outfalls associated ls 043, 194, 16A, 09	<i>lar DEQ-7 Monta</i> odium, calcium ar g <sup>2+</sup> ]) rcury, nickel, silve d with Coal Prepa 9A	ina Numeric Water ( nd magnesium with a er, and zinc as total ration Plants and Co	<i>Quality</i> 1 ML of pal

Alternate monitoring requirements for discharges caused by precipitation events are summarized in **Tables 17 through 24**. The permittee is required to monitor precipitation in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek basins, as described in Section I.C.7 below. The permittee shall have the burden of proof that any discharge was a result of a precipitation events, and that these alternate monitoring requirements are applicable.

Table 17. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek - Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	0.4
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

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Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek - Ephemeral: 025, 044, 048, 056, 061, 063, 128, 136, 139, 128A, 128B, 128C, 128D, 059A

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek - Ephemeral: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137

Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in Circular DEO-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.

- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + 1]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 18. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek - Ephemeral and unnamed ephemeral tributaries to East Fork Armells Creek - Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek – Ephemeral: 025, 044, 048, 056, 061, 063, 128, 136, 139, 128A, 128B, 128C, 128D, 059A

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Ephemeral: 023, 024, 026, 043, 046, 049, 051, 052, 054, 058, 059, 060, 064, 127, 133, 137 Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in Circular DEQ-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>])

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

#### Table 19. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek - Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrogen, total as N	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Phosphorus, total as P	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	3
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	ĩ
Silver, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

	Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Ou	tfalls discharging to East Fo	ork Armells Creek	- Intermittent:	009, 010, 012, 013	,019,022,010A,1	13A,
16/	A, 09A, 075	a the second second	a series for a large			
Ou	tfalls discharging to unnam	ed ephemeral trib	utaries to East Fo	ork Armells Creek	- Intermittent: 01	1, 014,
015	5, 016, 018, 020, 021, 194, 0	)8D				
For	otnotes:	a later start in the	Section and the	and the second second	Nucleon and in	1.253.1
(1)	These monitoring requirer precipitation within any 2 snowmelt of equal volum	nents apply to any 24-hour period les ae) of 2.4 inches.	y discharges or it is than or equal t	ncreases in volume o the 10-year, 24-h	e of discharges caus nour precipitation e	sed by vent (or
(2)	Required reporting values Quality Standard are curr	(RRV) for param rent as of the June	eters listed in <i>Ci</i> 2019 edition.	ircular DEQ-7 Mo	ntana Numeric Wa	ter
(3)	Requires recording device	or totalizer.				
(4)	Monitoring for SAR shall ML of 1.0 mg/L; calculat	consist of monito ed as SAR = [Na	ring for dissolve $+\frac{1}{\sqrt{0.5}}$	d sodium, calcium $a^{2+}$ ] + [ $Mg^{2+}$ ])	and magnesium w	rith a
(5)	Metals include: arsenic, ca recoverable.	ıdmium, chromiu	m, copper, lead,	mercury, nickel, si	ilver, and zinc as to	otal
(6)	Whole effluent toxicity ter Preparation Plant Associa	sting is required for ated Areas: Outfal	or outfalls associ lls 043, 194, 16A	iated with Coal Pre	eparation Plants and	d Coal

Table 20. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – East Fork Armells Creek – Intermittent and unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrogen, total as N	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Phosphorus, total as P	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	3

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to East Fork Armells Creek – Intermittent: 009, 010, 012, 013, 019, 022, 010A, 13A, 16A, 09A, 075

Outfalls discharging to unnamed ephemeral tributaries to East Fork Armells Creek – Intermittent: 011, 014, 015, 016, 018, 020, 021, 194, 08D

Footnotes:

- (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>])
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

Table 21. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to West Fork Armells Creek: 109

Outfalls discharging to unnamed ephemeral tributaries to West Fork Armells Creek: 095, 100, 101, 103, 104, 105, 106, 107, 108, 104A, 95A

Outfalls discharging to unnamed ephemeral tributaries to Black Hank Creek: 096

Outfalls discharging to unnamed ephemeral tributaries to Donley Creek: 098

Outfalls discharging to Stocker Creek: 030, 072

Outfalls discharging to unnamed ephemeral tributaries to Stocker Creek: 032, 033, 034, 035, 069, 070, 071, 71C

Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in Circular DEQ-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>])

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A Table 22. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – West Fork Armells Creek, unnamed ephemeral tributaries to West Fork Armells Creek, unnamed ephemeral tributaries to Black Hank Creek, unnamed ephemeral tributaries to Donley Creek, Stocker Creek, and unnamed ephemeral tributaries to Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Outfalls discharging to West Fo	ork Armells Cree	<u>k</u> : 109	17. 9 C 1441 - 4	5	1.11.1
Outfalls discharging to unname	d ephemeral trib	utaries to West F	ork Armells Creek	c: 095, 100, 101, 10	3, 104,
105, 106, 107, 108, 104A, 95A					1944
Outfalls discharging to unname	d ephemeral trib	utaries to Black I	Hank Creek: 096		
Outfalls discharging to unname	d ephemeral trib	utaries to Donley	Creek: 098		
Outfalls discharging to Stocker	Creek: 030, 072				
Outfalls discharging to unname	d ephemeral tribu	utaries to Stocke	r Creek: 032, 033,	034, 035, 069, 070	, 071,
71C					
Footnotes:					
<ol> <li>These monitoring requirem precipitation within any 2- snowmelt of equal volume</li> </ol>	ents apply to any 4-hour period gre e) of 2.4 inches.	/ discharges or in eater than the 10-	ocreases in volume year, 24-hour prec	of discharges caus cipitation event (or	ed by
(2) Required reporting values ( Quality Standard are curred	RRV) for param ent as of the June	eters listed in Ci 2019 edition.	rcular DEQ-7 Mo	ntana Numeric Wat	ler
(3) Requires recording device	or totalizer.				
(4) Monitoring for SAR shall of ML of 1.0 mg/L; calculate	onsist of monitor d as SAR = [Na	ring for dissolve +]/√(0.5 * ([Ca	d sodium, calcium $a^{2+}] + [Mg^{2+}]$ )	and magnesium w	ith a
(5) Metals include: arsenic, cae recoverable.	lmium, chromiur	n, copper, lead,	mercury, nickel, si	lver, and zinc as to	tal
(6) Whole effluent toxicity test Preparation Plant Associat	ing is required for ed Areas: Outfal	or outfalls associ ls 043, 194, 16A	ated with Coal Pre	paration Plants and	l Coal

## Table 23. Summary of Monitoring Requirements for Small Precipitation-Driven Events<sup>(1)</sup> – Unnamed ephemeral tributaries to Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
рН	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	- 1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA
Westmoreland Rosebud Mining LLC ROSEBUD MINE

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A

Footnotes:

- (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in Circular DEQ-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR = [Na +]/√(0.5 \* ([Ca<sup>2+</sup>] + [Mg<sup>2+</sup>])
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
- (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

### Table 24. Summary of Monitoring Requirements for Large Precipitation-Driven Events<sup>(1)</sup> – Unnamed ephemeral tributaries to Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	μS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	μg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated <sup>(4)</sup>	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	<b>RRV</b> (2)
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable <sup>(5)</sup>	μg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species <sup>(6)</sup>	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls discharging to unnamed ephemeral tributaries to Lee Coulee: 130, 131, 132, 134, 130A, 130B, 131A

Footnotes:

- These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
- (2) Required reporting values (RRV) for parameters listed in Circular DEQ-7 Montana Numeric Water Quality Standard are current as of the June 2019 edition.
- (3) Requires recording device or totalizer.
- (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR =  $[Na + ]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$
- (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 16A, 09A

#### 4. Whole Effluent Toxicity Testing

#### a. Acute Whole Effluent Toxicity Testing

Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas", and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located. As defined by the Permittee's application, this includes Outfalls 043, 194, 16A, and 09A.

#### i. Sampling and Dilution Series Requirements

Beginning in the calendar year in which this Permit becomes effective, and each calendar year thereafter, the Permittee shall conduct annual acute static toxicity tests on grab samples of the effluent discharged from Outfalls 043, 194, 16A, and 09A. Testing will employ two species per test and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of grab samples of moderately hard water, in accordance with WET Methods. If no discharges occur from Outfalls 043, 194, 16A, or 09A during the calendar year, this fact shall be reported in the annual report with a statement of no discharge. The report shall be submitted to DEQ as described in Section I.C.6 of the permit.

#### ii. Methods

Acute WET tests shall be conducted in general accordance with the procedures set out in *Methods of Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012 (or a subsequent edition) and the "Region VIII USEPA

NPDES Acute Test Conditions – Static Renewal Whole Effluent Toxicity Test" contained in the *Region VIII NPDES Whole Effluent Toxics Control Program, August 1997.* The Permittee must conduct a 48-hour static renewal acute toxicity test using *Ceriodaphnia dubia* (USEPA Method 2002.0) and a 96-hour static renewal acute toxicity test using *Pimephales promelas* (fathead minnow) (USEPA Method 2000.0). Acute toxicity is measured by determining the LC<sub>50</sub> (i.e., the percent of effluent that is lethal to 50 percent of the exposed test organisms) for each type of test.

#### iii. Test Validity

If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

#### iv. Accelerated Testing

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test or if a second sample cannot be collected, testing shall occur at each discharge event for the duration of the permit term. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Section III.A of this Permit.

#### 5. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in **Tables 13 through 24**.

#### 6. Discharge Monitoring Reports

Monitoring results must be reported within a Discharge Monitoring Report (DMR). Monitoring results must be submitted electronically (NetDMR web-based application) no later than the 28th day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, "No Discharge" must be reported within the respective DMR. All other reports must be signed and certified in accordance with Part III.G 'Signatory Requirements' of this permit and submitted to DEQ at the following address:

Montana Department of Environmental Quality Water Protection Bureau PO Box 200901 Helena, Montana 59620-0901

Whole Effluent Toxicity (WET) results from the laboratory shall be reported along with the DMR form. The format for the laboratory report shall be consistent with the latest revision of *Region VIII Guidance for Acute Whole Effluent Reporting and Chronic Whole Effluent Reporting* and shall include all chemical and physical data as specified.

#### 7. Other Monitoring Requirements

#### a. Precipitation Monitoring:

Precipitation shall be monitored and recorded using a precipitation gauge which meets the standards provided in the National Weather Service Instructional Bulletin 10-1302 (November 14, 2014), *Instrument Requirements and Standards for the NWS Surface Observing Programs (Land)* and provided in **Table 25**. Precipitation gauges will be maintained in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek.

	Manual I	Daily Precipitati	on – Gauge	Standard	
Parameter	Requires	Seasonal	Range	Resolution	Measurement Accuracy
Precipitation, Rain	Eight-Inch Diameter Collection Vessel with Tube and Measuring Stick	Funnel (All year except for snow or frozen precip events)	0 to 20 inches	0.01 inches	±0.02 inches
	Four-Inch Diameter Collection Vessel with Tube	Funnel (All year except for snow or frozen precip events.)	0 to 10 inches	0.01 inches	±0.02 inches
Precipitation, Frozen (Liquid Equivalent)	Eight-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 24 inches of snow	0.01 inches melted	±0.04 inches melted
	Four-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 12 inches of snow	0.01 inches melted	±0.04 inches melted
	Snowfall	Snow Depth - I	Equipment	Standard	
Snowfall / Snow Depth: 0.1 to 20 in.	Snow stick (marked) and Snow board		0 to 20 inches	0.1 inch	±0.1 inch
Snowfall / Snow Depth: 20 to 40 in.	Snow stick (marked) and Snow board	Not applicable	0 to 40 inches	0.1 inch	±0.1 inch
Snow Depth: 40 to 60 in.	Snow stake (marked)		0 to 60 inches	1 inch	$\pm 1$ inch

#### Table 25. Precipitation Gauge Performance Standards

#### b. Flow Monitoring and Sampling Units

The permit requires the permittee to install and use flow monitoring and sampling equipment at each outfall. This requirement is necessary because precipitation events are often localized, high intensity, short duration thunderstorms, and watersheds often cover vast and isolated areas. Ponds may retain water from previous events. Likewise, weather conditions may prevent access to outfalls for monitoring whether an overflow discharge occurred or for discharge sampling. A crest gauge or equivalent equipment can measure flow at the crest, with the establishment of a ratings curve that shows the relationship between peak flow and gauge height. A remote sampling unit can sample a representative sample of the discharged effluent when discharge occurs. The discharge point and monitoring location shall be permanently marked and identified at the overflow structure.

#### **II. SPECIAL CONDITIONS**

#### A. Additional Monitoring and Special Studies

- 1. Ambient Monitoring Not Applicable.
- 2. Supplemental Monitoring and Studies Not Applicable.
- 3. Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE) The permittee shall submit to the Department and initiate implementation of a TIE/TRE plan within 45 days of detecting acute toxicity during any accelerated testing required under Section I.C.4. The TIE/TRE shall describe steps to be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity.

If implementation of the TIE/TRE establishes that the toxicity cannot be eliminated, the permittee shall submit a proposed compliance plan to the Department. The compliance plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control If the approach and schedule are acceptable of the Department, this permit may be reopened and modified.

If the TIE/TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with parameter-specific numeric limitations, the permittee may:

- a. Submit an alternative control program for compliance with the parameter-specific numeric effluent limitations,
- b. If necessary, provide a modified whole effluent testing protocol, which compensates for the pollutant(s) being controlled with parameter-specific numeric effluent limitations.

Based on the results of WET testing and a TIE/TRE conducted by the permittee, the Department may reopen and modify this permit in accordance with the provisions in Section II.C to incorporate any additional WET or parameter-specific numeric limitations, a modified compliance schedule if judged necessary by the Department, and/or a modified whole effluent toxicity protocol.

#### B. Western Alkaline Standards

The permittee shall submit a Sediment Control Plan, watershed model, and a schedule of BMP/BTCA implementation and maintenance meeting the requirements of 40 CFR 434 (H) to the department for approval prior to conversion of any permitted outfall to Western Alkaline Standards status. Outfalls are only eligible for conversion to Western Alkaline Standards effluent limitations described in Section I.B.4 of this permit when the entire contributing drainage of the outfall has been released from Phase II bonding under the Montana SMPs C1986003A, C1984003B, C1985003C, and C1986003D. Notification of intent to convert an outfall to Western Alkaline Standards status shall be provided by the applicant at the time of bond release application for C1986003A, C1984003B, C1985003C, and C1986003D. Notification of Phase II bond release by the Department shall be provided to the MPDES file and to the applicant within 30 days of successful Phase II bond release for an entire contributing watershed for an outfall. Following a minor modification to MT0023965, pursuant to ARM 17.30.1362, effluent limitations for an applicable outfall convert to Western Alkaline Standards as described in Section I.B.4 of this permit. Western Energy must design, implement and maintain Best Management Practices specified in the Sediment Control Plans.

#### C. Reopener Provisions

This permit shall be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

#### 1. Water Quality Standards

The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limitations than contained in this permit.

#### 2. Water Quality Standards are Exceeded

If water quality standards or Trigger Values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the effluent limitations or the water quality management plan. Trigger Values are used to determine if a given increase in the concentration of toxic parameters is significant or non-significant as per the non-degradation rules ARM 17.30.701 et seq. and are listed in Circular DEQ-7.

#### 3. TMDL or Wasteload Allocation

TMDL requirements or a wasteload allocation is developed and approved by the Department and/or USEPA for incorporation in this permit.

#### 4. Water Quality Management Plan

A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

#### **5. Toxic Pollutants**

A toxic standard or prohibition is established under Clean Water Act Section 307(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

#### 6. Toxicity Limitations - Not Applicable

#### D. Compliance Schedules

The permit imposes new WQBELs for ammonia, mercury, selenium, and silver and more stringent WQBELs for dissolved aluminum and total iron at outfalls discharging to East Fork Armells Creek – Intermittent.

The actions listed below must be completed on or before three years from the effective date of the permit. The completion of all actions or deliverables must be reported to DEQ at the address listed in Section I.C.6 of the permit and in accordance with the signatory requirements of Section III.C.6 of the permit.

The Permittee shall meet the new limits listed in Section I.B.1, Table 4, and Section I.B.3, Table 9, of this permit within three years of the effective date of the permit. During the compliance period, monitoring is required for ammonia, mercury, selenium, and silver in accordance with Section I.C.3 and there are no interim effluent limitations. During the compliance period, the effluent limitations for dissolved aluminum and total iron will be retained from the previous permit and monitoring is required in accordance with Section I.C.3.

The Permittee shall submit annual progress report to DEQ for actions taken to meet the future limits in the previous year and projected efforts for the upcoming year. The annual reports must include any water quality monitoring results and any planned alterations to the facility in accordance with Section II.B.2 and ARM 17.30.1342(12). Each annual report is due January 28<sup>th</sup> until the end of the compliance period, which is three years from the effective date of the permit.

The Permittee shall submit a final reporting on the efforts achieved in meeting the new limits within 14 days after the end of the compliance period.

The permit does not authorize the use of representative monitoring for precipitationdriven events. The Permittee will be granted a one-year compliance schedule from the date of permit issuance to facilitate procurement, installation, and commissioning of flow monitoring and effluent sampling devices at all outfalls requiring equipment. Until such equipment is installed, the Permittee must continue to monitor and sample effluent using non-automated methods. The Permittee shall submit a final reporting on the efforts achieved in installing monitoring equipment within 14 days after the end of the compliance period.

#### **III.STANDARD CONDITIONS**

#### A. Monitoring, Recording, and Reporting

- Representative Sampling: Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [ARM 17.30.1342(10)(a)]
- 2. Monitoring and Reporting Procedures: Monitoring results must be reported on a Discharge Monitoring Report (DMR) form at the intervals specified in Section II of

this permit. Calculations for all limitations that require averaging of measurements must use an arithmetic mean unless otherwise specified by the Department in the permit [ARM 17.30.1342(12)(d)(i), (iii)]. Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal Regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit. [ARM 17.30.1342(10)(d)]

- 3. Penalties for Tampering: The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than six months, or by both. [MCA 75-5-633]
- 4. Compliance Schedule Reporting: Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date. [ARM 17.30.1342(12)(e)]
- 5. Additional Monitoring by the Permittee: If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. [ARM 17.30.1342(12)(d)(ii)]
- 6. Records Contents [ARM 17.30.1342(10)(c)]: Records of monitoring information must include:
  - a) the date, exact place, and time of sampling or measurements;
  - b) the initials or name(s) of the individual(s) who performed the sampling or measurements;
  - c) the date(s) analyses were performed;
  - d) the initials or name(s) of individual(s) who performed the analyses;
  - e) the analytical techniques or methods used; and
  - f) the results of such analyses;
- 7. Retention of Records: The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. [ARM 17.30.1342(10)(b)]
- 8. Twenty-four Hour Notification [ARM 17.30.1342(12)(f)]: The permittee shall report any serious incident of noncompliance as soon as possible, but no later than twentyfour (24) hours from the time the permittee first became aware of the circumstances.

#### a. Oral notification

The report shall be made orally to the Water Protection Bureau at (406) 444-5546 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents of noncompliance:

- i. Any noncompliance which might endanger health or the environment;
- ii. Any unanticipated bypass that exceeds any effluent limitation in the permit (See Section III.B.7 of this permit, "Bypass of Treatment Facilities");
- iii. Any upset which exceeds any effluent limitation in the permit (See Section III.B.8 of this permit, "Upset Conditions") or;
- iv. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in this permit to be reported within 24 hours.

#### b. Written notification

A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

- i. A description of the noncompliance and its cause;
- ii. The period of noncompliance, including exact dates and times;
- iii. The estimated time noncompliance is expected to continue if it has not been corrected; and
- Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

#### c. Waiver of written notification requirement

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546. Reports shall be submitted to the addresses in Section I.C.6 of this permit ("Discharge Monitoring Reports").

- 9. Other Noncompliance Reporting: Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Section I.C.6 of this permit ("Discharge Monitoring Reports") are submitted. The reports shall contain the information listed in Section III.A.8.b of this permit ("Twenty-four Hour Notification"). [ARM 17.30.1342(12)(g)]
- 10. Inspection and Entry [ARM 17.30.1342(9)]: The permittee shall allow the head of the Department, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location.

#### B. Compliance Responsibilities

- 1. Duty to Comply: The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [ARM 17.30.1342(1)]
- 2. Planned Changes: The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source under ARM 17.30.1340(2); or
  - The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit, or to pollutants that are not subject to notification requirements under ARM 17.30.1343(1)(a).

The permittee shall give advance notice to the Department of any planned changes at the permitted facility or of an activity that could result in noncompliance with permit requirements. [ARM 17.30.1342(12)(b)]

#### 3. Penalties for Violations of Permit Conditions

- a. In an action initiated by the Department to collect civil penalties against a person who is found to have violated a permit condition, the person is subject to a civil penalty not to exceed \$25,000. Each day of violation constitutes a separate violation. [MCA 75-5-631], [ARM 17.30.1342(1)(b)].
- b. The Montana Water Quality Act provides that any person who willfully or negligently violates a prohibition or permit condition is subject, upon conviction, to criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. [MCA 75-5-632], [ARM 17.30.1342(1)(b)].
- c. MCA 75-5-611(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations.
- d. Except as provided in permit conditions on Section III.B.7 of this permit ("Bypass of Treatment Facilities") and Section III.B.8 of this permit ("Upset Conditions"), nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- 4. Need to Halt or Reduce Activity Not a Defense: It may not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [ARM 17.30.1342(3)]

- 5. Duty to Mitigate: The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. [ARM 17.30.1342(4)]
- 6. Proper Operation and Maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [*ARM 17.30.1342(5)*]

#### 7. Bypass of Treatment Facilities [ARM 17.30.1342(13)]

- a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions under "Prohibition of bypass" and "Notice" (Sections III.B.7.b and c of this permit) below.
- **b.** *Prohibition of bypass.* Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
  - The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- iii. The permittee submitted notices as required under "Notice" below (Section III.B.7.c of this permit).
- c. Notice:
  - i. <u>Anticipated bypass</u>. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.
  - ii. <u>Unanticipated bypass</u>. The permittee shall submit notice of an unanticipated bypass as required under Section III.A.8 of this permit ("Twenty-four Hour Notification").
- **d.** Approval of bypass under certain conditions. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above under "Prohibition of bypass" (Section III.B.7.b of this permit).
- 8. Upset Conditions [ARM 17.30.1342(14)]

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of Section III.B.8.b of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- **b.** Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - ii. The permitted facility was at the time being properly operated;
- iii. The permittee submitted notice of the upset as required under Section III.A.8 of this permit ("Twenty-four Hour Notification"); and
- iv. The permittee complied with any remedial measures required under Section III.B.5 of this permit, ("Duty to Mitigate").
- c. *Burden of proof.* In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### C. General Requirements

- 1. Anticipated Noncompliance: The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements [*ARM* 17.30.1342(12)(b)].
- 2. Permit Actions: This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [ARM 17.30.1342(6)]
- 3. Duty to Reapply: If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must first apply for and obtain a new permit. [ARM 17.30.1342(2)] In accordance with ARM 17.30.1322(4), the application must be submitted at least 180 days before the expiration date of this permit.
- 4. Duty to Provide Information: The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit. [ARM 17.30.1342(8)]
- 5. Other Information: Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information [ARM 17.30.1342(12)(h)].

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#### 6. Signatory Requirements

- a. All applications, reports or information submitted to the Department shall be signed and certified. [ARM 17.30.1342(11)]
- **b.** All permit applications must be signed as follows:
  - i. For a corporation: By a responsible corporate officer, which means
    - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
    - 2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
- iii. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. A principal executive office of a federal agency includes:
  - 1) The chief executive officer of the agency; or
  - A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency [ARM 17.30.1323(1)].
- c. *Authorized representatives.* All reports required by the permit and other information requested by the Department shall be signed by a person described above in Section III.C.6.b of this permit or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
  - i. The authorization is made in writing by a person described above in Section III.C.6.b and submitted to the Department; and
  - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (a duly authorized representative may thus be either a named individual or an individual occupying a named position) [ARM 17.30.1323(2)].
- **d.** Changes to authorization. If an authorization under Section III.C.6.c of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section III.C.6.c of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative [ARM 17.30.1323(3)].
- e. *Certification*. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations" [ARM 17.30.1323(4)].

- 7. Penalties for Falsification of Reports: The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more that \$25,000 per violation, or by imprisonment for not more than six months per violation, or both. [MCA 75-5-633]
- 8. Property Rights: The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. [ARM 17.30.1342(7)]
- 9. Severability: The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [ARM 17.30.1302]
- 10. Transfers [ARM 17.30.1360(2)]: This permit may be automatically transferred to a new permittee if:
  - The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
  - c. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Section III.C.10.b of this permit; and
  - d. Required annual and application fees have been paid.
- 11. Fees [ARM 17.30.201(8)]: The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:
  - a. Impose an additional assessment consisting of 20% of the fee plus interest on the required fee computed at the rate established under 15-1-216, MCA, or
  - b. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all

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outstanding fees, including all penalties, assessments and interest imposed under this subsection. Suspensions are limited to one year, after which the permit will be terminated.

#### D. Notification Levels

- 1. The permittee shall comply with effluent standards or prohibitions established under Clean Water Act Section 307(a) for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. [ARM 17.30.1342(1)(a)]
- 2. Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe [ARM 17.30.1343(1)(a)]:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. One hundred micrograms per liter (100 µg/l);
    - ii. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with ARM 17.30.1322(7)(g); or
  - iv. The level established by the Department in accordance with 40 CFR 122.44(f).
  - **b.** That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. Five hundred micrograms per liter (500 µg/l);
    - ii. One milligram per liter (1 mg/l) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with ARM 17.30.1322(7)(g); or
  - iv. The level established by the Department in accordance with 40 CFR 122.44(f).

#### IV. DEFINITIONS AND ABBREVIATIONS

"1-year, 2-year, 10-year, and 25-year, 24-hour precipitation events" means the maximum 24hour precipitation event with a probable recurrence interval of once in one, two, ten, and twentyfive years, respectively, as defined by the National Weather Service Technical Paper No. 40, *Rainfall Frequency Atlas of the U.S.*, May 1961, or equivalent regional or rainfall probability information developed therefrom.

"Act" means the Montana Water Quality Act, Title 75, chapter 5, MCA.

"Active mining area" means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas, and post-mining areas.

"Acute Toxicity" occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

"Administrator" means the administrator of the United States Environmental Protection Agency.

"Alkaline mine drainage" means mine drainage which, before any treatment, has a pH equal or greater than 6.0, and total iron concentration of less than 10 mg/L.

"Arithmetic Mean" or "Arithmetic Average" for any set of related values means the summation of the individual values divided by the number of individual values.

"Average monthly limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

"Average weekly limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

"Best Management Practices" (BMPs) mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States.

"Bond release" means the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed.

"Brushing and grubbing area" means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil being salvaged.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

Westmoreland Rosebud Mining LLC ROSEBUD MINE

"CFR" means the Code of Federal Regulations.

"Chronic toxicity" occurs when, during a chronic toxicity test, the 25% inhibition concentration (IC<sub>25</sub>) for any tested species is less than or equal to 100% effluent (i.e., IC<sub>25</sub>  $\leq$  100% effluent).

"Clean Water Act" means the federal legislation at 33 USC 1251, et seq.

"Coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.

"Coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.

"Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

- Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
- b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
- c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,
- d. Continuous collection of sample, with sample collection rate proportional to flow rate.

"Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

"Department" means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.

"Director" means the Director of the Montana Department of Environmental Quality.

"Discharge" means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.

"Effluent Limitations Guidelines" (ELGs) mean regulations published by the Administrator under Section 304(b) of the CWA that establishes national technology-based effluent requirements for a specific industrial category. Westmoreland Rosebud Mining LLC ROSEBUD MINE

"EPA" or "USEPA" means the United States Environmental Protection Agency.

"GPM" means gallons per minute.

"Grab Sample" means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.

"Instantaneous Maximum Limit" means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

"Instantaneous Measurement", for monitoring requirements, means a single reading, observation, or measurement.

"Maximum Daily Limit" means the highest allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

"mg/L" means milligrams per liter.

"Mine drainage" means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area.

"Minimum Level" (ML) of quantitation means the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, as determined by the procedure set forth at 40 CFR 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) unless otherwise specified in the permit. (ARM 17.30.702(22))

"Mixing zone" means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

"ml/L" means milliliters per liter.

"MSUMRA" means the Montana Strip and Underground Mine Reclamation Act.

"Reclamation area" means the surface area of a coal mine which has been returned to required contour and on which re-vegetation (specifically, seeding or planting) work has commenced.

"Regraded area" means the surface area of a coal mine that has been returned to required contour.

"Regional Administrator" means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.

"Settleable solids" means that matter measured by the volumetric method specified in 40 CFR 434.64.

Westmoreland Rosebud Mining LLC ROSEBUD MINE

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"SMCRA" means the Surface Mining Control and Reclamation Act.

"Storm water" means storm water runoff, snow melt runoff, and surface run-off and drainage in response to a precipitation event.

"TIE" means a toxicity identification evaluation.

"TMDL" means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

"Topsoil stockpiling area" means the area outside the mined-out area where topsoil is temporarily stored for use in reclamation, including containment berms.

"TRE" means a toxicity reduction evaluation.

"TSS" means the pollutant parameter total suspended solids.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#### **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA**

IN THE MATTER OF:	CAUSE NO. BER 2021-05 WQ
THE NOTICE OF APPEAL AND REQUEST FOR HEARING BY WESTMORELAND ROSEBUD MINING LLC REGARDING ISSUANCE OF MPDES PERMIT NO. MT0023965	(PROPOSED) BOARD ORDER FOR FINAL AGENCY DECISION

This matter is before the Board of Environmental Review ("Board") upon Westmoreland Rosebud Mining LLC's ("Westmoreland") appeal of MPDES Permit No MT0023965 issued by the Department of Environmental Quality ("DEQ"). See Notice of Appeal (July 7, 2021). The Board received a Stipulation for Entry of final Agency Decision ("Stipulation") by and between Westmoreland and the Montana Department of Environmental Quality ("DEQ"), dated November 19, 2021. The Board has reviewed and considered the Stipulation and has been advised that all issues raised in the appeal have been fully and finally compromised and settled as further ORDERED herein. The Board finds good cause for entry of the Final Agency Decision as stipulated and requested by DEQ and Westmoreland.

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED as follows:

1. Pursuant to Mont. Code Ann. § 75-5-403, the Board of Environmental Review ("Board") has authority to hear contested case appeals of DEQ's Montana Pollutant Discharge Elimination System ("MPDES") permitting decisions, such that the Board may affirm, modify, or reverse a permitting action of DEQ.

DEQ is a department of the executive branch of state government,
 duly created and existing under the authority of Mont. Code Ann.§ 2-15-3501.
 DEQ has statutory authority to administer Montana's water quality statutes,
 including the review and issuance of MPDES Permits under Mont. Code Ann.§ 75 5-402 and ARM 17.30.1301.

3. Westmoreland is a limited liability company registered to do business in Montana.

Westmoreland owns the Rosebud Mine, which is an MPDES permitted facility. Westmoreland has been issued MPDES Permit No.
 MT0023965 for the facility.

5. MPDES Permit No. MT0023965 was renewed on June 7, 2021 and became effective August 1, 2021 (the "2021 Renewal").

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6. On July 7, 2021, Westmoreland timely filed with the Board a Notice of Appeal and Request for Hearing, appealing only the electrical conductivity ("EC") effluent limitations for discharges to tributaries of and into Lee Coulee. *See* Notice of Appeal (July 7, 2021).

7. On August 5, 2021, pursuant to Admin. R. Mont. 17.30.1379, DEQ noted that all provisions of the 2021 Renewal were in effect, except for the EC effluent limitations for outfalls discharging to tributaries to Lee Coulee, which were stayed. During the pendency of the appeal, the EC effluent limitations for Lee Coulee from the previous version of MPDES Permit No. MT0023965 (the "2012 Renewal") remain in effect.

8. On August 6, 2021, in accordance with Admin. R. Mont. 17.30.1362, DEQ issued a minor modification to the 2021 Renewal correcting typographical and other minor errors (the "2021 Minor Mod"). The 2021 Minor Modification corrects descriptions of the receiving waters, including tributaries to Lee Coulee, but does not materially affect this Appeal.

9. Admin. R. Mont. 17.30.670(4) provides "[f]or all tributaries and other surface waters in the Rosebud Creek, Tongue, Powder, and Little Powder river watersheds, the monthly average numeric water quality standard for EC is 500  $\mu$ S/cm and no sample may exceed an EC value of 500  $\mu$ S/cm." Lee Coulee is a tributary to Rosebud Creek.

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10. As outlined in DEQ's white paper titled <u>A Review of the Rationale for</u> <u>EC and SAR Standards</u>, "[w]hen the natural EC values exceed the proposed EC standards, the provisions of 75-5-306, MCA would apply" directing that "[i]t is not necessary that wastes be treated to a purer condition than the natural condition of the receiving stream as long as the minimum treatment requirements" are met. DEQ "will determine the natural condition of the stream at any given point in time through monitoring, interpretation of historic data, and modeling to ensure that water quality is not diminished." <u>Rationale</u>, Sec. 6.0, p. 15. Neither DEQ nor Westmoreland has yet determined the natural condition of EC in Lee Coulee and its unnamed tributaries for purposes of surface water quality regulation.

11. The 2021 Renewal included electrical conductivity limitations for Lee Coulee as follows:

	Final	Effluent Limitations:	Average Monthly limit of 249 μS/cm Maximum Daily limit of 500 μS/cm
	Alter	nate Effluent Limitation:	Maximum Daily limit of 500 µS/cm
	12.	The immediately precede	ing version of MPDES Permit No.
MT0	023965	5 (the "2012 Renewal") in	cluded electrical conductivity limitations for
Lee (	Coulee	as follows:	

Final Effluent Limitations:	Average Monthly limit of 500 μS/cm Maximum Daily limit of 500 μS/cm
Alternate Effluent Limitation:	Maximum Daily limit of 500 $\mu$ S/cm

13. The 2021 Renewal, like the 2012 Renewal, provides seven outfalls that are permitted to discharge to unnamed ephemeral tributaries to Lee Coulee: Outfalls 130, 131, 132, 134, 130A, 130B, and 131A. *See* 2021 Minor Mod, Table 1. There were no discharges from any of those seven outfalls during the previous period of record for MPDES Permit No. MT0023965. *See* 2021 Fact Sheet, p. 90.

14. Lee Coulee meets the definition of a hydrologically ephemeral stream where it receives discharges from the Rosebud Mine. *See* ARM
17.30.602(10), 2021 Fact Sheet, p. 10, 31.

15. Lee Coulee has water quality that "is highly variable due to a mixture of runoff dominated flows and some reaches with groundwater dominated baseflows." Amendment AM4 Cumulative Hydrologic Impact Assessment (CHIA), p. 9-11. Total Dissolved Solids ("TDS") measurements in the Lee Coulee, which are roughly analogous to EC measurements, ranged from 220 mg/L to 4,330 mg/L with a median measurement of 2,700 mg/L. *Id*.

16. Groundwater samples from monitoring wells near the head of Lee Coulee revealed TDS levels ranging from 436 mg/L to 3,630 mg/L, with an average of 1,956 mg/L and a median of 1,840 mg/L. CHIA, p. 8-10. Alluvial groundwater is classified as Class III groundwater, which by definition has

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Specific Conductance between  $2,500 - 15,000 \mu$ S/cm. Specific Conductance is roughly analogous to EC. CHIA, p. 8-7, ARM 17.30.1006(3).

17. The Reasonable Potential Analysis for EC in Lee Coulee provided in the 2021 Renewal Fact Sheet did not account for the natural condition of surface water in Lee Coulee and its unnamed ephemeral tributaries.

18. DEQ and Westmoreland agree that, for the term of the 2021 Renewal, Westmoreland's planned discharges that are subject to the final effluent limitations provided in Table 7 of the 2021 Renewal, will be governed as before, in the 2012 Renewal, at the following levels, which are set equal to the water quality standard provided in Admin. R. Mont. 17.30.670(4):

Final Effluent Limitations:Average Monthly limit of 500 μS/cmMaximum Daily limit of 500 μS/cm

19. In accordance with ARM 17.24.639 and Westmoreland's surface mining permit (SMP C1984003B), Westmoreland has constructed and is required to maintain sedimentation ponds upgradient of each of the Lee Coulee outfalls (Outfalls 130, 131, 132, 134, 130A, 130B, and 131A). These sedimentation ponds are designed and constructed to capture and detain stormwater runoff from, at a minimum, the theoretical 10-year, 24-hour storm event. The sedimentation ponds are part of "the facilities and systems of treatment and control" that Westmoreland "shall at all times properly operate and maintain" in accordance with ARM 17.30.1342(5) and the 2021 Renewal.

20. Westmoreland agrees to dismiss its appeal as it applies to the alternate effluent limitations in Table 12 of the 2021 Renewal.

21. Neither DEQ nor Westmoreland waives the right to assert any obligations, challenges or defenses in the future based on the natural condition of EC in Lee Coulee and its unnamed tributaries.

22. Westmoreland does not admit that Admin. R. Mont. 17.30.670(4) governs the discharges to unnamed ephemeral tributaries of Lee Coulee in terms of EC and SAR and Westmoreland maintains that the provisions of Mont. Code Ann. § 75-5-306, MCA govern.

23. Nothing in the Stipulation filed by DEQ and Westmoreland shall prohibit DEQ or Westmoreland from exercising any rights or authority under the Water Quality Act.

24. Westmoreland's Notice of Appeal and Request for Hearing is fully and finally compromised and settled by agreement of DEQ and Westmoreland as specified herein and as further set forth in the Modified Permit attached as **Exhibit A**.

25. The Modified Permit attached as Exhibit A appropriately incorporates modifications to the appealed 2021 Renewal as contemplated by DEQ and Westmoreland.

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26. Pursuant to its authority to hear contested case appeals of MPDES Permits under Mont. Code Ann.§ 75-5-403(2) and ARM 17.30.13710(4), the Board adopts, as the final agency decision concerning Westmoreland's Notice of Appeal, the Modified Permit attached as Exhibit A.

27. All conditions of the Modified Permit, attached as Exhibit A, will be fully effective and enforceable on January 1, 2022.

28. The Parties shall each pay their own attorney fees and costs.

29. The Board's Decision as to Westmoreland's Notice of Appeal shall

represent the FINAL AGENCY DECISION for purposes of the Montana

Administrative Procedure Act, Section 2-4-623, MCA.

DATED this \_\_\_\_\_ day of December, 2021.

Steven Ruffatto, Chair Board of Environmental Review

cc: Hearing Examiner, DOJ ALS Kirsten Bowers, DEQ Jon Kenning, DEQ John C. Martin Sarah Boredelon Victoria A. Marquis

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#### STATE OF MONTANA DEPARTMENT OF JUSTICE AGENCY LEGAL SERVICES BUREAU

Austin Knudsen Attorney General



1712 Ninth Avenue P.O. Box 201440 Helena, MT 59620-1440

#### MEMORANDUM

TO:	Chairman and Members of the Board of Environmental Review
FROM:	Katherine Orr Aislinn Brown Agency Legal Services Bureau
RE:	Contested Case Backlog and Contested Case Procedure
DATE:	September 29, 2021

The following is a response to the questions posed in a memorandum to the Board of Environmental Review (BER) chairman and members by Board Member Dave Simpson on July 30, 2021. It analyzes whether the application of informal Montana Administrative Procedures Act (MAPA) proceedings is appropriate to contested cases before the BER, as well as alternatives to speed up resolution of contested cases. In summary, whether to choose to use the informal process is up to the parties, who both must agree in writing that a formal MAPA proceeding is waived. It is unlikely this will happen in many, if any, cases. Alternatives to speed up the process may include shorter discovery timelines, encouragement of summary judgment or partial summary judgment disposition, mediation concerning discovery disputes, and mediation regarding settlement. However, each party has a due process right to procedurally and substantively pursue their case to a final disposition, and the BER will want to avoid being overturned on appeal because the parties did not have sufficient time to present their case.

# I. Is the informal conference routinely used as a first step in contested case procedure?

In most cases, informal proceedings are offered to the parties but rarely accepted.

# II. To what extent have hearing examiners advised of, promoted, and employed informal proceedings?

This depends on the subject matter of the contested case. Typically, as mentioned in the previous section, parties are advised that they may agree to an informal proceeding; however, hearing examiners typically do not "promote" such proceedings but leave the decision to the

BER Chairman and Members September 30, 2021 Page 2

parties. Informal proceedings are rarely consented to. One reason for this is that formal MAPA proceedings better protect a parties' rights and create a more complete record for appeal.

With respect to contested case proceedings before the BER, past hearing examiners have informed the parties of their ability to use informal proceedings during the scheduling conference. However, we recommend doing so in the prehearing order (typically, the first order that goes out) as well.

# III. Should the BER initiate rulemaking to promote and facilitate informal proceedings under MAPA where appropriate? Or are existing statutory and regulatory provisions adequate? How can the Board encourage use of informal procedure where feasible?

We respond to these questions by first addressing how informal MAPA procedures work; followed by whether such procedures are appropriate here; and finally, whether the BER would need to conduct rulemaking to allow for informal proceedings in certain cases.

#### a. Informal MAPA proceedings, generally.

Contested case proceedings, including those conducted by the BER, are conducted pursuant to MAPA. *See e.g.*, Mont. Code Ann. § 82-4-130. Pursuant to Mont. Code Ann. § 2-4-601(1) and (2)(e), "[i]n a contested case, all parties must be afforded an opportunity for hearing after reasonable notice," and the notice must include "a statement that a formal proceeding may be waived pursuant to 2-4-603."

Montana Code Annotated § 2-4-603(1)(a) provides: "unless precluded by law, informal disposition may be made of any contested case by [written] stipulation, agreed settlement, consent order, or default" (emphasis added). Subsection (2) provides: "Except as otherwise provided, parties to a contested case may jointly waive in writing a formal proceeding under this part. The parties may then use informal proceedings under 2-4-604." There is not an exception to this ability to conduct informal proceedings that would apply to the BER.

Montana Code Annotated § 2-4-604 sets forth the requirements for informal disposition of contested cases. Subsection (1) requires the agency to, "in accordance with procedures adopted under 2-4-201":

(a) give affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing examiner: (i) written or oral evidence in opposition to the agency's action or refusal to act; (ii) a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction; or (iii) other written or oral evidence relating to the contested case; (b) if the objections of the persons or parties are overruled, provide a written explanation within 7 days.

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Subsection (2) requires the agency to maintain a record consisting of, in pertinent part:

(a) the notice and summary of grounds of the opposition; (b) evidence offered or considered; (c) any objections and rulings on the objections; (d) all matters placed on the record after ex parte communication pursuant to 2-4-613; (e) a recording of any hearing held, together with a statement of the substance of the evidence received or considered, the written or oral statements of the parties or other persons, and the proceedings.

The rules of evidence for informal proceedings are much more relaxed than for formal proceedings. Montana Code Annotated § 2-4-603(4) provides that, in informal proceedings, "irrelevant, immaterial, or unduly repetitious evidence must be excluded but all other evidence of a type commonly relied upon by reasonably prudent persons in the conduct of their affairs is admissible, whether or not the evidence is admissible in a trial in the courts of Montana." By contrast, in formal proceedings, "[e]xcept as otherwise provided by statute relating directly to an agency, agencies shall be bound by common law and statutory rules of evidence." Mont. Code Ann. § 2-4-612(2). This potentially means that a lot more evidence could come into the record in an informal proceeding than a formal one, which could have the opposite of the intended effect by lengthening the proceedings.

Parties to informal proceedings have a lot of discretion with how they want those proceedings to look. For example, the Attorney General's model rules do not apply to informal proceedings unless the parties want them to.

Both informal and formal proceedings are appealable to district court pursuant to Mont. Code Ann. § 2-4-702.

#### b. Whether informal proceedings are appropriate for contested cases before the BER.

As discussed above, informal proceedings must be offered to each party in every contested case. However, it is up to the parties to choose whether or not to use the informal procedures. The informal MAPA process is case-by-case and depends on what works best for the parties to resolve a situation. In part, discretion is given to the parties to ensure their due process requirements are met.

#### c. Whether the BER must engage in rulemaking to allow for informal proceedings.

The BER does not need to conduct rulemaking to advise the parties of their ability to waive a formal proceeding because that right is statutory. Mont. Code Ann. § 2-4-601(1) and (2)(e). With respect to procedure during a hearing, the BER has adopted several of the Attorney General's Organizational and Procedural Rules. Admin. R. Mont. 1.3.215 provides, in pertinent part: "Informal proceedings in contested cases must give the parties an opportunity to present to

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the agency or the hearing examiner written or oral evidence challenging the agency's actions, its refusal to act, its justifications for determination, or other evidence relating to the contested case;" "An informal conference may be conducted prior to the proceedings in order to define issues, determine witnesses, and agree upon stipulation;" and "A record of proceedings conducted under this part must be made in accordance with 2-4-604, MCA." Other relevant administrative rules provide for discovery, Admin. R. Mont. 1.3.217, procedures at the hearing, Admin. R. Mont. 1.3.219, maintaining the case record, Admin. R. Mont. 1.3.220, and issuing final orders, Admin. R. Mont. 1.3.224, among other things.

The BER could add to these rules through rulemaking but it is not necessary. As discussed above, typically, informal proceedings leave a lot of flexibility to the parties. Partly, this is because the hearing examiner will want to ensure the parties' rights are protected.

# IV. What other measures, if any, are available to expedite the time frames in contested cases to reduce and minimize backlog?

A review of some of the longest cases before the BER indicates that much of the delay has been due to parties requesting extensions. This is somewhat unavoidable, as the Hearings Examiner must protect the parties' rights to present their case and extensions typically are freely given (especially if unopposed). The BER could shorten discovery and other timelines, though this risks the same issue—ensuring the parties are able to fully present their case. If deadlines are shorter than provided for by the rules of civil procedure, the BER may need to engage in rulemaking and likely will be challenged on this issue. Alternatively, the parties to a formal MAPA proceeding can agree to forego certain things. This would most likely happen during a scheduling conference, during which the Hearings Examiner could ask the parties whether they wish to make any adjustments to the formal MAPA proceeding as it applies to the case.

Delays can also be created by interlocutory appeals between a hearing examiner and the Board. It is recommended that the delegation to a hearing examiner from the inception should make clear that the BER does not review a hearing examiner's opinion, for example on discovery rulings, except when the entire recommended decision is presented to the Board at the end of a contested case proceeding.

# V. Are there other avenues of dispute resolution that can be offered and employed as alternatives to formal contested case procedure?

Although it will likely never be used in cases before the BER, which tend to be factintensive, Mont. Code Ann. § 2-4-603(3) provides: "If a contested case does not involve a disputed issue of material fact, parties may jointly stipulate in writing to waive contested case proceedings and may directly petition the district court for judicial review pursuant to 2-4-702."

Dispute resolution may also include mediation if agreed to by the parties. The BER (or a hearing examiner) may request that the parties attempt to settle a case before engaging in the contested case steps of discovery, motions practice and presentation of evidence.