

AGENDA

THURSDAY, SEPTEMBER 27, 2012

FRIDAY, SEPTEMBER 28, 2012

METCALF BUILDING, ROOM 111

1520 EAST SIXTH AVENUE, HELENA, MONTANA

NOTE: Individual agenda items are not assigned specific times. For public notice purposes, the meeting will begin no earlier than the time specified; however, the Board might not address the specific agenda items in the order they are scheduled. The Board will make reasonable accommodations for persons with disabilities who wish to participate in this meeting. Please contact the Board Secretary by telephone at (406) 444-6701 or by e-mail at jwittenberg@mt.gov no later than 24 hours prior to the meeting to advise her of the nature of the accommodation you need.

**THURSDAY, SEPTEMBER 27
2:30 P.M.**

I. ADMINISTRATIVE ITEMS

A. REVIEW AND APPROVE MINUTES

1. July 27, 2012, Board meeting minutes.

II. BRIEFING ITEMS

A. CONTESTED CASE UPDATE

1. Enforcement cases assigned to the Hearing Examiner
 - a. **In the matter of violations of the Montana Septage Disposal and Licensure Laws by James Vaughn, d/b/a Any Time Septic & Porta-Potty, Lake County, BER 2011-06 SDL.** A *Stay of Proceedings* was in effect until July 18, 2012. A telephonic status conference was held on July 24, 2012, and on July 25, the hearing examiner issued *Second Scheduling Order*. A hearing is scheduled for November 14, 2012.
 - b. **In the matter of violations of the Public Water Supply laws by the city of Ronan Public Water Supply System, PWSID #MT0000318, Ronan, Lake County, BER 2012-04 PWS.** The hearing examiner issued *First Scheduling Order* on July 17, 2012. A hearing is scheduled for January 31, 2013.
 - c. **In the matter of violations of the Montana Solid Waste Management Act by Valley County Refuse District #1 at the Valley County Landfill, Glasgow, BER 2012-06 SW.** The hearing examiner issued *First Scheduling Order* on July 17, 2012. A hearing is scheduled for January 23, 2013.
2. Contested Cases not assigned to a Hearing Examiner
 - a. **In the matter of violations of the Opencut Mining Act by Brad Blakeman at the Camas Prairie Gravel Pit, Sanders County, BER 2012-01 OC.** On July 26, 2012, DEQ filed *The Department's Motion for Summary Judgment on the Issue of Liability* and *The Department's Brief in Support of Motion for Summary Judgment on the Issue of Liability*. A telephonic hearing on the motion was held August 30; the appellant did not appear. On September 6, DEQ filed *The Department's Supplemental Brief in*

Support of Motion for Summary Judgment on the issue of Liability requesting the Board enter an order granting motion for the summary judgment on the issue of liability. This matter will proceed to a contested case proceeding.

- b. **In the matter of the request for hearing by William E. Smith, on behalf of Mike Adkins, regarding Park County's denial to validate Adkins Class III Waste Tire Monofill License No. 517, BER 2012-05 SW.** On July 11, 2012, the Board received *Amended Appeal Brief and Petition for Declaratory Ruling* from the attorney for appellants. At its July 27, 2012, meeting, the Board voted to hear all matters in this case. On September 11, 2012, the Board heard oral argument on pending motions; the Board granted the pending motion to intervene of Protecting Paradise, and granted a motion to stay proceedings until disposition of the Petition for Judicial Review filed in the Sixth Judicial District.
3. Other Contested Case Briefings
 - a. **In the matter of violations of the Montana Underground Storage Tank Act by Jeanny Hlavka, individually and d/b/a J.R. Enterprise, LLC, at the Fort Peck Station, Valley County, BER 2010-08 UST.** On March 9, 2012, the District Court remanded the case back to the Board. On July 9, 2012, attorney for DEQ filed *The Department's Second Motion for Summary Judgment*. The appellants filed *Response to Second Summary Judgment Motion* on July 19, and on July 25, DEQ filed *Reply Brief in Support of the Department's Second Motion for Summary Judgment*. On August 30, DEQ filed *Motion to Vacate the Schedule pending a Decision on the Department's Second Motion for Summary Judgment*. A hearing is set for October 25, 2012.

III. ACTION ITEMS

A. INITIATION OF RULEMAKING

DEQ will propose that the Board initiate rulemaking to:

1. Amend ARM Title 17, Chapter 38, Subchapter 1, Public Water and Sewer Plans, Cross Connections, and Drilling Water Wells, by adding a new rule to address the repair of significant deficiencies and add a new line item and fee to the plan review fee tables. The proposed new rule would clarify the definition of a significant deficiency and would require its repair, with department approval. The proposed amendments to 17.38.106 would create a new line item and associated fee related to water and wastewater sliplining projects. The new fees would reduce the costs of those reviews by approximately 40 percent.

B. REPEAL, AMENDMENT, OR ADOPTION OF FINAL RULES

1. In the matter of final adoption of the revision of Circular DEQ-2, Design Standards for Municipal Wastewater Collection and Treatment. Included in the revisions to DEQ-2 are treatment standards, classifications, and allowable uses for reclaimed wastewater. Associated with these reuse standards are proposed rule changes under the Water Quality Act and the Public Water Supply Act.
2. In the matter of the amendment of water quality standards rules. The department proposes to adopt amendments to rules in ARM 17, Chapter 30, subchapters 5, 6, 7, and 10, pertaining to mixing zones, surface water quality standards, nondegradation requirements, and ground water rules. The department also proposes to adopt amendments to ARM 17, Chapter 24, subchapter 6, pertaining to reclamation; ARM 17, Chapter 36, subchapter 3,

pertaining to subdivisions; ARM 17, Chapter 55, subchapter 1, pertaining to CECRA; and ARM 17, Chapter 56, subchapters 5 and 6, pertaining to underground storage tanks. The proposed rulemaking is primarily intended to incorporate new and revised water quality standards and required reporting values in Circular DEQ-7 into the rules listed above. Proposed changes to ARM 17, Chapter 30, subchapter 6 also includes amendments to update definitions, amendments to avoid duplication and inconsistencies with other rules, and removal of a water-use classification that is no longer relevant.

3. In the matter of the amendment of ARM 17.8.801 and 17.8.818 related to ozone implementation, pertaining to definitions and review of major stationary sources and major modifications as set forth in MAR Notice No. 17-334.

C. FINAL ACTION ON CONTESTED CASES

1. **In the matter of the appeal and request for hearing by Roseburg Forest Products Co. of DEQ's Notice of Final Decision regarding Montana Ground Water Pollution Control System Permit No. MTX000099, BER 2010-09 WQ.** A telephonic conference was held on June 19, 2012, in which the parties indicated they were discussing settlement. On July 31, 2012, the parties filed *Stipulation for Dismissal*. An order dismissing the case will be presented for signature.
2. **In the matter of violations of the Public Water Supply Laws by Olson's Lolo Hot Springs, Inc. at Lolo Hot Springs, PWSID #MT0000805, Missoula County, BER 2011-09 PWS.** On August 15, the Board received the parties' *Stipulation for Dismissal*. An order dismissing the case will be presented for signature.
3. **In the matter of violations of the Opencut Mining Act by Ell Dirt Works, LLC, at the Gene Foss Pit 1, Richland County, BER 2011-11 OC.** On August 30, 2012, the Board received *Stipulation to Dismiss*, signed by the parties. An order dismissing the case will be presented for signature.
4. **In the matter of violations of the Water Quality Act by SK Construction, Inc. on US Highway 2 near Bainville, Roosevelt County, BER 2011-20 WQ.** On September 12, 2012, the Board received *Stipulation for Dismissal* signed by the parties. An order dismissing the case will be presented for signature.
5. **In the matter of violations of the Opencut Mining Act by the City of Ronan at Ronan, Lake County, BER 2011-23 OC.** On July 27, the Board received *Stipulation to Dismiss*, signed by the parties. An order dismissing the case will be presented for signature.
6. **In the matter of violations of the Opencut Mining Act by Russell Olsen at PaveCo Pit, Flathead County, BER 2012-07 OC.** The Board received the request for hearing on July 11, 2012. DEQ filed *Motion to Dismiss* on July 13, 2012. On August 30, the hearing examiner issued *Order on Motion to Dismiss*, granting DEQ's motion to dismiss with prejudice and providing the petitioner until September 11, 2012, to file written exceptions. No exceptions were filed. An order dismissing the case will be presented for signature.

D. NEW CONTESTED CASES

1. **In the matter of violations of the Montana Strip and Underground Mine Reclamation Act by Signal Peak Energy, LLC at Bull Mountain Mine #1, Roundup, Musselshell County, BER 2012-08 SM.** The Board received the appeal on July 19, 2012. On August 6, the interim hearing examiner issued *First Prehearing Order*, and the parties

filed *Joint Proposed Hearing Schedule* on August 16, 2012. A *First Scheduling Order* was issued on September 13, 2012. The Board may appoint a permanent hearing examiner or decide to hear the matter.

2. **In the matter of the request for hearing by Hawthorne Springs Property Owners Association; H Lazy Heart, LLC; Patchy, Inc.; and other residents regarding Opencut Mining Permit No. 2258, issued to Farwest Rock Products, Missoula County, BER 2012-09 OC.** The Board received the request on August 20, 2012. The interim hearing examiner issued *First Prehearing Order* on August 31, giving the parties until September 17, to file a proposed schedule. On September 7, the Board received a notice of appearance Pro Se from Farwest Rock Products. The Board may appoint a permanent hearing examiner or decide to hear the matter.
3. **In the matter of the request for hearing by Earth Justice, Montana Environmental Information Center, Sierra Club, and National Wildlife Federation regarding the Administrative Order on Consent issued to PPL Montana, LLC, BER 2012-10 MFS.** The Board received the request for hearing on September 4, 2012. A *First Prehearing Order* was issued on September 13, 2012. The Board may appoint a permanent hearing examiner or decide to hear the matter.

IV. 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 of the meeting. Individual contested case proceedings are not public matters on which the public may comment.

V. ADJOURNMENT

**FRIDAY, SEPTEMBER 28
9:00 A.M.**

I. HEARING

In the matter of violations of the Opencut Mining Act by Brad Blakeman at the Camas Prairie Gravel Pit, Sanders County, BER 2012-01 OC. The Board will hold a contested case hearing in this matter.

II. 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 of the meeting. Individual contested case proceedings are not public matters on which the public may comment.

III. ADJOURN



P. O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.state.mt.us

MINUTES
July 27, 2012

Call to Order

The Board of Environmental Review's regularly scheduled meeting was called to order by Chairman Russell at 9:05 a.m., on Friday, July 27, 2012, in Room 111 of the Metcalf Building, 1520 East Sixth Avenue, Helena, Montana.

Attendance

Board Members Present: Chairman Joseph Russell, Marvin Miller, Robin Shropshire, Heidi Kaiser, Larry Mires, and Joe Whalen

Board Members Absent: Larry Anderson

Board Attorney Present: Katherine Orr, Attorney General's Office, Department of Justice

Board Secretary Present: Joyce Wittenberg

Court Reporter Present: Laurie Crutcher, Crutcher Court Reporting

Department Personnel Present: Tom Livers (Deputy Director); John North, David Dennis, Jim Madden, Jane Amdahl, and Norman Mullen – Legal; Jenny Chambers and Tom Reid – Water Protection Bureau; Jon Dilliard, and Rachel Clark – Public Water Supply & Subdivisions Bureau; Bob Habeck, Debra Wolfe, Julie Merkel, and Charles Homer – Air Resources Management Bureau; Ed Coleman and Robert Smith – Industrial & Energy Minerals Bureau; George Mathieus – Planning, Prevention & Assistance Division; Todd Teegarden, Eric Regensburger, Amy Steinmetz, Terry Campbell, Mike Abrahamson, and Paul LaVigne – Technical & Financial Assistance Bureau; Mark Bostrom – Water Quality Planning Bureau; John Arrigo – Enforcement Division

Interested Persons Present (*Disclaimer: Names are spelled as best they can be read from the official sign-in sheet.*): No members of the public were present.

I.	<p>Rule Hearing</p> <p>At 9:05 a.m., the Board held a public hearing regarding the proposed revisions of Circular DEQ-2, design standards for municipal wastewater collection and treatment. The hearing ended at 9:21 a.m., at which time the regularly scheduled meeting began.</p>
II.A.1	<p>Review & Approve May 18, 2012, Board Meeting Minutes</p> <p>Mr. Miller MOVED to approve the May 18, 2012, Board meeting minutes. Mr. Whalen SECONDED the motion. The motion CARRIED with a unanimous vote.</p>
II.B.	<p>Set November / December Meeting Date</p> <p>Mr. Livers explained that the Board had not chosen a specific date for the final meeting in 2012, leaving it open for November 30 or December 7. He said DEQ would likely prefer the latter date for rule purposes, but that either date is workable.</p> <p>Several Board members indicated a preference for December 7 also. The Board agreed on December 7 for the November/December meeting date.</p>
III.A.1.a	<p>In the matter of violations of the Montana Septage Disposal and Licensure Laws by James Vaughn, d/b/a Any Time Septic & Porta-Potty, Lake County, BER 2011-06 SDL.</p> <p>Ms. Orr said a status conference had taken place on July 24. She said the stay of proceedings was lifted and a hearing is now set for November 14.</p>
III.A.1.b	<p>In the matter of violations of the Public Water Supply Laws by Olson's Lolo Hot Springs, Inc. at Lolo Hot Springs, PWSID #MT0000805, Missoula County, BER 2011-09 PWS.</p> <p>Ms. Orr informed the Board that this case has been settled.</p>
III.A.1.c	<p>In the matter of violations of the Opencut Mining Act by Ell Dirt Works, LLC, at the Gene Foss Pit 1, Richland County, BER 2011-11 OC. <i>(No discussion took place regarding this matter.)</i></p>
III.A.1.d	<p>In the matter of violations of the Water Quality Act by SK Construction, Inc. on US Highway 2 near Bainville, Roosevelt County, BER 2011-20 WQ. <i>(No discussion took place regarding this matter.)</i></p>
III.A.1.e	<p>In the matter of violations of the Opencut Mining Act by the City of Ronan at Ronan, Lake County, BER 2011-23 OC.</p> <p>Ms. Orr said this case appears to be settling.</p>

- III.A.2.a In the matter of the appeal and request for hearing by Roseburg Forest Products Co. of DEQ's Notice of Final Decision regarding Montana Ground Water Pollution Control System Permit No. MTX000099, BER 2010-09 WQ.
- Ms. Orr said this matter is settling.
- III.A.3.a In the matter of violations of the Opencut Mining Act by Brad Blakeman at the Camas Prairie Gravel Pit, Sanders County, BER 2012-01 OC.
- Ms. Orr said this matter was retained by Board and that it appears to be going to a hearing, which is scheduled to take place at the September Board meeting. She noted that the hearing could take a half to a full day.
- III.A.4.a In the matter of violations of the Montana Underground Storage Tank Act by Jeanny Hlavka, individually and d/b/a J.R. Enterprise, LLC, at the Fort Peck Station, Valley County, BER 2010-08 UST.
- Ms. Orr said a motion for summary judgment was filed, as well as responses, and that she would soon rule on that.
- IV.A.1 In the matter of DEQ's request to initiate rulemaking to amend rules governing the Montana Pollutant Discharge Elimination System (MPDES) permit program in ARM Title 17, Chapter 30, subchapter 13.
- Mr. Reid said DEQ is requesting that the Board initiate rulemaking to amend ARM 13.30, subchapter 13, and appoint a hearing examiner to conduct a hearing on the rule amendments. He said the primary reason for the amendments is to update the rules to maintain consistency with federal rules. Mr. Reid provided a summary of the proposed amendments and said the amendments went to the Water Pollution Control Advisory Council (WPCAC) on June 29 and were mailed to stakeholders on June 22. He noted that WPCAC supported the rules and that there wasn't a lot of interest from stakeholders. Mr. Reid responded to questions from the Board.
- Chairman Russell called for public comment. There was no response. He then called for a motion to initiate the rulemaking and to appoint Ms. Orr as the presiding officer for the rulemaking. Ms. Shropshire so MOVED. Ms. Kaiser SECONDED the motion. The motion CARRIED with a unanimous vote.
- IV.A.2 In the matter of DEQ's request to initiate rulemaking to add a new rule in ARM Title 17, Chapter 30, subchapter 17 adopting DEQ's new Nutrient Trading Policy.
- Mr. Teegarden provided an overview of the nutrient trading policy, and said the policy had been in the works for a couple years and that the Board had been briefed on it in a previous meeting. He explained that trading is a market-based approach to improve water quality and added that the EPA supports it as a tool to meet TMDL loads. Mr. Teegarden said staff presented the trading policy to the nutrient work group a couple of times, held a nutrient trading workshop in April 2011, had additional

subgroup meetings and conference calls, took informal comment and edited drafts of the policy based on the comments, and created space on the nutrient trading group website to provide information.

Mr. Teegarden, Mr. Regensburger, and Mr. Bostrom responded to questions from the Board.

Chairman Russell called for public comment on the proposed rulemaking; there was no response. He called for a motion to initiate the rulemaking and to appoint Ms. Orr as the presiding officer. Mr. Whalen so MOVED. Mr. Miller SECONDED the motion. The motion CARRIED with a unanimous vote.

IV.A.3 In the matter of DEQ's request to initiate rulemaking to amend ARM 17.8.102 to amend the air quality rules to adopt the 2010 edition of the Code of Federal Regulations and current updates to state statutes and regulations that are incorporated by reference in the rules.

Ms. Wolfe said DEQ is requesting that the Board initiate rulemaking to adopt the current edition of federal and state statutes that are incorporated by reference in the air quality rules.

Chairman Russell called for public comment on the proposed rulemaking; there was no response. He called for a motion to initiate the rulemaking and to appoint Ms. Orr as the presiding officer. Mr. Mires so MOVED. Mr. Whalen SECONDED the motion. The motion CARRIED with a unanimous vote.

IV.B.1 In the matter of DEQ's request for final adoption of amendments to ARM Title 17, Chapter 24, subchapter 9, in order to regulate underground mining using in situ coal gasification.

Mr. Smith said DEQ is requesting the Board adopt the proposed amended rules implementing the Montana Strip and Underground Mine Reclamation Act. He said the rulemaking was required by Senate Bill 292 in the 2011 legislature. He said there were no comments received during the public comment period.

Mr. North passed around House Bill 521 and House Bill 311 analyses, saying he had previously overlooked submitting it.

Chairman Russell called for a motion to adopt the rule, and accept the department's 521 and 311 analyses. Mr. Miller so MOVED. Mr. Mires SECONDED the motion.

Ms. Kaiser recused herself from taking action on this item.

Chairman Russell called for public comment on the proposed adoption; there was no response. He called for a vote and the motion CARRIED 5-0.

- IV.C.1 | In the matter of final action on CR Kendall Corporation's request for a hearing to appeal DEQ's decision to deny a minor permit amendment under the Metal Mine Reclamation Act, BER 2002-09 MM.
- Ms. Orr said there had been several iterations of what the closure plan would involve, and that there had now been an agreement that CR Kendall will fund an EIS. She said the Board had a 41(a) dismissal before it and a proposed dismissal order.
- Chairman Russell called for a motion to authorize him to sign the dismissal order. Ms. Shropshire so MOVED. Mr. Whalen SECONDED the motion. The motion CARRIED with a unanimous vote.
- IV.C.2 | In the matter of final action on the appeal and request for hearing by the City of Helena regarding the DEQ's Notice of Final Decision for Montana Pollutant Discharge Elimination System (MPDES) Permit No. MT0022641, BER 2011-08 WQ.
- Ms. Orr said the parties have reached agreement and she provided some background information about the case.
- Chairman Russell called for a motion to authorize him to sign dismissal order. Ms. Kaiser so MOVED. Mr. Mires SECONDED the motion. The motion CARRIED unanimously.
- IV.C.3 | In the matter of final action regarding violations of the Montana Strip and Underground Mine Reclamation Act by Westmoreland Resources, Inc., at the Absaloka Mine, Big Horn County, BER 2012-02 SM.
- Ms. Orr provided information about the case and said a stipulation to dismiss and a proposed order were before the Board.
- Chairman Russell called for a motion to authorize him to sign the dismissal order. Mr. Whalen so MOVED. Mr. Miller SECONDED the motion.
- Ms. Kaiser recused herself from this matter and the next (IV.C.4).
- Chairman Russell called for a vote and the motion CARRIED 5-0.
- IV.C.4 | In the matter of final action regarding violations of the Montana Strip and Underground Mine Reclamation Act by Westmoreland Resources, Inc., at the Absaloka Mine, Big Horn County, BER 2012-03 SM.
- Ms. Orr provided information about the case and said a stipulation to dismiss under 41(a) and a proposed order were before the Board.
- Chairman Russell called for a motion to authorize him to sign the dismissal order. Mr. Miller so MOVED. Ms. Shropshire SECONDED the motion. The motion CARRIED 5-0.

- IV.D.1 In the matter of violations of the Public Water Supply laws by the city of Ronan Public Water Supply System, PWSID #MT0000318, Ronan, Lake County, BER 2012-04 PWS.
- Ms. Orr provided an overview of the violation.
- Mr. Arrigo responded to questions regarding there being no proposed penalty.
- Chairman Russell called for a motion. Mr. Whalen MOVED to appoint Ms. Orr as the hearing examiner for this matter. Mr. Miller SEONDED the motion. The motion CARRIED with a unanimous vote.
- IV.D.2 In the matter of the request for hearing by William E. Smith, on behalf of Mike Adkins, regarding Park County's refusal to validate Adkins Class III Waste Tire Monofill License No. 517, BER 2012-05 SW.
- Ms. Orr explained that DEQ had approved Adkins' application for the monofill license, but Park County refused to validate DEQ's decision, and that Mr. Adkins has appealed that refusal to the Board. She said a motion to intervene was filed by Protecting Paradise, to which Adkins filed a brief in opposition. She said Adkins also had filed a petition for declaratory ruling. Ms. Orr noted that this might be a case the Board would want to hear.
- Chairman Russell entertained a motion to have the Board hear this matter. Mr. Whalen so MOVED. Ms. Shropshire SECONDED the motion. The motion CARRIED with a unanimous vote.
- IV.D.3 In the matter of violations of the Montana solid Waste Management Act by Valley County Refuse District #1 at the Valley County Landfill, Glasgow, BER 2012-06 SW.
- Ms. Orr said the violations involve failure to cover the landfill on at least seven occasions, and a \$750 penalty is requested.
- Chairman Russell called for a motion to appoint Ms. Orr as the permanent hearings examiner for this matter. Mr. Miller so MOVED. Ms. Kaiser SECONDED the motion. The motion CARRIED with a unanimous vote.
- IV.D.4 In the matter of violations of the Opencut Mining Act by Russell Olsen at PaveCo Pit, Flathead County, BER 2012-07 OC.
- Ms. Orr said the violation had to do with failure to submit an annual progress report and the fee associated with it. She said the penalty requested is \$480. Ms. Orr noted that a motion to dismiss the matter is pending.
- Chairman Russell called for a motion to appoint Ms. Orr as the permanent hearing examiner for this matter. Mr. Mires so MOVED. Mr. Miller SECONDED the motion. The motion CARRIED with a unanimous vote.

V. General Public Comment

Mr. Livers discussed the September meeting, saying it may need to be a longer one – two days – for the Camas Prairie appeal hearing and possibly some of the Adkins issues.

Chairman Russell called for public comment on matters in the Board's jurisdiction. There were no comments.

V. Adjournment

Chairman Russell called for a motion to adjourn. Ms. Kaiser so MOVED. Mr. Miller SECONDED the motion. The motion CARRIED with a unanimous vote.

The meeting adjourned at 11:27 a.m.

Board of Environmental Review July 27, 2012, minutes approved:

JOSEPH W. RUSSELL, M.P.H.
CHAIRMAN
BOARD OF ENVIRONMENTAL REVIEW

DATE

**BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR RULEMAKING PROPOSAL**

AGENDA # III.A.1.

AGENDA ITEM SUMMARY - The department requests approval of amendments to the public water supply rules to:

1. Amend existing public water supply engineering fee rules to adopt a new line item and associated fee for water and wastewater sliplining of existing piping; and
2. Adopt a New Rule to require the repair of significant deficiencies.

LIST OF AFFECTED RULES - ARM 17.38.106 and New Rule I

AFFECTED PARTIES SUMMARY - Owners or operators of public water or wastewater systems replacing existing piping with a sliplining process and those systems that may have a significant deficiency, as determined by the department

SCOPE OF PROPOSED PROCEEDING - The department is requesting initiation of rulemaking and appointment of a hearing officer for a public hearing.

BACKGROUND - The Legislature requires the department to collect fees commensurate with the cost of reviewing plans and specifications. MCA, 75-6-108(3), states, "The board shall by rule prescribe fees to be assessed by the department on persons who submit plans and specifications for construction, alteration, or extension of a public water supply system or public sewage system. The fees must be commensurate with the cost to the department for reviewing the plans and specifications." Past legislative audits identified that the department was not recovering its costs for conducting engineering review. Based on those findings the BER adopted increased engineering fees. During testimony the department stated that if a fee rate was found to be excessive it would return to the BER with a request to correct that issue. The proposed engineering review change acts upon that pledge.

The remaining proposed changes are intended to implement new authority authorized in the 2009 Legislature. The Legislature authorized the BER to adopt rules requiring the identification and repair of significant deficiencies that have the potential to contaminate drinking water.

HEARING INFORMATION - No hearings have been held.

BOARD OPTIONS - The Board may:

1. Initiate rulemaking, appoint a hearing officer, and schedule a hearing;
2. Determine that the amendment and adoption of the rules is not appropriate and decline to initiate rulemaking; or
3. Direct the department to modify the rulemaking and proceed.

DEQ RECOMMENDATION - The department recommends initiation of rulemaking and appointment of a hearing officer for a public hearing.

ENCLOSURES:

1. Draft Notice of Public Hearing on Proposed Amendment and Adoption.

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF PUBLIC HEARING ON
17.38.106 pertaining to fees and the)	PROPOSED AMENDMENT AND
adoption of New Rule I pertaining to)	ADOPTION
significant deficiency)	
)	(PUBLIC WATER AND SEWAGE
)	SYSTEM REQUIREMENTS)

TO: All Concerned Persons

1. On _____, 2012, at __: __ .m., the Board of Environmental Review will hold a public hearing [in/at address], Montana, to consider the proposed amendment and adoption of the above-stated rules.

2. The board will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Elois Johnson, Paralegal, no later than 5:00 p.m., _____, 2012, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The rule proposed to be amended provides as follows, stricken matter interlined, new matter underlined:

17.38.106 FEES (1) The purpose of this rule is to establish fee schedules to be used to calculate fees to be paid to the department for review of plans and specifications for public water supply and public sewage systems, as required under Title 75, chapter 6, part 1, MCA, and ARM 17.38.101.

(2) Department review will not be initiated until fees calculated under (2)(a) through (e) and (5) have been received by the department. If applicable, the final approval will not be issued until the calculated fees under (3) and (4) have been paid in full. The total fee for the review of a set of plans and specifications is the sum of the fees for the applicable parts or subparts listed in these citations.

(a) The fee schedule for designs requiring review for compliance with Department Circular DEQ-1 is set forth in Schedule I, as follows:

SCHEDULE I

Policies

ultra violet disinfection.....	\$ 700
point-of-use/point-of-entry treatment.....	\$ 700
Section 1.0 Engineering Report.....	\$ 280
Section 3.1 Surface water	
quality and quantity	\$ 700
structures	\$ 700

Section 3.2 Ground water	\$ 840
Section 4.1 Clarification	
standard clarification	\$ 700
solid contact units.....	\$ 1,400
Section 4.2 Filtration	
rapid rate.....	\$ 1,750
pressure filtration.....	\$ 1,400
diatomaceous earth.....	\$ 1,400
slow sand	\$ 1,400
direct filtration.....	\$ 1,400
biologically active filtration.....	\$ 1,400
membrane filtration	\$ 1,400
micro and ultra filtration.....	\$ 1,400
bag and cartridge filtration.....	\$ 420
Section 4.3 Disinfection	\$ 700
Section 4.4 Softening.....	\$ 700
Section 4.5 Aeration	
natural draft	\$ 280
forced draft.....	\$ 280
spray/pressure	\$ 280
packed tower.....	\$ 700
Section 4.6 Iron and manganese	\$ 700
Section 4.7 Fluoridation	\$ 700
Section 4.8 Stabilization.....	\$ 420
Section 4.9 Taste and odor control	\$ 560
Section 4.10 Microscreening.....	\$ 280
Section 4.11 Ion exchange	\$ 700
Section 4.12 Adsorptive media	\$ 700
Chapter 5 Chemical application	\$ 980
Chapter 6 Pumping facilities	\$ 980
Section 7.1 Plant storage.....	\$ 980
Section 7.2 Hydropneumatic tanks	\$ 420
Section 7.3 Distribution storage	\$ 980
Section 7.4 Cisterns.....	\$ 420
Chapter 8 Distribution system	
per lot fee	\$ 70
non-standard specifications	\$ 420
transmission distribution (per lineal foot).....	\$ 0.25
rural distribution system (per lineal foot)	\$ 0.03
sliplining existing mains (per lineal foot).....	\$ 0.15
Chapter 9 Waste disposal.....	\$ 700
Appendix A	
new systems	\$ 280
modifications	\$ 140

(b) The fee schedule for designs requiring review for compliance with Department Circular DEQ-2 is set forth in Schedule II, as follows:

SCHEDULE II

Chapter 10 Engineering reports and facility plans	
engineering reports (minor)	\$ 280
comprehensive facility plan (major)	\$ 1,400
Chapter 30 Design of sewers	
per lot fee	\$ 70
non-standard specifications	\$ 420
collection system (per lineal foot)	\$ 0.25
sliplining existing mains (per lineal foot)	\$ 0.15
Chapter 40 Sewage pumping station	
force mains (per lineal foot)	\$ 0.25
1000 gpm or less	\$ 700
greater than 1000 gpm	\$ 1,400
Chapter 60 Screening grit removal	
screening devices and comminutors	\$ 420
grit removal	\$ 420
flow equalization	\$ 700
Chapter 70 Settling	\$ 1,120
Chapter 80 Sludge handling	\$ 2,240
Chapter 90 Biological treatment	\$ 3,360
nonaerated treatment ponds	\$ 1,120
aerated treatment ponds	\$ 1,960
Chapter 100 Disinfection	\$ 900
Appendices A, B, C, & D (per design)	\$ 980
(c) through (7) remain the same.	

AUTH: 75-6-108, MCA

IMP: 75-6-108, MCA

REASON: The proposed amendments to ARM 17.38.106 would create a new line item and a corresponding fee rate. The proposed new line item and fee are necessary to collect fees commensurate with the costs associated with conducting certain engineering reviews required under 75-6-108, MCA. Specifically, sliplining existing mains are currently included in the transmission distribution or collection system categories. The proposed amendment adds a new fee category for sliplining. Systems that would submit plans under this new definition and fee schedule would see a significant reduction in their review fees, from 25 cents/lineal foot to fifteen cents/lineal foot. The new rate will reduce fees for those reviews by approximately 40 percent. The new lower fee rate is necessary in order for the review fee to reflect actual review costs to the department, as required under 75-6-108(3), MCA. The department does not have sufficient information to estimate the number of fee payers nor the lineal feet of distribution or wastewater collection systems that may be affected by the reduced fee.

4. The proposed new rule provides as follows:

NEW RULE I SIGNIFICANT DEFICIENCY (1) For the purposes of this rule,

MAR Notice No. 17-____

"significant deficiency" means any defect in design, operation, or maintenance of a public water supply system or public sewage system, or a failure or malfunction of the system, that the department determines causes or has the potential to cause the introduction of contamination into a drinking water supply or a source of ice. The term also includes fecal contamination in water used by a public water supply system.

(2) If the department determines that a significant deficiency exists with a public water supply system or a public sewage system, the department shall provide written notice to the system owner. The system owner shall correct the deficiency in accordance with a plan and timeframe approved by the department.

(3) If the department has reason to believe that a significant deficiency may exist with a public water supply system or a public sewage system, the department may request the system owner to provide additional information to assist the department in making a final determination. The system owner shall provide the department with the requested information. If the system owner fails to supply the requested information, the department may make a determination based on available information about the potential risk of contamination from the system to drinking water or a source of ice, and the department may require the system owner to take measures that the department determines are appropriate to prevent contamination.

AUTH: 75-6-103, 75-6-112, MCA

IMP: 75-6-103, 75-6-112, MCA

REASON: Proposed New Rule I is the second Board rulemaking to implement statutory changes enacted during the 2009 Legislature. Sec. 1, Ch. 85, L. 2009 (SB 102). SB 102 directed the Board to adopt rules requiring public water supply systems and public sewage systems to remedy certain deficiencies. The deficiencies listed in SB 102 include defects in design, operation, or maintenance of the system, and system failures or malfunctions, that could contaminate a drinking water supply or a source of ice. SB 102 also listed the presence of fecal contamination in the water used by a public water supply system. The Board first implemented SB 102 in 2009 by incorporating by reference the federal drinking water rule for groundwater sources. The Board had earlier incorporated by reference federal drinking water rules for surface water sources. The federal groundwater and surface water rules contain corrective action requirements for public water supply systems.

Proposed New Rule I is necessary to clarify the conditions that constitute a deficiency that requires corrective action. Based on SB 102, New Rule I defines "significant deficiency" as a defect in the design, operation, or maintenance of a public water supply or public sewage system, or a failure or malfunction of the system, that causes or has the potential to cause the introduction of contamination into a drinking water supply or a source of ice. The Rule clarifies that these significant deficiencies may arise based on the potential to contaminate any drinking water supply or source of ice, whether public or private. Based on SB 102, the definition of "significant deficiency" also includes fecal contamination in water used

by a public water supply system.

New Rule I clarifies that the requirement to correct significant deficiencies applies to both public water supply systems and public sewage systems. The Rule requires the owner of the public system to correct identified significant deficiencies in accordance with a timeframe and plan approved by the department. New Rule I allows the department to obtain additional information from the system owner related to the potential for the system to cause contamination. If the system owner fails to provide the requested information, the Rule allows the department to require the system owner to take measures to prevent contamination. New Rule I is necessary to implement SB 102 and to provide guidance to public water supply systems and public sewage systems about how the department will implement SB 102.

5. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to ejohnson@mt.gov, no later than 5:00 p.m., _____, 2012. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

6. Katherine Orr, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.

7. The board maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supply; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to [Elois Johnson at ejohnson@mt.gov](mailto:ejohnson@mt.gov), or may be made by completing a request form at any rules hearing held by the board.

8. The bill sponsor contact requirements of 2-4-302, MCA, do not apply.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

_____	BY: _____
JAMES M. MADDEN	JOSEPH W. RUSSELL, M.P.H.,
Rule Reviewer	Chairman

Certified to the Secretary of State, _____, 2012.

**BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR
RULEMAKING ADOPTION**

AGENDA # III.B.1.

AGENDA ITEM SUMMARY: The Department requests that the Board adopt the amendments to rules governing the Department's review of plans and specifications for public sewage systems in ARM 17.38.101, 17.38.102, 17.38.103, 17.38.106, and to adopt changes to Department Circular DEQ-2, which is incorporated by reference in ARM 17.30.1001 and 17.38.101. The Department also requests that the Board amend ARM 17.30.1022 to clarify the scope of an existing ground water permit exemption and add an exemption for public sewage systems that use "unrestricted reclaimed wastewater."

LIST OF AFFECTED BOARD RULES: ARM 17.30.1001, 17.30.1022, 17.38.101, 17.38.102, 17.38.103, and 17.38.106.

LIST OF AFFECTED DEPARTMENT RULES: ARM 17.36.345, 17.36.914, 17.50.811, 17.50.815, and 17.50.819 (all changes are incorporation by reference or correcting the title of DEQ-2).

AFFECTED PARTIES SUMMARY: The proposed rule amendments could potentially affect public wastewater facilities and anyone submitting plans and specifications to the Department under the public water and sewer laws.

SCOPE OF PROPOSED PROCEEDING: The Board is considering final action on adoption of amendments to the above-referenced rules as proposed in the Montana Administrative Register.

BACKGROUND: The changes to Department Circular DEQ-2 (DEQ-2) include new information and recommendations from the 2004 edition of a document entitled, "Recommended Standards for Wastewater Facilities," also known as the "Ten State Standards," published by the Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. This document is a compilation of common engineering standards used by states in the design and preparation of plans and specifications for wastewater treatment facilities. Since its inception, DEQ-2 has been based primarily on the information contained within this document. In this rulemaking, new information from the 2004 edition of the document is being proposed for incorporation into DEQ-2 in order to provide: (1) design standards that reflect recent technological advances in the wastewater industry; (2) additional and important design considerations to ensure compliance with water quality standards; and (3) better clarity for design engineers through the expansion of text or a restructuring of its content.

In addition, DEQ-2 has been revised to include a new Appendix B that establishes design standards and other considerations for public sewage systems that propose to use reclaimed wastewater for other purposes. The new Appendix B would establish requirements for using reclaimed wastewater for a variety of uses that go beyond its current use for irrigation at agronomic rates. If adopted, this proposal will expand the allowable reuse alternatives available to public sewage systems in a manner that is consistent with the U.S. Environmental Protection Agency (EPA) guidance and national design standards. The proposal to adopt Appendix B, in combination with the irrigation reuse standards in Chapter 120, Section 121, is in response to the recent enactment of House Bill 52 (2011), authorizing the board to adopt rules identifying allowable uses of reclaimed wastewater and

classifications for those uses. The newly-enacted state law also requires the adoption of treatment, monitoring, and reporting standards tailored to each classification to protect the uses of the reclaimed wastewater and any receiving water. The classification, standards, and allowable uses proposed for adoption in Appendix B are based on EPA guidance and standards established in many other western states. The levels of treatment for each of the proposed classifications have been extensively evaluated by public health agencies, primarily in California, Washington, Florida, and Texas, and have been determined in each of those states to be protective of public health and the environment.

Finally, ARM 17.30.1022 is proposed for amendment to clarify that only public sewage systems that apply reclaimed wastewater at agronomic rates qualify for a ground water permit exemption and to add a new ground water permit exemption for public sewage systems that treat reclaimed wastewater to the highest standards proposed for adoption in DEQ-2.

HEARING INFORMATION: Katherine Orr conducted a public hearing on July 27, 2012, on the proposed amendments. The Presiding Officer's Report and the draft Notice of Amendment, with public comments and proposed responses, are attached to this executive summary.

BOARD OPTIONS: The Board may:

1. Adopt the proposed amendments as set forth in the attached Notice of Public Hearing on Proposed Amendment;
2. Adopt the proposed amendments with revisions that the Board finds are appropriate and that are consistent with the scope of the Notice of Public Hearing on Proposed Amendment and the record in this proceeding; or
3. Decide not to adopt the amendments.

DEQ RECOMMENDATION:

The Department recommends adoption of the proposed amendments as set forth in the attached Notice of Public Hearing on Proposed Amendment.

ENCLOSURES:

1. Notice of Public Hearing on Proposed Amendment
2. Presiding Officer's Report
3. HB521 and 311 Analysis
4. Draft Notice of Proposed Amendment

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF PUBLIC HEARING ON
17.30.1001, 17.30.1022, 17.36.345,)	PROPOSED AMENDMENT
17.36.914, 17.38.101, 17.38.102,)	
17.38.103, 17.38.106, 17.50.811,)	(WATER QUALITY)
17.50.815, and 17.50.819 pertaining to)	(SUBDIVISIONS/ON-SITE
definitions, exclusions from permit)	SUBSURFACE WASTEWATER
requirements, subdivisions, wastewater)	TREATMENT)
treatment systems, plans for public water)	(PUBLIC WATER AND SEWAGE
supply or wastewater system, fees,)	SYSTEM REQUIREMENTS)
operation and maintenance)	(SOLID WASTE MANAGEMENT)
requirements for land application or)	
incorporation of septage, grease trap)	
wastes, and incorporation by reference)	

TO: All Concerned Persons

1. On July 27, 2012, at 9:00 a.m., the Board of Environmental Review and the Department of Environmental Quality will hold a public hearing in Room 111, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed amendment of the above-stated rules.

2. The board and department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Elois Johnson, Paralegal, no later than 5:00 p.m., July 9, 2012, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.30.1001 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:

(1) through (13) remain the same.

(14) "Reclaimed wastewater" is defined in 75-6-102, MCA.

(14) and (15) remain the same, but are numbered (15) and (16).

(17) "Unrestricted reclaimed wastewater" means wastewater that is treated to the standards for Class A-1 or Class B-1 reclaimed wastewater, as set forth in Appendix B of Department Circular DEQ-2, entitled "Montana Department of Environmental Quality Design Standards for Public Sewage Systems" (May 2012 edition).

(a) The board adopts and incorporates by reference Department Circular

DEQ-2, entitled "Department of Environmental Quality Design Standards for Public Sewage Systems" (May 2012 edition). Copies are available from the Department of Environmental Quality, Technical and Financial Assistance Bureau, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-301, 75-5-401, MCA

17.30.1022 EXCLUSIONS FROM PERMIT REQUIREMENTS (1) In addition to the permit exclusions identified in 75-5-401, MCA, the following activities or operations are not subject to the permit requirements of ARM 17.30.1023, 17.30.1024, 17.30.1030 through 17.30.1033, 17.30.1040, and 17.30.1041:

(a) through (e) remain the same.

(f) multifamily sewage disposal systems reviewed and approved by the Department of Public Health and Human Services under Title 50, chapters 50, 51, and 52, MCA, and multifamily sewage disposal systems reviewed and approved by local boards of health under Title 50, chapter 2, MCA, after May 1, 1998. However, this exclusion does not apply to aerobic package plant systems, mechanical treatment plants, and nutrient removal systems, which require a high degree of operation and maintenance, or systems which require monitoring pursuant to ARM 17.30.517(1)(d)(ix); and

(g) public sewage systems that use apply reclaimed wastewater at agronomic rates to land application as a method of disposal and that have been reviewed and approved by the department under Title 75, chapter 6, MCA, and ARM 17.38.101;

(h) public sewage systems that discharge unrestricted reclaimed wastewater and that have been reviewed and approved under Title 75, chapter 6, MCA, and ARM 17.38.101. Discharges of unrestricted reclaimed wastewater excluded under this rule remain subject to the monitoring and reporting requirements imposed as a condition of approval under ARM 17.38.101(8)(c).

(2) remains the same.

AUTH: 75-5-401, MCA

IMP: 75-5-401, 75-5-602, MCA

17.36.345 ADOPTION BY REFERENCE (1) For purposes of this chapter, the department adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:

(a) remains the same.

(b) Department Circular DEQ-2, "Design Standards for ~~Wastewater Facilities~~ Public Sewage Systems," ~~1999~~ 2012 edition;

(c) through (2) remain the same.

AUTH: 76-4-104, MCA

IMP: 76-4-104, MCA

17.36.914 WASTEWATER TREATMENT SYSTEMS - TECHNICAL

REQUIREMENTS (1) remains the same.

(2) Department Circular DEQ-4, 2009 edition, which sets forth standards for subsurface sewage treatment systems, and Department Circular DEQ-2, ~~1999~~ 2012 edition, which sets forth design standards for ~~wastewater facilities~~ public sewage systems, are adopted and incorporated by reference for purposes of this subchapter. All references to these documents in this subchapter refer to the editions set out above. Copies are available from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

(3) through (7) remain the same.

AUTH: 75-5-201, MCA

IMP: 75-5-305, MCA

17.38.101 PLANS FOR PUBLIC WATER SUPPLY OR WASTEWATER PUBLIC SEWAGE SYSTEM (1) For purposes of this rule, "delegated division of local government" means a local government that has been delegated authority pursuant to ARM 17.38.102 and 75-6-121, MCA, to review and approve plans and specifications for public water supply or ~~wastewater~~ public sewage systems, as designated in the written delegation.

(2) The purpose of this rule is to assure the protection of public health and the quality of state waters by requiring review and approval, by either the department or a delegated division of local government, of plans and specifications for siting, construction, and modification of public water supply and ~~wastewater~~ public sewage systems prior to the beginning of construction.

(3) As used in this rule, the following definitions apply in addition to those in 75-6-102, MCA:

(a) through (e)(ii) remain the same.

(f) "Reclaimed wastewater" is defined in 75-6-102, MCA;

(f) through (m)(ii) remain the same, but are renumbered (g) through (n)(ii).

(4) A person may not commence or continue the construction, alteration, extension, or operation of a public water supply system or ~~wastewater~~ public sewage system until the applicant has submitted a design report along with the necessary plans and specifications for the system to the department or a delegated division of local government for its review and has received written approval. Three sets of plans and specifications are needed for final approval. Approval by the department or a delegated division of local government is contingent upon construction and operation of the public water supply or ~~wastewater~~ public sewage system consistent with the approved design report, plans, and specifications. Failure to construct or operate the system according to the approved plans and specifications or the department's conditions of approval is an alteration for purposes of this rule. Design reports, plans, and specifications must meet the following criteria:

(a) and (b) remain the same.

(c) the design report, plans, and specifications for all ~~wastewater~~ public sewage systems, except public subsurface sewage treatment systems, must be prepared and designed by a professional engineer in accordance with the format and criteria set forth in ~~d~~Department Circular DEQ-2, "Montana Department of Environmental Quality Design Standards for ~~Wastewater Facilities~~ Public Sewage

Systems." The design report, plans, and specifications for a wastewater public sewage system must also be designed to protect public health and ensure compliance with the Montana Water Quality Act, Title 75, chapter 5, MCA, and rules adopted under the Act, including ARM Title 17, chapter 30, subchapter 7;

(d) through (j) remain the same.

(5) through (7) remain the same.

(8) The department or a delegated division of local government shall issue a written approval for a public water supply system or wastewater public sewage system if it determines that the design report, plans, and specifications are complete and the applicant has complied with all provisions of this rule. The approval may be conditional as follows:

(a) the department's approval of a public water supply system may set forth conditions of approval which may include, but shall not be limited to, those specifying limits on quantities available for irrigation and fire flows, limited storage, standby power sources, and peak flows; or

(b) the department's approval of a wastewater public sewage system may set forth conditions of approval which may include, but shall not be limited to, expected performance characteristics and performance limitations such as operations, staffing, financing, wastewater loads, standby power, and access; or

(c) the department's approval of the use of reclaimed wastewater by a public sewage system must require compliance with the treatment standards, monitoring, recordkeeping, and reporting requirements required for each classification, as described in Department Circular DEQ-2.

(9) Except as provided in (10)(b), unless the applicant has completed the construction, alteration, or extension of a public water supply or wastewater public sewage system within three years after the department or a delegated unit of local government has issued its written approval, the approval is void and a design report, plans, and specifications must be resubmitted as required by (4) with the appropriate fees specified in this subchapter. The department may grant a completion deadline extension if the applicant requests an extension in writing and demonstrates adequate justification to the department.

(10) through (11) remain the same.

(12) A person may not commence or continue the operation of a public water supply or wastewater public sewage system, or any portion of such system, prior to certifying by letter to the department or a delegated division of local government that the system, or portion of the system constructed, altered, or extended to that date, was completed in accordance with plans and specifications approved by the department. For a system or any portion of a system designed by a professional engineer, the engineer shall sign and submit the certification letter to the department or a delegated division of local government.

(13) Within 90 days after the completion of construction, alteration, or extension of a public water supply or wastewater public sewage system, or any portion of such system, a complete set of certified "as-built" drawings must be signed and submitted to the department or a delegated division of local government. The department may require that the "as-built" submittal be accompanied by an operation and maintenance manual. For a system or any portion of a system designed by a professional engineer, the engineer shall sign and submit the certified

"as-built" drawings to the department or a delegated division of local government.

(14) remains the same.

(15) The department or a delegated division of local government may require that chemical analyses, microbiological examinations, flow tests, pressure tests, treatment plant performance records, or other measures of performance for a public water supply or ~~wastewater~~ public sewage system be conducted by the applicant to substantiate that the system complies with the criteria set forth in the design report, plans, and specifications.

(16) remains the same.

(17) When design reports, plans, and specifications submitted pursuant to this rule include a proposal to use reclaimed wastewater, the department or delegated division of local government may not approve the proposal until the applicant has obtained any necessary approvals required under Title 85, MCA, from the Department of Natural Resources and Conservation.

(18) An owner or operator of a public sewage system may not:

(a) use reclaimed wastewater for a use that has not been approved by the department or by a delegated division of local government, according to the use classification system in department Circular DEQ-2, "Montana Department of Environmental Quality Design Standards for Public Sewage Systems;" or

(b) use reclaimed wastewater that has not been treated to the applicable standards for the use set forth in department Circular DEQ-2, "Montana Department of Environmental Quality Design Standards for Public Sewage Systems."

~~(17)~~ (19) For purposes of this chapter, the ~~department~~ board adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:

(a) remains the same.

(b) Department of Environmental Quality Circular DEQ-2, ~~4999~~ 2012 edition, which sets forth the requirements for the design and preparation of plans and specifications for sewage works;

(c) through (i) remain the same.

~~(18)~~ (20) A copy of any of the documents adopted under ~~(16)~~ (19) may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-6-103, MCA

IMP: 75-6-103, 75-6-112, 75-6-121, MCA

17.38.102 DELEGATION OF REVIEW OF SMALL PUBLIC WATER AND SEWER SEWAGE SYSTEM PLANS AND SPECIFICATIONS (1) The department may delegate to divisions of local government the review of plans and specifications for:

(a) small public water supply systems and small public ~~sewer~~ sewage systems; and

(b) extensions or alterations of existing public water and public ~~sewer~~ sewage systems that involve 50 or fewer connections.

(2) Delegation may occur only if:

(a) a division of local government submits a written application to the

department that includes the following:

- (i) and (ii) remain the same.
- (iii) a request that the department provide training for public water and sewer sewage system review.
- (b) remains the same.

AUTH: 75-6-103, 75-6-121, MCA

IMP: 75-6-121, MCA

17.38.103 PUBLIC WATER AND SEWER SEWAGE PROJECTS ELIGIBLE FOR CATEGORICAL EXCLUSION FROM MEPA REVIEW (1) Except as provided in (2), a department action under this subchapter and under either Title 75, chapter 6, part 1 or Title 75, chapter 6, part 2, MCA, is excluded from the requirement to prepare an environmental assessment or an environmental impact statement if the application for department review is for any of the following projects:

(a) projects relating to existing infrastructure systems such as sewer sewage systems, drinking water supply systems, and stormwater systems, including combined sewer overflow systems that involve:

- (i) through (4)(d) remain the same.

AUTH: 75-6-103, MCA

IMP: 75-6-103, MCA

17.38.106 FEES (1) remains the same.

(2) Department review will not be initiated until fees calculated under (2)(a) through (e) and (5) have been received by the department. If applicable, the final approval will not be issued until the calculated fees under (3) and (4) have been paid in full. The total fee for the review of a set of plans and specifications is the sum of the fees for the applicable parts or subparts listed in these citations.

(a) remains the same.

(b) The fee schedule for designs requiring review for compliance with Department Circular DEQ-2 is set forth in Schedule II, as follows:

SCHEDULE II

Chapter 10 Engineering reports and facility plans	
engineering reports (minor)	\$ 280
comprehensive facility plan (major)	\$ 1,400
Chapter 30 Design of sewers	
per lot fee.....	\$ 70
non-standard specifications	\$ 420
collection system (per lineal foot).....	\$ 0.25
Chapter 40 Sewage pumping station	
force mains (per lineal foot)	\$ 0.25
1000 gpm or less	\$ 700
greater than 1000 gpm	\$ 1,400
Chapter 60 Screening grit removal	
screening devices and comminutors.....	\$ 420

grit removal.....	\$ 420
flow equalization	\$ 700
Chapter 70 Settling.....	\$ 1,120
Chapter 80 Sludge handling	\$ 2,240
Chapter 90 Biological treatment	\$ 3,360
nonaerated treatment ponds.....	\$ 1,120
aerated treatment ponds.....	\$ 1,960
Chapter 100 Disinfection	\$ 900
<u>Chapter 120 Irrigation and Rapid Infiltration Systems</u>	<u>\$ 980</u>
Appendices A, B, and C, & D (per design)	\$ 980

(c) through (7) remain the same.

AUTH: 75-6-108, MCA

IMP: 75-6-108, MCA

17.50.811 OPERATION AND MAINTENANCE REQUIREMENTS FOR LAND APPLICATION OR INCORPORATION OF SEPTAGE (1) through (6) remain the same.

(7) Septage may be placed in an active sewage sludge management unit at a permitted wastewater treatment facility only if the facility is designed and operated to handle septage in a manner protective of human health and the environment and in conformance with Department Circular DEQ-2, Design Standards for Wastewater Facilities Public Sewage Systems.

(8) through (11) remain the same.

AUTH: 75-10-204, 75-10-1202, MCA

IMP: 75-10-204, 75-10-1202, MCA

17.50.815 GREASE TRAP WASTES (1) and (2) remain the same.

(3) Grease trap waste may be dewatered at a permitted wastewater treatment works designed in conformance with Department Circular DEQ-2, Design Standards for Wastewater Facilities Public Sewage Systems, a solid waste management system licensed in conformance with Title 75, chapter 10, part 2, MCA, or at a land application site approved in conformance with this subchapter.

(4) through (8) remain the same.

AUTH: 75-10-1202, MCA

IMP: 75-10-1202, MCA

17.50.819 INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED DOCUMENTS (1) The department hereby adopts and incorporates by reference:

(a) Department Circular DEQ-2, Design Standards for Wastewater Facilities Public Sewage Systems (1999 ed. 2012 edition), which sets forth design standards for wastewater facilities public sewage systems;

(b) through (3) remain the same.

AUTH: 75-10-1202, MCA
IMP: 75-10-1202, MCA

REASON: The board is proposing to amend Montana's rules regulating the design and construction of public sewage systems in ARM 17.38.101, 17.38.102, and 17.38.103 in order to clarify existing language, add requirements related to the department's approval of proposals to use reclaimed wastewater, and incorporate revisions to Department Circular DEQ-2, currently entitled "Department of Environmental Quality Design Standards for Wastewater Facilities" (1999 edition) (hereafter "DEQ-2"). In general, the proposed revisions to DEQ-2 consist of updates to the existing design standards, the addition of new design standards for relatively new technology, and the addition of treatment standards and associated classifications for reclaimed wastewater that will be reused for other purposes. The board is also proposing to change the title of DEQ-2 to be consistent with the changes in terms proposed in ARM 17.38.101. The draft Department Circular DEQ-2 can be viewed at <http://deq.mt.gov/wqinfo/pws/PlanReviewEngineer.mcp>.

In addition, the board is proposing amendments to ARM 17.30.1022 to provide a ground water permit exemption for certain classes of reclaimed wastewater and to add definitions into ARM 17.30.1001 to limit the new exemption to specific classes of reclaimed wastewater.

The board's specific reasons for amending the rules and revising DEQ-2 are as follows:

Rule Amendments

ARM 17.30.1001(14) and (17)

The board is proposing to amend ARM 17.30.1001 in order to incorporate the statutory definition of "reclaimed wastewater" in (14) and add a new definition of "unrestricted reclaimed wastewater" in (17) to supplement the existing definitions in Montana's ground water rules. The proposed adoption of these definitions will ensure that only reclaimed wastewater that is treated to the highest standards in DEQ-2 will qualify for an exemption from the ground water permit requirements, because the wastewater must comply with the standards specified in the definition of "unrestricted reclaimed wastewater." The board is further proposing to incorporate by reference DEQ-2 into ARM 17.30.1001(17), because the definition of "unrestricted reclaimed wastewater" requires compliance with Class A-1 or B-1 treatment standards, which are proposed for adoption in the revised DEQ-2.

ARM 17.30.1022(1)(g)

The board is proposing to amend ARM 17.30.1022(1)(g) to clarify that only public sewage systems that apply reclaimed wastewater at agronomic rates qualify for a ground water permit exemption. As currently written, the rule provides an exemption for any public sewage system that land applies its wastewater regardless of method or volume. By specifying that the wastewater must be applied at agronomic rates (i.e., the controlled application of wastewater in a manner that

ensures that all of the effluent is used by vegetation and no impacts to ground water will occur), the amendment clarifies that the exemption only applies to land application methods that do not result in impacts to ground water.

ARM 17.30.1022(1)(h)

The board is proposing to add a new exemption from the ground water permitting requirements in ARM 17.30.1022(1)(h), which will exempt discharges from public sewage systems that meet the definition of "unrestricted reclaimed wastewater." Under that definition, a discharge must be treated to the highest standards proposed for adoption in DEQ-2 prior to being used for other purposes. The proposed exemption would allow a public sewage system that meets Class A-1 or B-1 standards to discharge the treated water without first obtaining a ground water permit from the department.

The board is proposing this exemption for two reasons: (1) treating wastewater to the standards for Class A-1 or B-1 prior to reusing it poses minimal risk to public health and the environment; and (2) providing a ground water permit exemption may provide an incentive for public sewage systems to provide a higher level of treatment than required by current regulations governing ground water permits. In order to ensure that any exempt reclaimed wastewater continues to meet Class A-1 or B-1 treatment standards during the life of a reuse project, the board is proposing language in ARM 17.30.1022(1)(h) specifying that the reclaimed wastewater remains subject to the monitoring and reporting requirements imposed by the department during its approval of a reuse project.

ARM 17.36.345, 17.36.914, and 17.50.819

The board and department are amending these rules to update the incorporation by reference of DEQ-2, 2012 edition, to make the department's review under subdivisions and solid waste programs consistent with the department's review of public sewage systems under ARM 17.38.101.

ARM 17.38.101, 17.38.102, 17.38.103

The board is proposing to amend ARM 17.38.101, 17.38.102, and 17.38.103 to replace the terms "wastewater system" and "sewer," as used throughout the rules, with the term "public sewage system." The board is proposing this amendment to clarify that the rules only apply to "public sewage systems" that, by definition, are systems for the collection and disposal of sewage that serve 15 or more families or 25 or more persons daily for 60 or more days. In contrast, the term "wastewater system" is broadly defined in ARM 17.38.101 to mean "a public sewage system or other system that collects, transports, treats, or disposes of industrial wastes." Since the board's authority under 75-6-103, MCA, is expressly limited to adopting rules governing public sewage systems, the board is proposing this amendment to be consistent with its statutory authority.

ARM 17.38.101(8)(c)

The board is also proposing to add new requirements to ARM 17.38.101 in response to recent amendments to state laws governing the department's review and approval of public sewage systems (House Bill 52, 2011). Specifically, 75-6-103, MCA, has been amended to require the board to adopt rules establishing allowable uses and associated classifications of reclaimed wastewater and also adopt monitoring, reporting, and recordkeeping requirements tailored to each classification. In response to these directives, ARM 17.38.101(8) is being amended to add (c) specifying that the department's approval of a reclaimed wastewater project must require compliance with the treatment standards and reporting requirements currently being proposed for adoption in DEQ-2. The adoption of new (8)(c) is necessary to ensure that the department's approval of a reclaimed wastewater project imposes a clear legal obligation on the owner or operator to adhere to the treatment and reporting standards proposed for adoption in DEQ-2.

ARM 17.38.101(17)

The amendments to 75-6-103, MCA, further require the adoption of rules requiring applicants requesting the department's approval of a proposal to use reclaimed wastewater to first obtain from the Department of Natural Resources and Conservation "any necessary approvals required under Title 85, MCA." In response to this directive, the board is proposing to add a new (17) to ARM 17.38.101, which prohibits the department or a delegated division of local government from approving a reclaimed wastewater project until the applicant has obtained any necessary approvals under Title 85, MCA. Since a delegated division of local government may also approve a reclaimed wastewater project, the prohibition against approving a project without first obtaining any necessary approvals from the Department of Natural Resources and Conservation applies to those entities as well.

ARM 17.38.101(18)

Finally, the amendments to 75-6-103, MCA, require the adoption of a rule prohibiting the use of reclaimed wastewater, unless the particular use is allowed under the board's rules. The amendments also require a rule prohibiting the use of reclaimed wastewater, unless it has been treated to meet the standards adopted by the board for the particular use. In response to these directives, the board is proposing to add a new (18) to ARM 17.38.101. Under (18), an owner or operator of a public sewage system may not use reclaimed wastewater for a use that has not been adopted by the board in DEQ-2. The new section also prohibits an owner or operator from using reclaimed wastewater that has not been treated to the standards for that particular use specified in DEQ-2.

ARM 17.38.101(19)

The board is proposing to amend ARM 17.38.101(19) in order to incorporate the board's proposed revisions to DEQ-2 into rules regulating the design and

construction of public sewage systems. This amendment is necessary to provide the department with authority to require compliance with the new requirements proposed for adoption in DEQ-2, including requirements for reclaimed wastewater.

ARM 17.38.106

As a result of the proposed revisions to Circular DEQ-2, an adjustment to the fees in ARM 17.38.106 (2)(b), Schedule II, is necessary to account for the removal of the design standards currently in Appendix B and D and the consolidation of those design standards into new Chapter 120. In order to maintain the existing fee amount for the review of projects under Appendix B and D, the board is proposing to apply the fee amount currently provided for the department's review under both appendixes to the department's review of the same projects under new Chapter 120. The board is further proposing to eliminate Appendix B and D from Schedule II, since all projects currently reviewed under those appendixes will be reviewed under new Chapter 120.

The proposed amendments to the fee rule are necessary to ensure that the fees now assessed for review of projects under Appendix B and D will apply to the same projects that will now be reviewed under Chapter 120. Specifically, 75-6-108, MCA, requires the board to adopt rules to recover the department's costs for its review of plans and specifications submitted by persons for the alteration, construction, or extension of public sewage systems. Since no change to the existing fee for projects currently reviewed under Appendix B and D is being proposed, the board finds the adoption of the proposed fee for Chapter 120 is reasonable and necessary.

ARM 17.50.811 and 17.50.815

These rules are being amended to change the title of Department Circular DEQ-2 to be consistent with the other changes in the rule notice.

Circular DEQ-2 Revisions

DEQ-2, General Revisions

Many of the proposed revisions throughout DEQ-2 are based on new information and recommendations from the "parent document." All references to the parent document, as used in the board's reasons for revising DEQ-2, refer to the 2004 edition of a document entitled, "Recommended Standards for Wastewater Facilities," also known as the "Ten State Standards," published by the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. This document is a compilation of common standards used by states in the design and preparation of plans and specifications for wastewater treatment facilities. Since its inception, DEQ-2 has been based primarily on the information contained within the parent document. New information from the 2004 edition of the parent document is being proposed for incorporation into DEQ-2 in order to provide: (1) design standards that reflect recent technological advances

in the wastewater industry; (2) additional and important design considerations; and (3) better clarity for design engineers through the expansion of text or a restructuring of its content. When a revision to DEQ-2 is being proposed based on a recommendation or requirement of the parent document, the reason for the revision indicates that fact.

In addition to the specific revisions explained below, the board is proposing to generally revise the text of DEQ-2 to replace the terms "DEQ," "reviewing agency," "regulatory agency," and "reviewing authority" with the single term "Department." The board is proposing this change to provide consistency and clarity throughout the document. The board is also proposing to add applicable titles next to the numerical internal references used throughout DEQ-2, which refer the reader to other sections of the document. This change is being made to assist the reader in identifying the content of the numerical references to other sections in DEQ-2.

DEQ-2, Section 10.1

This section addresses the planning document requirements for wastewater improvement projects. The board is proposing to amend the section by specifying the number of copies of engineering reports or facility planning documents that must be submitted to the department. The board is also deleting information that pertains to plans and specification submittals. The deleted information will be relocated in Chapter 20 which addresses plan and specification requirements.

DEQ-2, Section 11

This section addresses the informational requirements for engineering reports and facility plans. The board is proposing to amend this section by requiring the planning document to discuss the benefits and purpose of the proposed project. This amendment is necessary to provide the treatment works' owner with adequate information for decision making.

DEQ-2, Section 11.12

This section addresses the informational requirements for engineering reports. The board is proposing to amend this section to require more detail in the planning document. This information is necessary to provide a better basis for design and is also a requirement in the parent document.

DEQ-2, Section 11.14 and Section 11.15

The board is proposing to delete the site drawing information from Section 11.14 and add a new Section 11.15 to clarify that site drawings are mandatory rather than a recommendation, as currently stated in Section 11.14. This amendment is necessary to make site drawings a mandatory requirement and is consistent with the recommendation in the parent document.

DEQ-2, Section 11.18

The board is proposing to add this new section to recommend that the planning document include the reasons for selection of the proposed alternative. This amendment is necessary to provide the owner with adequate information for decision making. This amendment is also a recommendation in the parent document.

DEQ-2, Section 11.19

This section addresses the environmental impacts of the proposed project. The board is proposing to amend the section by requiring that the discussion of environmental impacts be expanded to include cumulative and secondary impacts, as well as how adverse impacts will be minimized and mitigated. This amendment is necessary in order to provide information to the funding and reviewing agencies that will assist the agencies in completing an environmental assessment or environmental impact statement for the project. This amendment is also a recommendation in the parent document.

DEQ-2, Section 11.23

This section addresses the informational requirements for facility plans. The board is proposing to amend the section by recommending that the wastewater improvements with a design life in excess of 20 years be designed for the extended period. This amendment is necessary to provide the owner with adequate information for decision-making purposes. This amendment is also a recommendation in the parent document.

DEQ-2, Section 11.24 d

This section provides definitions for key design parameters. The board is proposing to amend the section to provide a more precise definition of the "design peak instantaneous flow." This amendment is necessary because the amended definition is a design parameter used for the design of wastewater treatment facilities.

DEQ-2, Section 11.24 e

This section provides definitions for key design parameters. The board is proposing to add this section to provide a definition for "design maximum month flow." This addition is necessary because the design maximum month flow is a design parameter used for the design of wastewater treatment facilities.

DEQ-2, Section 11.242

This section addresses hydraulic capacity for facilities served by existing collection systems. The board is proposing to amend the section by recommending

that the wastewater flows should be more thoroughly evaluated prior to initiation of design and that actual flow data for wet weather flow conditions should be included in the facility plan. This amendment is necessary to encourage the collection of information that may result in better treatment and is also a recommendation in the parent document.

DEQ-2, Section 11.243

This section addresses hydraulic capacity for facilities served by new collection systems. The board is proposing to amend the section by deleting Figure 1 (depicting the ratio of peak hourly flow to design average flow) and replace it with the peaking factor equation, which was used to develop the peaking factor curve in Figure 1. This revision is necessary to ensure that the peaking factors used in the design are as accurate as possible, and eliminates the redundancy of information and guesswork associated with the use of Figure 1.

DEQ-2, Section 11.251 b 1 and 2

This section provides organic load definitions for wastewater facilities. The board is proposing to amend the section by adding a definition for "design total nitrogen." This amendment is necessary because total nitrogen is a key design parameter for many wastewater facilities that are subject to new Montana Pollutant Discharge Elimination System (MPDES) permits and Montana Ground Water Pollution Control System (MGWPCS) permits with requirements related to total maximum daily loads (TMDLs) for nitrogen and nondegradation analysis for nitrogen.

DEQ-2, Section 11.251 c 1

This section provides organic load definitions for wastewater facilities. The board is proposing to amend the section by adding a definition for "design total phosphorus." This amendment is necessary because total phosphorus is a key design parameter for many wastewater facilities that are subject to new MPDES permits with requirements related to total maximum daily loads (TMDLs) for nutrients.

DEQ-2, Section 11.252

This section addresses organic loads for facilities served by existing collection systems. The board is proposing to amend the section by adding language from the parent document that clarifies the informational requirements that are currently in DEQ-2, which address higher organic loads from industrial sources and from septage haulers.

DEQ-2, Section 11.253 a

This section addresses organic loads for facilities served by new collection

systems. The board is proposing to amend the section by adding a requirement that specific values must be used for determining influent per capita loads for total nitrogen and total phosphorus during the design of wastewater systems when actual influent loads for these parameters are not available. The values reported were obtained from Wastewater Engineering Treatment and Reuse by Metcalf & Eddy, 4th edition. This amendment is necessary to more accurately assess organic loads when no actual data on organic loads is available during the design phase.

DEQ-2, Section 11.253 d

This section addresses organic loads for facilities served by new collection systems. The board is proposing to amend the section by adding recommended language from the parent document that allows, in some circumstances, organic loading data from a similar municipality to be used for design purposes. This amendment is necessary to provide an alternative method of determining organic loads when no actual data is available.

DEQ-2, Section 11.27

This section requires the facility plan to address effluent permit limits and how the proposed facility will meet the limits. The board is proposing to amend the section by requiring the facility plan to address compliance with permit limits based on TMDLs, numeric water quality standards, and nondegradation requirements.

DEQ-2, Section 11.29 b

This section requires that the facility plan provide a detailed evaluation of each alternative considered. The board is proposing to add this section to require the facility plan to address the transport and treatment of wet weather flows. This amendment is a recommendation in the parent document.

DEQ-2, Section 11.29 c 1

This section requires that the facility plan provide a detailed site evaluation for each alternative considered. The board is proposing to amend this section by adding recommended language from the parent document that recommends consideration be given to facility location and future development as well as the use of nonaerated treatment technologies and the potential for odor generation for wastewater with high sulfate concentrations.

DEQ-2, Section 11.29 c 7

This section requires that the facility plan provide a detailed site evaluation for each alternative considered. The board is proposing to amend this section by adding recommended language from the parent document that prevents the construction of lagoons in karst areas unless geologic and construction details are acceptable.

DEQ-2, Section 11.29 c 12 to c 18

This section requires that the facility plan provide a detailed site evaluation for each alternative considered. The board is proposing to amend this section by requiring more detail in the planning document to address environmental impacts that may result from construction of the proposed alternatives. This amendment is necessary to provide a better basis for design and will provide the owner with adequate information for decision making. Adding these criteria to the site evaluation will enable the department to better assess and understand early in the project what sensitive or critical environmental resources may be impacted by the project and what mitigation or permitting requirements may be needed. This information is also required by the public funding agencies.

DEQ-2, Section 11.29 g

This section allows for the usage of technologies not included in the standards. The board is proposing to amend this section by reorganizing its content to provide better clarity.

DEQ-2, Section 11.29 i

This section addresses the method and level of treatment to be achieved during construction. The board is proposing to amend this section by adding language that requires that the department's permitting program be notified when a unit bypass is needed during construction. This addition is necessary to ensure that this step is not overlooked (a requirement in the facility's discharge permit), and to make sure adequate planning occurs to maintain overall treatment at the highest level possible during construction.

DEQ-2, Section 11.29 j

The board is proposing to add this new section to require the development of a plan of operation for wastewater treatment systems undergoing significant upgrades. The plan of operation will provide the community with an outline of key tasks that need to be completed prior to system start-up for the successful operation of the new facility. The plan of operation will address the development and implementation of an operating budget, administrative procedures, staffing and training plans, routine and emergency operational procedures, and an operation and maintenance manual. This new section is necessary to provide key information during the planning process.

DEQ-2, Section 11.29 l

This section requires cost estimates for the alternatives considered. The board is proposing to amend this section by requiring that engineering, administration, and contingency costs be added to the overall cost estimate. This information will provide the town or owner with adequate information for decision

making and will provide interested parties with a more comprehensive understanding of the financial impacts of the project.

DEQ-2, Section 11.29 m

This section addresses staffing and operational requirements for the alternatives considered. The board is proposing to add this section to ensure that the proper operator certification and the associated costs to hire the operator(s) is considered in the development of the alternatives analysis. The system classifications were taken from ARM 17.40.202(1)(c).

DEQ-2, Section 11.29 n

This section addresses the environmental impacts of the proposed project. The board is proposing to amend this section by requiring that the discussion of environmental impacts be expanded to include cumulative and secondary impacts and that the impacts to the environment and human population, as outlined under the Montana Environmental Policy Act, must be addressed as well. This information is necessary for the funding and reviewing agencies to complete a thorough environmental assessment or environmental impact statement for the project.

DEQ-2, Section 20

This section addresses the submittal of plans and specifications for the proposed project. The board is proposing to amend this section by relocating information from Section 10.1 that pertains to the plan and specification review, project certification, and as-built submittals. Additional language has been added to provide guidance and clarity regarding plan and specifications submittal requirements.

DEQ-2, Section 20.14

This section addresses project design criteria. The board is proposing to amend this section by adding recommended language from the parent document, which requires that downstream facilities be evaluated to ensure that sufficient capacity exists for the proposed project.

DEQ-2, Section 20.15

This section addresses the development of procedures for operation of the existing facilities during construction. The board is proposing to amend this section by adding a recommendation that facility personnel, essential to implementation of the operating procedures, be listed in the project documents.

DEQ-2, Section 21

This section addresses the project specifications. The board is proposing to

amend this section by adding recommended language from the parent document to provide clarity.

DEQ-2, Section 21.1

This section addresses the submittal of an operation and maintenance manual for the project. The board is proposing to delete this section and relocate the information to a new operation and maintenance section that provides more details regarding operation and maintenance manual content.

DEQ-2, Section 23

This section addresses the submittal of additional information to the department. The board is proposing to amend this section by adding pump curves and buoyancy calculations to the list of information that may need to be submitted for a project. This additional information is necessary to provide clarity to the design engineer on the type of information the department may request to determine the adequacy of a project design.

DEQ-2, Section 24

This section addresses the submittal of deviation requests by the owner or operator for the project. The board is proposing to amend this section by reorganizing its content to provide better clarity.

DEQ-2, Section 24.1

This section addresses the procedure for the submittal of deviation requests for the project. The board is proposing to amend this section by requiring a professional engineer to submit all deviation requests on a newly developed form from the department. Additional information has been added to this section to provide clarity to the deviation process.

DEQ-2, Section 25

The board is proposing to add this new section which addresses the submittal requirements of an operation and maintenance manual for the project. In addition, it requires that the system have an operation and maintenance manual prior to system start-up and provides the design engineer with guidance on the type of information that must be included in the document. These changes will ensure that the system owner has the information needed to successfully operate the facility and will provide conformity of operation and maintenance manuals.

DEQ-2, Section 33.1

This section addresses the minimum pipe diameter for gravity sewer mains. The board is proposing to amend this section by reorganizing its content to provide

clarity.

DEQ-2, Section 33.2

This section addresses the minimum bury depth to prevent sewer pipes from freezing. The board is proposing to amend this section by establishing a minimum bury depth of four feet and requiring a review of local building codes for determination of maximum frost depths to ensure that four feet is adequate.

DEQ-2, Section 33.41

This section addresses the minimum slopes for gravity sewer mains. The board is proposing to amend this section by adding recommended language from the parent document that requires sewer mains to be designed with minimum self-cleansing flow velocities.

DEQ-2, Section 33.42

This section addresses minimum flow depths in gravity sewer mains. The board is proposing to amend this section by adding language that clarifies the need to obtain a deviation from the department when minimum pipe slopes are not met.

DEQ-2, Section 33.5

This section addresses curvilinear sewer mains. The board is proposing to amend this section by adding recommended language from the parent document, which requires that curvilinear sewers must provide a minimum flow velocity of two feet per second.

DEQ-2, Section 33.83 a through d

This section addresses pipe bedding material and placement for sewer main installation. The board is proposing to amend this section by deleting existing language and replacing it with the pipe bedding requirements located in the Montana Public Works Standard Specifications (MPWSS) 6th edition. Engineering consultants typically do not reference the bedding classes included in the current section, but instead reference the MPWSS for pipe bedding material requirements. Including the bedding requirements in DEQ-2 will simplify the review process by eliminating the need to cross check against the MPWSS.

DEQ-2, Section 33.84

This section addresses trench backfill requirements for sewer main installation. The board is proposing to amend this section by adding language from the MPWSS that includes backfill compaction requirements depending on surface restoration needs. Engineering consultants commonly reference the MPWSS for trench backfill requirements. Including these requirements in DEQ-2 will simplify the

review process by eliminating the need to cross check against the MPWSS.

DEQ-2, Section 33.92

This section addresses the testing of sewer mains for leakage. The board is proposing to amend this section by allowing video inspections on sewer mains with active service connections. This amendment is necessary because it is not possible to conduct water or low air pressure testing on sewer mains with active service connections.

DEQ-2, Section 33.10

The board is proposing to add this new section which addresses the use of casing pipes on sewer mains. This information will clarify and provide consistency in the department's review of casing pipe installations.

DEQ-2, Section 34.1

This section addresses manhole spacing on sewer mains. The board is proposing to amend this section by requiring the town or owner, under certain circumstances, to submit documentation stating that adequate cleaning equipment is available for the proposed manhole spacing.

DEQ-2, Section 34.2

This section addresses drop type manholes. The board is proposing to amend this section by making the "recommended" use of a drop pipe, when sewers enter manholes at an elevation 24 inches or more above the manhole invert, a "requirement." The use of a drop pipe is a requirement in the parent document.

DEQ-2, Section 34.4

This section addresses the flow channel height through manholes. The board is proposing to amend this section by making the "recommendation," that the flow channel for pipes greater than eight inches in diameter be formed to the full height of the outer sewer pipe, a "requirement." Larger diameter pipe is utilized with higher flows. Deeper channels will contain the flow better and prevent the deposition of solids within the manhole structure.

DEQ-2, Section 34.6

This section addresses the watertightness of manholes. The board is proposing to amend this section by adding recommended language from the parent document that requires manhole lift holes and grade adjustment rings to be properly sealed to prevent the infiltration of water.

DEQ-2, Section 34.7

This section addresses the testing requirements for the confirmation of manhole watertightness. The board is proposing to amend this section by adding vacuum and water testing procedures. This amendment will provide the design engineer with better guidance on testing requirements and will indicate under which conditions testing must take place. The vacuum testing procedure is recommended in the parent document and the water testing procedure is similar to the septic tank testing in both Circular DEQ-4 and the "San Antonio Water System Standard Specification for Construction."

DEQ-2, Section 35

This section addresses the use of inverted siphons in sewer collection systems. The board is proposing to amend this section by making the "recommended" use of at least two barrels for inverted siphons a "requirement." Use of at least two barrels for inverted siphons is a requirement in the parent document.

DEQ-2, Section 36.11

This section addresses cover depths for sewers entering or crossing streams. The board is proposing to amend this section by requiring the engineer to conduct a scour analysis to justify the proposed burial depth.

DEQ-2, Section 36.21

This section addresses piping material for sewers entering or crossing streams. The board is proposing to amend this section by recommending that a casing pipe be used when crossing streams and providing additional requirements when material other than ductile iron pipe is used for stream crossings. This amendment will provide the design engineer with better guidance and clarity of construction requirements for stream crossings and requires the use of mechanical joints or encasement in concrete to maintain alignment and improve structural integrity.

DEQ-2, Section 36.22

This section addresses construction methods and practices for sewers entering or crossing streams. The board is proposing to amend this section by listing the specific permits that may be required for work done in and around streams. Adding this information will provide the design engineer with better guidance and clarity regarding which permits are needed and which regulatory agencies should be contacted.

DEQ-2, Section 37

This section addresses aerial crossings of sewer collection systems. The board is proposing to amend this section by making the "recommendation," that the bottom of the sewer pipe be located above the 50-year flood plain, a "requirement." In addition adequate justification must be submitted for the use of pier structures to support sewer mains and, if sewers are to be attached to bridges, the town or owner must obtain written permission from the bridge owner. These amendments will provide the design engineer with better guidance and clarity regarding the design requirements of aerial crossings.

DEQ-2, Section 38

This section addresses the protection of water supplies from sewer collection systems. The board is proposing to amend this section by making the "recommendation," that the factors listed in Circular DEQ-1 be considered in the establishment of acceptable isolation distances between water and sewer mains, a "requirement."

DEQ-2, Section 38.2

This section addresses the setback distances of sewer mains from water works structures. In addition to the 100-foot separation from public water supply wells, the board is proposing to amend this section by requiring a 50-foot separation between sewer mains and all other wells. This amendment is necessary to provide consistency with ARM 17.36.323 regarding horizontal setback distances. In addition, language has been added requiring documentation from the operating authority of the collection system stating that all waterworks units, within 100 feet of the proposed sewer main alignment, have been identified and are shown on the plans. The way the standard is currently written, it is hard to know if there are no waterworks units in the area or if the engineer simply overlooked it. Adding this language will ensure that these setback distances are not overlooked on any project.

DEQ-2, Section 38.31

This section addresses the horizontal separation of water and sewer mains. The board is proposing to amend this section by deleting parts (a) and (b) of the existing language and replacing it with the recommended language from the parent document requiring that sewers be constructed in compliance with public water supply standards and pressure tested to 150 psi to assure watertightness.

DEQ-2, Section 38.32

This section addresses the vertical separation of water and sewer mains. The board is proposing to amend this section by deleting parts (b) and (d) of the existing language and replacing it with the recommended language from the parent document requiring that sewers be constructed in compliance with public water

supply standards and pressure tested to 150 psi to assure watertightness. The amendment also allows a minimum separation of six inches provided that flowable fill, or a watertight carrier pipe, that extends ten feet on both sides of the pipe crossing is used. This amendment eliminates the need for submittal of a deviation when the 18-inch separation could not be met, which will save time during the review process.

DEQ-2, Section 39

This section requires the conformance of service connections with local and state plumbing codes. The board is proposing to amend this section by updating the ARM reference number that incorporates by reference the uniform plumbing code.

DEQ-2, Section 42.22

This section addresses equipment removal from pumping stations. The board is proposing to amend this section by adding recommended language from the parent document that requires the pumping station to remain operational when an individual pump is removed for maintenance.

DEQ-2, Section 42.231

This section addresses access by personnel into pumping stations. The board is proposing to amend this section by reorganizing its content to provide better clarity.

DEQ-2, Section 42.24

This section addresses the buoyancy of pumping stations due to ground water. The board is proposing to amend this section by requiring the submittal of buoyancy calculations to the department when the potential for high ground water exists. This amendment will ensure proper design to protect the structure from potential floatation.

DEQ-2, Section 42.321

This section addresses bar racks for pumping stations. The board is proposing to amend this section by adding recommended language from the parent document that references other sections that must be considered in the design of bar racks in pumping stations.

DEQ-2, Section 42.33

This section addresses pump opening sizes. The board is proposing to amend this section by adding language that allows smaller pump openings and allows the passing of smaller spheres for grinder pumps. The current standard does not take into consideration smaller piping diameters permissible with grinder pumps.

This amendment will allow the use of grinder pumps without the need to obtain a deviation from the department regarding pump openings, which will simplify the review process.

DEQ-2, Section 42.36

This section addresses pump intakes. The board is proposing to amend this section by making the "recommendation," that each pump have its own intake, a "requirement." Each pump having its own intake is a requirement in the parent document.

DEQ-2, Section 42.4

This section addresses pump controls for pumping stations. The board is proposing to amend this section by adding recommended language from the parent document requiring dual air compressors for bubbler control systems and the alternation of pumps daily, instead of each cycle, for suction lift stations.

DEQ-2, Section 42.52

This section addresses check valve placement requirements for pumps. The board is proposing to amend this section by adding language that allows swing and flexible disk check valves to be located on a vertical run of pipe. Allowing these check valves to be installed in the vertical run will prevent the need for the submittal of a commonly approved deviation and simplify the review process.

DEQ-2, Section 42.62

This section addresses sizing of wet wells for pumping stations. The board is proposing to amend this section by adding language that recommends wet wells be designed with the flexibility to accommodate phased growth. In addition, an equation has been added to calculate the wet wells "active" volume. These amendments will ensure that the value added by the improvements is optimized and will provide the design and review engineers with information to confirm wet well sizing. The wet well volume equation is recommended in the State of Washington Department of Ecology document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 42.73

This section addresses electrical controls for pumping stations. The board is proposing to amend this section by adding recommended language from the parent document that recommends an automatic increase in ventilation rates whenever hazardous concentrations of gases or vapors are detected.

DEQ-2, Section 42.74

This section addresses pumping station electrical equipment. The board is proposing to amend this section by adding recommended language from the parent document, which requires that all electrical equipment in the lift station be installed in accordance with the National Electrical Code for Class 1, Division 1, Group D locations.

DEQ-2, Section 42.75

This section addresses ventilation requirements in pumping station wet wells. The board is proposing to amend this section by adding recommended language from the parent document, which requires that the air used for ventilation be 100 percent fresh.

DEQ-2, Section 42.76

This section addresses ventilation requirements in pumping station dry wells. The board is proposing to amend this section by adding recommended language from the parent document, which requires that the air used for ventilation be 100 percent fresh.

DEQ-2, Section 43

This section addresses suction lift pumping stations. The board is proposing to amend this section by adding language from Section 43.1 for clarity.

DEQ-2, Section 43.2

This section addresses pumping equipment compartment location and wet well access for suction lift pumping stations. The board is proposing to relocate information from existing Section 43.1 and to create a new section for clarity.

DEQ-2, Section 44.32

This section addresses electrical controls for submersible lift stations. The board is proposing to amend this section by adding recommended language from the parent document, which requires that electrical controls located outside be housed in a weatherproof structure.

DEQ-2, Section 44.4

This section addresses the location of valves for submersible lift stations. The board is proposing to amend this section by adding recommended language from the parent document, which requires that provisions be made to drain or remove accumulated water in the valve chamber.

DEQ-2, Section 45 through 45.3

These sections address the minimum design requirements for screw pump stations. The board is proposing to add information that addresses covers, the isolation of pump wells, and bearing lubrication using recommended language from the parent document.

DEQ-2, Section 46

This section addresses alarm systems for lift stations. The board is proposing to amend this section by adding recommended language from the parent document, which requires a back-up power supply for the alarm system and identification of the alarm condition. In addition, a requirement was added requiring thermal and moisture sensors on submersible pumps. This requirement was added for compliance with Section 44.1, which requires an effective method to detect seal failure.

DEQ-2, Section 47.2

This section addresses emergency pumping capability for lift stations. The board is proposing to amend this section by making the "recommendation," that a riser be provided on the force main to hook up a portable pump, a "requirement." Having a riser on the force main to hook up a portable pump is a requirement in the parent document. In addition, language has been added requiring that a separate portable pump or generator is to be provided for each lift station within the community to ensure that the community's entire collection system remains functional during extended power outages.

DEQ-2, Section 47.3

This section addresses emergency storage requirements for lift stations. The board is proposing to amend this section by adding language that recommends one hour of emergency storage be provided for lift stations, but also provides the department with the flexibility to alter the storage requirements based on site specific conditions. This amendment is necessary to provide the design engineer with sizing guidance.

DEQ-2, Section 47.44

This section addresses utility substations for emergency power to pumping stations. The board is proposing to add this new section that requires each independent substation to be capable of operating the pump station at its rated capacity. This amendment is a requirement in the parent document.

DEQ-2, Section 49.1

This section addresses force main diameters and velocities. The board is

proposing to amend this section by adding language that requires force mains that serve grinder pumps to be designed with a minimum velocity of two feet per second and a minimum diameter of 1.5 inches. In addition, language was added to limit the force main velocity to less than eight feet per second. This amendment is necessary to provide the design engineer with force main sizing guidance. Limiting force main velocities is a requirement in the State of Washington Department of Ecology document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 49.3

This section addresses the termination of force mains in a manhole. The board is proposing to amend this section by adding recommended language from the parent document that requires corrosion protection of the manhole.

DEQ-2, Section 49.4

This section addresses pressure changes in force mains. The board is proposing to amend this section by specifying that the use of surge protection devices must be evaluated to protect the force main. This amendment is a requirement in the parent document.

DEQ-2, Section 49.71

This section addresses friction coefficients used in the Hazen-Williams equation to calculate pump flows. The board is proposing to amend this section by requiring the design engineer to consider both new pipe and old pipe flow conditions and to consider how the higher discharge rates with the new piping will impact the pumps and downstream facilities.

DEQ-2, Section 49.10

This section addresses maintenance considerations for force mains. The board is proposing to amend this section by requiring isolation valves where force mains connect to a common force main and recommending the installation of cleanout ports for pig launching and catching. These amendments are based on recommendations in the parent document.

DEQ-2, Section 51.1

This section addresses general considerations for the siting of wastewater treatment facilities. The board is proposing to amend this section by requiring, in addition to considering nondegradation requirements, that consideration be given to future requirements from the development of TMDLs or compliance with water quality standards when selecting a site, to ensure that adequate space exists for future facilities that may be required to provide increased levels of treatment. This amendment is necessary to ensure that a comprehensive evaluation is made of future compliance issues.

DEQ-2, Section 52

This section addresses the need for wastewater facilities to provide the necessary degree of treatment to meet water quality standards established by the state. The board is proposing to add language encouraging the design engineer to consider future permit requirements that are related specifically to the implementation of TMDLs, new water quality standards, and the state's nondegradation policy.

DEQ-2, Section 53.8

This section addresses the evaluation of pumps at wastewater treatment facilities. The board is proposing to add this section to ensure that a thorough evaluation of major pumps or key unit processes has been made by the design engineer.

DEQ-2, Section 54.1

This section addresses the installation of mechanical equipment at wastewater treatment facilities. The board is proposing to amend this section by making the "recommendation," that the installation and initial operation of major items of mechanical equipment be inspected and approved by a representative of the manufacturer, a "requirement." This amendment is necessary to ensure that new equipment is installed and operating correctly.

DEQ-2, Section 54.21

This section addresses bypass structures and piping at wastewater treatment facilities. The board is proposing to amend this section by adding language that requires the capability to manually operate all bypasses and recommending that a fixed high water level bypass overflow be provided. These amendments are recommended in the parent document.

DEQ-2, Section 54.5

This section addresses the hydraulic testing of water bearing units. The board is proposing to add this section to require that all water bearing structures be hydraulically tested and to establish leakage standards. The leakage standards are based on recommendations developed by the American Concrete Institute Committee 350 and the American Water Works Association Committee 400, as presented in the joint subcommittee report entitled "Testing Reinforced Concrete Structures for Watertightness." This amendment is necessary to establish standardized criteria for testing the watertightness of concrete structures.

DEQ-2, Section 54.6

This section addresses the use of paint to color-code piping in wastewater

treatment facilities to facilitate identification. The board is proposing to amend this section by making the "recommendation," that the use of mercury or lead in paint be avoided, a "requirement" due to health concerns associated with mercury and lead. In addition, the existing language was altered making color-coding of pipelines a requirement for all plants, not just a recommendation for large facilities. The operation of all facilities is enhanced by having piping that is readily identifiable. Three colors and their associated piping contents were added based on recommendations from the parent document.

DEQ-2, Section 54.8

This section addresses erosion control at wastewater treatment facilities during construction. The board is proposing to amend this section by adding clarifying language that specifically states that a dewatering or storm water permit may be required.

DEQ-2, Section 56.22

This section addresses the direct connections of potable water piping and sewer connected wastes. The board is proposing to amend this section by adding language that requires a backflow prevention assembly be used on any potable water line that serves a wastewater treatment facility and adding language that directly references cross-connection requirements, as provided in state rules governing cross-connections and the Uniform Plumbing Code. These amendments will ensure that the potable water supply is adequately protected.

DEQ-2, Section 56.23

This section addresses the indirect connections of potable water piping and sewer connected wastes. The board is proposing to amend this section by adding clarifying language for the usage of backflow devices and includes requirements where air gaps are used. The air gap requirements are based on the Technical Brief entitled "Cross Connection and Backflow Prevention" published by the National Drinking Water Clearinghouse (2004 edition).

DEQ-2, Section 56.24

This section addresses the use of an individual well to provide potable water to a wastewater treatment facility. The board is proposing to amend this section by making the "recommendation," that the well be constructed in accordance with Circular DEQ-3 and the Montana Board of Water Well Contractor's rules, a "requirement."

DEQ-2, Section 56.7

This section addresses composite sampling equipment for influent and effluent flows. The board is proposing to amend this section by requiring the

sampling point to be located prior to any process return flows. This amendment is based on a recommendation in the parent document.

DEQ-2, Section 57.1

This section addresses safety equipment for wastewater facilities. The board is proposing to amend this section by recommending that OSHA and the Montana Department of Labor and Industry Safety Bureau be contacted for any additional safety considerations that may be implemented for the protection of visitors and workers to the treatment facility. In addition, language has been added requiring suitable lighting be provided for all access and work areas. These amendments will promote operator and visitor safety and assist with maintenance activities. Finally, vector control was added to the list of safety provisions. This amendment is recommended in the parent document.

DEQ-2, Section 57.27

This section addresses protective clothing and equipment for wastewater system personnel. The board is proposing to amend this section by requiring that UV light safety goggles and rubber gloves be provided to operations personnel for facilities that use UV disinfection systems and that masks be provided in areas where exposure to aerosols and sprays may occur. These amendments are necessary to provide further protection to operations personnel.

DEQ-2, Section 57.30

This section addresses eyewash devices and safety showers. The board is proposing to add this new section to clarify where the safety devices must be located within the facility. In addition, the new section specifies the discharge pressure, capacities, and water temperature that must be provided to the eyewash devices and safety showers. These amendments are required in the parent document.

DEQ-2, Section 58.341

This section addresses fume hood design considerations for Category II laboratories. The board is proposing to amend this section by recommending that the air intake for the laboratory be balanced against all exhaust ventilation, including the fume hood, so that an overall positive pressure is maintained in the laboratory. This amendment is recommended in the parent document.

DEQ-2, Section 58.38

This section addresses safety equipment and considerations for Category II laboratories. The board is proposing to amend this section by deleting information that covers eyewash devices and safety showers, as this information is already covered in Section 57.30.

DEQ-2, Section 58.41

This section addresses siting, space requirements, and the layout for Category III laboratories. The board is proposing to amend this section by recommending that analytical and storage areas are isolated from sources of contamination. In addition, language has been added requiring adequate security for storage areas and that provisions are made for the storage and disposal of chemical wastes. These amendments are based on recommendations and requirements in the parent document.

DEQ-2, Section 58.44

This section addresses the location, design, materials, fixtures, and exhaust considerations for fume hoods and canopy hoods in Category III laboratories. The board is proposing to amend this section by making many of the "recommendations" in the current text "requirements." A category III laboratory is typically used at more complex systems when a high level of sampling is required. These amendments will result in an improved working environment and will promote laboratory technician safety.

DEQ-2, Section 58.49

This section addresses safety equipment and considerations for Category III laboratories. The board is proposing to amend this section by deleting information that covers eyewash devices and safety showers, as this information is already covered in Section 57.30.

DEQ-2, Section 61.129

This section addresses the removal and cleaning of screening material. The board is proposing to amend this section by adding clarifying language that requires washing of the screening material for devices with an opening of 0.5 inch or less. This amendment is necessary as these screens tend to also screen out a significant amount of organic material, which can result in the generation of odors. Washing the screening material will return much of the organic material back to the influent flow stream for treatment in the facility and reduce odors in the headworks building.

DEQ-2, Section 61.130

This section addresses the construction material for bar racks. The board is proposing to add this new section to specify what materials are acceptable for use in the construction of bar racks due to the corrosive environment.

DEQ-2, Section 61.16

This section addresses the cleaning needs for facilities that use coarse screens. The board is proposing to add this new section to require that hosing

equipment be provided for cleaning. The parent document has the same requirement for fine screen facilities.

DEQ-2, Section 61.21

This section addresses the use of fine screens in wastewater treatment facilities. The board is proposing to amend this section by adding clarifying language that lists the various types of screens that can be used and by requiring automated washing of screening material for all fine screens. This amendment is necessary because fine screens tend to also screen out a significant amount of organic material, which can result in the generation of odors. Washing the screening material will return much of the organic material back to the influent flow stream for treatment in the facility and reduce odors in the headworks building.

DEQ-2, Section 61.22

This section addresses the design and installation of fine screens. The board is proposing to amend this section by adding language that allows the manufacturer of the fine screen to determine if a coarse screen should precede the fine screen. The cleaning strategies and mechanism of present-day fine screens does not necessitate the need for coarse screens.

DEQ-2, Section 61.25

This section addresses the use of hoods on fine screens. The board is proposing to add this new section requiring that fine screens be equipped with hoods to contain any aerosols and spray from the backwash system. This amendment is necessary for operator safety and to prevent the floor from becoming wet and slippery.

DEQ-2, Section 62.2

This section addresses considerations for the use of comminutors and grinders in wastewater treatment. The board is proposing to amend this section by adding clarifying language indicating that accumulation of stringy material, from use of these devices, may require special design considerations to protect equipment in downstream unit processes, as well as result in additional operation and maintenance activities for operations.

DEQ-2, Section 63.3

This section addresses design parameters for grit removal facilities. The board is proposing to amend this section by adding clarifying language that defines what flow designates a small treatment system and providing recommended design parameters for aerated grit chambers and horizontal grit chambers. The values reported were obtained from a document entitled, "Wastewater Engineering Treatment and Reuse," by Metcalf & Eddy (4th edition).

DEQ-2, Section 65.2

This section addresses the location of flow equalization basins. The board is proposing to amend this section by making the current "recommendation," that equalization basins be located downstream of pretreatment facilities, a "requirement." Flow equalization is typically used for mechanical treatment facilities that are also equipped with screening devices. Requiring this layout will prevent the excessive accumulation of solids in the equalization basin, making maintenance of the system easier for the operator.

DEQ-2, Section 65.51

This section addresses mixing and draw-off piping in flow equalization basins. The board is proposing to amend this section by making the current "recommendation," that corner fillets and hopper bottoms be used in equalization basins, a "requirement." A hopper bottom provides the most efficient means for the removal of any solids that settle out and will simplify maintenance activities associated with the equalization basin.

DEQ-2, Section 71.2

This section addresses flow distribution and control for clarifiers. The board is proposing to add language that prevents the use of valves for flow proportioning. This amendment is necessary because valves are more susceptible to plugging. In addition, since they are submerged, a visual confirmation to assess if flows are being evenly split between multiple units cannot be made. This can lead to flow imbalances resulting in overloading to individual tanks.

DEQ-2, Section 72.1

This section addresses clarifier dimensions. The board is proposing to amend this section by increasing the minimum side water depth for primary clarifiers from seven to ten feet. This amendment is recommended in the parent document. In addition, clarifying language has been added recommending that a minimum side wall depth of 16 feet be used to meet stringent phosphorous or total suspended solid limits (TSS). The increased depth will provide increased settling and improve the removal of particles. The 16-foot side water depth is based on values reported in a document entitled "Wastewater Engineering Treatment and Reuse," by Metcalf & Eddy (4th edition).

DEQ-2, Section 72.21

This section addresses surface overflow rates for primary and intermediate settling tanks. The board is proposing to amend this section by recommending a maximum detention time of 2.5 hours in the primary settling tank. This value was obtained from a document entitled "Wastewater Engineering Treatment and Reuse," by Metcalf & Eddy (4th edition). The board is also proposing to amend this section

by adding recommended language from the parent document that addresses surface overflow rates for intermediate settling tanks.

DEQ-2, Section 72.8

This section addresses the use of baffles in settling basins. The board is proposing to add this new section recommending that baffles be utilized in settling basins for systems that must meet stringent phosphorous or TSS limits. The baffles prevent short-circuiting caused by density currents resulting in improved treatment.

DEQ-2, Section 73.2

This section addresses sludge collection and removal from clarifiers. The board is proposing to amend this section by adding language from the parent document that recommends suction withdrawal from clarifiers over 60 feet in diameter and for activated sludge facilities that nitrify.

DEQ-2, Section 72.23

This section addresses sludge removal piping diameters. The board is proposing to amend this section by allowing sequencing batch reactors and membrane bioreactor plants to have sludge removal piping that is four inches in diameter. This amendment is consistent with the manufacturer's recommendations for these types of facilities. In addition, language was added requiring that provisions be made that allow for the return sludge to be sampled, which will enhance operability of the plant.

DEQ-2, Section 73.24

This section addresses sludge removal from clarifiers. The board is proposing to amend this section by discouraging the use of air-lift pumps for secondary sludge removal where stringent TSS or phosphorous limits are required. Air-lift pumps lack the capability of providing a wide range of flow control limiting the operability of the clarifier and the operator's ability to optimize unit process performance.

DEQ-2, Section 74.4

This section addresses the use of covers on final settling basins to prevent them from freezing. The board is proposing to amend this section by adding language that recommends nitrogen removal facilities consider covering their final settling basins, which have been shown to be prone to freezing in some parts of the state.

DEQ-2, Section 81

This section addresses facilities for sludge processing at mechanical

treatment plants. The board is proposing to amend this section by adding recommended language from the parent document requiring that the department be contacted if any sludge processing system is being considered that is not covered by these standards, to ensure that state and federal sludge disposal requirements can be met.

DEQ-2, Section 82

This section provides key considerations in the selection of sludge handling processes. The board is proposing to amend this section by adding clarifying language that discusses the importance of time and temperature to meet pathogen and vector attraction reduction in accordance with regulations for sludge stabilization provided in 40 CFR Part 503. This amendment is recommended in the parent document.

DEQ-2, Section 84.132

This section addresses the installation of access manholes on the top of anaerobic digesters. The board is proposing to amend this section by adding clarifying language from the parent document that recommends the access manholes have a 30-inch diameter.

DEQ-2, Section 84.31

This section addresses the design of the anaerobic digester tank capacity. The board is proposing to amend this section by adding clarifying language from the parent document that requires consideration of the solids retention time at peak loadings in the determination of tank capacity. The board is also proposing to amend this section by making the "recommendation," that tank sizing design calculations be submitted to the department, a "requirement."

DEQ-2, Section 84.45

This section addresses the installation of electrical equipment associated with anaerobic digester appurtenances. The board is proposing to amend this section by changing the electrical requirement from Class I, Division 2 to Class I, Division 1. This amendment is required in the parent document.

DEQ-2, Section 84.47

This section addresses ventilation requirements for areas that contain anaerobic digester appurtenances and digester gas piping. The board is proposing to amend this section by adding recommended language from the parent document that requires at least 12 complete air changes per hour, on a continuous basis, for areas designated Class I, Division 2.

DEQ-2, Section 84.531

This section addresses heating requirements for anaerobic digesters. The board is proposing to amend this section by adding clarifying language from the parent document that recommends an operating temperature range of 85° to 100 °F for the optimization of mesophilic digestion.

DEQ-2, Section 84.542

This section addresses the use of boilers to heat sludge in anaerobic digesters. The board is proposing to amend this section by making the "recommendation," that boiler controls be automatic, a "requirement." Automatic controls will enhance operator safety and optimize system performance.

DEQ-2, Section 84.7

This section addresses anaerobic digestion sludge production. The board is proposing to add this new section by removing information from existing DEQ-2, Section 88.11, which covered anaerobic solids production values based on the treatment process and population equivalents, and inserting that information into new Section 84.7.

DEQ-2, Section 85.4

This section addresses mixing equipment in aerobic digesters. The board is proposing to amend this section by including a minimum mixing energy requirement of 0.75 Hp/1000 ft³ of digester capacity for mechanical mixing equipment. This value was obtained from a document entitled "Wastewater Engineering Treatment and Reuse" by Metcalf & Eddy (4th edition).

DEQ-2, Section 85.8

This section addresses aerobic digestion sludge production. The board is proposing to add this new section by removing information from existing DEQ-2, Section 88.12, which covered aerobic solids production values based on the treatment process and population equivalents, and inserting that information into new Section 85.8.

DEQ-2, Section 86.3

This section addresses odor control from sludge storage tanks. The board is proposing to amend the section by deleting the sentence that states: "The reviewing authority should be contacted for design and air pollution control objectives to be met for various types of air scrubber units." The department does not have design standards for air scrubber units.

DEQ-2, Section 87.23

This section addresses piping supports located in digestion tanks. The board is proposing to amend this section by stressing the importance of designing the piping support system to withstand the corrosive environment of the digestion tank.

DEQ-2, Section 88.1

This section addresses sludge dewatering. The board is proposing to amend the section by deleting information that pertains to aerobic and anaerobic solids production values. The deleted information is being relocated to sections 84.7 and 85.8.

DEQ-2, Section 88.3

This section addresses the use of ponds as sludge dewatering units. The board is proposing to amend the section by deleting the information related to sludge dewatering and relocating it to Section 89.2, which addresses sludge storage ponds. This revision is recommended in the parent document.

DEQ-2, Section 88.32

This section addresses protection of the water supply in mechanical dewatering facilities. The board is proposing to add this new section by adding recommended language from the parent document that requires the water system to be designed in accordance with Section 56.23 (Indirect Connections) of DEQ-2. This amendment will ensure that the water supply remains adequately protected from contamination.

DEQ-2, Section 89.22

This section addresses the location of ponds for sludge storage. The board is proposing to add language that requires a minimum separation of 500 feet between water wells and sludge storage ponds. This separation distance is required by a provision in state water quality laws at 75-5-605, MCA.

DEQ-2, Section 89.23

This section addresses the seal of ponds used for sludge storage. The board is proposing to add language that requires the test results from the leakage test be submitted to the department for approval. This will ensure that the leakage meets department standards.

DEQ-2, Section 89.25

This section addresses the use of ponds for sludge storage. The board is proposing to add this new section by adding recommended language from the

parent document that requires that the pond be equipped with a method of decanting and for supernatant to be returned to the treatment process.

DEQ-2, Section 89.31

This section addresses the disposal of sludge. The board is proposing to add this new section by adding recommended language from the parent document that requires drainage facilities at sludge vehicle transfer stations to collect and return any spillage or washdown material to the treatment plant or sludge storage facility.

DEQ-2, Section 89.32

This section addresses the disposal of sludge via sanitary landfilling. The board is proposing to amend this section by adding language that explains that sludges typically must pass a Toxicity Characteristic Leaching Procedure (TCLP) test for disposal in a landfill. In addition, language has been added requiring documentation from the operating authority of the landfill stating that they are licensed and willing to accept sewage sludge.

DEQ-2, Section 89.33

This section addresses the disposal of sludge via land application. The board is proposing to amend this section by adding recommended language from the parent document that lists several design considerations for the proper disposal of sludge at a land application site. Clarifying language was also added stating that a sludge disposal permit from the U.S. Environmental Protection Agency (EPA), along with department approval, is required for the land application of sludge.

DEQ-2, Section 91.211

This section addresses the wastewater distribution system in trickling filters. The board is proposing to amend this section by adding recommended language from the parent document that adds design considerations for rotary distributors and motor driven distributor arms.

DEQ-2, Section 92.12

This section addresses the use of activated sludge for wastewater treatment. The board is proposing to amend the section by deleting information that pertains to sequencing batch reactors. Design considerations for sequencing batch reactors are addressed in Section 96.

DEQ-2, Section 92.2

This section addresses the pretreatment of wastewater for activated sludge facilities. The board is proposing to amend this section by adding recommended language from the parent document that requires screening devices, with a clear

opening of 1/4-inch or less, to be provided prior to the activated sludge process.

DEQ-2, Section 92.31

This section addresses capacities and permissible loadings in activated sludge facilities. The board is proposing to amend this section by adding clarifying language that references Section 95.31 for the design of systems that incorporate nitrification into the treatment process.

DEQ-2, Section 92.32 b

This section addresses short-circuiting through small aeration tanks at activated sludge plants. The board is proposing to amend this section by requiring that tanks be designed with a means of positive control. This requirement prevents short-circuiting through the tank.

DEQ-2, Section 92.331

This section addresses the general requirements associated with the oxygen demand at activated sludge plants. The board is proposing to amend this section by adding clarifying language that requires, in addition to the maximum diurnal organic loading, that the diurnal peak TKN loading be taken into account for nitrogen removal plants. Furthermore a reference is included directing the design engineer to Section 95.31 for additional nitrification design considerations.

DEQ-2, Section 92.41

This section addresses return sludge rates for activated sludge facilities. The board is proposing to amend this section by adding recommended language from the parent document that includes minimum and maximum return sludge rates for step aeration, complete mix, and single stage nitrification processes, and requiring design flexibility that enables operation in various process modes. In addition, return sludge rates for Biological Nutrient Removal treatment processes have been added. The range of 70% to 120% is supported by information from the Water Environment Federation (WEF) in a document entitled "Design of Municipal Wastewater Treatment Plants" (4th edition) and from a seminar entitled "Basics of Biological Nutrient Removal" presented to department staff by Dr. Bill Oldham in February 2009.

DEQ-2, Section 92.5

This section addresses flow measuring devices for various unit processes. The board is proposing to amend this section by making the "recommendation," that flow rate measuring devices be installed for various unit processes, a "requirement." This amendment will ensure that the design is not limiting the operator's ability to optimize unit process performance.

DEQ-2, Section 93.26

This section addresses the separation distance between water wells and wastewater treatment ponds. The board is proposing to add this new section that requires a minimum separation of 500 feet between water wells and wastewater treatment ponds. This separation distance is required by a provision in state water quality laws at 75-5-605, MCA. Language is also included that directs the design engineer to Section B.6 for the separation requirements for storage ponds.

DEQ-2, Section 93.34

This section addresses the number of treatment cells and piping requirements for treatment ponds. The board is proposing to amend this section by making the "recommendation," that piping flexibility be incorporated into the design to allow for isolation of a treatment cell or splitting the flow to two or more cells, a "requirement". Piping flexibility is essential for providing adequate treatment under different operational scenarios.

DEQ-2, Section 93.341

This section addresses controlled discharge facultative treatment lagoon system design considerations. The board is proposing to delete this section as this information is included in Table 93-1, entitled "Facultative Pond Design Criteria."

DEQ-2, Section 93.342

This section addresses flow through facultative treatment lagoon system design considerations. The board is proposing to delete this section as this information is included in Table 93-1, entitled "Facultative Pond Design Criteria."

DEQ-2, Section 93.36

This section addresses design criteria for facultative ponds. The board is proposing to amend this section by changing the minimum operating depth of storage cells from two feet to one foot for land application and total retention systems. This amendment is necessary so the minimum operating level in Table 93-1 is in agreement with Note 2 of the Table, which states the detention time for storage lagoons can be based on the volume between one foot and the maximum operating depth. In addition, the board is proposing to amend the minimum operating depth of the primary cell for total retention systems from two feet to four feet. Since total retention systems are typically utilized in smaller communities with lower flows, this amendment will ensure that the primary cell is not oversized and is able to maintain an adequate depth of water, especially during system start-up, to keep the sludge covered, minimize odors, and provide better treatment.

DEQ-2, Section 93.411

This section addresses pond embankment or dike construction. The board is proposing to amend this section by deleting the reference to the Standard Proctor Density and instead referencing AASHTO T99 and ASTM D698 for compaction requirements. Referencing AASHTO T99 and ASTM D698 is consistent with the compaction methods cited in the revised Section 33.83 of DEQ-2, which relies on the standards and methods in the document entitled "Montana Public Works Standard Specifications (MPWSS)" (6th edition).

DEQ-2, Section 93.415

This section addresses freeboard depths for wastewater treatment pond systems. The board is proposing to amend this section by adding clarifying language that defines a small treatment system as being 25,000 gallons per day or less.

DEQ-2, Section 93.416 b

This section addresses the use of riprap on the interior slopes of pond embankments for erosion control. The board is proposing to amend this section by deleting the sentence that allows for riprap to be limited only to interior dikes receiving prevailing winds. Previous projects have shown that, where limited riprap has been allowed, erosion still occurs on the interior slopes at the water line and from rain and snowmelt around the entire pond, regardless of wind direction.

DEQ-2, Section 93.421

This section addresses pond bottom construction. The board is proposing to amend this section by deleting the reference to the Standard Proctor Density and instead referencing AASHTO T99 and ASTM D698 for compaction requirements. Referencing AASHTO T99 and ASTM D698 is consistent with the compaction methods cited in the revised Sections 93.411 and 33.83 of DEQ-2, which rely on the standards and methods in the document entitled "Montana Public Works Standard Specifications (MPWSS)" (6th edition).

DEQ-2, Section 93.422

This section addresses pond seal leakage requirements. The board is proposing to amend this section by adding language that clarifies the leakage allowances, testing duration, and testing protocol for pond liners. This amendment is necessary to ensure that the leakage test is included in the specifications for review and approval by the department. In addition, language from the parent document was added that clarified the testing of soil and bentonite liners.

DEQ-2, Section 93.434

This section addresses the placement of influent lines in treatment ponds. The board is proposing to amend this section by adding clarifying language that the influent line must be located above the required sludge storage depth. This will ensure that flow into the treatment pond does not become obstructed.

DEQ-2, Section 93.442 a 3

This section addresses drawdown structure design for irrigation storage ponds. The board is proposing to add this new section that allows the bottom pipe for land application systems to be located one foot above the pond bottom. Adding this design standard will provide consistency with the allowable operating range proposed in Table 93-1 for land application systems.

DEQ-2, Section 93.442 a 4

This section addresses piping requirements for cell bypass. The board is proposing to amend this section by deleting the language associated with cell bypass requirements as this information is already included in Section 93.34.

DEQ-2, Section 95

A provision in this section allows department approval for other biological processes not covered in DEQ-2. The board is proposing to relocate this information from existing Section 95 to new Section 98.

DEQ-2, Section 95

The information in this section addresses design standards for Biological Nutrient Removal (BNR) wastewater treatment systems. The board is proposing to add new information in Section 95 to ensure that key design components and requirements for the biological removal of phosphorus and nitrogen are addressed in the design of BNR facilities to optimize treatment and operability. The board finds that the inclusion of this new information in DEQ-2 is necessary so that owners and operators of public sewage systems have the necessary design standards for installing BNR treatment as a means to meet future permit limits for phosphorus and nitrogen.

The design standards proposed for inclusion in this section are supported by information from the following documents and seminars: (1) Water Environment Federation's (WEF) "Design of Municipal Wastewater Treatment Plants" (4th edition); (2) WEF's Manual of Practice No.34 entitled "Nutrient Removal"; (3) "Biological Nutrient Removal in Advanced Wastewater Treatment Plants: Design and Operational Considerations," a seminar presented to department staff by Glen Daigger (May 2011); (4) "Phosphorus Removal - Tips for Operators, Trainers, and Design Engineers," a WEF Webcast (June 2011); (5) "Biological Nutrient Removal," a seminar presented to department staff by Ron Schuyler (June 2011); (6) "Basics of

Biological Nutrient Removal," a seminar presented to department staff by Dr. Bill Oldham (February 2009); (7) "Improving Performance of Biological Wastewater Treatment Systems," an METC sponsored course (August 2008); (8) "2009 Nutrient Removal Conference," a WEF sponsored course; and (9) "2007 Nutrient Removal Conference," a WEF sponsored course.

DEQ-2, Section 96

This section addresses design standards for Sequencing Batch Reactor (SBR) wastewater treatment systems. The board is proposing to add this new section to DEQ-2 to ensure that key design components and requirements are addressed in the design of SBR facilities to optimize treatment and operability. The board finds that the inclusion of this new information in DEQ-2 is necessary so that owners and operators of public sewage systems have the necessary design standards for installing SBR treatment as a means to meet future permit limits for nitrogen and phosphorus.

The design standards proposed for inclusion in this section are supported by information from: (1) the parent document; (2) WEF's document entitled "Design of Municipal Wastewater Treatment Plants" (4th edition); (3) Texas Commission on Environmental Quality's "Chapter 217 - Design Criteria for Domestic Wastewater Systems"; (4) "Aqua SBR Design Manual"; and (5) State of Washington Department of Ecology's "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 97

This section addresses design standards for Membrane Bioreactors (MBR) wastewater treatment systems. The board is proposing to add this new section to ensure that key design components and requirements are addressed in the design of MBR facilities to optimize treatment and operability. The board finds that the inclusion of this new information in DEQ-2 is necessary so that owners and operators of public sewage systems have the necessary design standards for installing MBR treatment as a means to meet future permit limits for nitrogen and phosphorus.

The design standards proposed for inclusion in this section are supported by information from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition) and the "2008 Membrane Technology," which is a WEF sponsored course.

DEQ-2, Section 98

This section addresses approval for other biological processes not covered in DEQ-2. This new section refers the reader to Section 53.2, which contains the requirements for approval and use of innovative technologies not covered in DEQ-2.

DEQ-2, Section 102.2

This section addresses chlorine dosages. The board is proposing to amend

this section by adding dosage requirements for lagoon facilities and changing trickling films to fixed films, which is a more general term and includes rotating biological contactor systems as well.

DEQ-2, Section 102.31

This section addresses the storage of chlorine gas cylinders. The board is proposing to amend this section by making the "recommendation," that chlorine gas cylinders be stored upright, a "requirement." Proper storage will enhance operator safety.

DEQ-2, Section 102.32

This section addresses the storage of chlorine gas in one-ton containers. The board is proposing to amend this section by adding language that states a means for securing the containers must be provided. Proper storage will enhance operator safety.

DEQ-2, Section 102.45

This section addresses piping requirements for chlorine disinfection systems. The board is proposing to amend this section by adding recommended language from the parent document, which requires that a chlorine piping system be color coded to ensure that interconnection between the chlorine and sodium hydroxide systems cannot occur. These amendments will promote operator safety.

DEQ-2, Section 102.511

This section addresses the use of locker-type chlorine enclosures for small systems. The board is proposing to amend this section by adding language from Section 5.4.2 of Circular DEQ-1, entitled "Standards for Water Works" (2006 edition). This amendment will provide cost savings to small systems.

DEQ-2, Section 102.53

This section addresses heating requirements for chlorination rooms. The board is proposing to amend this section by adding recommended language from the parent document, which allows liquid hypochlorite to be stored in unheated areas.

DEQ-2, Section 102.6

This section addresses sampling and testing associated with chlorine disinfection. The board is proposing to amend this section by adding clarifying language that states sampling must be done in accordance with permit requirements.

DEQ-2, Section 103.2

This section addresses dechlorination chemical dosages. The board is proposing to amend this section by adding recommended language from the parent document, which includes dosage requirements for sodium thiosulfate and sodium sulfite.

DEQ-2, Section 103.42

This section addresses mixing requirements for dechlorination systems. The board is proposing to amend this section by adding language from the parent document, which recommends that the chemicals be introduced at a point of adequate hydraulic turbulence or requires that mechanical mixing be provided.

DEQ-2, Section 103.51

This section addresses the storage of dechlorination chemicals. The board is proposing to amend this section by making the "recommendation," that sulfur dioxide housing guidelines follow those used for chlorine gas, a "requirement." This amendment will promote operator safety.

DEQ-2, Section 104

This section addresses ultraviolet (UV) radiation disinfection systems. The board is proposing to amend this section by expanding its content to include both open channel and closed vessel UV units and providing additional requirements that relate to the characterization of the wastewater, system hydraulics, installation and maintenance considerations, system sizing, electrical provisions, and spare parts needs. Due to safety concerns with chlorine disinfection, and as UV technology has evolved, the use of UV to meet disinfection needs has been on the rise. Expansion of the UV disinfection system section will ensure improved system design and reliability.

DEQ-2, Chapter 110

This chapter addresses supplemental treatment processes with a specific emphasis on phosphorus removal by chemical treatment. The board is proposing to amend this chapter to expand the process design requirements for coagulation, chemical mixing, flocculation, and filtration. This amendment will change the current focus from phosphorus removal to only clarification in general.

DEQ-2, Section 111.123

This section addresses feed water characteristics and conditions that must be considered in the clarification process. The board is proposing to add this new section to ensure that water and solid characteristics, over the range of conditions expected, are defined for the proposed clarification process. The language for this

section was obtained from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 111.21

This section addresses dosage considerations for the coagulation process. The board is proposing to amend this section by adding design considerations and requirements for coagulation processes that use charge neutralization or sweep coagulation. This amendment will ensure that key design parameters are addressed when these processes are proposed. The language for this section was obtained from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 111.22

This section addresses chemical selection for phosphorus removal. The board is proposing to amend this section by adding language from the parent document, which recommends that additional considerations in the chemical selection process. This amendment will ensure a more thorough evaluation regarding chemical selection.

DEQ-2, Section 111.24

This section addresses chemical mixing for the coagulation process. The board is proposing to amend this section by adding design considerations and requirements for mechanical mixers and in-line static mixers. This amendment will ensure that key design parameters are addressed when these devices are used. The language for this section was obtained from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 111.25

This section addresses flocculation for the clarification process. The board is proposing to amend this section by adding design considerations and requirements for flocculation basins. This amendment will ensure that key design parameters are addressed in the design of flocculation basins. The language for this section was obtained from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition).

DEQ-2, Section 111.26

This section addresses settling for the clarification process. The board is proposing to amend this section by referencing additional settling processes that are located in Circular DEQ- 1. This amendment will give the designer more options for solids separation in the clarification process, as well as provide basic design requirements.

DEQ-2, Section 111.27

This section addresses filtration for the clarification process. The board is proposing to amend this section by establishing filtration design requirements based on treatment objectives and effluent uses. Given the potential for human contact when the use of reclaimed wastewater is approved by the department, the board is proposing to require filtration for reclaimed wastewater that is equivalent to the filtration required in the drinking water industry. Due to the variety of filters available and accompanying design requirements, the board is proposing language that requires compliance with Circular DEQ-1, Section 4.2 (Filtration), rather than repeat those requirements in DEQ-2. This amendment will ensure that adequate filtration units are used for the proposed uses.

DEQ-2, Section 111.33

This section addresses dry chemical feed systems for phosphorus removal. The board is proposing to amend this section by adding some additional design requirements from Circular DEQ-1, "Standards for Water Works," for dry chemical feed systems including the use of gravimetric or volumetric feeders and mixing requirements for dissolved solutions. These amendments will improve the delivery of dry chemicals to the treatment process.

DEQ-2, Chapter 120

This chapter addresses design standards and other considerations for irrigation and rapid infiltration systems. The board is proposing to replace and incorporate the existing design standards from DEQ-2 (1999 edition) in Appendix B, "Standards for the Spray Irrigation of Wastewater," and Appendix D, "Standards for Rapid Infiltration Basins," into a new Chapter 120. As proposed, the new chapter 120 will not only include the information from both Appendix B and D, but also expand and clarify the content of the information in the current Appendix B. The new information relating to the irrigation with wastewater is necessary to provide design considerations, including tables and equations, from a document entitled "Process Design Manual for Land Treatment of Municipal Wastewater Effluents," published by the U.S. EPA.

DEQ-2, Section 121

Section 121, formerly Appendix B, provides design standards for the irrigation of wastewater at or below agronomic rates. Notable additions to Section 121 include the development of treatment standards and an associated classification system for reclaimed wastewater used for irrigation and the inclusion of key design components from a document entitled "Process Design Manual for Land Treatment of Municipal Wastewater Effluents," published by the U.S. EPA.

In the current version of DEQ-2, EPA's design manual for land treatment is merely incorporated by reference. In this rulemaking, the board is proposing to insert key portions of the text, tables, and equations from EPA's manual into Section

121, which will simplify the review process by eliminating the need to cross reference against the EPA document. The board is also proposing to enhance the requirements and content of the Operations and Maintenance (O&M) Manual for irrigation with wastewater by requiring a discussion of critical operation tasks and the establishment of a recordkeeping database to track irrigation practices. A comprehensive O&M Manual is necessary to ensure that the irrigation with reclaimed wastewater occurs in accordance with the department's approval.

Other provisions of EPA's manual proposed for inclusion in Section 121 are requirements for buffer zones, access control of the irrigation site, effluent monitoring, and soil testing. These provisions will ensure that public health and any potential receiving waters are protected during land treatment of domestic wastes.

In addition, the board is proposing to include classifications and associated treatment standards for reclaimed wastewater that is applied to land at or below agronomic rates. The new classes and standards that are required for irrigation uses at agronomic rates are identified in Section 121.3. That section establishes four classifications of reclaimed wastewater that differ by the degree of additional treatment required for each class following secondary treatment, as specified in 40 CFR Part 133. The four classifications of reclaimed wastewater that are identified in Section 121.3 require less treatment than classes that meet the definition of "unrestricted reclaimed wastewater" that are included in revised Appendix B. A more detailed explanation of the derivation of the four classes and associated treatment standards is provided in the board's reasons for revising Appendix B. The board is proposing to adopt these four classifications and associated treatment standards for land treatment of effluent, because the additional treatment requirements specified in Section 121.3, along with the monitoring, reporting, and design requirements proposed for adoption in Section 121, will ensure that public health and the beneficial uses of any potential receiving water will be protected.

DEQ-2, Section 122

Section 122, formerly Appendix D, provides design standards for rapid infiltration systems. The board is proposing to revise Section 122 by including tables and text from EPA's document entitled "Process Design Manual for Land Treatment of Municipal Wastewater Effluents" (2006 edition), relating to the design of rapid infiltration systems. These additions from EPA's manual include hydraulic loading rates, infiltration/percolation basin loading requirements, and minimum number of cells. In addition, the board is proposing to include design guidance for the use of subsurface absorption cells, also known as ground water infiltrators, for the disposal of treated effluents in Section 12.24, as an addition to traditional "open basin" design requirements. The board is proposing these revisions to provide clarity to the design requirements for rapid infiltration systems.

DEQ-2, Appendix A, Section A.11

This section addresses the handling of septage at wastewater treatment facilities. The board is proposing to amend this section by adding language from the parent document, which recommends that grease not be hauled to wastewater

treatment plants for disposal.

DEQ-2, Appendix A, Section A.12

This section addresses the characterization of septage. The board is proposing to amend this section by adding language from the parent document, which recommends that the septage source be sampled and analyzed with consideration of those results in the design of septage receiving and treatment systems.

DEQ-2, Appendix A, Section A.25

This section addresses the point of introduction of septage into the wastewater treatment process. The board is proposing to amend this section by recommending that septage enter the treatment process upstream, or within the headworks of the facility, and clarifying that other points of introduction require adequate justification.

DEQ-2, Appendix A, Section A.36

This section addresses the location of septage-receiving facilities at wastewater treatment plants. The board is proposing to amend this section by adding language that recommends that the septage-receiving facility be located and designed to allow for the slow release of septage into the treatment system during the nonpeak periods. This addition is necessary to prevent "shock loads" from upsetting the treatment process that can lead to permit violations.

DEQ-2, Appendix A, Section A.50

This section addresses recording devices at septage-receiving facilities. The board is proposing to amend this section by recommending that a key pad, card reader, or similar recording device be installed at septage receiving facilities. This amendment will help track the source and volume of septage received at the facility.

DEQ-2, Appendix B

This new Appendix B establishes design standards and other considerations for public sewage systems that propose to use reclaimed wastewater for other purposes. In Appendix B, the board is proposing to establish requirements for using reclaimed wastewater for a variety of uses that go beyond its use for irrigation at agronomic rates. If adopted, this proposal will expand the allowable reuse alternatives available to public sewage systems in a manner that is consistent with EPA guidance and national design standards. The board's proposal to adopt new Appendix B, in combination with the irrigation reuse standards in Chapter 120, Section 121, is in response to the recent enactment of House Bill 52 (2011), authorizing the board to adopt rules identifying allowable uses of reclaimed wastewater and classifications for those uses. The newly enacted state law also

requires the adoption of treatment, monitoring, and reporting standards tailored to each classification to protect the uses of the reclaimed wastewater and any receiving water. The classification, standards, and allowable uses proposed for adoption in Appendix B are based on EPA guidance and standards established in many other western states. The levels of treatment for each of the proposed classifications have been extensively evaluated by public health agencies, primarily in California, Washington, Florida, and Texas, and have been determined in each of those states to be protective of public health and the environment.

DEQ-2, Appendix B, Section B-2

This section includes definitions that are used throughout Appendix B. These definitions are necessary to describe and define the allowable uses, treatment standards, and other requirements for the use of reclaimed wastewater.

DEQ-2, Appendix B, Section B.3

This section identifies, in tabular form, all of the allowable uses of reclaimed wastewater proposed for adoption by the board and the class of reclaimed wastewater required for each use. The allowable uses identified in this section will provide alternatives for using reclaimed wastewater, in lieu of potable water, for such things as landscape impoundments, firefighting, construction dust control and compaction, industrial use, and aquifer recharge and injection.

DEQ-2, Appendix B, Section B.4

This section establishes treatment standards to achieve the quality of reclaimed water that would be required for each of the various uses identified in B.3, Table B-1. Table B-2 in Section B.4 establishes six classifications of reclaimed wastewater that are differentiated by the degree of additional treatment provided following secondary treatment, which is applicable to each class. The highest degree of treatment within the classification system is required for Class A-1 and B-1 reclaimed waters. These waters not only meet the various treatment standards used or recommended by other states and EPA, but must also meet Montana's nondegradation requirements prior to reuse.

DEQ-2, Appendix B, Section B.5

This section establishes requirements for the conveyance of reclaimed wastewater. The board is proposing to require compliance with the standards adopted by the board for the conveyance of drinking water, set forth in Circular DEQ-1. The board is proposing this approach because reclaimed wastewater is typically delivered to the place of reuse in the same manner as drinking water. Therefore, Section B.5 requires compliance with the standards in Circular DEQ-1 for drinking water pumping facilities (DEQ-1, Chapter 6), storage tanks and basins (DEQ-1, Chapter 7), and delivery piping, trenching, and bedding (DEQ-1, Chapter 8). In addition, Section B.5 requires the use of purple piping or marking to identify

reclaimed wastewater conveyance systems. This last requirement is based upon EPA guidelines for water reuse.

DEQ-2, Appendix B, Section B.7

This section establishes requirements for fencing and advisory signs as a means of notifying the public and protecting public health when appropriate to do so. The board is proposing to adopt provisions that allow the department to determine when fencing or signs are needed on a case-by-case basis.

DEQ-2, Appendix B, Section B.8

This section requires a written agreement or lease arrangement that secures the land where reclaimed wastewater will be used for a period of 20 years or more. The board is proposing this requirement to avoid situations where the owner of the reclaimed wastewater has no place to send the reclaimed wastewater in the event that a landowner refuses to accept it.

DEQ-2, Appendix B, Section B.9

This section establishes requirements for measuring the flow of reclaimed wastewater on a daily basis and also requires sampling the reclaimed wastewater prior to reuse. The board is proposing to adopt these provisions to ensure that the quality and amount of reclaimed wastewater complies with the department's approval of the reuse project.

DEQ-2, Appendix B, Section B.10

This section establishes specific requirements for an O&M Manual for various uses of reclaimed wastewater. The requirements in this section are tailored to each use so that, when prepared, the manual establishes clear requirements for the operation, treatment, monitoring, and recordkeeping of reclaimed wastewater. This section also authorizes the department to establish and require project-specific operations and monitoring when justified by the project. The board is proposing these requirements to ensure that the reclaimed wastewater system is operated and maintained, according to the department's approval, so that public health and the environment are protected.

DEQ-2, Appendix C

This appendix addresses design standards and considerations for alternative sewer collection systems. The board is proposing to amend Appendix C by expanding its content to include information on small diameter gravity systems, septic tank effluent pump systems, grinder pump systems, and their associated requirements with regard to system hydraulics, material considerations, and connection to conventional sewer systems. The proposed expansion of the appendix requires these systems to have an O&M Manual prior to system start-up

and provides guidance on the type of information that must be included in the manual. The standards developed in Appendix C are supported by information from the State of Washington Department of Ecology's document entitled "Criteria for Sewage Works Design" (2008 edition); EPA's document entitled "Alternative Wastewater Collection Systems" (October 1991); and EPA's document entitled "Decentralized Systems Technology Fact Sheet Small Diameter Gravity Sewers" (September 2000).

DEQ-2, Appendix D

This appendix establishes guidelines for sewer rehabilitation. The board is proposing a new Appendix D to provide general information and guidance regarding rehabilitation techniques for sewer mains, sewer service connections, and manholes, which do not require extensive trench excavation and pipe replacement. Rehabilitation methods covered in the appendix include sliplining, cured-in-place pipe, and pipe bursting. The guidelines developed in the new Appendix D are supported by information from EPA's document entitled "Collection Systems O&M Fact Sheet Trenchless Sewer Rehabilitation" (September 1999).

DEQ-2, Appendix E

This appendix addresses required information on capacity development for wastewater systems. The board is proposing a new Appendix E in order to provide the department with the information necessary for its review and evaluation of a proposed new system. The information required in Appendix E includes management, operation, maintenance, and financing of the system. By requiring the submission of this information to the department, the department will be able to evaluate a new system for proper system maintenance, operation, and financial planning that will provide long-term stability of a new system. The language proposed for inclusion in Appendix E is based on language taken from Appendix A of Circular DEQ-1, entitled "Standards for Water Works" (2006 edition). This proposed addition of the information in new Appendix E is necessary to meet the requirements of 75-6-103(2)(f), MCA, which requires the board to adopt rules concerning the technical, managerial, and financial capacity of a proposed public sewage system to ensure that the system is capable of meeting the applicable requirements in DEQ-2.

4. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to ejohnson@mt.gov, no later than 5:00 p.m., August 7, 2012. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

5. Katherine Orr, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the

hearing.

6. The board and department maintain a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supply; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to Elois Johnson at ejohnson@mt.gov, or may be made by completing a request form at any rules hearing held by the board.

7. The bill sponsor contact requirements of 2-4-302, MCA, do not apply.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

/s/ James M. Madden
JAMES M. MADDEN
Rule Reviewer

BY: /s/ Joseph W. Russell
JOSEPH W. RUSSELL, M.P.H.,
Chairman

DEPARTMENT OF ENVIRONMENTAL
QUALITY

BY: /s/ Richard H. Oppen
RICHARD H. OPPEN, Director

Certified to the Secretary of State, June 11, 2012.

1 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
2 **AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY**
3 **OF THE STATE OF MONTANA**

4 **In the matter of the amendment of**
5 **ARM 17.30.1001, 17.30.1022,**
6 **17.36.345, 17.36.914, 17.38.101,**
7 **17.38.102, 17.38.103, 17.38.106,**
8 **17.50.811, 17.50.815, and 17.50.819**
9 **pertaining to definitions, exclusions**
10 **from permit requirements,**
11 **subdivisions, wastewater treatment**
12 **systems, plans for public water**
13 **supply or wastewater system, fees,**
14 **operation and maintenance**
15 **requirements for land application**
16 **or incorporation of septage, grease**
17 **trap wasters, and incorporation by**
18 **reference**

PRESIDING OFFICER REPORT

12 1. On July 27, 2012, at 9 a.m., the undersigned Presiding Officer, with
13 the Board of Environmental Review in attendance, presided over and conducted the
14 public hearing held in Room 111 of the Metcalf Building, 1520 East Sixth Avenue,
15 Helena, Montana, to take public comment on the above-captioned proposed
16 amendments. The proposed amendments include the following: (1) adopt the
17 August 2012 version of Department Circular DEQ-2 ("DEQ-2") which updates
18 current design standards, adds new design standards to accommodate improved
19 technology and provides treatment standards and associated classifications for
20 wastewater that will be reused; (2) amend Montana's rules regulating the design and
21 construction of public sewage systems in ARM 17.38.101, 17.38.102 and 17.38.103
22 in order to clarify existing language and add requirements related to the
23 department's approval of proposals to use reclaimed wastewater; (3) amend ARM
24 17.30.1022 to provide a ground water permit exemption for certain classes of
25 reclaimed wastewater; (4) add definitions in ARM 17.320.1001 to limit the new
26 exemption to specific classes of reclaimed wastewater.

1 2. Notice of the hearing was contained in the Montana Administrative
2 Register (MAR), Notice No. 17-336, published on June 21, 2012, in Issue No. 12 at
3 pages 1169 through 1221. A copy of the notice is attached to this report.

4 (Attachments are provided in the same order as they are referenced in this report.)

5 3. The hearing began at 9 a.m. The hearing was recorded by Ms. Laurie
6 Crutcher.

7 4. There were no public comments or testimony received. At the
8 hearing, the Presiding Officer identified and summarized the MAR notice and read
9 the Notice of Function of Administrative Rule Review Committee as required by
10 Mont. Code Ann. § 2-4-302(7)(a).

11 **SUMMARY OF HEARING**

12 5. Mr. Paul LaVigne, with the Planning, Prevention and Assistance
13 Division of the Montana Department of Environmental Quality (“Department”)
14 submitted a written statement and gave a brief oral summary of the amendments at
15 the hearing. (The written statement is attached.)

16 6. No other testimony or written comments were submitted.

17 7. A written memorandum was submitted from the Department staff
18 attorney, Mr. David Dennis with HB 521 and HB 311 reviews of the proposed
19 amendments and a Private Property Assessment Act Checklist. (Mr. Dennis’
20 memorandum is attached to this report.)

21 8. As to the HB 521 analysis, it is concluded that none of the proposed
22 amendments would make the state rules more stringent than comparable federal
23 regulations or guidelines concerning corresponding federal water quality rules or
24 standards. Therefore, no written findings are required pursuant to Mont. Code Ann.
25 § 75-5-203 and 75-5-309.

26 9. With respect to HB 311 (the Private Property Assessment Act, Mont.
27 Code Ann. §§ 2-10-101 through 105), the Board is required to assess the taking or

1 damaging implications of a proposed rule or amendments affecting the use of
2 private real property. This rulemaking affects the use of private real property. A
3 Private Property Assessment Act Checklist was prepared, which shows that the
4 proposed amendments do not have taking or damaging implications. Therefore, no
5 further assessment is required.

6 10. The period to submit comments ended at 5 p.m. on August 7, 2012.

7 **PRESIDING OFFICER COMMENTS**

8 11. The Board has jurisdiction to make the proposed amendments. See
9 Mont. Code Ann. §§ 75-5-201, 75-5-401, 75-4-104, 75-6-103, 75-6-103, 75-6-121,
10 75-6-103, 75-6-108, 75-10-204, 75-10-1202.

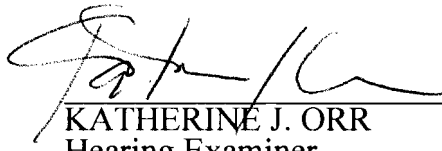
11 12. The conclusions in the memorandum of Mr. Dennis concerning House
12 Bill 521 (1995) and House Bill 311 (1995) are correct.

13 13. The procedures required by the Montana Administrative Procedure
14 Act, including public notice, hearing, and comment, have been followed.

15 14. The Board may adopt the proposed rule amendments, reject them, or
16 adopt the rule amendments with revisions not exceeding the scope of the public
17 notice.

18 15. Under Mont. Code Ann. § 2-4-305(7), for the rulemaking process to
19 be valid, the Board must publish a notice of adoption within six months of the date
20 the Board published the notice of proposed rulemaking in the Montana
21 Administrative Register, or by December 21, 2012.

22 DATED this 14th day of September, 2012.

23
24 
25 KATHERINE J. ORR
26 Hearing Examiner
27 Agency Legal Services Bureau
1712 Ninth Avenue
P.O. Box 201440
Helena, MT 59620-1440

MEMORANDUM

To: Board of Environmental Review
From: David Dennis, DEQ Staff Attorney
Re: Stringency Review and Takings Checklist for Proposed Amendments to ARM 17.30.1001, 17.30.1022, 17.36.345, 17.36.914, 17.38.101, 17.38.102, 17.38.103, 17.38.106, 17.50.811, 17.50.816, and 17.50.819 - MAR Notice No. 17-336.

Date: August 22, 2012

STRINGENCY REVIEW

Prior to adopting a rule that is more stringent than a comparable federal standard or guidelines, § 75-5-203, MCA, requires the Board of Environmental Review to make certain written findings after a public hearing and after receiving public comment. No written findings are required if the more stringent standard is "required by state law." In addition, § 75-5-309, MCA, requires the Board of Environmental Review to make certain written findings that are accompanied by a Board opinion evaluating the environmental and public health information in the record prior to adopting a rule that is more stringent than corresponding federal draft or final regulations, guidelines, or criteria.

In summary, the proposed action of the Board will accomplish the following: (1) adopt the August 2012 version of Department Circular DEQ-2 ("DEQ-2"), which updates current design standards, adds new design standards to accommodate improved technology, and provides treatment standards and associated classifications for wastewater that will be reused; (2) amend Montana's rules regulating the design and construction of public sewage systems in ARM 17.38.101, 17.38.102, and 17.38.103 in order to clarify existing language and add requirements related to the department's approval of proposals to use reclaimed wastewater; (3) amend ARM 17.30.1022 to provide a ground water permit exemption for certain classes of reclaimed wastewater; (4) add definitions in ARM 17.320.1001 to limit the new exemption to specific classes of reclaimed wastewater.

ARM 17.30.1001(14) and (17)

The proposed amendment to ARM 17.30.1001 incorporates the statutory definition of "reclaimed wastewater" from § 75-6-102, MCA, and adds a new definition of "unrestricted reclaimed wastewater" in (17). The adoption of these definitions will ensure that only reclaimed wastewater that is treated to the highest standards in DEQ-2 will qualify for an exemption from the ground water permit requirements.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.30.1022(1)(g)

The proposed amendment to ARM 17.30.1022(1)(g) will add language clarifying that a ground water permit exemption is available only to public sewage systems that apply reclaimed wastewater at agronomic rates. By requiring wastewater to be applied at agronomic rates (i.e., the controlled application of wastewater in a manner that ensures that all of the effluent is used by vegetation and no impacts to ground water will occur), the amendment limits the exemption to land application methods that do not result in impacts to ground water.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.30.1022(1)(h)

The proposed amendment adding (h) to ARM 17.30.1022(1)(h) will exempt discharges from public sewage systems that meet the definition of "unrestricted reclaimed wastewater." Under that definition, a discharge must be treated to the highest standards proposed for adoption in DEQ-2 prior to being used for other purposes. The proposed exemption would allow a public sewage system that meets Class A-1 or B-1 standards to discharge the treated water without first obtaining a ground water permit from the department.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.36.345, 17.36.914, and 17.50.819

The board and department are amending these rules to update the incorporation by reference of DEQ-2, 2012 edition, to make the department's review under subdivisions and solid waste programs consistent with the department's review of public sewage systems under ARM 17.38.101.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.101, 17.38.102, 17.38.103

The proposed amendments to ARM 17.38.101, 17.38.102, and 17.38.103 replace the terms "wastewater system" and "sewer," as used throughout the rules, with

the term "public sewage system." Since the board's authority under § 75-6-103, MCA, is expressly limited to adopting rules governing public sewage systems, the board is proposing this amendment to be consistent with its statutory authority.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.101(8)(c)

The proposed amendment to ARM 17.38.101 implements recent legislative amendments to § 75-6-103, MCA, which governs the department's review and approval of public sewage systems. The statute requires the board to adopt rules establishing allowable uses and associated classifications of reclaimed wastewater and also adopt monitoring, reporting, and recordkeeping requirements tailored to each classification. In response to these directives, ARM 17.38.101(8) adds (c) specifying that the department's approval of a reclaimed wastewater project must require compliance with the treatment standards and reporting requirements currently being proposed for adoption in DEQ-2.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.101(17)

The legislative amendments to § 75-6-103, MCA, require the adoption of rules requiring applicants requesting the department's approval of a proposal to use reclaimed wastewater to first obtain from the Department of Natural resources and Conservation "any necessary approvals required under Title 85, MCA." In response to this directive, the board is proposing to add a new (17) to ARM 17.38.101, which prohibits the department or a delegated division of local government from approving a reclaimed wastewater project until the applicant has obtained any necessary approvals under Title 85, MCA.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.101(18)

The amendments to § 75-6-103, MCA, also require the adoption of a rule prohibiting the use of reclaimed wastewater, unless the particular use is allowed under

the board's rules. The amendments also require a rule prohibiting the use of reclaimed wastewater, unless it has been treated to meet the standards adopted by the board for the particular use. In response to these directives, the board is proposing to add a new (18) to ARM 17.38.101. Under (18), an owner or operator of a public sewage system may not use reclaimed wastewater for a use that has not been adopted by the board in DEQ-2. The new section also prohibits an owner or operator from using reclaimed wastewater that has not been treated to the standards for that particular use specified in DEQ-2.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.101(19)

The board is proposing to amend ARM 17.38.101(19) in order to incorporate the board's proposed revisions to DEQ-2 into rules regulating the design and construction of public sewage systems. This amendment is necessary to provide the department with authority to require compliance with the new requirements proposed for adoption in DEQ-2, including requirements for reclaimed wastewater.

Neither the proposed revisions to DEQ-2 nor the amendment to ARM 17.38.101(19), incorporating the revisions to DEQ-2 by reference, render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.38.106

As a result of the proposed revisions to DEQ-2, an adjustment to the fees in ARM 17.38.106(2)(b), Schedule II, is necessary to account for the removal of the design standards currently set forth in Appendix B and D and the consolidation of those design standards into new Chapter 120.

The proposed amendments do not render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203, and 75-5-309, MCA.

ARM 17.50.811 and 17.50.815

These rules are being amended to change the title of DEQ-2 to be consistent with the other changes in the rule notice.

Modifications of Department Circular DEQ-2

The modifications to Circular DEQ-2 primarily are based upon guidelines approved or developed by EPA. Neither the modifications, nor their incorporation by reference into the Administrative Rules of Montana as described above and in MAR Notice No. 17-336, render any water quality rule or standard more stringent than any corresponding federal water quality rule or standard. Therefore, no written findings are required pursuant to §§ 75-5-203 and 75-5-309, MCA.

TAKINGS REVIEW

The Private Property Assessment Act, codified as § 2-10-101, MCA, requires that, prior to adopting a proposed rule that has taking or damaging implications for private real property, an agency must prepare a taking or damaging impact statement. "Action with taking or damaging implications" means:

[A] proposed state agency administrative rule, policy, or permit condition or denial pertaining to land or water management or to some other environmental matter that if adopted and enforced would constitute a deprivation of private property in violation of the United States or Montana Constitution.

§ 2-10-103, MCA.

Section 2-10-104, MCA, requires the Montana Attorney General to develop guidelines, including a checklist, to assist agencies in determining whether an agency action has taking or damaging implications. I have completed an Attorney General's "Private Property Assessment Act Checklist" pertaining to the Board's adoption of proposed revisions in MAR Notice No. 17-336, which is attached to this memo. Based upon completion of the checklist, the proposed revisions do not have taking or damaging implications. Therefore, no further HB 311 assessment is required.

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST FOR AMENDMENT OF SEPTIC
PUMPER RULES AS PROPOSED IN MAR NOTICE 17-201

YES NO

X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights or some other environmental matter?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)


Signature of Reviewer

8/22/2012
Date

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF AMENDMENT AND
17.30.1001, 17.30.1022, 17.36.345,)	REPEAL
17.36.914, 17.38.101, 17.38.102,)	
17.38.103, 17.38.106, 17.50.811,)	(WATER QUALITY)
17.50.815, and 17.50.819 pertaining to)	(SUBDIVISIONS/ON-SITE
definitions, exclusions from permit)	SUBSURFACE WASTEWATER
requirements, subdivisions, wastewater)	TREATMENT)
treatment systems, plans for public water)	(PUBLIC WATER AND SEWAGE
supply or wastewater system, fees,)	SYSTEM REQUIREMENTS)
operation and maintenance)	(SOLID WASTE MANAGEMENT)
requirements for land application or)	
incorporation of septage, grease trap)	
wastes, and incorporation by reference)	

TO: All Concerned Persons

1. On June 21, 2012, the Board of Environmental Review and the Department of Environmental Quality published MAR Notice No. 17-336 regarding a notice of public hearing on the proposed amendment of the above-stated rules at page 1169, 2012 Montana Administrative Register, issue number 12.
2. The board and the department have amended the rules exactly as proposed.
3. No public comments or testimony were received.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

JAMES M. MADDEN
Rule Reviewer

By: _____
JOSEPH W. RUSSELL, M.P.H.
Chairman

Certified to the Secretary of State, _____, 2012.

**BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR PROPOSED RULE AMENDMENT AND REPEAL**

Agenda Item # III.B.2.

Agenda Item Summary – The Department requests approval of rulemaking to adopt changes to Department Circular DEQ-7 (DEQ-7) incorporated by reference in ARM 17.24.645, 17.24.646, 17.30.502, 17.30.619, 17.30.637, 17.30.702, 17.30.1001, and repeal of 17.30.616, and 17.30.658.

The Department also requests approval of rulemaking to amend ARM 17.30.602, 17.30.629 and 17.30.635, which are included in the surface water quality rules found in ARM Title 17, Chapter 30, Subchapter 6.

The changes to DEQ-7 include adopting surface and ground water standards for: (1) new numeric water standards for 5 pesticides and revised standards for 12 pesticides; (2) new and revised aquatic life standards for 2 parameters; (3) new and revised human health standards for 9 parameters; (4) revision of the toxic and carcinogenic categories of 12 parameters; (5) adoption of new and revised required reporting values for 213 parameters; (6) revision of 8 footnotes; (7) correction of 28 numeric standard source attributions; (8) deletion of references to the narrative water quality standards for nutrients; (9) elimination of manganese from DEQ-7 as well as elimination of references to secondary maximum contaminant limits; and (10) revision of the introduction.

The proposed revisions to Subchapter 6 fall into five categories: (1) repeal and amendment of two definitions; (2) repeal of two federal regulations incorporated by reference; (3) amendment of the C-3 classification; (4) removal of sewage and mining treatment provisions to eliminate duplication and inconsistencies with Montana Pollutant Discharge Elimination System rules and the Strip and Underground Mine Reclamation Act; and (5) repeal of the G-1 classification for ponds and reservoirs.

List of Affected Board Rules – ARM 17.24.645, 17.24.646, 17.30.502, 17.30.602, 17.30.619, 17.30.629, 17.30.635, 17.30.637, 17.30.702, 17.30.1001, 17.30.616, and 17.30.658.

List of Affected Department Rules – ARM 17.36.345, 17.55.109, 17.56.507, 17.56.608 (all changes are incorporation by reference to DEQ-7).

Affected Parties Summary – These proposed changes would affect parties required to monitor surface or ground water quality due to real or potential contamination from remediation sites, underground storage tanks, and subdivisions. Also affected would be strip and underground mine sites required to monitor ground water and surface water. Additionally, the agricultural community may be affected by the proposed changes and additions to pesticide standards.

Scope of Proposed Proceeding – The Board is considering final action on adoption of amendments and repeals to the above-referenced rules as proposed in the Montana

Administrative Register.

Background – In general, the amendments to Department Circular DEQ-7 are being proposed to ensure that the numeric water quality standards reflect the best current science, to correct errors, to provide clarity and consistency of terminology, and to avoid duplication and inconsistency with narrative standards in both the surface water and ground water rules.

The proposed amendments to DEQ-7 would incorporate interim standards for five new pesticides and revise existing interim standards for twelve pesticides. These pesticides are agricultural chemicals that have no federally-promulgated standard adopted by EPA for the protection of water quality. Pursuant to 80-15-201(3) and 80-15-203(2)(a), MCA, the Board is required to adopt an “interim numerical standard” for ground water when there is no federally-promulgated or published standard for an agricultural chemical that has been detected in Montana’s ground water. The Board is also required to review the interim standard whenever EPA promulgates a standard for the agricultural chemical at issue (80-15-201(3), MCA) or as new scientific information becomes available. The Department, in conjunction with EPA, has developed interim standards for five new pesticides detected in Montana’s ground water and has revised the existing interim standards for 12 pesticides.

The proposed amendments to DEQ-7 would incorporate one new and one revised aquatic life standard to reflect the national recommended 304(a) criteria promulgated by the U.S. Environmental Protection Agency (EPA). In addition, five new human health standards based on EPA’s Maximum Contaminant Levels and one human health standard based on EPA’s 304(a) criteria are proposed for inclusion in DEQ-7. Revisions to three human health standards are also proposed to correct errors or to reflect new science.

The proposed amendments to DEQ-7 would change the categories (i.e., harmful, carcinogenic, or toxic) for 12 parameters and adopt or revise the Required Reporting Values (RRV’s) for 213 parameters. Changes to the sources of information for 28 parameters are also proposed to reflect new information.

Other revisions to DEQ-7 include changes to the footnotes and the introduction. These changes are being proposed for clarification and consistency of interpretation.

The proposed revisions to the surface water standards in Subchapter 6 fall into five categories: (1) repeal and amendment of definitions to ensure consistency with statutory definitions; (2) repeal of two federal regulations incorporated by reference in order to eliminate duplication with Montana Pollutant Discharge Elimination System (MPDES) rules; (3) amendment of the C-3 classification to avoid conflict with Montana’s nondegradation requirements; (4) removal of sewage and mining treatment provisions to eliminate duplication and inconsistencies with MPDES rules and the Strip and Underground Mine Reclamation Act; and (5) repeal of the G-1 classification for ponds and reservoirs constructed for the disposal of coal bed methane water.

Hearing Information – Katherine Orr conducted a public hearing on July 12, 2012, on the proposed amendments. The Presiding Officer’s Report and the draft Notice of Amendment and Repeal, with public comments and proposed responses, are attached to this executive summary.

Board Options – The Board may:

1. Adopt the proposed amendments and repeals as set forth in the attached Notice of Public Hearing on Proposed Amendment and Repeal;
2. Adopt the proposed amendments with revisions and repeals that the Board finds are appropriate and that are consistent with the scope of the Notice of Public Hearing on Proposed Amendment and Repeal and the record in this proceeding; or
3. Decide not to adopt the amendments and repeals.

DEQ Recommendation – The Department recommends adoption of the proposed amendments and repeals as set forth in the attached Notice of Public Hearing on Proposed Amendment and Repeal.

Enclosures –

1. Notice of Public Hearing on Proposed Amendment and Repeal
2. Presiding Officer's Report
3. Public Comments
4. HB 521 and 311 Analysis
5. Draft Notice of Amendment and Repeal

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF PUBLIC HEARING ON
17.24.645, 17.24.646, 17.30.502,)	PROPOSED AMENDMENT AND
17.30.602, 17.30.619, 17.30.629,)	REPEAL
17.30.635, 17.30.637, 17.30.702,)	
17.30.1001, 17.36.345, 17.55.109,)	(RECLAMATION)
17.56.507, and 17.56.608 pertaining to)	(WATER QUALITY)
Department Circular DEQ-7, definitions,)	(SUBDIVISIONS)
incorporations by reference, C-3)	(CECRA)
classification standards, general)	(UNDERGROUND STORAGE
treatment standards, and general)	TANKS)
prohibitions, and the repeal of ARM)	
17.30.616 and 17.30.658 pertaining to)	
water-use classification and descriptions)	
for ponds and reservoirs constructed for)	
the disposal of coal bed methane water)	
and G-1 classification standards)	

TO: All Concerned Persons

1. On July 12, 2012, at 1:30 p.m., the Board of Environmental Review and the Department of Environmental Quality will hold a public hearing in the Conference Room, Agency Legal Services Bureau, Department of Justice, 1712 Ninth Avenue, Helena, Montana, to consider the proposed amendment and repeal of the above-stated rules.

2. The board and department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Elois Johnson, Paralegal, no later than 5:00 p.m., June 18, 2012, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.24.645 GROUND WATER MONITORING (1) through (5)(c) remain the same.

(6) Methods of sample collection, preservation, and sample analysis must be conducted in accordance with 40 CFR Part 136 titled "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July 2003) and the department's document titled "Department Circular WQB DEQ-7, Montana Numeric Water Quality Standards," ~~January 2004~~ August 2012 edition. Copies of Department Circular

WQB DEQ-7 are available at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901. Sampling and analyses must include a quality assurance program acceptable to the department.

(7) and (8) remain the same.

AUTH: 82-4-204, MCA

IMP: 82-4-231, 82-4-232, MCA

REASON: The board is proposing to amend Montana's reclamation and water quality rules in ARM 17.24.645, 17.24.646, 17.30.502, 17.30.619, 17.30.702, and 17.30.1001, to incorporate proposed revisions to Montana's numeric water quality standards contained in Department Circular DEQ-7 (August 2010 edition). The proposed revisions to the Circular fall into ten categories:

(1) adopt new surface and ground water standards for five pesticides recently detected in Montana's ground water and revise the existing standards for 12 pesticides based on new information;

(2) adopt new and revised aquatic life standards for two parameters, in order to be consistent with the U.S. Environmental Protection Agency's (EPA's) national recommended water quality criteria, promulgated under Section 304(a) of the federal Clean Water Act;

(3) adopt new and revised human health standards for nine parameters in order to be consistent with EPA's recent promulgation of new or revised criteria under Section 304(a) of the federal Clean Water Act and the Safe Drinking Water Act;

(4) revise the categories of 12 parameters currently listed in Department Circular DEQ-7 pertaining to toxins and carcinogens;

(5) adopt new and revised Required Reporting Values (RRV) for 213 parameters currently listed in Department Circular DEQ-7 based on a recent review of minimum detection limits achieved by laboratories in Montana;

(6) adopt revisions to eight footnotes to correct errors, eliminate text, or add information, as well as add three footnotes to clarify quantitation for newly listed parameters;

(7) correct 28 errors concerning the sources of information obtained from EPA. For instance, a parameter has been attributed to the Non Priority Pollutant (NPP) list when in fact the information was obtained from the Priority Pollutant list (PP); and

(8) delete all references to the narrative water quality standard for nutrients in surface water by specifically deleting the parameters listed as "Nitrogen, total inorganic (as Nitrogen N)" and "Phosphorus, inorganic," and modifying footnote 8 as well. This change is being proposed, in part, due to the department's development of numeric nutrient standards that will be brought to the board for consideration in the upcoming year.

(9) eliminate manganese entirely from DEQ-7 as no numeric aquatic life or human health standards have been adopted for this parameter.

(10) generally revise the introduction to DEQ-7 for clarity and consistency of commonly used terms.

In this rulemaking, the department is proposing to amend ARM 17.36.345 regarding subdivisions, ARM 17.55.109, implementing the Comprehensive Environmental Cleanup and Responsibility Act (CECRA), and ARM 17.56.507 and 17.56.608, implementing the underground storage tank program, in order to incorporate the board's revisions to Department Circular DEQ-7. These amendments are necessary to ensure that the department's programs for the regulation of water quality affected by remediation sites, underground storage tanks, and subdivisions will use the most current version of Montana's numeric water quality standards adopted by the board.

The revisions to Department Circular DEQ-7, and the reasons for them, are summarized below. Copies of Department Circular DEQ-7 with the proposed revisions may be obtained by contacting Rod McNeil at Water Quality Planning Bureau, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901, by phone at (406) 444-5361, or by e-mail at mcneil@mt.gov, or may be obtained online at <http://www.deq.mt.gov/wqinfo/Standards>.

(1) Interim Standards for Pesticides

The board is proposing to adopt numeric water quality standards for five pesticides that were recently detected in ground water by the Montana Department of Agriculture. These pesticides and metabolites are agricultural chemicals that have no federally promulgated standards adopted by EPA for the protection of water quality. In addition, the department has developed revised interim pesticide standards for twelve parameters adopted into Department Circular DEQ-7 during the period from 1998 to 2000. The water quality standards for these twelve parameters were initially developed using data from federal sources available on the internet as of June 1998. Given that new scientific information has become available since the adoption of those standards, the board is proposing to revise the interim water quality standards for ten pesticides described below to reflect current scientific information. The same process of EPA review, also described below, was used to derive both the new and revised interim standards for each pesticide indicated below.

Pursuant to 80-15-201(3), MCA, the board is required to adopt an "interim numerical standard" for ground water when there is no federally promulgated or published standard for an agricultural chemical that has been detected in Montana's ground water. The board is also required to review the interim standard whenever EPA promulgates a standard for the agricultural chemical at issue. 80-15-201(3), MCA.

The department, in conjunction with EPA, has developed interim standards for the following five pesticides detected in Montana's ground water in 2010-2011: Fluroxypyr, Dichlorprop(2,4DP), Fipronil, Myclobutanil and Pyroxsulam. In addition, the department, in conjunction with EPA, has developed revised interim standards for 12 pesticides based on new scientific health-based information. The 12 pesticides are the following: Chlorothalonil, Clopyralid, MCPP, Metalaxyl, Methamidophos, Metsulfuron Methyl, Mirex, Nicosulfuron, Oxydemeton methyl, Primisulfuron Methyl, Tribenuron Methyl, and Triclopyr. The new and revised interim standards were developed using the process recommended by the Region VIII EPA

toxicologist.

The levels set in the interim standards are determined in a two-stage process. First, the department reviews the available scientific literature and does preliminary calculations to determine a level that is protective of human health. The department then determines whether a compound is toxic or carcinogenic by using the Chemical Index List at www.toxnet.nlm.nih.gov or by using EPA's Integrated Risk Information System (IRIS). Depending on the identification of the pesticide as either toxic or carcinogenic, an interim standard is calculated using a chronic reference dose (RfD) for toxins or the oral cancer slope factor for carcinogens. If an RfD is used in the calculation, a Relative Source Contribution (RSC) is also used. The purpose of the RSC is to take into account all environmental sources of input, such as drinking water, food, and air. In the second step, the scientific references selected for these calculations are submitted to EPA for further review by the agency's toxicologist. If a pesticide is defined as carcinogenic, the appropriate cancer slope index is used along with a risk factor of 1×10^{-5} (1 in 100,000) to produce a final interim standard. The EPA has reviewed the proposed interim standards and has determined that they are protective of public health. Supporting documentation used to establish the standards is available from the department.

The board finds that modifying Department Circular DEQ-7 to adopt interim standards for the above-listed pesticides is necessary in order to fulfill its statutory obligation to establish ground water standards for agricultural chemicals that have been detected in Montana's ground water. The board also finds that it is necessary and reasonable to adopt interim standards for surface waters for the protection of human health that address these same pesticides and metabolites. The board could choose to adopt only ground water standards and meet the requirements of state law, but rejects that alternative as inconsistent with the policy of the state to "protect and maintain" all state waters, both surface and ground water. By adopting standards for surface waters as well as ground waters, Montana's surface waters will receive the same protection as ground water whenever state law mandates a ground water standard for an agricultural chemical.

(2) Aquatic Life Standards

(a) New standard: In 2010, the board adopted an acute aquatic life standard for acrolein in response to EPA's publication of a national recommended acute criterion for that parameter. In this rulemaking, the board is now proposing to adopt a chronic aquatic life standard for acrolein in response to EPA's recent promulgation of a chronic criterion for that same parameter.

The board finds it is reasonable and necessary to adopt a chronic aquatic life standard for this pollutant based upon EPA's recommended criteria, because the board does not have the resources necessary to develop aquatic life standards for Montana. In order to ensure that aquatic life in Montana's surface waters is protected from the toxic effects of this chemical, the board finds it necessary to use EPA's recommended criteria as the scientific basis for adopting a standard that ensures the protection of aquatic life from chronic adverse affects.

(b) Revised standards: The board is proposing to revise the acute aquatic life standard for Endrin currently in Department Circular DEQ-7 to correct a previous

error.

In 2010, the board revised the acute aquatic life standards for six parameters to reflect the change in exceedance frequency adopted by the board during the same rulemaking. The revised standards were calculated by dividing the existing acute standards for the six parameters by a factor of two in order to derive an acute standard that was consistent with EPA's 1985 method. The acute aquatic life standard for Endrin was one of the six acute aquatic life standards that were revised by this method. This particular revision, however, was in error, because EPA's guidance indicates that dividing the acute standard for Endrin applies only to saltwater criteria. The revision to the aquatic life standard for Endrin proposed in this rulemaking corrects that error. The board finds it necessary to adopt this revision to make the acute aquatic life standard for Endrin consistent with EPA's 1985 method.

(3) Human Health Standards

The board is proposing to adopt five new human health standards: Sulfone, Bromate, Chlorite, Haloacetic acids, and Dichloroethylene, 1,1-, based upon maximum contaminant levels (MCLs) recently published by EPA under the federal Safe Drinking Water Act.

In addition, the board is proposing to revise the human health standard for two parameters, due to EPA's recent promulgation of an MCL for each of these parameters. This proposed revision will result in changing the existing water quality standard for alpha emitters from 1.5 pico-curies/liter (based on a former Health Advisory analysis) to a standard of 15 pico-curies/liter (based on EPA's promulgation of an MCL for this parameter). The proposed revision will also result in changing the existing water quality standard for metolachlor from 100 µg/liter (based on a former Health Advisory analysis) to 700 µg/liter (based on EPA's promulgation of an MCL for this parameter).

The board is proposing to revise the human health standard for Aldicarb Sulfone in order to correct an error in listing the existing standard.

Finally, the board is proposing to adopt a new human health standard for Hexachlorocyclohexane, based upon EPA's recent promulgation of a human health-based criterion for this NPP under section 304(a) of the Clean Water Act.

The board finds it reasonable and necessary to adopt these new or revised human health standards based upon EPA's recommendation, because the board does not have the resources necessary to develop human health standards using state-sponsored research. In order to ensure that the quality of state waters protects public health, the board finds it necessary to use EPA's recommended criteria as the scientific basis for adopting standards that ensure the protection of human health from adverse effects. For the parameters listed above that are carcinogens, the board is using EPA's recommended criteria to establish human health standards based on a risk level of 1×10^{-5} as required by 75-5-301(2)(b)(i), MCA.

(4) Revisions to the Categories of 12 Parameters

The board is revising the categories of 12 parameters currently listed in Department Circular DEQ-7 as toxic or carcinogenic, based upon EPA's revisions to the manner in which it classifies carcinogens in the IRIS system. Based upon EPA's revisions to IRIS, the board is proposing the following revisions to the existing categories of certain parameters in Department Circular DEQ-7 as described below.

First, the board is proposing to change the category of the following parameters from carcinogenic to toxic: Alachlor, Atrazine, Butylate, Dichlorobenzene, 1,4-, Dichloropropane, 1,2-, Gamma-hexachlorocyclohexane, and Propane, 1,2, Dibromo-3-chloro-. The board is proposing these changes based on new scientific evidence proving that these parameters have no discernable human carcinogenic potential. As such, the board finds it reasonable and necessary to revise the Department Circular DEQ-7 category for these parameters.

Second, the board is proposing to change the category of the following parameters from toxic to carcinogenic: Butyl Benzyl Phthalate, Cadmium, and Nitrobenzene. The board is proposing these changes based on new scientific evidence proving that these parameters have a measurable human carcinogenic potential. As such, the board finds it reasonable and necessary to revise the category for these parameters in Department Circular DEQ-7.

Third, the board is proposing to change the category of the following parameters from harmful to toxic: Phenol and Trichlorophenol, 2,4,5-. The board is proposing these changes due to recent scientific information which has led to the development of chronic reference dose information for these parameters indicating toxicity. As such, the board finds it reasonable and necessary to revise the Department Circular DEQ-7 category for these parameters from harmful to toxic.

(5) Required Reporting Values

The board is proposing to adopt new or revised required reporting values (RRVs) for 213 parameters currently listed in Department Circular DEQ-7.

These proposed changes are due, in part, to significant advances in detection limits that have developed over the past ten years and also in response to EPA guidance. These detection limits, using new EPA-approved procedures promulgated under 40 CFR Part 136, allow the quantification of many pollutants to levels well below the current water quality standards in Department Circular DEQ-7. In contrast, some of the existing RRVs in Department Circular DEQ-7 specify reporting values for many parameters at levels that exceed the water quality standard for the parameter. These reporting values make compliance determinations by the department difficult, if not impossible, to achieve. Consequently, the board is proposing to adopt new or revised RRVs using the procedures summarized below and is also modifying the description of RRVs in Department Circular DEQ-7 for clarity and accuracy. As explained in the revised description, the RRVs proposed for adoption represent the board's "best selection of an appropriate laboratory reporting limit that is sufficiently sensitive to meet the most stringent numeric water quality standard."

The department's RRV calculation primarily uses method detection limits (MDLs) provided by analytical laboratories. MDLs and minimum reporting levels (MRLs) were collected from seven state and commercial labs using methods listed

in 40 CFR Part 136 and the Safe Drinking Water Act, as well as for select methods approved by EPA's Office of Pesticides. The department then calculated RRVs for the parameters in Department Circular DEQ-7 for each method using the 75th percentile of the MDLs obtained from the labs and multiplied the resulting value by 3.18. This method of calculating RRVs is based upon the method set forth in EPA 821-B-04-005 (Revised Assessment of Detection and Quantitation Approaches), as modified to account for MDLs from multiple laboratories.

From the RRVs calculated for each analytical procedure described above, the department selected the RRV for each pollutant closest to 10 percent of the most restrictive standard. In situations where all calculated RRVs for a pollutant were larger than the most restrictive standard or less than 10 percent of the most restrictive standard, the department reviewed the laboratory-provided MRLs, and, if one of the MRLs was closer to 10 percent of the standard, that MRL became the default RRV. Based on this selection procedure, the board is proposing new and revised RRVs for 213 parameters in Department Circular DEQ-7.

The board finds it reasonable and necessary to adopt new and revised RRVs for 213 parameters using the selection method described above, in order to establish RRVs that are sufficient for determining compliance with all applicable water quality standards. If the RRVs are not updated using this selection method, many RRVs would not meet Department Circular DEQ-7 numeric water quality standards, making compliance determination by the department unfeasible, while other RRVs would be too restrictive, making implementation by the laboratories impractical. A copy of Department Circular DEQ-7, with all new or revised RRVs indicated by interlining and underlining, is available for review.

(6) Revisions to the Footnotes of Department Circular DEQ-7

The board is modifying the following footnotes, for the reasons given below:

Footnote (1) is being modified to correct an error. As currently written, the footnote indicates that the categories for toxic, carcinogenic, and harmful parameters are all derived from EPA references. The category for harmful parameters, however, is a state-adopted category and the footnote is being revised to reflect this fact.

Footnote (2) is being modified to add categories from EPA's new scale used in IRIS to identify parameters that are carcinogenic. Since the older 1986 scale and the newer 2005 scale are in simultaneous use to identify parameters as carcinogens, both scales are identified in the footnote as the basis for classifying a particular parameter as carcinogenic.

Footnote (7) is being revised to correct an error. The revised footnote eliminates reference to ammonia concentrations as being related to flow, since they are not. This correction is necessary to clarify the basis for the ammonia standard in Department Circular DEQ-7.

Footnote (8) is being modified to indicate that numeric nutrient criteria for aquatic life will be listed in Department Circular DEQ-12, which will be proposed for adoption in a future rulemaking. Footnote 8 is also being removed as a reference for the aquatic life standards for ammonia, because the existing numeric aquatic life

standards for ammonia will remain within Department Circular DEQ-7 and will not be included in proposed Department Circular DEQ-12.

Footnote (17) is being revised to eliminate I and the Secondary Maximum Contaminant Level (SMCL) as a source for human health standards in Department Circular DEQ-7. Since the board's proposed revisions to the human health standards in this rulemaking eliminate these sources as a basis for these standards, the revision to the footnote is also necessary.

Footnote (19) is being revised to more clearly explain the derivation of RRV values proposed in this rulemaking.

Footnote (23) is being modified to eliminate the current text within that footnote for the reasons given in paragraph (9).

Footnote (24) is being modified to eliminate the current text within that footnote for the reasons given in paragraph (9).

Footnote (37) is being added to explain that the sum of Aldicarb with any of its degradates cannot exceed 7 µg/L, because all of the degradates and their parent compound have a similar mode of action.

Footnote (38) is being added to explain that the measured concentration of Haloacetic acids must include all five of the listed compounds found in the listing.

Footnote (39) is being added to make clear that the cis and trans isomers of Endosulfan (Endosulfan I and Endosulfan II) are to be quantitatively added together with the parent compound (Endosulfan) in determining the total concentration for this parameter.

(7) Correcting Information Sources for 28 Parameters

The board is revising Department Circular DEQ-7 to correct errors and update the sources of information obtained from EPA that were used in the development of the water quality standards for the following parameters, as indicated below:

Parameter	Old Source	New Source
Alpha emitters	HA	MCL
Alpha-chlordane	PP	HA
Beta emitters	HA	MCL
Butylate	HA	MCL
Clopyralid	I	HA
Dichloroethylene, 1,1-	PP	MCL
Gamma chlordane	PP	HA
Gamma-hexachlorocyclohexane	HA	MCL
Imazamethabenz-methyl ester	I	HA
Imazapyr	I	HA
Lead	PP	MCL
MCP	I	HA
Metalaxyl	I	HA
Methamidophos	I	HA
Metsulfuron methyl	I	HA
Mirex	I	NPP

Nicosulfuron	I	HA
Nitrate	MCL	NPP
N-nitrosopyrrolidine	PP	NPP
Oxydemeton methyl	I	HA
P-chloro-m-cresol	PP	OL
Phenol	PP	OL
Primisulfuron, methyl	I	HA
Radon 222	HA	MCL
Thifensulfuron, methyl	I	HA
Triasulfuron	I	HA
Tribenuron, methyl	I	HA
Triclopyr	I	HA

HA = Health Advisory

I = data obtained from federal data sources available on the internet from 1998 to 2000.

MCL = Maximum Contaminant Level

NPP = Non Priority Pollutant Criteria

OL = Organoleptic Pollutant Criteria

PP = Priority Pollutant Criteria

(8) Repealing References to the Narrative Water Quality Standard for Nutrients in Surface Waters

The board is proposing to modify footnote 8 in Department Circular DEQ-7, which references a narrative standard in ARM 17.30.637(1)(e) that prohibits undesirable aquatic growth in surface waters. Currently, Footnote 8 indicates that various nutrient parameters in Department Circular DEQ-7 are subject to this narrative standard, because none of the nutrient parameters have a numeric water quality standard for the protection of aquatic life. Since the narrative standard in ARM 17.30.637(1)(e) may be applied to nutrients without the need of referencing it in Department Circular DEQ-7, the board is proposing to delete the existing text of footnote 8 since it serves no purpose other than inform the public that nutrients have no numeric standards.

The board is aware, however, that the department has been in the process of developing numeric standards for nutrients that, if adopted by the board, will protect aquatic life by controlling eutrophication in surface waters. Consequently, leaving the narrative standard in Department Circular DEQ-7 may result in two separate and potentially conflicting aquatic life standards for nutrients in the event numeric standards are adopted. Given that the numeric standards for nutrients, if adopted, will be contained in a new Department Circular DEQ-12, the board is proposing to replace the existing text of Footnote 8 with a reference to the numeric nutrient standards that will be contained in proposed Department Circular DEQ-12.

The board is also proposing to remove from Department Circular DEQ-7 two nutrient parameters that have no numeric water quality standards for either aquatic life or human health. The specific nutrient parameters proposed for removal are "Nitrogen, total inorganic (as Nitrogen in [N])" and "Phosphorus, inorganic." Since

there are no numeric standards for these parameters, removing them from Department Circular DEQ-7 is reasonable given that the narrative aquatic life standard in ARM 17.30.637(1)(e) may be applied independently from its inclusion in Department Circular DEQ-7 and no human health standard for these two nutrients exists. Other nutrient parameters in Department Circular DEQ-7, for which a numeric human health-based standard has been adopted, will remain unchanged.

(9) Removing Manganese and Eliminating References to Secondary Maximum Contaminant Levels (SMCLs)

The board is proposing to remove manganese and Footnote 24 from Department Circular DEQ-7, because no water quality standards for manganese have been adopted by the board. Despite the lack of numeric standards for manganese, manganese is currently listed in Department Circular DEQ-7 with Footnote 24 indicating a standard to protect human health is contained within the footnote. The text of Footnote 24, however, does not establish human health standards. Instead, the footnote simply refers to administrative rules containing narrative water quality standards that are used by the department when developing site-specific standards to protect the beneficial uses of surface and ground water. The footnote further indicates that the SMCL for manganese (i.e., 50 micrograms per liter) may be used by the department when interpreting a level of harm to beneficial uses caused by manganese. The board is proposing to remove manganese and the text of Footnote 24 for two reasons. First, referencing the narrative standards is not necessary because the narrative standards contained in ARM 17.30.637 and 17.30.1006 provide the department with an independent source of authority to develop site-specific standards when no numeric standards exist. Second, the reference to the SMCL within the footnote may be misconstrued as binding rather than mere guidance. In order to eliminate any confusion between the narrative standards developed by the department using site-specific information and the statewide numeric standards contained in Department Circular DEQ-7, the board is proposing to eliminate the parameter manganese and the entire text of Footnote 24.

For the same reasons given above, the board is also proposing to eliminate the text of Footnote 23, which references the SMCL for iron to be used as guidance when developing human health standards under existing rules. Although the board is proposing to eliminate the text of the footnote, the board is not proposing to entirely remove iron from Department Circular DEQ-7. Since the circular currently includes an aquatic life standard for iron, the board will retain iron and its aquatic life standard in the revised Department Circular DEQ-7.

(10) General Revisions to the Introduction

The board is proposing to generally revise the Introduction to Department Circular DEQ-7 in order to provide consistency among commonly used terms, to clarify the meaning of acronyms, and to more clearly and accurately specify the sources of information used to develop water quality standards. These revisions are necessary to assist the public's understanding of an inherently complex and technical document.

17.24.646 SURFACE WATER MONITORING (1) through (5) remain the same.

(6) Methods of sample collection, preservation and sample analysis must be conducted in accordance with 40 CFR Part 136 titled "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July 2003) and Part 434 titled "Coal Mining Point Source Category BPT, BAT, BCT Limitations and New Source Performance Standards" (January 2002), and the ~~January 2004 version~~ August 2012 edition of the department's document titled "Department Circular WQB DEQ-7, Montana Numeric Water Quality Standards". Copies of 40 CFR Part 136, 40 CFR 434, and Department Circular WQB DEQ-7 are available at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901. Sampling and analyses must include a quality assurance program acceptable to the department.

(7) remains the same.

AUTH: 82-4-204, MCA

IMP: 82-4-231, 82-4-232, MCA

REASON: The board is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

17.30.502 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, and ARM Title 17, chapter 30, subchapters 6 and 7, apply throughout this subchapter:

(1) through (13) remain the same.

(14) The board adopts and incorporates by reference Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters. Copies of Department Circular DEQ-7 are available from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The board is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

17.30.602 DEFINITIONS In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions given in 75-5-103, MCA:

~~(1) "Acutely toxic conditions" means conditions lethal to aquatic organisms passing through the mixing zone. Lethality is a function of the magnitude of pollutant concentrations and the duration of organism exposure to those concentrations.~~

(2) through (4) remain the same, but are renumbered (1) through (3).

~~(5) "Chronic toxicity" means that death or functional impairment occurs or can be expected to occur to organisms exposed for periods of time exceeding 96 hours.~~

(6) through (15) remain the same, but are renumbered (4) through (13).

~~(16) (14) "Mixing zone" means the area of a water body contiguous to an effluent with characteristics qualitatively or quantitatively different from those of the receiving water. The mixing zone is a place where effluent and receiving water mix and not a place where effluents are treated. Certain water quality standards may not apply in the mixing zone for those parameters regulated by a MPDES or NPDES permit. An effluent, in its mixing zone, may not block passage of aquatic organisms nor may it cause acutely toxic conditions, except that ammonia, chlorine, and dissolved oxygen may be present at concentrations so as to cause potentially toxic conditions in no more than 10% of the mixing zone provided that there is no lethality to aquatic organisms passing through the mixing zone. The area in which these exceedences may be allowed shall be as small as practicable. Provisions for specific mixing zones will be determined on a case by case basis by application of the department's surface water mixing zone rules in ARM 17.30.501 through 17.30.518 is defined in 75-5-103, MCA, and also means a limited area of a surface water body or a portion of an aquifer, where initial dilution of a discharge takes place and where water quality changes may occur and where certain water quality standards may be exceeded.~~

(17) through (23) remain the same, but are renumbered (15) through (21).

~~(24) (22) "Pollutants" means sewage, industrial wastes and other wastes as those terms are defined in 75-5-103(12), (19), (26), MCA.~~

(25) through (41) remain the same, but are renumbered (23) through (39).

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The board is proposing the amendments to the definitions in ARM 17.30.602 for the reasons given below:

First, the board is proposing to repeal the definition of "acutely toxic conditions," because that term will no longer be used in the surface water quality standards rules due to the proposed amendment to the definition of "mixing zone" described below. The board is also proposing to repeal the definition of "chronic toxicity" in the surface water quality standards rules, because that term is not used within ARM Title 17, chapter 30, subchapter 6.

Second, the board is proposing to amend the definition of "mixing zone" in the surface water quality standards rules in order to ensure that the definition is consistent with the statutory definition of "mixing zone" in Title 75, chapter 5, MCA, and with the definitions in ARM 17.30.502 (mixing zone rules) and in ARM 17.30.702 (nondegradation rules). The board is proposing this amendment because the definition in ARM 17.30.602 includes provisions that may conflict with the board's rules governing the granting of mixing zones. The board finds that the proposed amendment is necessary to ensure consistency with existing statutory and regulatory provisions defining "mixing zones" and to eliminate any inconsistency

between the definition and the requirements for granting mixing zones established in ARM 17.30.501 through 17.30.518.

Finally, the board is proposing to amend the definition of "pollutant" in order to eliminate incorrect citations to the statutory definitions of "sewage," "industrial wastes," and "other wastes." Since the statutory definitions in 75-5-103, MCA, are renumbered from time to time by legislative additions to the definitions, the board is proposing to simply eliminate specific references to the statutory numbering system.

17.30.619 INCORPORATIONS BY REFERENCE (1) The board adopts and incorporates by reference the following state and federal requirements and procedures as part of Montana's surface water quality standards:

(a) Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;

(b) remains the same.

~~(c) 40 CFR Part 133 (July 1, 1991), which establishes requirements for the level of effluent quality through the application of secondary treatment or its equivalent;~~

~~(d) 40 CFR Chapter I, Subchapter N (July 1, 1991), which establishes effluent guidelines and standards for point source discharges;~~

~~(e) (c) 40 CFR Part 136 (July 1, 2007 2011), which establishes guidelines and procedures for the analysis of pollutants; and~~

(f) remains the same, but is renumbered (d).

(2) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The board is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

Also, the board is proposing to repeal the federal regulations incorporated by reference in ARM 17.30.619(1)(c) and (d) because the board is also proposing to eliminate the treatment requirements that are based on these federal regulations set forth in ARM 17.30.635. Since the treatment requirements currently in ARM 17.30.635 will no longer be a component of the surface water quality standards rules, incorporating the federal regulations upon which they are based is no longer necessary. The board is proposing these amendments in order to eliminate duplication between rules establishing surface water quality standards and rules establishing effluent limitations and treatment standards for MPDES permits set forth in ARM Title 17, chapter 30, subchapter 12.

The board is also proposing to update the incorporation by reference of 40 CFR Part 136 in order to adopt the U.S. Environmental Protection Agency's (EPA) recent revisions to those methods. According to EPA, the recent revisions to 40 CFR Part 136 will provide greater flexibility to the regulated community in terms of providing more methods that satisfy EPA's requirements for the sampling and

analysis of pollutants.

17.30.629 C-3 CLASSIFICATION STANDARDS (1) Waters classified C-3 are to be maintained suitable for bathing, swimming, and recreation, and growth and propagation of nonsalmonid fishes and associated aquatic life, waterfowl, and furbearers. The quality of these waters is naturally marginal for drinking, culinary, and food processing purposes, agriculture, and industrial water supply. ~~Degradation which will impact established beneficial uses will not be allowed.~~

(2) through (2)(k) remain the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The board is proposing to amend the C-3 classification in the surface water quality standards rules in order to eliminate language implying that degradation occurs only when a beneficial use is impacted. This amendment is necessary, because allowing degradation to the point that uses may be impacted without requiring the activity to undergo nondegradation review pursuant to 75-5-303, MCA, conflicts with Montana's statutory and regulatory nondegradation requirements.

17.30.635 GENERAL TREATMENT STANDARDS (1) through (1)(e) remain the same.

~~(2) Sewage must receive a minimum of secondary treatment as defined by EPA in accordance with requirements set forth in the Federal Water Pollution Control Act, 33 USC Sections 1251 through 1387 and 40 CFR Part 133 (July 1, 1991). Copies of 40 CFR Part 133 may be obtained from the department.~~

~~(3) Industrial waste must receive, as a minimum, treatment equivalent to the best practicable control technology currently available (BPCTCA) as defined in 40 CFR Chapter I, Subchapter N (July 1, 1991). Copies of 40 CFR Subchapter N may be obtained from the department.~~

(4) and (5) remain the same, but are renumbered (2) and (3).

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The board is proposing to remove the treatment requirements currently found in (2) and (3) of ARM 17.30.635 in order to eliminate duplication and inconsistencies between these requirements and the rules establishing technology-based treatment requirements for point source discharges in ARM Title 17, chapter 30, subchapter 12.

17.30.637 GENERAL PROHIBITIONS (1) through (2) remain the same.

~~(3) Leaching pads, tailing ponds, or water, waste, or product holding facilities must be located, constructed, operated, and maintained in such a manner and of such materials so as to prevent the discharge, seepage, drainage, infiltration, or flow which may result in the pollution of surface waters. The department may require that~~

~~a monitoring system be installed and operated if the department determines that pollutants are likely to reach surface waters or present a substantial risk to public health.~~

~~(a) Complete plans and specifications for proposed leaching pads, tailing ponds, or water, waste, or product holding facilities utilized in the processing of ore must be submitted to the department no less than 180 days prior to the day on which it is desired to commence their operation.~~

~~(b) Leaching pads, tailing ponds, or water, waste, or product holding facilities operating as of the effective date of this rule must be operated and maintained in such a manner so as to prevent the discharge, seepage, drainage, infiltration, or flow which may result in the pollution of surface waters.~~

~~(4) Dumping of snow from municipal and/or parking lot snow removal activities directly into surface waters or placing snow in a location where it is likely to cause pollution of surface waters is prohibited unless authorized in writing by the department.~~

~~(5) (3) Until such time as minimum stream flows are established for dewatered streams, the minimum treatment requirements for discharges to dewatered receiving streams must be no less than the minimum treatment requirements set forth in ARM 17.30.635(2) and (3) 17.30.1203.~~

~~(6) (4) Treatment requirements for discharges to ephemeral streams must be no less than the minimum treatment requirements set forth in ARM 17.30.635(2) and (3) 17.30.1203. Ephemeral streams are subject to ARM 17.30.635 through 17.30.637, 17.30.640, 17.30.641, 17.30.645, and 17.30.646 but not to the specific water quality standards of ARM 17.30.620 through 17.30.629.~~

~~(7) through (9) remain the same, but are renumbered (5) through (7).~~

AUTH: 75-5-201, 75-5-301, 75-6-112, MCA
IMP: 75-5-301, MCA

REASON: The board is proposing to delete the requirements in (3) and (4) of ARM 17.30.637, because these activities are addressed under other regulatory programs administered by the department.

In ARM 17.30.637(3), the board is proposing to eliminate the provision that requires mining facilities and wastes be operated in a manner that prevents pollution of surface waters, because that provision is no longer necessary. Mining activities that result in a discharge to surface waters are subject to the Montana Pollutant Discharge Elimination System (MPDES) permit requirements in ARM Title 17, chapter 30, subchapters 12 and 13. In addition, the location and construction of leach pads, tailing facilities, and related structures associated with mining activities are subject to regulation under the Strip and Underground Mine Reclamation Act, Title 82, chapter 4, part 2, MCA, or the metal mine reclamation laws in Title 82, chapter 4, part 3, MCA. Since the department has adequate authority under these other laws to protect state waters from pollution associated with mining activities, the board is removing the requirements in (3) to eliminate duplication and potential conflicts with other regulatory requirements.

In ARM 17.30.637(4), the board is proposing to eliminate the prohibition against dumping snow from parking lots into state surface waters. The removal of

snow is not a significant threat to water quality and is adequately addressed by the board's rules establishing requirements for municipal separate storm sewer systems (MS4).

The board is also amending ARM 17.30.637(5) and (6) to delete the citation to ARM 17.30.635 as the authority to impose minimum treatment. The board is proposing these amendments because the proposed amendments to ARM 17.30.635 in this rulemaking will remove all treatment requirements from that rule. Since minimum treatment is now defined and authorized only under ARM 17.30.1203, the board is replacing the citation to ARM 17.30.635 with ARM 17.30.1203.

17.30.702 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter (Note: 75-5-103, MCA, includes definitions for "degradation," "existing uses," "high quality waters," "mixing zone," and "parameter"):

(1) through (25) remain the same.

(26) The board adopts and incorporates by reference:

(a) Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;

(b) through (d) remain the same.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

REASON: The board is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

17.30.1001 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:

(1) remains the same.

(2) "DEQ-7" means Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition), which establishes water quality standards for toxic, carcinogenic, radioactive, bioconcentrating, nutrient, and harmful parameters.

(a) The board adopts and incorporates by reference Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.

(3) through (15) remain the same.

AUTH: 75-5-201, 75-5-401, MCA

IMP: 75-5-301, 75-5-401, MCA

REASON: The board is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for

amending ARM 17.24.645.

17.36.345 ADOPTION BY REFERENCE (1) For purposes of this chapter, the department adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:

(a) through (d) remain the same.

(e) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012 edition);

(f) through (2) remain the same.

AUTH: 76-4-104, MCA

IMP: 76-4-104, MCA

REASON: The department is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645..

17.55.109 INCORPORATION BY REFERENCE (1) For the purposes of this subchapter, the department adopts and incorporates by reference:

(a) Department Circular DEQ-7, Montana Numeric Water Quality Standards (~~February 2008~~ August 2012);

(b) through (5) remain the same.

AUTH: 75-10-702, 75-10-704, MCA

IMP: 75-10-702, 75-10-704, 75-10-711, MCA

REASON: The department is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

17.56.507 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

(a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012);

(b) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: The department is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

17.56.608 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

(a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (~~August 2010~~ August 2012);

(b) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA

IMP: 75-11-309, 75-11-505, MCA

REASON: The department is proposing to amend the incorporation by reference of Department Circular DEQ-7 in this rule for the reasons given by the board for amending ARM 17.24.645.

4. The rules proposed for repeal are as follows:

17.30.616 WATER-USE CLASSIFICATION AND DESCRIPTIONS FOR PONDS AND RESERVOIRS CONSTRUCTED FOR THE DISPOSAL OF COAL BED METHANE WATER (AUTH: 75-5-301, MCA; IMP: 75-5-301, MCA), located at page 17-2709, Administrative Rules of Montana. The board is proposing to repeal the G-1 water-use classification because the Ninth Circuit has held that ground water produced during coal bed methane development is a "pollutant." Since coal bed methane produced water is a pollutant, ponds and reservoirs constructed for the purpose of impounding those pollutants are not defined as "state waters" in 75-5-103, MCA. Consequently, the board is repealing the G-1 classification because it is not appropriate to classify coal bed methane ponds or reservoirs that are used to impound pollutants as state waters.

17.30.658 G-1 CLASSIFICATION STANDARDS (AUTH: 75-5-301, MCA; IMP: 75-5-301, MCA), located at pages 17-2756 and 17-2757, Administrative Rules of Montana. The board is proposing to repeal the water quality standards that are applicable to waters classified as G-1, because the board is also proposing to repeal the entire G-1 classification in ARM 17.30.616. The board is proposing that both ARM 17.30.616 and 17.30.658 be removed from the surface water quality standards rules, because the Ninth Circuit has held that ground water produced during coal bed methane development is a "pollutant." Since coal bed methane produced water is a pollutant, ponds and reservoirs constructed for the purpose of impounding those pollutants are not defined as "state waters" in 75-5-103, MCA. Consequently, the board is repealing the G-1 classification and associated water quality standards since it is not appropriate to apply water quality standards to ponds or reservoirs that are not state waters.

5. Concerned persons may submit their data, views, or arguments, either orally or in writing regarding the proposed rule amendments and changes to Department Circular DEQ-7, at the hearing. Written data, views, or arguments regarding the rule amendments and changes to Department Circular DEQ-7 also may be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to ejohnson@mt.gov, no later than 5:00 p.m., July 12, 2012. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

6. Katherine Orr, attorney for the board, or another attorney for the Agency

Legal Services Bureau, has been designated to preside over and conduct the hearing.

7. The board and department maintain a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to Elois Johnson at ejohnson@mt.gov; or may be made by completing a request form at any rules hearing held by the board or department.

8. The bill sponsor contact requirements of 2-4-302, MCA, do not apply.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

/s/ James M. Madden

JAMES M. MADDEN

Rule Reviewer

BY: /s/ Joseph W. Russell

JOSEPH W. RUSSELL, M.P.H.,

Chairman

DEPARTMENT OF ENVIRONMENTAL
QUALITY

BY: /s/ Richard H. Oppen

RICHARD H. OPPEN, Director

Certified to the Secretary of State, May 29, 2012.

1 federal wastewater treatment regulations that are no longer applicable; (5) clarify
2 the application of non-degradation rules to C-3 classified waters; (6) eliminate
3 standards and prohibitions that are duplicative of other rules; and (7) repeal the G-1
4 water-use classification and associated water quality standards.

5 2. Notice of the hearing was contained in the Montana Administrative
6 Register (MAR), Notice No. 17-335, published on June 7, 2012, in Issue No. 11. A
7 copy of the notice is attached to this report. (Attachments are provided in the same
8 order as they are referenced in this report.)

9 3. The Court Reporter, Cheryl Romsa, recorded the hearing.

10 4. One member of the public, Mr. Marc Thompson with the Golden
11 Sunlight Mine and as a representative of the Montana Mining Association, testified
12 at the hearing and referenced written comments submitted by Montana Mining
13 Association. . He addressed interim criteria regarding pesticides stating the
14 standards disadvantage local dischargers who are competitively engaged in a
15 national or international market without benefit to the environment or human health.
16 He stated that in FN8 DEQ7 there are numeric nutrient criteria that don't exist yet.
17 He addressed the change of classification of cadmium and stated cadmium is
18 ubiquitous. He stated very few other states have listed cadmium as a carcinogen
19 especially for the purposes of water quality standards. He questioned whether
20 required reporting values are achievable with real world samples.

21 At the hearing, the Presiding Officer identified and summarized the MAR
22 notice and read the Notice of Function of Administrative Rule Review Committee
23 as required by Mont. Code Ann. § 2-4-302(7)(a).

24 **SUMMARY OF HEARING**

25 5. Mr. Rod McNeil, of Planning, Prevention and assistance Division of
26 the Montana Department of Environmental Quality gave a statement of support
27 through a brief oral summary of the amendments and repeal of rules at the hearing.

1
2 6. Written comments were submitted by four different entities which are
3 (1) the Missoula City-County Health Department Water Quality District (clean-up
4 of manganese contamination is necessary); (2) the United States Environmental
5 Protection Agency, Region 8 (supporting the amendments and repeal); (3) the
6 Montana Petroleum Association, Inc. (additional treatment levels and required
7 reporting levels are onerous); (4) the Montana Mining Association (addressing
8 critically Interim Numeric Criteria, deleting the narrative nutrient water quality
9 standards referenced in DEQ-7, cadmium as a carcinogen, proposed required
10 reporting values). These comments are attached.
11

12 7. A written memorandum was submitted from Department of
13 Environmental Quality (Department) Staff Attorney, Mr. David Dennis, with HB
14 521 and HB 311 reviews of the proposed amendments and repeal and a Private
15 Property Assessment Act Checklist. (Mr. Dennis' memorandum is attached to this
16 report.)

17 8. None of the proposed amendments and repeal would trigger the
18 requirement for a statement of written findings or make the proposed amendments
19 and repeal more stringent than comparable federal regulations or guidelines. No
20 further HB 521 analysis is required.

21 9. With respect to HB 311 (the Private Property Assessment Act, Mont.
22 Code Ann. §§ 2-10-101 through 105), the State is required to assess the taking or
23 damaging implications of a proposed rule or amendments affecting the use of
24 private real property. This rulemaking affects the use of private real property. A
25 Private Property Assessment Act Checklist was prepared, which shows that the
26 proposed amendments and repeal do not have taking or damaging implications.
27 Therefore, no further assessment is required.

10. The period to submit comments ended at 5 p.m. on July 12, 2012.

PRESIDING OFFICER COMMENTS

11. The Board of Environmental Review (Board) has jurisdiction to make the proposed amendments. See Mont. Code Ann. §§ 82-4-204, 75-5-301, 75-5-201, 75-5-301, 75-6-112, 75-5-303, 75-5-401, 76-4-104, 75-10-702, 75-10-704, 75-11-319, 75-11-505, 75-11-319, 75-11-505.


12. The conclusions in the memorandum of Mr. Dennis concerning House Bill 521 (1995) and House Bill 311 (1995) are correct.

13. The procedures required by the Montana Administrative Procedure Act, including public notice, hearing, and comment, have been followed.

14. The Board may adopt the proposed rule amendments and repeal, reject them, or adopt the proposed amendments and repeal with revisions not exceeding the scope of the public notice.

15. Under Mont. Code Ann. § 2-4-305(7), for the rulemaking process to be valid, the Board must publish a notice of adoption within six months of the date the Board published the notice of proposed rulemaking in the Montana Administrative Register, or by November 26, 2011.

DATED this 4 day of September, 2012.


KATHERINE J. ORR
Hearing Examiner
Agency Legal Services Bureau
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Helena, MT 59620-1440

MONTANA MINING ASSOCIATION

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Ms. Elois Johnson
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

DEQ Metcalf Legal

JUL 11 2012

PO Box 200901

July 10, 2012

Dear Ms. Johnson:

Per the notice from Mr. Eric Urban of the Montana DEQ dated June 11, 2012, please accept this letter as comments of the Montana Mining Association on the proposed amendments to the water quality standards contained in the Montana Administrative Rules and in DEQ – 7.

As a general comment on the use of Interim Numeric Criteria, we respectfully submit that overly stringent environmental regulations can result in significant costs to a permittee competitively engaged in a national or international market without real benefit to the environment or human health. While it may appear environmentally prudent to be overly cautious, there is a price to pay, and that price is often at the detriment of Montana's economy and the ability of Montana to sustain employment of Montanans.

It is stated that "Repealing References to the narrative Water Quality Standards for Nutrients in Surface Waters..." is being proposed, in part, due to the department's development of "numeric nutrient standards that will be brought to the board for consideration in the upcoming year."

MMA would respectfully note that deleting the narrative nutrient water quality standards references in DEQ-7 prior to adopting numeric water quality standards is 'putting the cart before the horse', so to speak. MMA suggests that it is important for the State to, at all times, maintain standards upon which MPDES permit effluent limits can be based. Although the numeric nutrient standards have been in process for a number of years and appear to be nearing completion, there remains a rulemaking process that may delay their adoption.

Given the potential significant economic impacts that numeric nutrient criteria may cause to Montana's municipalities and industries, adoption of these criteria should be for the right reasons, not because the existing narrative standards were prematurely deleted.

We would suggest the repeal of the references to narrative nutrient standards and associated footnotes be removed from this particular rulemaking process and deferred until such time as DEQ-12 is adopted. Perhaps the repeal of the references to narrative standards could be included in the rulemaking to

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adopt the numerical nutrient standards; it is only logical that these two actions would be taken simultaneously.

MMA fails to see the technical justification for the designation of cadmium as a carcinogen for purposes of Water Quality Standards. While cadmium may properly be considered as carcinogenic when airborne, we would respectfully submit that there is no evidence to support its classification as such for the purpose of water quality standards. When interpreting toxicological affects to establish water quality criteria, the exposure pathway must be considered, otherwise water itself would require a water quality standard because it is acutely toxic if not lethal to humans when inhaled. MMA would ask that DEQ reconsider this proposal. Further, when coupling the rules for discharge of carcinogenic compounds with the ultra-low aquatic life standards for cadmium, a nearly untenable situation is created for any permittee, including municipalities, which may have detectable concentrations of cadmium in their effluent.

The proposed RRV were developed through a survey of commercial laboratories. RRV are established through the use of ultrapure laboratory standards. MMA respectfully questions their validity for application on "real world" samples that are frequently a complex matrix that may or may not contain interfering compounds for any given analytical method. The ultrapure laboratory standards do not contain any inferring compounds. The complexity of the matrix will increase, sometimes dramatically, the RRV for that sample.

MMA requests that DEQ provide a demonstration that laboratories can achieve the proposed RRV on "real world" samples or that DEQ provide in rule both the ability and methodology to develop sample specific RRV. Given that a method to develop sample specific RRV would apply to large discharges as well as small discharges; industries as well as municipalities, a cost effective method would be needed.

Thank you for consideration of our comments.

Sincerely,

Tom K. Hopgood, Executive Director
Montana Mining Association
P.O. Box 5567
Helena, MT 595604



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July 12, 2012

Ms. Elois Johnson, Paralegal
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901

DEQ Metcalf Legal

JUL 16 2012

PO Box 200901

RE: Comments on MAR Notice No.17-335

Dear Ms. Johnson:

Please accept the following comments to MAR Notice No.17-335 made on behalf of the Montana Petroleum Association. Comments are being made concerning proposed amendments to Department Circular DEQ-7 and changes to certain water quality rules.

Our comments specifically address items #3 Human Health Standards, #4 Revisions to Categories of 12 Parameters, #5 Required Reporting Values, and #8 Repealing Reference to the Narrative Water Quality Standards for Nutrients in Surface Water.

#3 Human Health Standards

The proposed adoption of new human health standards for chlorite may significantly impact members of the association by requiring an additional level of treatment prior to discharging treated effluent under their discharge permits. Several members expressed concern about additional sampling and analysis of this parameter in addition to the existing total residual chlorine (TRC) requirements. Most Montana Pollutant Discharge Elimination System (MPDES) discharge permits apply the aquatic life standards for TRC which are still an order of magnitude below the RRV level. The application of chlorite in addition to TRC would represent an unnecessary burden on members that disinfect their effluent or utilize potable water sources utilizing chlorine as a disinfection agent.

#4 Revisions to Categories of 12 Parameters

Reclassification of phenol as a toxic will affect oil and gas facilities and may require additional treatment and control for removal of this parameter. Most MPDES permits are limited by Technology Based Effluent Limits (TBELs) and are based on production levels for the facility. With the reclassification of phenol from a harmful to a toxic, additional regulatory burden will be placed on these regulated facilities. Additionally, MPDES permits contain Whole Effluent Toxicity (WET) testing requirements. DEQ currently regulates toxicity (including toxicity from phenol) in this manner.

Any new or increased dischargers will be held to a more stringent standard under nondegradation rules. New permit limits developed under the toxics classification will be developed using the trigger value if the resulting instream water quality is <15% of the lowest applicable standard.

MPA requests that DEQ provide further justification for the proposed reclassification.

#5 Required Reporting Values (RRVs)

MPA members and their consultants have submitted substantial comments to the DEQ concerning the proposed RRV development. It appears the DEQ is determined to modify a majority of RRV values without considering the direct or indirect implications from these changes.

It is a well known that ultra low RRVs have a higher laboratory costs to achieve those levels; however, those levels do not reflect real world effluents with matrix effects. Laboratories routinely evaluate RRV studies with laboratory-generated waters that have low levels of total dissolved solids with no other analytes being present. Effluents discharged from oil and gas facilities have complex characteristics that may prevent achieving these ultra-low RRV levels.

Although DEQ justifies the need for low RRVs as needed to validate adherence to water quality standards, there are a number of cases where permit limits are substantially above the RRV and the requirement to analyze to the low RRV level does not provide any benefit to the regulator, as a much higher reporting level would more accurately show compliance with permit limits, and only increases costs to the regulated community. Rather than lower RRVs or require reporting to the DEQ RRV levels, it would be more appropriate to indicate in DEQ-7 or in permits that an alternate reporting level would be acceptable.

Third, the draft DEQ-7 requires that labs attempt to achieve these stringent levels even though they are unable to do so with existing instrumentation and analysis techniques; this may result in some incompatibility of results between labs.

MPA requests that the DEQ conduct RRV studies with representative effluents from facilities located in the state and with laboratories located in the state prior to establishing new RRVs.

#8 Repealing Reference to the Narrative Water Quality Standards for Nutrients in Surface Water

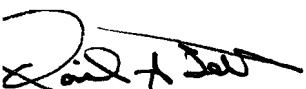
The MPA and other stakeholders have been engaged with the DEQ during the last several years discussing the development of instream nutrient criteria. To date nutrient criteria have not been adopted or even taken up by the Board for approval. To remove references of nutrients from DEQ-7 at this time would be premature.

Removing all nutrient references from DEQ-7 at this time, would cause a perceived need to conclude nutrient criteria development in an expedited fashion. By expediting the process, it could cost the citizen of Montana a vast amount of their resources for little environmental benefit. MPA respectfully submits that until a comprehensive nutrient policy is implemented, there cannot be a fair and equitable means to control nutrient discharges to surface waters of the State of Montana.

MPA is requesting the Board to repeal the proposed deletion of the narrative nutrient standards from DEQ-7 until such time the Board has had a chance to take up rule making in this very important area.

MPA appreciates the opportunity to comment on the proposed rules changes before the Board at this time. It is our expectation the Board will consider our comments during the adoption of these proposed changes.

Sincerely,

A handwritten signature in black ink, appearing to read "David A. Galt", with a stylized flourish at the end.

David A. Galt
Executive Director
Montana Petroleum Assn.

**MISSOULA
COUNTY**



**MISSOULA CITY-COUNTY HEALTH DEPARTMENT
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Elois Johnson
Paralegal
Montana Department of Environmental Quality
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Helena MT 59620

RE: Proposed amendments to DEQ-7 for manganese

Dear Ms. Johnson,

I am writing to submit comments on the proposed amendments to DEQ-7 regarding manganese. The proposed amendment would delete footnote 24 from Department Circular DEQ-7. I oppose the proposed amendment. I believe that the Department should do or to address manganese contamination of domestic drinking water supplies, not less, and that this proposed amendment is a step in the wrong direction.

Manganese affects drinking water quality in many domestic wells in Missoula County. The presence of manganese in Missoula County is related to sites including active or closed lumber mills, mine waste and petroleum release sites. Manganese is present in groundwater near the former Hart Petroleum Refinery in Missoula, the former Missoula sawmill site, the Milltown Reservoir Superfund Site, and the former Stimson Lumber Mill. Manganese has affected domestic water supplies at some of these sites. The Department of Environmental Quality has taken action to regulate manganese at some sites, but not at others where domestic wells are directly impacted by the presence of contaminants at adjacent sites.

The federal standard for manganese is a secondary drinking water standard, which is not set due to the likelihood of health affects but rather due to the color, taste and odor associated with manganese which makes water undesirable for drinking and domestic use.

Public complaints' about manganese and iron are among the most common that we receive. People don't know it when they have arsenic in their water, which has a human health impact but no taste or odor. But they sure know it when they have manganese, and they don't hesitate to call us to let us know about it.

Manganese causes discoloration, taste and odor in drinking water. It also causes stains to plumbing and laundry. When someone calls our office to ask about bad tasting water, the first thing we suggest is to open the lid to their toilet tank and look inside. If the color is dark brown, or there are dark flecks in the water, the most likely cause is manganese. Manganese is also often present in association with high levels of iron, which compounds the impact on drinking and other domestic uses.

The point is, manganese does affect people. If they can't drink their water or it turns their plumbing and laundry black, then they can't use it without treatment.

Manganese can also have serious health effects, including neurological affects similar to lead, but at higher levels than the secondary standard. The U.S. EPA and some other states are in the process of evaluating potential standards for manganese health effects. I believe that the Board should direct the Department to develop a health based standard for manganese.

I do not support the deletion of footnote 24 from DEQ-7. The rationale provided by the Department is that the footnote is unnecessary because the narrative standards in ARM 17.30.637 and 17.30.1006 provide the Department authority to develop site specific standards. However, the authority to do so is vague and there is little guidance to the Department on how to protect water quality of those using domestic drinking water wells near sites that generate manganese in groundwater.

The Missoula Valley Aquifer is considered a Class I aquifer under Montana Water Quality standards. Beneficial uses are to be protected in Class I aquifers, including a prohibition of "an increase of a parameter to a level that renders the waters harmful, detrimental, or injurious to the beneficial uses listed for Class I water. The Department may use any pertinent credible information to determine these levels." In my opinion, the reference to the federal secondary drinking water standard for manganese in footnote 24 provides necessary guidance to the Department as to the appropriate "pertinent credible information" that may be used to determine the acceptable level of manganese in a domestic water supply. This is important. Without such reference, the Department is unclear what level to use for manganese. We recently received a letter from the DEQ regarding manganese in groundwater at the former Hart Refinery Site in Missoula which underscores the importance of this issue. The Department stated in the letter that the level of manganese necessary to maintain beneficial use of groundwater is "likely the DEQ-7 standard of 0.05 mg/l, or perhaps the WHO (World Health Organization) guidance of 0.1 mg/l based on acceptability to consumers." There is a very significant difference in water quality between these two standards. The WHO standard is numerically twice as high. But the reality is that the level of discoloration, taste and odor is more dramatic than that. Without clear reference to the standards for manganese as adopted here in the United States, the Department is left without clear guidance to appropriate standards, and will be under pressure from parties responsible for the pollution to apply a weaker standard. This much is clear, the result will impact real people using water in Montana.

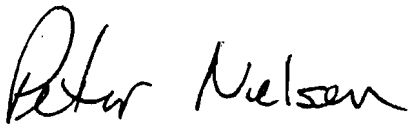
The other issue raised in the narrative standards that merits clarification is the definition of "little or no treatment". ARM 17.30.1006(1)(a) states that the "quality of Class I groundwater must be maintained suitable for the following beneficial uses with *little or no treatment*: public and private water supplies; culinary and food processing purposes, irrigation, drinking water for livestock and wildlife, and commercial and industrial Purposes." But what constitutes "little or treatment?" If the water in a homeowner's well is impacted with manganese by a neighboring industrial site, what treatment should the homeowner be responsible to pay for and what should the site owner be responsible to pay? In my opinion, little or no treatment should not be considered to be anything more than simple carbon filtration or perhaps disinfection. If a homeowner has to install a water treatment device to remove manganese so that his family can stand to drink it, so their laundry can be done without staining and their plumbing fixtures are not

stained, then I believe that the party that placed the wastes in the ground where they would cause the release of the manganese to groundwater should pay to clean it up and provide the homeowner clean water. The contamination may not be at a level that affects public health as far as we know, but it still affects people in a real and significant manner, and imposes a cost on the homeowners to deal with the problem.

I believe that the DEQ should be more assertive in cleaning up manganese contamination in groundwater, not less. This proposed amendment takes a step in the wrong direction. I propose that the footnote 24 reference to manganese be retained, and the Board direct the Department to propose new rules to further clarify the acceptable level of manganese in water to consumers and the definition of "little or no treatment." I also request that the Board direct the Department to pursue cleanup and installation of water treatment at sites where contaminants such as wood wastes, petroleum or mine wastes have been disposed of and manganese is affecting the drinking water quality in nearby domestic water supplies. Montana citizens should not be required to foot the bill for treating water polluted by others.

Thank you for considering these comments.

Sincerely,

A handwritten signature in black ink that reads "Peter Nielsen". The signature is written in a cursive, flowing style.

Peter Nielsen
Environmental Health Supervisor



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

July 12, 2012

Ref: 8EPR-EP

Joe Russell, Chairman
Montana Board of Environmental Review
1520 E. Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

Subject: EPA's Comments on Proposed New and
Revised Water Quality Standards

Dear Chairman Russell:

The U.S. Environmental Protection Agency (EPA) Region 8's Water Quality Unit received MAR Notice No. 17-335, published on June 7, 2012. The Notice includes the proposed water quality standards changes, public hearing information, and invites public comment. The Water Quality Unit has reviewed the proposed amendments and recommends adoption to the Board of Environmental Review (Board) with the following comments.

The Montana Department of Environmental Quality (Department) notified the EPA of its intent to initiate a rulemaking focusing on revisions to Department Circular DEQ-7 in late 2010. Since that time, the EPA and the Department coordinated closely on the development of the proposed new and revised water quality standards. We commend the Department for early involvement with the EPA and their responsiveness to our comments throughout the rulemaking process.

We have reviewed the proposed new and revised water quality standards, including:

- Aquatic life criteria for Acrolein and Endrin, and human health criteria for Hexachlorocyclohexane consistent with the EPA's national criteria recommendations published pursuant to Clean Water Act (CWA) § 304(a);¹
- Human health criteria consistent with the Maximum Contaminant Level (MCL) established by the EPA under the Safe Drinking Water Act² for Aldicarb sulfone, Alpha Emitters, Bromate, Chlorite, Dichloroethylene, 1,1-, Haloacetic acids,³ and
- Human health criteria for pesticides consistent with EPA's national Lifetime Health Advisory for Metolachlor² and consistent with the Region's recommendations⁴ for Chlorothalonil, Clopyralid, Dichlorprop (2,4DP), Fipronil, Fluroxypyr, MCPP, Metalaxyl, Methamidophos, Metsulfuron

¹ Available at <http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>.

² Available at <http://water.epa.gov/action/advisories/drinking/upload/dwstandards2012.pdf>.

³ See 63 Fed. Reg. 69,396 (December 16, 1998).

⁴ See the EPA letters dated March 4, 2009, June 13, 2011, October 31, 2011, and February 13, 2012 available at <http://deq.mt.gov/wqinfo/standards/default.mcp>.

Methyl, Mirex, Myclobutanil, Nicosulfuron, Oxydemeton Methyl, Primisulfuron Methyl, Pyroxsulam, Tribenuron Methyl, and Triclopyr.

We support the proposed amendments and, to the extent that the EPA has the authority to act on the provisions under CWA § 303(c)(3), if adopted, anticipate the Water Quality Unit will recommend the EPA approve these new and revised water quality standards upon submission to the Agency (see enclosure). We thank the Department for its efforts to improve the water quality standards that protect the waters of Montana and the citizens that use them.

A number of the new or revised water quality standards apply to both surface water and ground water. Although the EPA supports the protection of ground water quality, our CWA § 303(c) approval and disapproval authority does not apply to ground water. Therefore, these comments only address the water quality standards applicable to surface water.

Please note that these comments are preliminary in nature and should not be interpreted as final Agency decisions under CWA § 303(c). If you have any questions, please call Tonya Fish on my staff at (303) 312-6832.

Sincerely,

A handwritten signature in black ink, appearing to read "Sandra Spence".

Sandra Spence, Acting Chief
Water Quality Unit

Enclosure

Summary of Proposed New/Revised Water Quality Standards

Criteria

Parameter	New/ Revised	Proposed Criterion (µg/L unless noted)	Rationale
Aquatic Life Criteria			
Acrolein	N	3 (chronic)	Consistent with the EPA's CWA § 304(a) national criteria recommendation (acute was adopted in 2010)
Endrin	R	acute change from 0.043 to 0.086 chronic change from 0.0036 to 0.036	Consistent with the EPA's CWA § 304(a) national criteria recommendation
Human Health Criteria			
Aldicarb Sulfone	R	Change from 3 to 2	Consistent with the EPA's Safe Drinking Water Act Maximum Contaminant Level (MCL)
Alpha Emitters	R	Change from 1.5 to 15 picocuries/liter	Consistent with the EPA's MCL
Bromate	N	10	Consistent with the EPA's MCL
Chlorite	N	1000	Consistent with the EPA's MCL
Chlorothalonil	R	15 to 100	Consistent with the EPA Region 8 Lifetime Health Advisory (October 31, 2011 letter)
Clopyralid	R	Change from 3,500 to 1000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Dichloroethylene, 1,1- (previously listed in DEQ-7 as Dichloroethene, 1,1-)	R	0.57 to 7	Consistent with the EPA's MCL. EPA's priority pollutant CWA § 304(a) recommendation is 330 (previously 0.57).
Dichloroprop (2,4DP)	N	300	Consistent with the EPA Region 8 Lifetime Health Advisory (February 13, 2012 letter)
Fipronil	N	1	Consistent with the EPA Region 8 Lifetime Health Advisory (February 13, 2012 letter)
Fluroxypyr	N	7000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Haloacetic acids	N	60	Consistent with the EPA's MCL
Hexachlorocyclohexane	N	0.123	Consistent with the EPA's CWA § 304(a) national criteria recommendation

Parameter	New/ Revised	Proposed Criterion (µg/L unless noted)	Rationale
MCPP	R	Change from 7 to 300	Consistent with the EPA Region 8 Lifetime Health Advisory (March 4, 2009 letter)
Metalaxyl	R	Change from 420 to 600	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Methamidophos	R	Change from 0.35 to 2	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Metsulfuron Methyl	R	Change from 1750 to 2000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Metolachlor	R	Change from 100 to 700	Consistent with the EPA's national Lifetime Health Advisory
Mirex	R	Change from 14 to 1	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Myclobutanil	N	200	Consistent with the EPA Region 8 Lifetime Health Advisory (February 13, 2012 letter)
Nicosulfuron	R	Change from 8750 to 9000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Oxydemeton Methyl	R	Change from 3.5 to 0.7	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Primisulfuron Methyl	R	Change from 42 to 2000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Pyroxsulam	N	7000	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Tribenuron Methyl	R	Change from 8 to 60	Consistent with the EPA Region 8 Lifetime Health Advisory (June 13, 2011 letter)
Triclopyr	R	Change from 350 to 400	Consistent with the EPA Region 8 Lifetime Health Advisory (March 4, 2009 letter). EPA did not act on 350 at the request of the state.

Acetochlor was revised to include degradates Acetochlor ESA and Acetochlor OA. Independent health advisories are not available, so Montana intends to assume degradates, without a Reference Dose derived by the EPA's Office of Pesticide Programs, have the same toxicity as the parent compound and list them together. As clarified in footnote 30, the sum of the concentrations of Acetochlor and the breakdown products shall not exceed 140 µg/L. The EPA supports this approach and based on the information provided concludes this revision would be consistent with the requirements of the CWA and the EPA's implementing regulation at 40 CFR § 131.11.

In addition, the numeric human health criterion for delta-Hexachlorocyclohexane was deleted from DEQ-7. This parameter is listed as delta-BHC in EPA's National Recommended Water Quality Criteria table for priority pollutants, but does not include a numeric criterion. Previously, this pollutant was listed in DEQ-7, but had no criterion. In 2010, Montana adopted 0.2 µg/L in error and the EPA did not act on this criterion. Montana has adopted human health criteria for alpha, beta, and gamma hexachlorocyclohexane and is also proposing to adopt the EPA recommended non priority pollutant criterion for Hexachlorocyclohexane. Therefore, our preliminary conclusion is that this revision would be consistent with the requirements of the CWA and the EPA's implementing regulation at 40 CFR § 131.11.

The revised DEQ-7 listing for ammonia (total ammonia nitrogen) and footnote 7 corrects the units from mg/L to µg/L and deletes reference to flow as a factor in calculating the criteria. This revision would be consistent with the EPA's National Recommended Water Quality Criteria for this non priority pollutant (see footnote 1 of this letter).

New footnote 37 states "The quantitative combination of two or more of Aldicarb, Aldicarb sulfone and Aldicarb sulfoxide shall not exceed 7 µg/L because of a similar mode of action." This revision would be consistent with the footnote 3 for these parameters in the EPA's 2012 Edition of the Drinking Water Standards and Health Advisories (see footnote 2 of this letter).

New footnote 38 states "The quantitative sum of all listed Haloacetic acids is used in determining the total Haloacetic acid concentration." This revision would be consistent with the EPA's MCL for Haloacetic acids (see footnote 3 of this letter, specifically, Table II-2).

New footnote 39 states "The sum of the concentrations of Endosulfan and its isomers Endosulfan I and II, shall not exceed the standards listed." This revision would be consistent with the footnote Y for alpha- and betha-Endosulfan in the EPA's National Recommended Water Quality Criteria (see footnote 1 of the letter).

Designated Uses

The G-1 Classification is proposed for deletion (ARM 17.30.616 and 17.30.658). There are currently no waters in the G-1 Class, therefore the practical effect of this change is simply the deletion of the Classification itself. The EPA's regulation allows states the discretion to create such groups of designated uses as long as they are consistent with the requirements of 40 CFR § 131.10. Therefore, Montana's decision to delete this Classification also would be within the discretion afforded by 40 CFR § 131.10.

Nondegradation

The proposed water quality standards include new and revised categories (e.g., carcinogen, toxic, harmful) that determine which nondegradation significance threshold applies under ARM 17.30.715 for numerous parameters (see table below). The state assigned categories based on the carcinogenicity status of the pollutant in the EPA's Integrated Risk Information System (IRIS). We reviewed the information in IRIS and alerted the state to updated information in IRIS on Tetrachloroethylene that indicates it should remain in the carcinogen category. In addition, the basis for the categories assigned to the human health criteria for pesticides is the Region's recommendations (see footnote 4 of this letter) because this

information is more current than IRIS. With the exception of Tetrachloroethylene, our preliminary conclusion is that the proposed categories would be consistent with 40 CFR § 131.12.

Parameter	Current Category	New/Revised Category
Alachlor	Carcinogen	Toxic
Atrazine	Carcinogen	Toxic
Bromate	-	Carcinogen
Butyl Benzyl Phthalate	Toxic	Carcinogen
Butylate	Carcinogen	Toxic
Cadmium	Toxic	Carcinogen
Chlorite	-	Toxic
Dichlorobenzene, 1,4-	Carcinogen	Toxic
Dichloropropane, 1,2-	Carcinogen	Toxic
Dichlorprop	-	Toxic
Fipronil	-	Carcinogen
Fluroxypur	-	Toxic
Gamma-hexachlorocyclohexane	Carcinogen	Toxic
Haloacetic acids	-	Carcinogen
Hexachlorocyclohexane	-	Carcinogen
Myclobutanil	-	Toxic
Nitrobenzene	Toxic	Carcinogen
Phenol	Harmful	Toxic
Propane, 1,2-Dibromo-3-Chloro-	Carcinogen	Toxic
Pyroxsulam	-	Toxic
Tetrachloroethylene	Carcinogen	Toxic
Trichlorophenol, 2,4,5-	Harmful	Toxic

The purpose of an antidegradation (nondegradation in Montana) policy is to maintain and protect existing uses and high quality waters. The antidegradation policy must, at a minimum, be consistent with 40 CFR § 131.12(a)(1-4). Like many states, Montana targets their antidegradation efforts by defining a significance threshold above which the effects on water quality require “Tier 2” review and findings of necessity and social and economic importance consistent with 40 CFR § 131.12(a)(2). The EPA recommends⁵ defining significance thresholds in terms of assimilative capacity – the difference between the applicable water quality criterion for a pollutant and the ambient water quality for that pollutant where it is better than the criterion (i.e., the amount by which the water body exceeds the quality necessary to support its designated use). The EPA also recommends a significance threshold value of 10% or less of the available assimilative capacity on a cumulative basis, so that the cumulative loss of assimilative capacity considered *de minimis* would not exceed 10%. The decision by the 6th Circuit Court of Appeals (*Kentucky Waterways Alliance v. Johnson*, 540 F.3d 466 (6th Cir. 2008)) appears to narrow the EPA’s and states’ discretion in determining what constitutes “degradation” and requires a more complete justification by the EPA and the state why exemptions from Tier 2 review will not result in degradation. The EPA would like to work with Montana to update its nondegradation requirements.

⁵ U.S. Environmental Protection Agency memorandum dated August 10, 2005 available at <http://water.epa.gov/scitech/swguidance/standards/adeq/upload/tier2.pdf>.

General Policies

The revisions to ARM 17.30.602 include deletion of the definitions for “chronic toxicity” because that term is not currently used in the water quality standards, and “acutely toxic conditions” because that term will no longer be used based on proposed revisions to the definition of “mixing zone.” The state wants to make the definition of “mixing zone” consistent with the statutory definition in MCA 75-5-103, ARM 17.30.502 (mixing zone rules), and ARM 17.30.702 (nondegradation rules). The proposed revisions would be consistent with 40 CFR Section 131.13.

MEMORANDUM

To: Board of Environmental Review
From: David Dennis, DEQ Staff Attorney
Re: HB 521 Analysis and Takings Checklist for Proposed Amendments to ARM 17.24.645, 17.24.646, 17.30.502, 17.30.602, 17.30.619, 17.30.629, 17.30.635, 17.30.637, 17.30.702, 17.30.1001, 17.24.345, 17.55.109, 17.56.507, and 17.56.608. MAR Notice No. 17-331.

Date: July 11, 2012

HB 521 REVIEW

House Bill (HB) 521 (1995), codified in the Montana Water Quality Act at § 75-5-203, MCA, requires the Board of Environmental Review to make certain written findings after a public hearing and public comment prior to adopting a rule that is more stringent than a comparable federal standard or guideline. No written findings are required if the more stringent standard is "required by state law." In addition, § 75-5-309, MCA, requires the Board of Environmental Review to make certain written findings that are accompanied by a Board opinion evaluating the environmental and public health information in the record prior to adopting a rule that is more stringent than corresponding federal draft or final regulations, guidelines, or criteria.

The proposed action of the Board will accomplish the following: (1) adopt the August 2012 version of Department Circular DEQ-7 ("DEQ-7"), which updates the August 2010 version of the circular, as described herein; (2) adopt housekeeping revisions to each administrative rule which incorporates DEQ-7 by reference, to ensure that each such rule correctly references the August 2012 version of DEQ-7; (3) revise the "Definitions" section of Chapter 30, Subchapter 6 (Surface Water Quality Standards and Procedures) deleting the defined terms "acutely toxic conditions" and "chronic toxicity," and modifying the definition of "mixing zone;" (4) update the incorporation by reference of certain federal wastewater treatment regulations by referencing the most recent versions of the federal rules, and repealing the incorporation by reference of other certain federal wastewater treatment regulations that are no longer applicable; (5) clarify the application of non-degradation rules to C-3 classified waters; (6) eliminate standards and prohibitions that are duplicative of other rules; and (7) repeal the G-1 water-use classification and associated water quality standards.

Revisions to DEQ 7:

Interim Standards for Pesticides:

The Board proposes to adopt numeric ground water standards for five pesticides and associated metabolites and revise interim standards for twelve to fulfill its statutory obligation to establish "interim" ground water standards for agricultural chemicals detected in Montana's ground waters when there are no federally promulgated standards. *See* § 80-15-201(3), MCA. In addition, the Board is adopting or revising interim surface water standards for those same pesticides and metabolites to promote the state's policy of protecting and maintaining the quality of all state waters. *See* § 75-5-102, MCA. The Department developed the proposed numeric surface and

ground water standards in consultation with an EPA toxicologist using EPA's recommended process for deriving water quality criteria.

Since EPA has not adopted any water quality standards or criteria for these pesticides and associated metabolites, no written findings are required for the adoption of either surface or ground water standards under § 75-5-203, MCA and § 75-5-309, MCA. Moreover, given that the adoption of "interim" ground water standards for pesticides is required under § 80-15-201(3), MCA, no written findings for the adoption of ground water standards are required under § 75-5-203, MCA.

Aquatic Life Standards.

The Board is proposing to adopt numeric chronic aquatic life standards for acrolein in response to EPA's promulgation of recommended chronic criteria for this chemical under § 304(a) of the CWA. Since the proposed aquatic life standards are consistent with, and not more stringent than EPA's recommended criteria, no written findings are required under § 75-5-203, MCA and § 75-5-309, MCA.

The board is proposing to revise the aquatic life standard for Endrin to correct a previous error. This revision is necessary to be consistent with EPA's 1985-method of incorporating a magnitude, frequency, and duration component into acute aquatic life standards. Since the proposed revision of Endrin is consistent with, and not more stringent than EPA's recommended method for establishing acute criteria, no written findings are required under § 75-5-203, MCA, and § 75-5-309, MCA.

Human Health Standards

The Board is proposing to adopt five new human health standards and to revise two human health standards currently listed in DEQ-7. The proposed human health standards are consistent with, and not more stringent than EPA's recommended criteria, therefore, no written findings are required under § 75-5-203, MCA, and § 75-5-309, MCA.

Revisions to the Categories for Twelve Parameters.

The board is revising the categories of 12 parameters currently listed in Department Circular DEQ-7 as toxic or carcinogenic, based upon EPA's revisions to the manner in which it classifies carcinogens. The board is proposing to change the category of seven parameters from carcinogenic to toxic, three parameters from toxic to carcinogenic, and two parameters from harmful to toxic. EPA's revisions to these classifications are based on the latest available scientific evidence. Since the Board's proposed revisions are consistent with, and not more stringent than EPA's recommended reclassifications, no written findings are required under § 75-5-203, and 75-5-309, MCA.

Revisions to Required Reporting Values.

The board is proposing to adopt new or revised required reporting values (RRVs) for 213 parameters currently listed in Department Circular DEQ-7. These proposed changes are due, in

part, to significant advances in detection limits that have developed over the past ten years and also in response to EPA guidance. These detection limits incorporate new EPA-approved procedures promulgated under 40 CFR Part 136. The department's RRV calculation primarily uses method detection limits (MDLs) provided by analytical laboratories. MDLs and minimum reporting levels (MRLs) were collected from seven state and commercial labs using methods listed in 40 CFR Part 136 and the Safe Drinking Water Act, as well as for select methods approved by EPA's Office of Pesticides. The department then calculated RRVs for the parameters using the method set forth in EPA 821-B-04-005 (Revised Assessment of Detection and Quantitation Approaches), as modified to account for MDLs from multiple laboratories.

Because the calculation of RRV's for the parameters follows EPA approved procedures and guidance, they are not more stringent than corresponding draft or final federal regulations, guidelines, or criteria. Therefore, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Revisions to the Footnotes for Department Circular DEQ-7.

The board is revising footnotes 1, 2, 7, 8, 17, 23, 24, 37, 38, and 39 to correct errors and clarify language. No written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Correction to EPA Information Sources For 28 Parameters.

The board is revising Department Circular DEQ-7 to correct errors and update the sources of information obtained from EPA that were used in the development of the water quality standards for twenty-eight parameters. The revisions do not otherwise alter the parameters, nor are the parameters more stringent than corresponding draft or final federal regulations, guidelines, or criteria. Therefore, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Repeal of Five References to Narrative Water Quality Standards for Nutrients in Surface Waters.

The board is proposing to delete the existing text of footnote 8 since it serves no purpose other than to inform the public that nutrients have no numeric standards. The board is also proposing to remove from Department Circular DEQ-7 two nutrient parameters that have no numeric water quality standards for either aquatic life or human health. Other nutrient parameters in Department Circular DEQ-7, for which a numeric human health-based standard has been adopted, will remain unchanged.

The board is proposing to remove the parameter manganese and Footnote 24 from Department Circular DEQ-7 to eliminate any confusion between the narrative standards developed by the department using site-specific information and the state-wide numeric standards contained in Department Circular DEQ-7. For the same reasons, the board is also proposing to eliminate the text of Footnote 23, which references the SMCL for iron.

These revisions do not otherwise alter the subject parameters or standards, nor do the revisions render any parameter or standard more stringent than corresponding draft or final federal regulations, guidelines, or criteria. Therefore, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

General Revisions to the Introduction.

The board is proposing to generally revise the Introduction to Department Circular DEQ-7 in order to provide consistency among commonly used terms, to clarify the meaning of acronyms, and to more clearly and accurately specify the sources of information used to develop water quality standards. No written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Revision of Rules Referencing Department Circular DEQ-7.

The board is proposing to amend ARM §§ 17.24.645, 17.24.646, 17.30.502, 17.30.619, 17.30.702, 17.30.1001, 17.24.345, 17.55.109, 17.56.507, and 17.56.608 to properly reference the most recently adopted version of Department Circular DEQ-7 (August 2012). Because the revisions to DEQ-7 do not adopt water quality standards or rules that are more stringent than draft or final federal water quality rules or regulations, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Revision of Definitions Section of Chapter 30, Subchapter 6 (Surface Water Quality Standards and Procedures).

The board is proposing to delete the defined terms “acutely toxic conditions” and “chronic toxicity,” and modify the definition of “mixing zone” contained in the “Definitions” section of Chapter 30, Subchapter 6 (Surface Water Quality Standards and Procedures). Because the revisions do not render any rule or regulation more stringent than corresponding federal draft or final regulations, guidelines, or criteria, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Repeal of the Incorporation By Reference of Federal Wastewater Treatment Regulations.

The board is proposing to repeal the incorporation by reference of federal regulations in ARM 17.30.619(1)(c) and (d) to eliminate duplication between rules establishing surface water quality standards and rules establishing effluent limitations and treatment standards for MPDES permits set forth in ARM Title 17, chapter 30, subchapter 12. Because the revisions do not render any rule or regulation more stringent than corresponding federal draft or final regulations, guidelines, or criteria, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Revision Eliminating Degradation Language in C-3 Classification.

The board is proposing remove language in the surface water quality standards regarding C-3 classification in order to eliminate any implication that degradation occurs only when a beneficial use is impacted. Because the revision does not render any rule or regulation more stringent than corresponding federal draft or final regulations, guidelines, or criteria, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Repeal of Standards and Prohibitions That Duplicate or Contradict Other Rules.

The board is proposing to remove the treatment requirements currently found in (2) and (3) of ARM 17.30.635 in order to eliminate duplication and inconsistencies between these requirements and the rules establishing technology-based treatment requirements for point source discharges in ARM Title 17, chapter 30, subchapter 12. In addition, the board is proposing to delete the requirements in (3) and (4) of ARM 17.30.637, because these activities are addressed under other regulatory programs administered by

the department. Finally, the board is revising ARM 17.30.637(5) and (6) to delete the citation to ARM 17.30.635 as the authority for imposing minimum treatment. None of these revisions render any rule or regulation more stringent than corresponding federal draft or final regulations, guidelines, or criteria. Therefore, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

Repeal of G-1 Water –Use Classification and Associated Water Quality Standards.

The board is proposing to delete §17.30.658 ARM (G-1 CLASSIFICATION STANDARDS) consistent with the board's repeal of the entire G-1 classification in ARM 17.30.616. Because none of these revisions render any rule or regulation more stringent than corresponding federal draft or final regulations, guidelines, or criteria, no written findings are required under §§ 75-5-203 and 75-5-309, MCA.

TAKINGS REVIEW

The Private Property Assessment Act, codified as § 2-10-101, MCA, requires that, prior to adopting a proposed rules that has taking or damaging implications for private real property, an agency must prepare a taking or damaging impact statement. "Action with taking or damaging implications" means:

[A] proposed state agency administrative rule, policy, or permit condition or denial pertaining to land or water management or to some other environmental matter that if adopted and enforced would constitute a deprivation of private property in violation of the United States or Montana Constitution.

§ 2-10-103, MCA.

Section 2-10-104, MCA, requires the Montana Attorney General to develop guidelines, including a checklist, to assist agencies in determining whether an agency action has taking or damaging implications. I have completed an Attorney General's "Private Property Assessment Act Checklist" pertaining to the Board's adoption of proposed revisions in MAR Notice No. 17-335, which is attached to this memo. Based upon completion of the checklist, the proposed revisions do not have taking or damaging implications. Therefore, no further HB 311 assessment is required.

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST FOR AMENDMENT OF SEPTIC
PUMPER RULES AS PROPOSED IN MAR NOTICE 17-335

YES NO

X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights or some other environmental matter?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
		Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Signature of Reviewer

Date

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF AMENDMENT AND
17.24.645, 17.24.646, 17.30.502,)	REPEAL
17.30.602, 17.30.619, 17.30.629,)	
17.30.635, 17.30.637, 17.30.702,)	(RECLAMATION)
17.30.1001, 17.36.345, 17.55.109,)	(WATER QUALITY)
17.56.507, and 17.56.608 pertaining to)	(SUBDIVISIONS)
Department Circular DEQ-7, definitions,)	(CECRA)
incorporations by reference, C-3)	(UNDERGROUND STORAGE
classification standards, general)	TANKS)
treatment standards, and general)	
prohibitions, and the repeal of ARM)	
17.30.616 and 17.30.658 pertaining to)	
water-use classification and descriptions)	
for ponds and reservoirs constructed for)	
the disposal of coal bed methane water)	
and G-1 classification standards)	

TO: All Concerned Persons

1. On June 7, 2012, the Board of Environmental Review and the Department of Environmental Quality published MAR Notice No. 17-335 regarding a notice of public hearing on the proposed amendment and repeal of the above-stated rules at page 1103, 2012 Montana Administrative Register, issue number 11.

2. The board and department have amended ARM 17.30.602, 17.30.629, 17.30.635, and 17.30.637 and repealed ARM 17.30.616 and 17.30.658 exactly as proposed and have amended ARM 17.24.645, 17.24.646, 17.30.602, 17.30.619, 17.30.702, 17.30.1001, 17.36.345, 17.55.109, 17.56.507, and 17.56.608 as proposed, but with the following changes:

17.24.645 GROUND WATER MONITORING (1) through (5)(c) remain as proposed.

(6) Methods of sample collection, preservation, and sample analysis must be conducted in accordance with 40 CFR Part 136 titled "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July 2003) and the department's document titled "Department Circular DEQ-7, Montana Numeric Water Quality Standards," August ~~October~~ 2012 edition. Copies of Department Circular DEQ-7 are available at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901. Sampling and analyses must include a quality assurance program acceptable to the department.

(7) and (8) remain as proposed.

17.24.646 SURFACE WATER MONITORING (1) through (5) remain as proposed.

(6) Methods of sample collection, preservation and sample analysis must be conducted in accordance with 40 CFR Part 136 titled "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July 2003) and Part 434 titled "Coal Mining Point Source Category BPT, BAT, BCT Limitations and New Source Performance Standards" (January 2002), and the ~~August~~ October 2012 edition of the department's document titled "Department Circular DEQ-7, Montana Numeric Water Quality Standards." Copies of 40 CFR Part 136, 40 CFR 434, and Department Circular DEQ-7 are available at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901. Sampling and analyses must include a quality assurance program acceptable to the department.

(7) remains as proposed.

17.30.502 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, and ARM Title 17, chapter 30, subchapters 6 and 7, apply throughout this subchapter:

(1) through (13) remain as proposed.

(14) The board adopts and incorporates by reference Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August~~ October 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters. Copies of Department Circular DEQ-7 are available from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

17.30.619 INCORPORATIONS BY REFERENCE (1) The board adopts and incorporates by reference the following state and federal requirements and procedures as part of Montana's surface water quality standards:

(a) Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August~~ October 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;

(b) through (2) remain as proposed.

17.30.702 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter (Note: 75-5-103, MCA, includes definitions for "degradation," "existing uses," "high quality waters," "mixing zone," and "parameter"):

(1) through (25) remain as proposed.

(26) The board adopts and incorporates by reference:

(a) Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (~~August~~ October 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;

(b) through (d) remain as proposed.

17.30.1001 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:

- (1) remains as proposed.
- (2) "DEQ-7" means Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (August October 2012 edition), which establishes water quality standards for toxic, carcinogenic, radioactive, bioconcentrating, nutrient, and harmful parameters.
- (a) The board adopts and incorporates by reference Department Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (August October 2012 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.
- (3) through (15) remain as proposed.

17.36.345 ADOPTION BY REFERENCE (1) For purposes of this chapter, the department adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:

- (a) through (d) remain as proposed.
- (e) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (August October 2012 edition);
- (f) through (2) remain as proposed.

17.55.109 INCORPORATION BY REFERENCE (1) For the purposes of this subchapter, the department adopts and incorporates by reference:

- (a) Department Circular DEQ-7, Montana Numeric Water Quality Standards (August October 2012 edition);
- (b) through (5) remain as proposed.

17.56.507 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (August October 2012 edition);
- (b) through (3) remain as proposed.

17.56.608 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (August October 2012 edition);
- (b) through (3) remain as proposed.

3. The following comments were received and appear with the board's and department's responses:

Interim Standards for Pesticides

COMMENT NO. 1: Overly stringent standards can take an economic toll on Montanans. Interim criteria shouldn't be too stringent or they can create a business burden and hurt Montana's economy.

RESPONSE: The department uses the most current available research for developing an interim health advisory when a federal standard does not already exist. The process for deriving the standard is fixed by EPA guidance. If the final standard is much less stringent than an interim standard, it is in response to new health studies. The same calculations are used in developing the state interim and potential future EPA standards. The only changes being made are the health studies selected for use in the calculations.

Revisions to the Categories for 12 Parameters

COMMENT NO. 2: Chlorite--The new human health standard for chlorite may increase the level of treatment necessary prior to discharging effluent from waste water treatment plants. Additional sampling and analysis would be a burden.

RESPONSE: Chlorite is used in a number of water treatment facilities for disinfection. In 2010, EPA Region 8 requested that the department evaluate this new criterion. The Integrated Risk Information System (IRIS) (2000) provides a reference dose (RfD) of 30 µg/kg-day and cites altered liver weights and impaired maturation in mice as evidence of toxicological impact. Confidence in the oral RfD assessment was medium to high and the database was rated as having high confidence. While there may be additional costs associated with the permit requirement to monitor this parameter, the establishment of a standard is appropriate to protect human health.

COMMENT NO. 3: Phenol--Reclassifying phenol as a toxic parameter will result in tighter regulations for Montana Pollutant Discharge Elimination System permit holders and may require additional treatment and control for removal of the parameter. Phenol is already regulated through whole effluent toxicity testing and additional regulations are not necessary. Additionally, recategorization of phenol to toxic will mandate more stringent standards under Montana's nondegradation rules.

RESPONSE: Since 1988, phenol has had an oral toxicity limit. Currently, the RfD established by the EPA and published in IRIS (2002) is at 300 µg/kg-day. Phenol is a toxin with proven impact to the kidneys and reproductive survival in mice. The number of studies conducted and the quality of the studies allows the EPA to conclude that the confidence in the oral RfD and the database used in its derivation is medium to high. Because phenol is a toxic parameter, it is appropriate that its exposure be limited more stringently than a harmful parameter.

COMMENT NO. 4: Tetrachloroethylene (PCE)--EPA informed the board of updated information in IRIS regarding PCE that indicates it should remain in the carcinogen category.

RESPONSE: Recent updates to IRIS, released in February of 2012, show that PCE is a carcinogen. Consequently, PCE will remain listed as a carcinogen.

COMMENT NO. 5: Cadmium--Change in the classification of cadmium is not supported because IRIS classification is based on inhalation of cadmium dust or fumes, not ingestion. Cadmium is listed as a carcinogen when inhaled, but not ingested, so it should not be classified as a carcinogen for water quality standards.

It is necessary to look at dosage and exposure pathway for standards. Additionally, the aquatic life standard and the Required Reporting Value (RRV) for cadmium are very low. Application of nondegradation rules to cadmium as a carcinogen with the low standard and RRV would result in the allowance of no cadmium detections in effluents. This would be a significant problem, since cadmium is ubiquitous in the environment and may be detected in effluents.

RESPONSE: A full review of the categorization of cadmium has revealed that it is inappropriate to consider an oral route of carcinogenic exposure for cadmium. Although a portion of the inhalatory route of cadmium exposure is calculated based on inhalation of water vapor, no independent cancer slope has been developed for either food ingestion or water intake. Consequently, the categorization of cadmium will be left as toxic.

COMMENT NO. 6: Category assignments in Department Circular DEQ-7 (DEQ-7) affect application of nondegradation rules. EPA recommends defining significance thresholds for nondegradation in terms of assimilative capacity and a significance threshold value of 10% or less of the available assimilative capacity on a cumulative basis. EPA recommends updating nondegradation requirements to be consistent with their recommendation.

RESPONSE: The comment is outside the scope of the current rulemaking. If and when the board proposes changes to the nondegradation rules, EPA's comments will be considered.

Required Reporting Values

COMMENT NO. 7: Required Reporting Values (RRVs) established through the use of ultrapure lab standards may not be appropriate for "real-world" samples and don't reflect real-world effluents with matrix effects. Matrix interference from effluent characteristics will increase the reporting limit for a sample and may prevent achieving low levels. Commentors requested a study on real-world samples.

RESPONSE: Matrix interference in a sample will increase the reporting limit for the sample. Laboratories have routine procedures for adding comments to the data report if the reporting limits are increased due to matrix interference. These procedures should be followed when this occurs.

COMMENT NO. 8: Permit limits may be well above standards, and RRVs, and analyzing down to the RRVs would provide no benefit and would be expensive. Commentor suggested including language in DEQ-7 indicating that alternate reporting levels may be acceptable.

RESPONSE: The RRV is the reporting limit that a laboratory must be able to achieve to meet the most stringent standard in DEQ-7. The department has latitude when establishing reporting limits in permits that may contain effluent limits above the numeric water quality standards found in DEQ-7. It is the responsibility of the individual requesting the analysis to ensure that appropriate methods and reporting limits are requested from the laboratory to meet analytical and reporting limit needs.

COMMENT NO. 9: If the department requires RRV compliance of all samplers regardless of the analytical method and numeric standard applied to the sample, inappropriate equipment and lab techniques may result in inconsistent results between labs. Commentor recommends conducting RRV studies with real-world effluents and labs located in state.

RESPONSE: RRVs do not encourage labs to provide substandard quality. The individual submitting samples is responsible for ensuring that the appropriate analytical method and laboratory reporting limit are requested from the lab based on his or her sampling requirement. If the laboratory cannot perform the method, the routine practice is to subcontract the work to a laboratory that can. If the appropriate reporting limit cannot be achieved, the laboratory should discuss this with the individual submitting the sample and the sample can either be subcontracted to another laboratory that can achieve this level or the laboratory can report the value as closely as possible to the RRV and qualify data (by comment in the analytical report) that is reported below the lowest calibration standard.

Repealing References to the Narrative Water Quality Standard for Nutrients in Surface Waters

COMMENT NO. 10: Commentors disagree with removing reference to the narrative nutrient standard and incorporating Department Circular DEQ-12 (DEQ-12) by reference. They are concerned that removing the narrative reference will prematurely drive adoption of numeric standards in DEQ-12. Removal of the narrative standard reference should be done when rulemaking is initiated on DEQ-12.

RESPONSE: It is appropriate to remove the reference to DEQ-12 until its formal adoption. DEQ-7 is the site for numeric water quality standards, and while deletion of the reference to the nutrient narrative standard in DEQ-7 was proposed, repeal of the narrative standard in rule was not. To eliminate confusion, until numeric standards are adopted, inorganic nitrogen and phosphorus and Footnote (8) will remain in DEQ-7 unchanged.

Removing Manganese and Eliminating References to Secondary Maximum Contaminant Levels (SMCLs)

COMMENT NO. 11: Commentor is opposed to the proposed amendment to delete Footnote (24) regarding the secondary maximum contaminant levels (SMCLs) from DEQ-7 and believes that the department should develop a health based standard for manganese. Commentor believes that "little or no treatment" in the narrative standards should be defined.

RESPONSE: The values for manganese provided in the footnote are guidance from EPA SMCLs and are not numeric standards. DEQ-7 is the circular that contains numeric water quality standards and, as such, the use of a secondary guidance value is inappropriate as part of its content. The footnote is reserved for future use relative to a Montana human health standard for manganese currently under development. There is growing evidence that manganese, at levels below the current EPA health advisory levels, may be harmful to infant neurological

development. The department is working with the researchers and the EPA to develop a health advisory standard for the state of Montana.

COMMENT NO. 12: Commentor requests that the board direct the department to pursue cleanup and installation of water treatment at sites where contaminants have been disposed of, resulting in manganese affecting the drinking water quality in nearby domestic water supplies.

RESPONSE: This comment is outside the scope of this rulemaking.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

JAMES M. MADDEN
Rule Reviewer

By: _____
JOSEPH W. RUSSELL, M.P.H.
Chairman

Certified to the Secretary of State, _____, 2012.

**BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM**

EXECUTIVE SUMMARY FOR ACTION ON RULE ADOPTION

Agenda # III.B.3.

Agenda Item Summary: The Department requests the Board adopt rules to amend air quality rule provisions in Administrative Rules of Montana (ARM) Title 17, Chapter 8, subchapter 8 to update major source permitting requirements for precursor emissions leading to the formation of ozone and to correct a reference to nitrogen dioxide pertaining to recent PM_{2.5} rule amendments.

List of Affected Rules: This rulemaking would amend ARM 17.8.801, and 17.8.818.

Affected Parties Summary: The rule amendments would affect owners and operators of major sources.

Scope of Proposed Proceeding: The Board initiated rulemaking, published notice of rulemaking, and conducted a public hearing to consider the proposed amendments. No comments were received.

Background: The Board considered revisions to Montana's PSD regulations as established in the federal rulemaking for PSD permitting implementation promulgated in 2005, 70 FR 71612. The proposal does not reflect a more stringent or extensive set of requirements for sources subject to PSD than required federal rules applicable nationwide.

This rulemaking action updates Montana's rules to incorporate requirements for major source permitting regarding the airborne emissions of nitrogen oxides as a precursor to ambient ozone concentrations. The federal Clean Air Act, 42 USC §§7401, *et seq.*, requires each state to assure air quality in that state meets minimum standards applicable across the nation. The Environmental Protection Agency (EPA) is directed to establish National Ambient Air Quality Standards (NAAQS) for air pollutants that meet certain criteria regarding effects on public health and welfare. In order for Montana to retain its authority to regulate major sources of air pollution in the state, Montana is required to adopt the minimum standards applicable to emissions of a NAAQS pollutant whenever a NAAQS is established or revised. These rules reflect changes to major source permitting requirements as a result of a revision to the NAAQS for Ozone.

These rule amendments make Montana's rules consistent with the minimum federal requirements for PSD permitting with respect to the 1997 ozone NAAQS. Montana's rules require a source to demonstrate that emissions from the proposed construction and operation will not cause or contribute to air pollution in excess of any maximum allowable increase or maximum allowable concentration for any NAAQS pollutant. Generally, the revisions to the rules add NO_x as a precursor pollutant for purposes of

determining applicability of preconstruction monitoring, impact analysis, and permitting provisions. The rule adds a definition for nitrogen oxides and revises the definition of "significant" to include nitrogen oxide emissions as a precursor to ozone.

The revisions also correct a reference to nitrogen dioxide (NO₂). The rule currently references NO₂ as a source emission when it is accurately a pollutant in the ambient air. The reference is revised to state "NO_x," a pollutant emitted from a source.

Hearing Information: The Department recommends that the Board appoint a presiding officer and conduct a public hearing to take comment on the proposed amendments. The department submitted testimony at the hearing. As part of that testimony, the department pointed out the need to make clerical corrections to the statement of reasonable necessity, which are attached in the draft Notice of Amendment.

Board Options: The Board may:

1. Adopt the proposed amendments as set forth in the Notice of Public Hearing on Proposed Amendment;
2. Adopt the proposed amendments with revisions that the Board finds are appropriate and that are within the scope of the Notice of Public Hearing on Proposed Amendment and the record in this proceeding; or
3. Decide not to adopt the amendments.

DEQ Recommendation: The Department recommends the Board adopt the rules as proposed in the Notice of Public Hearing on Proposed Amendment.

Enclosures:

1. Notice of Public Hearing on Proposed Amendment
2. HB 521 and 311 Analysis
3. Presiding Officer's Report
4. Draft Notice of Amendment

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)
17.8.801 and 17.8.818, pertaining to)
definitions and review of major stationary)
sources and major modifications--source)
applicability and exemptions)

NOTICE OF PUBLIC HEARING ON
PROPOSED AMENDMENT

(AIR QUALITY)

TO: All Concerned Persons

1. On July 12, 2012, at 11:00 a.m., the Board of Environmental Review will hold a public hearing in Room 35, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed amendment of the above-stated rules.

2. The board will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact Elois Johnson, Paralegal, no later than 5:00 p.m., June 18, 2012, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.8.801 DEFINITIONS In this subchapter, the following definitions apply:
(1) through (19) remain the same.

(20) "Major modification" means any physical change in, or change in the method of operation of, a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the FCAA, excluding hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA.

(a) Any net emissions increase that is significant for volatile organic compounds or NO_x will be considered significant for ozone.

(b) through (21)(d) remain the same.

(22) The following apply to the definition of the term "major stationary source":

(a) through (a)(iii) remain the same.

(b) A major source that is major for volatile organic compounds or NO_x will be considered major for ozone.

(c) through (24)(g) remain the same.

(25) "Nitrogen Oxides" or "NO_x" means the sum of nitric oxide and nitrogen dioxide in the flue gas or emission point.

(25) and (26) remain the same, but are renumbered (26) and (27).

~~(27)~~ (28) The following apply to the definition of the term "significant":

(a) "significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides (NO_x): 40 tpy

Sulfur dioxide (SO_2): 40 tpy

Particulate matter: 25 tpy of particulate matter emissions

15 tpy of PM-10 emissions

PM-2.5: 10 tpy of direct PM-2.5 emissions, 40 tpy of sulfur dioxide (SO_2) emissions, or 40 tpy of ~~nitrogen dioxide (NO_2)~~ nitrogen oxides (NO_x) emissions unless demonstrated not to be a PM-2.5 precursor

Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H_2S): 10 tpy

Total reduced sulfur (including H_2S): 10 tpy

Reduced sulfur compounds (including H_2S): 10 tpy

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year (3.5×10^{-6} tpy)

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tpy)

Municipal waste combustor acid gases (measured as sulfur dioxide (SO_2) and hydrogen chloride): 36 megagrams per year (40 tpy)

(b) "significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the FCAA, that ~~(27)~~ (28)(a) does not list any emissions rate. This does not include hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA.

(c) Notwithstanding ~~(27)~~ (28)(a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than one $\mu\text{g}/\text{m}^3$ (24-hour average).

(28) and (29) remain the same, but are renumbered (29) and (30).

AUTH: 75-2-111, 75-2-203, MCA

IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.818 REVIEW OF MAJOR STATIONARY SOURCES AND MAJOR MODIFICATIONS--SOURCE APPLICABILITY AND EXEMPTIONS (1) through (6) remain the same.

(7) The department may exempt a proposed major stationary source or major modification from the requirements of ARM 17.8.822, with respect to monitoring for a particular pollutant, if:

(a) the emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a modification would cause, in any area, air quality impacts less than the following amounts:

(i) through (v) remain the same.

(vi) ozone: no de minimus air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to this subchapter requires an ambient impact analysis, including the gathering of ambient air quality data;

(vii) through (c) remain the same.

AUTH: 75-2-111, 75-2-203, MCA

IMP: 75-2-202, 75-2-203, 75-2-204, MCA

REASON: The board is proposing amendments to Montana's prevention of significant deterioration (PSD) rules to conform the rules to amendments to federal regulations by the federal Environmental Protection Agency (EPA) in 2005. The federal Clean Air Act, 42 USC 7401 through 7671q (CAA), directs each state to assure that air quality in that state meets minimum standards applicable across the nation. The CAA directs the EPA to establish National Ambient Air Quality Standards (NAAQS) for air pollutants that meet certain criteria regarding effects on public health and welfare. Pursuant to the CAA, EPA has authorized the state of Montana to regulate major sources in the state. For Montana to retain this authority, the board is required to adopt the minimum standards applicable to major source emissions of a NAAQS pollutant whenever a NAAQS is established or revised 40 USC 7410(C).

On November 29, 2005, EPA published regulations regarding the implementation of the 1997 ozone NAAQS (70 CFR 71612). Those regulations required revisions to state programs for major source permitting. One of the requirements in the EPA regulations was to address ozone formation by regulating precursor pollutants. "Precursor pollutants" are pollutants that combine to form another pollutant. The federal regulations include nitrogen oxides (NO_x) that react with volatile organic compounds to form ozone. In a decision published on May 19, 2011, in the Federal Register at 76 FR 28934, EPA found Montana's PSD rules for ozone inadequate because the rules do not address NO_x as a precursor pollutant for ozone. The proposed amendments in this notice would address EPA's concerns and make Montana's rules for PSD permits adequate to implementing the 1997 8-hour ozone NAAQS.

Generally, the proposed amendments to the rules would add NO_x as a precursor pollutant that contributes to the formation of ozone. The department and applicants for permits to construct or modify major sources would be required to analyze the applicability of PSD requirements based on NO_x as a precursor to ozone. The following are brief descriptions of the proposed amendments:

ARM 17.8.801(20)(a) would be amended by modifying the definition of "major modification," adding NO_x as a precursor pollutant for ozone when NO_x emissions exceed a significance threshold.

ARM 17.8.801(22)(b) would be amended to add NO_x as a precursor to ozone,

triggering consideration of a source as "major" for ozone when the source emits or has the potential to emit 100 tons per year of NO_x.

ARM 17.8.801(25) would be amended by adding a definition of the term nitrogen oxides or NO_x, defining it as the sum of nitric oxide and nitrogen dioxide in the flue gas or emission point.

ARM 17.8.801(27)(a) would be amended to add a significance level of 40 tons or more per year of NO_x because NO_x is a precursor pollutant that, in combination with VOCs, creates ozone. Ozone is not a source emission, but an increase in NO_x emissions, which is a source emission, is a good surrogate for the formation of ozone. A significant increase in ozone will be assumed based on a 40 tpy or more net increase in the potential to emit of NO_x.

ARM 17.8.818(7)(a)(vi) would be amended to add that a net increase of 100 tons or more per year of NO_x, as a precursor to ozone formation, triggers an ambient impact analysis.

The board is also proposing the following amendment concerning particulate matter smaller than 2.5 microns, referred to as PM-2.5:

ARM 17.8.801(27)(a), would be amended by substituting "nitrogen oxides" for "nitrogen dioxide (NO₂)" as a precursor to PM-2.5 formation. In that subsection, a net emissions increase or potential to emit of 40 tons per year of NO_x would cause a source to be considered major for PM-2.5 for the purpose of triggering PSD review. The use of "nitrogen dioxide (NO₂)" was a mistake when the rule was adopted in September 2011. The board intended to use "nitrogen oxides," which include the sum of nitric oxide and nitrogen dioxide in the flue gas or emission point because they are precursors to the formation of PM-2.5, and the board is proposing to correct that mistake.

The board is also proposing to amend portions of rules listed above for consistency of language when referring to sulfur dioxide (SO₂) and nitrogen oxides (NO_x). The proposed amendments would match the comparable language provided in the Code of Federal Regulations (CFR). These proposed amendments are not intended to change the substance of these rules.

4. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to ejohnson@mt.gov, no later than 5:00 p.m., July 12, 2012. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

5. Katherine Orr, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.

6. The board maintains a list of interested persons who wish to receive

notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supply; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to Elois Johnson at ejohnson@mt.gov, or may be made by completing a request form at any rules hearing held by the board.

7. The bill sponsor contact requirements of 2-4-302, MCA, do not apply.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

/s/ David Rusoff

DAVID RUSOFF

Rule Reviewer

BY: /s/ Joseph W. Russell

JOSEPH W. RUSSELL, M.P.H.,

Chairman

Certified to the Secretary of State, May 29, 2012.



**Montana Department of
ENVIRONMENTAL QUALITY**

**Brian Schweitzer, Governor
Richard H. Opper, Director**

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

OFFICE MEMORANDUM

Filed with the

MONTANA BOARD OF

To: Board of Environmental Review

ENVIRONMENTAL REVIEW

From: Norm Mullen, DEQ Staff Attorney

This 12th day of July 2012
at 8:15 o'clock P.M.

Re: HB 521 and HB 311 Review for MAR Notice 17-334, rulemaking pertaining to definitions and review of major stationary sources and major modifications--source applicability and exemptions; NOx as a precursor to ozone

Date: July 11, 2012

HB 521 ANALYSIS

(Comparing Stringency of State Rules to Any
Comparable Federal Regulations or Guidelines)

Sections 75-2-111 and 207, MCA, codify the air quality provisions of House Bill 521 from the 1995 legislative session. They require that the Board of Environmental Review (Board), prior to adopting a rule to implement the Clean Air Act of Montana that is more stringent than a comparable federal regulation or guideline, make certain written findings after a public hearing and public comment.

In this proceeding, in addition to proposing minor editorial revisions that are not intended to have any substantive effect, the Board is proposing to amend three subsections of ARM Title 17, chapter 8, subchapter 8 that concern the regulation of nitrogen oxides as a precursor to the formation of ozone. Those subsections are ARM 17.8.801(20)(a), which, for the purposes of determining whether a "major modification" exists, would define a net emissions increase that is significant for volatile organic compounds (VOCs) or nitrogen oxides (NOx) as also significant for ozone; ARM 17.8.801(22)(b), which would state that a major source that is major for VOCs or NOx will be considered major for ozone; and ARM 17.8.818(7)(a)(vi), which would state that, for the purpose of exempting a major stationary source or modification from monitoring requirements, there is no exclusion as de minimis for ozone, and that an ambient impact analysis is required for a net increase of 100 or more tons per year of VOCs or nitrogen oxides.

These amendments are being proposed to satisfy Montana's obligations under the federal Clean Air Act to submit, to the federal Environmental Protection Agency (EPA), revisions to Montana's state implementation plan (SIP) that contain minimum standards applicable to major source emissions of a National Ambient Air Quality Standards (NAAQS) pollutant whenever a NAAQS is established or revised. 42 USC 7410(a)(2)(C).

EPA's regulations concerning implementation of the 1997 ozone NAAQS in areas that currently meet the NAAQS are contained in 40 CFR 51.166, concerning the prevention of significant deterioration of air quality (PSD). When that section was amended on November 29, 2005, at 70 FR 71612, to include NO_x as an ozone precursor, states were required to revise their programs for major source permitting. Those EPA regulations require states to address, in their SIPs, ozone formation by regulating precursor pollutants. "Precursor pollutants" are pollutants that combine to form another pollutant. EPA's regulations regulate NO_x as a precursor that reacts with VOCs to form ozone. See, for purposes of the current proceeding, 40 CFR 51.166(b)(2)(ii), 51.166(b)(1)(ii), and 51.166(i)(5)(i)(f), fn. 1.

In a decision published on July 22, 2011, in the Federal Register at 76 FR 43918, 43922, EPA disapproved the PSD rules for ozone in Montana's SIP because they do not address NO_x as a precursor pollutant for ozone. The rule amendments proposed by the Board in this proceeding would address EPA's concerns and make Montana's rules for PSD permits adequate to implement the 1997 8-hour ozone NAAQS.

Each of the proposed amendments, to ARM 17.8.801(20)(a), ARM 17.8.801(22)(b), and ARM 17.8.818(7)(a)(vi), uses the same language and imposes the same requirements as the comparable federal regulation, 40 CFR 51.166(b)(2)(ii), 51.166(b)(1)(ii), and 51.166(i)(5)(i)(f), fn. 1, respectively. Therefore, the proposed amendments are not more stringent than the comparable federal regulations, and the requirements of § 75-2-207, MCA, do not apply.

HB 311 REVIEW

(Assessing Impact on Private Property)

Sections 2-10-101 through 105, MCA, codify House Bill 311, the Private Property Assessment Act, from the 1995 legislative session. They require that, prior to taking an action that has taking or damaging implications for private real property, a state agency must prepare a taking or damaging impact assessment.

Section 2-10-104, MCA, requires the Montana Attorney General to develop guidelines, including a checklist, to assist agencies in determining whether an agency action has taking or damaging implications.

The present proposed action involves rules affecting use of private real property, and the Board has discretion legally not to take the action.

I have attached a takings checklist indicating that no taking would occur because of the amended rule being proposed here.

Name of Project: Proposed amendment of ARM 17.8.801 and 17.8.818, pertaining to definitions and review of major stationary sources and major modifications--source applicability and exemptions, as proposed in MAR Notice 17-334

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKING OR DAMAGING IMPLICATIONS
UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES NO

X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights or some other environmental matter?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
		7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)



Signature of Reviewer

7/11/2012
Date

1 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
2 **AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY**
3 **OF THE STATE OF MONTANA**

4 **In the matter of the amendment of**
5 **ARM 17.8.801 and 17.8.818**
6 **pertaining to definitions and review**
7 **of major stationary sources and**
8 **major modifications - source**
9 **applicability and exemptions**

10 **PRESIDING OFFICER REPORT**

11 **INTRODUCTION**

12 1. On July 12, 2012, at 11 a.m., the undersigned Presiding Officer
13 presided over and conducted the public hearing held in Room 35 of the Metcalf
14 Building, 1520 East Sixth Avenue, Helena, Montana, to take public comment on the
15 above-captioned proposed amendments. The amendments amend air quality rules to
16 update requirements for precursors to ozone, volatile organic compounds (VOCs)
17 and nitrogen oxides (NOx). The rulemaking is Montana's response to EPA's ozone
18 implementation rule establishing certain requirements for major sources. Montana's
19 rules require a major source to demonstrate that emissions from the proposed
20 construction and operation of the major source will not cause or contribute to air
21 pollution in excess of any maximum allowable increase or maximum allowable
22 concentration for any NAAQS (National Ambient Air Quality Standard) pollutant.
23 The proposed amendments would require those demonstrations for ozone precursors
24 VOCs and NOx. Additionally the amendments amend certain rules concerning PM
25 2.5 such that the rules reference nitrogen oxides instead of nitrogen dioxide.

26 2. Notice of the hearing was contained in the Montana Administrative
27 Register (MAR), Notice No. 17-334, published on June 7, 2012, in Issue No. 11 at
28 pages 1098 through 1102. A copy of the notice is attached to this report.
29 (Attachments are provided in the same order as they are referenced in this report.)

3. The hearing began at 11 a.m. Lesofski Reporting Service recorded the hearing.

4. There were no members of the public at the hearing. At the hearing, the Presiding Officer identified and summarized the MAR notice and read the Notice of Function of Administrative Rule Review Committee as required by Mont. Code Ann. § 2-4-302(7)(a).

SUMMARY OF HEARING

5. Ms. Debra Wolfe, a planner with the Air Resources Management Bureau within the Montana Department of Environmental Quality (“Department”) submitted a written statement and gave a brief oral summary of the amendments at the hearing. (The written statement is attached.)

6. No other testimony or written comments were submitted.

7. A written memorandum was submitted from the Department staff attorney, Mr. Norm Mullen with HB 521 and HB 311 reviews of the proposed amendments and a Private Property Assessment Act Checklist. (Mr. Mullen's memorandum is attached to this report.)

8. As to the HB 521 analysis, none of the proposed amendments would make the state rules more stringent than comparable federal regulations or guidelines. No further HB 521 analysis is required.

9. With respect to HB 311 (the Private Property Assessment Act, Mont. Code Ann. §§ 2-10-101 through 105), the Board is required to assess the taking or damaging implications of a proposed rule or amendments affecting the use of private real property. This rulemaking affects the use of private real property. A Private Property Assessment Act Checklist was prepared, which shows that the proposed amendments do not have taking or damaging implications under the Private Property Assessment Act. Therefore, no further assessment is required.

10. The period to submit comments ended at 5 p.m. on July 12, 2012.

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BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)
17.8.801 and 17.8.818, pertaining to)
definitions and review of major stationary)
sources and major modifications--source)
applicability and exemptions)

NOTICE OF AMENDMENT

(AIR QUALITY)

TO: All Concerned Persons

1. On June 7, 2012, the Board of Environmental Review published MAR Notice No. 17-334 regarding a notice of public hearing on proposed amendment of the above-stated rules at page 1098, 2012 Montana Administrative Register, issue number 11.
2. The board has amended the rules exactly as proposed.
3. The department submitted testimony at the rule hearing on July 12, 2012. In preparing its testimony for the rule hearing, DEQ noticed clerical errors in the statement of reasonable necessity concerning citations to federal laws and regulations. The department submitted testimony at the hearing to correct these clerical errors. The clerical corrections are as follows, stricken matter interlined, new matter underlined:

REASON: The board is proposing amendments to Montana's prevention of significant deterioration (PSD) rules to conform the rules to amendments to federal regulations by the federal Environmental Protection Agency (EPA) in 2005. The federal Clean Air Act, 42 USC 7401 through 7671q (CAA), directs each state to assure that air quality in that state meets minimum standards applicable across the nation. The CAA directs the EPA to establish National Ambient Air Quality Standards (NAAQS) for air pollutants that meet certain criteria regarding effects on public health and welfare. Pursuant to the CAA, EPA has authorized the state of Montana to regulate major sources in the state. For Montana to retain this authority, the board is required to adopt the minimum standards applicable to major source emissions of a NAAQS pollutant whenever a NAAQS is established or revised 40 USC 7410(G) 7410(a)(2)(C).

On November 29, 2005, EPA published regulations regarding the implementation of the 1997 ozone NAAQS (70 GFR 71612). Those regulations required revisions to state programs for major source permitting. One of the requirements in the EPA regulations was to address ozone formation by regulating precursor pollutants. "Precursor pollutants" are pollutants that combine to form another pollutant. The federal regulations include nitrogen oxides (NO_x) that react with volatile organic compounds to form ozone. In a decision published on ~~May 19~~ July 22, 2011, in the Federal Register at 76 FR 28934 43918, EPA found Montana's PSD rules for ozone inadequate because the rules do not address NO_x as a precursor pollutant for ozone. The proposed amendments in this notice would

address EPA's concerns and make Montana's rules for PSD permits adequate to implementing the 1997 8-hour ozone NAAQS.

The remainder of the statement of reasonable necessity remains as set forth in the Notice of Public Hearing on Proposed Amendment.

4. No public comments or testimony were received.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

_____	By: _____
JOHN F. NORTH	JOSEPH W. RUSSELL, M.P.H.
Rule Reviewer	Chairman

Certified to the Secretary of State, _____, 2012.

James M. Madden
Special Assistant Attorney General
Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-4009
Attorney for Department

Steven T. Wade
Browning, Kaleczyc, Berry & Hoven, P.C.
P.O. Box 1697
800 North Last Chance, Suite 101
Helena, MT 59624
Attorney for Appellant

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 31st day of July 2012
at 10:21 o'clock A.m.
By: [Signature]

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

IN THE MATTER OF:) Case No. BER 2010-09 WQ
The Appeal and Request for Hearing by)
Roseburg Forest Products Co.'s of DEQ's)
Notice of Final Decision Regarding) STIPULATION FOR DISMISSAL
Montana Ground Water Pollution Control)
System Permit No. MTX000099.)

The Department of Environmental Quality and Roseburg Forest Products, Co., by their respective counsel, hereby stipulate pursuant to Rule 41(a)(1), M.R.Civ.P. to the dismissal of this appeal with prejudice, each party to bear its own fees and costs. The parties have reached a resolution of the matters at issue and Appellant withdraws its appeal and request for hearing.

STATE OF MONTANA
Department of Environmental Quality

APPELLANT
Roseburg Forest Products, Co.

by:

[Signature]
James M. Madden
Attorney for Department

by:

[Signature]
Steven T. Wade
Attorney for Appellant

7/31/12
Date

7-27-12
Date

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7
8 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
9 **OF THE STATE OF MONTANA**

10
11 **IN THE MATTER OF:**) **Case No. BER 2010-09 WQ**
12 **The Appeal and Request for Hearing by**)
13 **Roseburg Forest Products Co.'s of DEQ's**)
14 **Notice of Final Decision Regarding**) **ORDER OF DISMISSAL**
15 **Montana Ground Water Pollution Control**)
16 **System Permit No. MTX000099.**)

17
18 The Department of Environmental Quality and Roseburg Forest Products, Co., by their
19 respective counsel, have filed a Stipulation for Dismissal pursuant to Rule 41(a)(1), M.R.Civ.P.
20 stating that the parties have reached a resolution of the matters at issue and Appellant has
21 withdrawn its appeal and request for hearing.

22
23 As requested in the Stipulation for Dismissal, IT IS HEREBY ORDERED that the above-
24 entitled matter is dismissed with prejudice, with each party to bear its own fees and costs.

25
DATED this _____ day of _____, 2012

JOSEPH W. RUSSELL, M.P.H
Chairman, Board of Environmental Review

1 Carol E. Schmidt
Special Assistant Attorney General
2 Department of Environmental Quality
P.O. Box 200901
3 1520 E. Sixth Avenue
Helena, Montana 59620-0901
4 Telephone: (406) 444-1422
Attorney for Department
5
Ryan Shaffer
6 Shaffer Law Office, P.C.
405 S First St. W
7 Missoula, MT 59801
Telephone: (406) 542-6929
8 Attorney for Olson's Lolo Hot Springs

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 15th day of August, 2012
at 4:06 o'clock P.m.
By: [Signature]

9 BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

10 IN THE MATTER OF:) Case No. BER 2011-09 PWS
11 VIOLATIONS OF THE MONTANA PUBLIC)
WATER SUPPLY LAWS BY OLSON'S LOLO) Stipulation for Dismissal
12 HOT SPRINGS, INC. AT LOLO HOT SPRINGS,)
PWSID #MT0000805, LOLO, MISSOULA)
13 COUNTY, MONTANA. [FID #2043])

14 COME NOW the parties and stipulate, pursuant to Rule 41(a), M.R.Civ.P., to the
15 dismissal of this appeal. The parties have reached a resolution of the matters at issue and
16 Appellant hereby withdraws its appeal and request for hearing. The parties request that the
17 Board issue an Order dismissing this matter with prejudice, with each party to bear its own costs.

18 STATE OF MONTANA
19 Department of Environmental Quality

APPELLANT
Olson's Lolo Hot Springs

20
21 By: [Signature]
Carol E. Schmidt
22 Attorney for Department

By: [Signature]
Ryan Shaffer
Attorney for Olson's Lolo Hot Springs

23 8-15-12
24 Date

8/6/12
Date

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATIONS OF THE PUBLIC WATER
SUPPLY LAWS BY OLSON'S LOLO HOT
SPRINGS, INC. AT LOLO HOT SPRINGS,
PWSID #MT0000805, LOLO, MISSOULA
COUNTY, MONTANA. (FID #2043)

ADMINISTRATIVE
ORDER ON CONSENT

Docket No. PWS-11-09

This Administrative Order on Consent (Consent Order) is issued to resolve and conclude the enforcement action (FID #2043) initiated by the State of Montana, acting by and through the Department of Environmental Quality (Department), against Olson's Lolo Hot Springs, Inc. (Respondent) for violations of the Public Water Supply Laws (PWSL) (Title 75, chapter 6, part 1, Montana Codes Annotated (MCA)) and Administrative Rules of Montana (ARM) (Title 17, chapter 38) adopted thereunder. This Consent Order supersedes the Notice of Violation and Administrative Compliance Order (Order) issued by the Department on May 31, 2011.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. The Department is an agency of the executive branch of government of the State of Montana, created and existing under the authority of Section 2-15-3501, MCA.

2. The Department administers the Act and the administrative rules implementing the Act.

3. Respondent is a "person" within the meaning of Section 75-6-102(11), MCA.

4. Respondent owns and operates the public water supply system that serves the customers of Lolo Hot Springs (System), PWSID #MT0000805, Lolo, Montana. The System regularly serves water to at least 25 persons daily for any 60 or more days in a calendar year.

Respondent is therefore a “supplier of water” and subject to the requirements of the PWSL and the rules adopted thereunder. *See* ARM 17.38.202 and 40 CFR 141.2 as incorporated therein.

5. The System does not regularly serve water to at least 25 of the same persons over six months per year. Therefore, the System is a “transient non-community water system” within the meaning of ARM 17.38.202 and 40 CFR 141.2 as incorporated therein.

6. The System is supplied by springs.

Failure to install filtration

7. A public water system that uses a surface water source or a ground water source under the direct influence of surface water, and does not meet all of the criteria to avoid filtration, must install and properly operate filtration and disinfection treatment within 18 months of the failure to meet one of the filtration avoidance criteria. *See* ARM 17.38.208 and 40 CFR 141.70-73 (Surface Water Treatment Rule) as incorporated therein.

8. On May 22, 2009, the Department notified Respondent in writing, via certified mail, that Respondent was in violation of the Surface Water Treatment Rule and that it had 18 months to achieve compliance by providing filtration treatment, finding a new source, or correcting construction issues at the current source in order to change the source classification.

9. On August 11, 2009, Professional Consultants, Inc. sent the Department a letter certifying that a small micron cartridge filter, an ultraviolet light disinfection component, and a chlorine disinfection process had been installed at the System as outlined in the plans submitted to the Department on June 19, 2009.

10. On December 17, 2009, the Department notified Respondent in writing, via certified mail, that the System’s spring had been classified by the Department as groundwater under the direct influence of surface water (GWUDISW) and therefore the System was subject to the Surface Water Treatment Rule. The December 17, 2009 letter further notified Respondent

1 that the Surface Water Treatment Rule required Respondent to provide filtration treatment, find
2 an approved new source, correct the System's construction issues to ensure the System is no
3 longer classified as GWUDISW, or meet the filtration avoidance criteria as outlined in 40 CFR
4 141.71. Finally, the December 17, 2009 letter notified Respondent that it was required to
5 comply with the Surface Water Treatment Rule within 18 months of the May 22, 2009 letter sent
6 by the Department.

7 11. On September 7, 2010, the Department notified Respondent in writing that
8 Respondent's installation of a small micron cartridge filter, an ultraviolet light disinfection
9 component and a chlorine disinfection process was considered interim treatment because only
10 the small micron cartridge filter had been approved by the Department and the treatment did not
11 address all the requirements of the Surface Water Treatment Rule.

12 12. On December 7, 2010, the Department notified Respondent in writing, via
13 certified mail, that Respondent was still in violation of the Surface Water Treatment Rule and in
14 order to return to compliance, Respondent must provide filtration treatment in accordance with
15 ARM 17.38.208 or find an approved new source.

16 13. The Department alleges Respondent violated and continues to violate ARM
17 17.38.208 by failing to provide filtration treatment for a public water system supplied by a
18 groundwater source under the direct influence of surface water.

19 14. On May 31, 2011, the Department issued a Notice of Violation and
20 Administrative Compliance Order (Order) to Respondent, alleging that Respondent violated and
21 continues to violate the PWSL by failing to provide filtration treatment for a public water system
22 supplied by a groundwater source under the direct influence of surface water.

23 15. On June 28, 2011, Respondent appealed the Order to the Board of Environmental
24 Review.

1 16. On May 23, 2012, Professional Consultants, Inc. submitted plans and
2 specifications for a new public water supply well to serve the System.

3 17. On May 25, 2012, the Department sent Professional Consultants, Inc. an approval
4 letter for the proposed public water supply well.

5 18. The Department and Respondent have reached an agreement, as set forth in this
6 Consent Order, to correct and resolve the violations alleged in the Department's May 31, 2011
7 Order.

8
9 **ADMINISTRATIVE ORDER ON CONSENT**

10 NOW, THEREFORE, the Department and Respondent hereby AGREE as to the
11 following:

12 19. Respondent shall construct a new public water supply well in accordance with its
13 Department-approved plans and specifications and the requirements of ARM 17.38.101, *et seq.*,
14 including, but not limited to, the submittal of as-built drawings and written certification for any
15 modifications to the System.

16 20. Respondent shall achieve compliance with the Surface Water Treatment Rule no
17 later than December 15, 2012.

18 21. If Respondent fails to achieve compliance with the Surface Water Treatment Rule
19 by December 15, 2012, the Department may seek penalties in accordance with Section 75-6-
20 109(6)(a)(ii), MCA.

21 22. If any event occurs that may prevent Respondent from meeting the compliance
22 deadline required by this Consent Order, Respondent shall notify the Department in writing
23 within ten (10) days after Respondent becomes aware of the event. The notice of delay must
24 include: (a) an explanation of the reasons for the delay; (b) the expected duration of the delay;

1 and (c) a description of all action taken or to be taken to prevent or minimize the delay and a
2 schedule for implementation of those actions. The notice shall be sent to:

3 John L. Arrigo, Administrator
4 Enforcement Division
5 Department of Environmental Quality
6 1520 East Sixth Avenue
7 P.O. Box 200901
8 Helena, MT 59620-0901

9 23. The Department shall review any notices of delay sent by Respondent under
10 Paragraph 22 and, if appropriate, modify the December 15, 2012 compliance date.

11 24. Failure to take the required corrective actions by the specified deadlines, as
12 ordered herein, constitutes a violation of Title 75, chapter 6, part 1, MCA, and may result in the
13 Department seeking a court order assessing civil penalties of up to \$10,000 per day of violation
14 pursuant to Section 76-6-114, MCA.

15 **CONSENT TO ADMINISTRATIVE ORDER**

16 25. Respondent waives its right to an administrative appeal, or a judicial review, of
17 the Administrative Order on Consent set forth herein and agrees that this Consent Order is the
18 final and binding resolution of the issues raised.

19 26. Respondent agrees that the violations established by the Findings of Fact and
20 Conclusions of Law may be considered by the Department as history of violation in calculating
21 penalties for subsequent violations as permitted by Section 75-1-1001(1)(c), MCA.

22 27. The terms of this Consent Order constitute the entire agreement between the
23 Department and Respondent with respect to the issues addressed herein notwithstanding any
24 other oral or written agreements and understandings made and entered into between the
Department and Respondent prior to the effective date of this Consent Order.

28. Except as herein provided, no amendment, alteration, or addition to this Consent Order shall be binding unless reduced to writing and signed by both parties.

29. Each of the signatories to this Consent Order represents that he or she is authorized to enter into this Consent Order and to bind the parties represented by him or her to the terms of this Consent Order.

30. None of the requirements in this Consent Order are intended to relieve Respondent from its obligation to comply with all applicable state, federal, and local statutes, rules, ordinances, orders, and permit conditions.

31. Respondent agrees to waive defenses based upon the statute of limitations for the violations alleged herein and not to challenge the Department's right to seek judicial relief in the event that Respondent fails to comply fully and satisfactorily with the terms of this Consent Order.

32. It is understood and agreed that this Consent Order is not to be construed as an admission of guilt or liability on the part of Respondent with regard to the violations. Respondent does not agree with the Department's Findings of Fact and Conclusions of Law, but executes this Consent Order to avoid further proceedings.

33. Respondent and the Department shall agree, via a stipulation, to a dismissal of Respondent's pending appeal to the Board of Environmental Review, Case No. BER 2011-09 PWS.

34. Each party shall bear its/his own costs incurred in this action, including attorney fees.

35. This Consent Order becomes effective upon signature of Respondent and the Director of the Department or his designee.

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//

1 IT IS SO ORDERED:

2 DEPARTMENT OF ENVIRONMENTAL
3 QUALITY

4 John L. Arrigo
JOHN L. ARRIGO, Administrator
Enforcement Division

5 8/15/12
6 Date

IT IS SO AGREED:

OLSON'S LOLO HOT SPRINGS, INC.

[Signature]
Signature

Brent Olson
Print Name

CEO
Title

7/10/11
Date

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8 BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
9 OF THE STATE OF MONTANA

10 IN THE MATTER OF:)
11 VIOLATIONS OF THE MONTANA PUBLIC) Case No. BER 2011-09 PWS
12 WATER SUPPLY LAWS BY OLSON'S LOLO)
13 HOT SPRINGS, INC. AT LOLO HOT SPRINGS,) ORDER OF DISMISSAL
14 PWSID#MT0000805, LOLO, MISSOULA)
15 COUNTY, MONTANA. [FID # 2043])

16 The parties have filed a Stipulation for Dismissal pursuant to Montana Rule of Civil
17 Procedure 41(a) stating that Appellant has withdrawn its appeal and its request for a hearing in
18 this matter. As provided in the parties' Stipulation for Dismissal,

19 IT IS HEREBY ORDERED THAT this appeal is dismissed with prejudice. Each party
20 shall bear its own costs and attorney fees.

21 DATED this _____ day of _____ 2012.

22 _____
23 JOSEPH W. RUSSELL, M.P.H., Chairman
24 Montana Board of Environmental Review

Jane B. Amdahl
 Department of Environmental Quality
 P.O. Box 200901
 1520 E. Sixth Avenue
 Helena, MT 59620-0901
 (406) 444-5690
 Attorney for the Department

Seth M. Cunningham
 Brown Law Firm, P.C.
 315 North 24th street
 P.O. Drawer 849
 Billings, MT 59103-0849
 Attorney for Ell Dirt Works, LLC

Arthur V. Wittich
 Wittich Law firm, P.C.
 602 Ferguson Ave., Suite 5
 Bozeman, MT 59715
 Attorney for Gene Foss

Filed with the

**MONTANA BOARD OF
 ENVIRONMENTAL REVIEW**

This 30th day of August, 2012
 at 11:30 o'clock A.m.
 By [Signature]

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

IN THE MATTER OF:
 VIOLATIONS OF THE OPENCUT MINING
 ACT BY ELL DIRT WORKS, LLC AT THE
 GENE FOSS PIT 1, RICHLAND COUNTY,
 MONTANA. [FID 2047; DOCKET NO. OC-
 11-05]

Case No. BER 2011-11 OC

STIPULATION TO DISMISS

Petitioner, Ell Dirt Works, LLC, Gene Foss, and the Department of Environmental
 Quality (the Parties), by their respective Counsel, hereby inform the Board of Environmental
 Review that they have settled their differences and stipulate that this contested case should be
 dismissed with prejudice pursuant to Rule 41(a) of the Montana Rules of Civil Procedure. A
 copy of the Administrative Order on Consent memorializing this settlement is attached hereto as
 Exhibit A. Each party shall bear its own costs, including attorney fees.

1 Respectfully submitted this 30th day of August, 2012.

2 DEPARTMENT OF ENVIRONMENTAL
3 QUALITY

4
5 By: Jane B. Amdahl
6 Jane B. Amdahl
7 Attorney for the Department

8 ELL DIRT WORKS, LLC

9
10
11 By: Seth M. Cunningham
12 Seth M. Cunningham
13 Attorney for the Petitioner

14 GENE FOSS

15 By: Arthur V. Wittich
16 Arthur V. Wittich
17 Attorney for Mr. Foss

18
19 **Certificate of Service**

20 I hereby certify that on the 30th day of August, 2012, I sent a true and correct
21 copy of the above Stipulation to Dismiss to Katherine Orr, Hearing Examiner, through inter-
22 departmental mail.

23
24 Jane B. Amdahl

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATION OF THE OPENCUT MINING
ACT BY ELL DIRT WORKS, L.L.C. AT
THE GENE FOSS PIT 1, RICHLAND
COUNTY, MONTANA (FID NO. 2047)

ADMINISTRATIVE ORDER
ON CONSENT

Docket No. OC-11-05

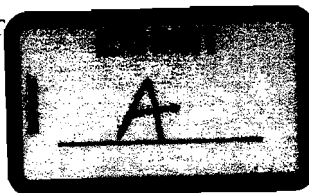
I. NOTICE OF VIOLATION

Pursuant to the authority of Section 82-4-441, Montana Code Annotated (MCA), the Department of Environmental Quality (Department) hereby gives notice to Ell Dirt Works, L.L.C. (Ell) of the following Findings of Fact and Conclusions of Law with respect to a violation of the Opencut Mining Act (the Act), Title 82, chapter 4, part 4, MCA, and the Administrative Rules of Montana (ARM) adopted thereunder. Concurrent with the issuance of this Administrative Order on Consent (Consent Order), the Department is terminating its June 28, 2011 Notice of Violation and Administrative Compliance and Penalty Order and is replacing it with this Consent Order.

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Department hereby makes the following Finding of Fact and Conclusions of Law:

1. The Department is an agency of the executive branch of government of the State of Montana, created and existing under the authority of Section 2-15-3501, MCA.
2. The Department administers the Act, Title 82, chapter 4, part 4, MCA.
3. The Department is authorized under Section 82-4-441, MCA, to issue this Consent Order to Ell to address the alleged violation of the Act, the administrative rules implementing the Act, and provisions of the reclamation permit issued under the Act, and to obtain corrective action and/or assess penalties for the alleged violation.
4. Ell is a "person" within the meaning of Section 82-4-403(10), MCA.



1 5. ARM 17.24.225 provides that “[a]n operator shall comply with the provisions of
2 its permit, this subchapter, and the Act.”

3 6. Ell engaged in or controlled an opencut operation at the Gene Foss Pit 1 (Site)
4 and, therefore, is an "operator" within the meaning of Section 82-4-403(8), MCA. Accordingly,
5 Ell is subject to the requirements of the Act and the rules adopted thereunder.

6 7. Section 82-4-431(1), MCA, requires that an operator may not conduct opencut
7 mining operations that result in the removal of 10,000 cubic yards or more of material and
8 overburden until the Department has issued a permit to the operator.

9 8. On November 1, 2010, Ell submitted an Opencut Mining Permit Application to
10 the Department to conduct opencut mining operations on 23.1 acres at the Site located in
11 Township 26 North, Range 55 East, Section 1 in Richland County, Montana.

12 9. On December 7, 2010, the Department sent Ell a letter (Deficiency Letter) which
13 identified numerous deficiencies in the Opencut Mining Permit Application and supporting
14 materials and informed Ell that the deficiencies must be corrected before the Department could
15 issue an Opencut Mining Permit for the Site.

16 10. On December 8, 2010, the Department conducted a routine inspection at the Site
17 (December 2010 Inspection).

18 11. On December 21, 2010, the Department sent Ell a violation letter (December
19 2010 Violation Letter) for conducting opencut operations without a permit at the Site. The
20 Department provided Ell with a copy of the December 2010 Inspection report.

21 ***Failure to obtain an opencut permit***

22 12. “Opencut operation” is defined as the following activities if they are conducted
23 for the primary purpose of sale or utilization of materials: (a) (i) removing the overburden and
24 mining directly from the exposed natural deposits; or (ii) mining directly from natural deposits of

1 materials; (b) mine site preparation, including access; (c) processing of materials within the area
2 that is to be mined or contiguous to the area that is to be mined or the access road; (d)
3 transportation of materials on areas referred to in subsections (7)(a) through (7)(c); (e) storing or
4 stockpiling of materials on areas referred to in subsections (7)(a) through (7)(c); (f) reclamation
5 of affected land; and (g) any other associated surface or subsurface activity conducted on areas
6 referred to in subsections (7)(a) through (7)(c). *See* Section 82-4-403(7), MCA.

7 13. During the December 2010 Inspection of the Site, the Department observed that
8 Ell had disturbed approximately 10.2 acres and conducted opencut operations without a permit.

9 14. As of the date of this Consent Order, Ell has not responded to the Deficiency
10 Letter and the Department has not issued a permit for the Site.

11 15. One reason why Ell has not responded to the Deficiency Letter is that Gene Foss
12 (Foss), an owner of the real property where the Gene Foss I Pit is located, had stated that he did
13 not want Ell to reclaim the Site.

14 16. Ell violated Section 82-4-431, MCA, by conducting an opencut mining operation
15 on 10.2 acres without a valid permit.

16 **Administrative penalty**

17 17. Section 82-4-441, MCA, provides that the Department may assess an
18 administrative penalty of not less than \$100 or more than \$1,000 for a violation and an additional
19 administrative penalty of not less than \$100 or more than \$1,000 for each day during which a
20 violation of a rule or permit continues.

21 18. Using the factors set forth in Section 82-4-1001, MCA, and ARM 17.4.301
22 through 17.4.308, the Department has calculated an administrative penalty in the amount of
23 \$13,685 to resolve the violation cited herein.

24 //

III. ADMINISTRATIVE ORDER ON CONSENT

This Consent Order is issued to Ell and Foss and pursuant to the authority vested in the State of Montana, acting by and through the Department under the Act and administrative rules adopted thereunder. Based on the foregoing Findings of Fact and Conclusions of Law and the authority cited above, the Department ORDERS and Ell and Foss AGREE to take the following actions:

19. Ell shall cease all opencut operations at the Site until a permit is obtained from the Department.

20. Ell and Foss shall sign a Stipulation to Dismiss Case No. BER 2011-11-OC, which is currently pending before the Board of Environmental Review.

21. Ell shall prepare revised permit application materials that address all deficiencies identified by the Department. Those revised materials shall include a reclamation plan that provides for an area to be used as a corral by Foss, prepared in consultation with Foss.

22. Within 30 days from the effective date of this Consent Order, Ell shall submit to Foss, for his review and comment, a copy of the final proposed reclamation plan.

23. Ell and Foss agree to cooperate in working out any disputes over the final proposed reclamation plan. Foss shall have the final say as to the post-mining land use for the Site, but the requirements of the Opencut Mining Act, its implementing rules, and Department guidelines shall govern how the post-mining land use is to be achieved.

24. Upon agreement with the reclamation plan and no later than 20 days after receipt of the proposed plan as described in paragraph 22 herein, Foss shall sign the Landowner Consultation Form and return it to Ell for submission to the Department.

25. Within 60 days from the effective date of this Consent Order, Ell shall submit to the Department revised application materials that correct the deficiencies identified in the

1 Deficiency Letter from the Department dated December 7, 2010, including an adequate bond for
2 the permitted area.

3 26. The revised application materials and bond must be submitted to:

4 Chris Cronin
5 Industrial and Energy Materials Bureau
6 Department of Environmental Quality
7 1520 East Sixth Avenue
8 P.O. Box 200901
9 Helena, MT 59620-0901

10 27. Within 60 days from the effective date of this Consent Order, Ell shall pay to the
11 Department an administrative penalty in the amount of \$13,685 to resolve the violation cited
12 herein. Ell has paid this administrative penalty in full and the Department acknowledges receipt
13 thereof.

14 **IV. CONSENT TO ADMINISTRATIVE ORDER**

15 28. Ell and Foss waive their right to administrative appeal or judicial review of the
16 Findings of Fact and Conclusions of Law and Administrative Order on Consent set forth herein
17 and agrees that this Consent Order is the final and binding resolution of the issues raised.

18 29. Ell agrees that the violation established by the Findings of Fact and Conclusions
19 of Law may be considered by the Department as history of violation in calculating penalties for
20 subsequent violations as permitted by Section 82-4-1001, MCA.

21 30. The terms of this Consent Order constitute the entire agreement between the
22 Department, Foss and Ell with respect to the issues addressed herein notwithstanding any other
23 oral or written agreements and understandings made and entered into between the Department
24 and Ell or Foss prior to the effective date of this Consent Order.

25 31. Except as herein provided, no amendment, alteration, or addition to this Consent
26 Order shall be binding unless reduced to writing and signed by all parties.

32. Each of the signatories to this Consent Order represents that he or she is authorized to enter into this Consent Order and to bind the parties represented by him or her to the terms of this Consent Order.

33. Each of the signatories to this Consent Order has been represented by competent counsel throughout the negotiation of this Consent Order.

34. None of the requirements in this Consent Order are intended to relieve Ell and Foss from their obligation to comply with all applicable state, federal, and local statutes, rules, ordinances, orders, and permit conditions.

35. Ell and Foss agree to waive defenses based upon the statute of limitations for the violation alleged herein and not to challenge the Department's right to seek judicial relief in the event that Ell or Foss fails to fully and satisfactorily comply with the terms of this Consent Order.

36. This Consent Order becomes effective upon signature of the Director of the Department or his designee.

IT IS SO ORDERED:

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

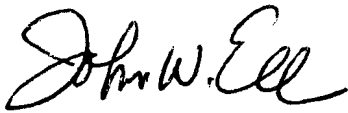

JOHN L. ARRIGO, Administrator
Enforcement Division

Date

8/30/12

IT IS SO AGREED:

ELL DIRT WORKS, L.L.C.


Signature

JOHN W. ELL
Print Name

OWNER
Title

08-23-12
Date

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IT IS SO AGREED:

GENE FOSS

Gene Foss
Gene Foss

Aug - 4 - 2012
Date

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8 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
9 **OF THE STATE OF MONTANA**

10 IN THE MATTER OF:
11 VIOLATIONS OF THE OPENCUT MINING
12 ACT BY ELL DIRT WORKS, LLC AT THE
13 GENE FOSS PIT 1, RICHLAND COUNTY,
MONTANA. [FID 2047; DOCKET NO. OC-
11-05]

Case No. BER 2011-11 OC

DISMISSAL ORDER

14 The Montana Department of Environmental Quality, Petitioner, Ell Dirt Works, LLC,
15 and Gene Foss have informed the Board of Environmental Review that they have settled their
16 differences and have filed a Stipulation to Dismiss this contested case with prejudice pursuant to
17 rule 41(a) of the Montana Rules of Civil Procedure.

18 Therefore, the Board finds good cause to dismiss this contested case, and this contested
19 case is hereby dismissed with prejudice.

20 DATED this ____ day of _____, 2012.

21
22 _____
23 JOSEPH W. RUSSELL, M.P.H., Chairman
24 Board of Environmental Review

James M. Madden
Special Assistant Attorney General
Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901
Attorney for Department

Michael S. Kakuk
Attorney at Law
Kakuk Law Offices, PC
1717 Harrison Avenue
Helena, MT 59601
Attorney for Appellant

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW

This 12th day of Sept., 2012
at 2:27 o'clock P.m.
By: Michael S. Kakuk

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATIONS OF THE WATER
QUALITY ACT BY SK
CONSTRUCTION, INC. ON US
HIGHWAY 2 NEAR BAINVILLE,
ROOSEVELT COUNTY, MONTANA,
[MTR 103291, FID #2035, DOCKET NO.
WQ-11-16]

CASE NO. BER 2011-20 WQ

STIPULATION FOR DISMISSAL

The Department of Environmental Quality and SK Construction, Inc., by their respective counsel, hereby stipulate pursuant to Rule 41(a)(1), M.R.Civ.P. to the dismissal of this appeal with prejudice, each party to bear its own fees and costs. The parties have reached a resolution of the matters at issue and Appellant withdraws its appeal and request for hearing.

STATE OF MONTANA
Department of Environmental Quality

APPELLANT
SK Construction, Inc.

by:

James M. Madden
James M. Madden
Attorney for Department

by:

Michael S. Kakuk
Michael S. Kakuk
Attorney for Appellant

Date

9/12/12

Date

9/7/2012

Stipulation for Dismissal

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8 BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

9)
10 IN THE MATTER OF:)
11 VIOLATIONS OF THE WATER)
12 QUALITY ACT BY SK)
13 CONSTRUCTION, INC. ON US)
HIGHWAY 2 NEAR BAINVILLE,)
ROOSEVELT COUNTY, MONTANA,)
[MTR 103291, FID #2035, DOCKET NO.)
WQ-11-16])
14

CASE NO. BER 2011-20 WQ

ORDER OF DISMISSAL

15
16 The Department of Environmental Quality and SK Construction, Inc., by their respective
17 counsel, have filed a Stipulation for Dismissal pursuant to Rule 41(a)(1), M.R.Civ.P. stating that
18 the parties have reached a resolution of the matters at issue and Appellant has withdrawn its
19 appeal and request for hearing.

20 As requested in the Stipulation for Dismissal, IT IS HEREBY ORDERED that the above-
21 entitled matter is dismissed with prejudice, with each party to bear its own fees and costs.

22 DATED this _____ day of _____, 2012

23
24
25 _____
JOSEPH W. RUSSELL, M.P.H
Chairman, Board of Environmental Review

1 Jane B. Amdahl
Department of Environmental Quality
2 P.O. Box 200901
1520 E. Sixth Avenue
3 Helena, MT 59620-0901
(406) 444-5690
4 Attorney for the Department

5 James Raymond
Raymond Law Office, PLLC
6 407 First Street West
Polson, MT 59860
7 (406) 883-5588
Attorney for the Petitioner

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 27th day of July, 2012
at 2:30 o'clock P.m.
By M. J. Cole

8
9 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
10 **OF THE STATE OF MONTANA**

11 IN THE MATTER OF:
12 VIOLATIONS OF THE OPENCUT MINING
13 ACT BY CITY OF RONAN AT RONAN,
LAKE COUNTY, MONTANA. [OPENCUT
14 PERMIT NO. 43, FID 2100, DOCKET NO.
OC-11-06]

Case No. BER 2011-23 OC

STIPULATION TO DISMISS

15 Petitioner, City of Ronan, and the Department of Environmental Quality (the Parties), by
16 their respective Counsel, hereby inform the Board of Environmental Review that Petitioner has
17 fully satisfied all requirements set forth in the Notice of Violation and Administrative
18 Compliance and Penalty Order issued on October 28, 2011, which is the subject of the above-
19 captioned contested case. Accordingly, the Parties hereby stipulate that this contested case
20 should be dismissed with prejudice, pursuant to Rule 41(a) of the Montana Rules of Civil
21 Procedure. Each party shall bear its own costs, including attorney fees.

22 Respectfully submitted this 27th day of July, 2012.
23 M. J. Cole
24

DEPARTMENT OF ENVIRONMENTAL
QUALITY

By: Jane B. Amdahl
Jane B. Amdahl
Attorney for the Department

CITY OF RONAN

By: James Raymond
James Raymond
Attorney for the Petitioner

Certificate of Service

I hereby certify that on the ^{27th}~~28th~~ day of ~~May~~^{July}, 2012, I sent a true and correct copy of the above Agreed Proposed Prehearing Schedule to Katherine Orr, Hearing Examiner, through inter-departmental mail. ~~Stipulation to Dismiss~~

Jane B. Amdahl

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5 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
6 **OF THE STATE OF MONTANA**

7
8 IN THE MATTER OF:
9 VIOLATIONS OF THE OPENCUT MINING
10 ACT BY CITY OF RONAN AT RONAN,
11 LAKE COUNTY, MONTANA. [OPENCUT
PERMIT NO. 43, FID 2100, DOCKET NO.
OC-11-06]

Case No. BER 2011-23 OC

DISMISSAL ORDER

12 The Montana Department of Environmental Quality and Petitioner, City of Ronan, have
13 filed a Stipulation to Dismiss this contested case with prejudice pursuant to rule 41(a) of the
14 Montana Rules of Civil Procedure, based on the City of Ronan's satisfaction of the requirements
15 of the Notice of Violation and Administrative Compliance and Penalty Order at issue in this
16 contested case.

17 Therefore, the Board finds good cause to dismiss this contested case, and this contested
18 case is hereby dismissed with prejudice.

19 DATED this ____ day of _____, 2012.

20
21 _____
22 JOSEPH W. RUSSELL, M.P.H., Chairman
23 Board of Environmental Review
24

1 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
2 **OF THE STATE OF MONTANA**

3 **IN THE MATTER OF:**
4 **VIOLATIONS OF THE OPENCUT**
5 **MINING ACT BY RUSSELL OLSEN AT**
6 **PAVECO PIT, FLATHEAD COUNTY,**
7 **MONTANA [PERMIT NO. 1520, FID**
8 **#2124, DOCKET NO. OC-12-02]**

CASE NO. BER 2012-07 OC

7 **ORDER ON MOTION TO DISMISS**

9 On July 13, 2012, the Department of Environmental Quality (Department)
10 filed a Motion to Dismiss (Motion) together with an Affidavit of Melissa Levens
11 and two exhibits, (a) Exhibit A, which consists of the Notice of Violation and
12 Administrative Compliance and Penalty Order (NOV) issued by the Department on
13 January 3, 2012, and the Department of Environmental Quality-Enforcement
14 Division Penalty Calculation Worksheet, and (b) Exhibit B which consists of a
15 cover letter sent by the Department to Petitioner, Mr. Olsen, with which the NOV
16 was enclosed and a form showing that Mr. Olsen signed for the letter containing the
17 cover letter and the NOV on January 4, 2012. In its Motion, the Department
18 contends that the Board lacks subject matter jurisdiction pursuant to Rule 12(b)(1),
19 M.R.Civ.P., because the Appeal letter filed with the Board of Environmental
20 Review (Board) by Petitioner was not timely filed within the 30 days as required by
21 the statute addressing the appropriate appeal period of 30 days, see, Mont. Code
22 Ann. § 82-4-441.

23 To date, Petitioner has not filed a response to the Department's Motion.

24 For the reasons stated herein, the Department's Motion is granted.

25 **BACKGROUND**

26 On January 3, 2012, the Department issued an NOV to Petitioner the
27 permittee for an opencut mine called the Paveco Pit. The NOV states that the

1 Petitioner, Mr. Olsen, had violated the Opencut Mining Act by failing to submit an
2 annual progress report for the year 2010 as required by Mont. Code Ann. § 82-4-
3 437(2) and ARM 17.24.214 and his opencut permit. Mr. Olsen was ordered to
4 submit the annual progress report and was assessed an administrative penalty of
5 \$480.00 for failing to submit the annual progress report which was due. The
6 Department sent the NOV and cover letter by certified mail and the Petitioner
7 signed the card indicating receipt of the NOV. Department Exhibits A and B
8 attached to the Motion. The Petitioner had notice from the NOV of the period in
9 which to appeal the NOV of 30 days after service of the NOV. The NOV specified
10 that service was complete three business days after mailing. The deadline for filing
11 an appeal was February 3, 2012. Mr. Olsen filed his appeal on July 11, 2012,
12 beyond the statutory deadline.

13 DISCUSSION

14 The operative statute is Mont. Code Ann. § 82-4-441(5)(b) which states that
15 “an order issued [such as the NOV in this case] becomes final unless, within 30 days
16 after the order is served, the person to whom the order is issued submits to the board
17 a written request for hearing stating the reasons for the request. Service of an order
18 by mail is complete 3 business days after mailing....”

19 The Department moves for dismissal of the appeal of the January 3, 2012,
20 NOV pursuant to Rule 12(b)(1), M.R. Civ. P. for lack of jurisdiction because Mr.
21 Olsen missed the mandatory and jurisdictional filing deadline by more than five
22 months.

23 In its Motion, the Department submits that, when deciding a motion to
24 dismiss based on lack of subject matter jurisdiction, the Board must determine
25 whether the facts asserted in the complaint, if true, would vest the court with subject
26 matter jurisdiction, which is a conclusion of law. Liberty Northwest Insurance
27

1 Corporation v. State Fund, 962 P.2d 1167, 1168 (1998) and Swingley v. Montana
2 Highway Patrol, No. 98-98, 2000 Mont. Dist. LEXIS 1302 at **2 (Sept. 19, 2000).

3 The Department further submits that the Supreme Court has consistently held
4 that statutes governing appeals must be strictly construed. State ex rel. Glacier
5 General Assurance Company v. District Court, 143 Mont. 569, 572; 393 P.2d 54, 56
6 (1964). The courts, from District Court level up to the Supreme Court of Montana,
7 agree that failing to meet the statutory deadline for filing an appeal results in lack of
8 jurisdiction for the appeal to be heard. See, e.g., State ex rel Albrecht v. District
9 Court, 126 Mont. 178, 246 P.2d 1035 (1952); In re the Support Obligation of
10 McGurran, No. ADV 98-602, 1999 Mont. Dist. LEXIS (Jan. 28, 1999); Mogan v.
11 Montana Power Company, No. ADV 92-1653, 1993 Mont. Dist. LEXIS (Jan. 28,
12 1999). If a statute sets a time period for an appeal and does not include a provision
13 for extending that time period for any reason, an untimely appeal should be denied
14 for lack of jurisdiction. In this case, it is clear that the Petitioner did not meet the
15 statutory deadline for filing an appeal of the NOV issued by the Department and has
16 not advanced any explanation of why this occurred. There being good cause,

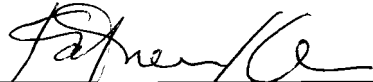
17 IT IS HEREBY ORDERED the appeal of the Petitioner is dismissed with
18 prejudice.

19 The Petitioner may submit written exceptions and a brief to the undersigned
20 Hearing Examiner if he objects to this decision. This must be done by
21 September 11, 2012. If exceptions are timely filed, the Petitioner may make an oral
22 presentation before the Board at its regularly scheduled meeting on

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1 September 28, 2012, and must indicate his intention to make an oral presentation to
2 the Board by letter to the Hearing Examiner by September 11, 2012.

3 DATED this 30th day of August, 2012.

4 
5 KATHERINE J. ORR
6 Hearing Examiner
7 Agency Legal Services Bureau
8 1712 Ninth Avenue
9 P.O. Box 201440
10 Helena, MT 59620-1440

11 **CERTIFICATE OF SERVICE**

12 I hereby certify that I caused a true and accurate copy of the foregoing Order
13 on Motion to Dismiss to be mailed to:

14 Ms. Joyce Wittenberg
15 Secretary, Board of Environmental Review
16 Department of Environmental Quality
17 1520 East Sixth Avenue
18 P.O. Box 200901
19 Helena, MT 59620-0901
20 (original)

21 Ms. Jane Amdahl
22 Legal Counsel
23 Department of Environmental Quality
24 P.O. Box 200901
25 Helena, MT 59620-0901

26 Mr. John Arrigo
27 Administrator, Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Mr. Russell Olsen
2828 Helena Flats Road
Kalispell, MT 59901

28 DATED: August 30, 2012 

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

7 **IN THE MATTER OF:**
8 **VIOLATIONS OF THE OPENCUT MINING ACT**
9 **BY RUSSELL OLSEN AT PAVECO PIT,**
10 **FLATHEAD COUNTY, MONTANA.**
[PERMIT NO. 1520, FID #2124, DOCKET
NO. OC-12-02]

CASE NO. BER 2012-07 OC

11
12 **FINAL ORDER ON MOTION TO DISMISS**
13

14 The Department of Environmental Quality (Department) filed a Motion to Dismiss the
15 above-captioned contested case on the ground that the Petition was not filed within 30 days of
16 service of the Notice of Violation and Administrative Compliance and Penalty Order issued to
17 Petitioner by the Department on January 3, 2012. Petitioner did not file a Response to that
18 Motion. On August 30, 2012, the Hearing Examiner appointed by the Board of Environmental
19 Review (Board) to hear the contested case entered an Order on Motion to Dismiss, granting the
20 Department's Motion and dismissing the contested case with prejudice for lack of jurisdiction.

21 The Petitioner having been given notice of his right to submit written exceptions to the
22 Order on Motion to Dismiss and having not filed any exceptions, the Board hereby adopts the
23 Order on Motion to Dismiss and dismisses this contested case with prejudice pursuant to
24 Mont.R.Civ.P. 41(b) for lack of jurisdiction.

1 IT IS HEREBY ORDERED THAT this appeal is dismissed with prejudice. Each party
2 shall bear its own costs.

3 DATED this _____ day of _____, 2012.
4
5

6 BOARD OF ENVIRONMENTAL REVIEW
7

8 By: _____
9 JOSEPH W. RUSSELL, M.P.H.
Chairman
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MEMO

TO: Katherine Orr, Hearing Examiner
Board of Environmental Review

FROM: *for* Joyce Wittenberg, Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

DATE: July 20, 2012

SUBJECT: Board of Environmental Review case, Case No. BER 2012-08 SM

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATIONS OF THE MONTANA STRIP
AND UNDERGROUND MINE RECLAMATION
ACT BY SIGNAL PEAK ENERGY, LLC AT
BULL MOUNTAIN MINE #1, ROUNDUP,
MUSSELSHELL COUNTY, MONTANA.
[FID #2162, DOCKET NO. SM-12-03]

Case No. BER 2012-08 SM

TITLE

BER has received the attached request for hearing. Also attached is DEQ's administrative document relating to this request (Enforcement Case FID #2162, Docket No. SM-12-03).

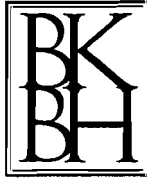
Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Dana David
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

John Arrigo, Administrator
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

G. ANDREW ADAMEK
CHAD E. ADAMS
DANIEL J. AUERBACH
KIMBERLY A. BEATTY
TROY L. BENTSON
SARA S. BERG
LEO BERRY
CARLO CANTY
MARK D. ETCHART
OLIVER H. GOE
ERICA R. GRINDE
J. DANIEL HOVEN
STANLEY T. KALECZYC
BROOKE C. KUHL



**BROWNING KALECZYC
BERRY & HOVEN P.C.**
ATTORNEYS AT LAW
Bozeman • Great Falls • Helena • Missoula

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JESSIE L. LUTHER
CHRISTY SURR MCCANN
JOANNE MCCORMACK
DAVID M. MCLEAN
ERIC D. MILLS
KYLE W. NELSON
MARK R. TAYLOR
EVAN THOMPSON
W. JOHN TIETZ
STEVEN T. WADE
LEO S. WARD
MORGAN WEBER
RYAN C. WILLMORE
R. STEPHEN BROWNING : RETIRED

July 18, 2012

Board Secretary
Board of Environmental Review
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

RE: *Non - Compliance Issue*
Cause No. SM-12-03

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 19th day of July, 2012
at _____ o'clock _____ m.
By: [Signature]

Dear Sir/Madam:

Enclosed for filing in the above-referenced matter please find the original and one copy of Signal Peak's **Request For Hearing**. Please advise me of the filing of this document by date-stamping the attached copy and returning it in the envelope provided.

Should you have any questions regarding this filing, please do not hesitate to contact me. Thank you for your assistance.

Sincerely,

BROWNING, KALECZYC, BERRY & HOVEN, P.C.

By: [Signature]
Kathleen Summers
Legal Assistant to Steven T. Wade

Enclosures

Steven T. Wade
Browning, Kaleczyc, Berry & Hoven, P.C.
800 N. Last Chance Gulch, Suite 101
P.O. Box 1697
Helena, MT 59624-1697
Telephone: 406-443-6820
Facsimile: 406-443-6883
steve@bkbh.com

Attorneys for Signal Peak Energy, LLC

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATIONS OF THE MONTANA STRIP
AND UNDERGROUND MINE
RECLAMATION ACT BY SIGNAL PEAK
ENERGY, LLC AT BULL MOUNTAIN
MINE#1, ROUNDUP, MUSSELSHELL
COUNTY, MONTANA.[FID# 2162].

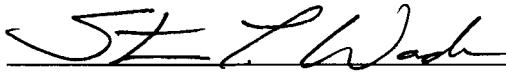
Docket No. SM-12-03

REQUEST FOR HEARING

Signal Peak Energy, LLC, (hereinafter “SPE”), by and through its counsel, Browning, Kaleczyc, Berry & Hoven, P.C., appeals and requests a hearing on the Montana Department of Environmental Quality’s (hereinafter “MDEQ”) Notice of Violation and Administrative Penalty Order , Docket No. SM-12-03 [FID#2162]. Pursuant to Mont. Code Ann. § 82-4-254, the basis for this request is that the actions alleged as the reason for the alleged violations did not constitute a violation of Montana’s Strip and Underground Mine Reclamation Act or SPE’s permit; or the actions were either authorized by statute, regulation, or SPE’s permit. In the alternative, the penalties sought are excessive, do not comply with statutory or regulatory penalty requirements, and are therefore not proper.

DATED this 18th day of July, 2012.

BROWNING, KALECZYC, BERRY & HOVEN, P.C.

By 
Steven T. Wade

Attorneys for Signal Peak Energy, LLC

CERTIFICATE OF SERVICE

I hereby certify that on the 18th day of July, 2012, a true and correct copy of the foregoing was this day deposited in the United States mail, postage prepaid, addressed to:

Mr. John Arrigo
Department of Environmental Quality
Enforcement Division
P.O. Box 200901
Helena, MT 59620-0901


BROWNING, KALECZYC, BERRY & HOVEN, P.C.

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF:
VIOLATIONS OF THE MONTANA STRIP
AND UNDERGROUND MINE
RECLAMATION ACT BY SIGNAL PEAK
ENERGY, LLC AT BULL MOUNTAIN
MINE #1, ROUNDUP, MUSSELSHELL
COUNTY, MONTANA. (FID #2162)

NOTICE OF VIOLATION
AND
ADMINISTRATIVE PENALTY ORDER

Docket No. SM-12-03

I. NOTICE OF VIOLATION

Pursuant to the authority of Section 82-4-254, Montana Code Annotated (MCA), the Department of Environmental Quality (Department) hereby gives notice to Signal Peak Energy, LLC (Signal Peak) of the following violations of the Montana Strip and Underground Mine Reclamation Act (the Act) codified at Title 82, chapter 4, part 2, MCA, and the administrative rules implementing the Act set forth in Title 17, chapter 24, Administrative Rules of Montana (ARM); and/or the provisions of Signal Peak's operating permit.

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. The Department is an agency of the executive branch of government of the State of Montana, created and existing under the authority of Section 2-15-3501, MCA.

2. The Department administers the Act.

3. Signal Peak is a person" within the meaning of Section 82-4-203(40), MCA.

4. Signal Peak operates an underground coal mine, known as the Bull Mountain Mine #1 located near Roundup, Musselshell County, Montana, under Surface Mine Permit No. 93017 (Permit). The Permit was issued by the Department under the Act.

5. Signal Peak, therefore, is an "operator" as defined by Section 82-4-203(36), MCA.

6. As an operator, Signal Peak is subject to the requirements of the Act, the administrative rules adopted under the Act, and the provisions of the Permit.

1 7. The Department conducted field inspections at the Bull Mountain Mine #1 (Site)
2 on February 9 and 20, 2012 (February 2012 Inspections).

3 8. On March 8, 2012, the Department issued a Notice of Noncompliance and Order
4 of Abatement (NON 12-17-01) alleging that Signal Peak violated the Act and administrative
5 rules implementing the Act by constructing roads and drill pads, and drilling boreholes prior to
6 receiving Department approval. In addition, NON 12-17-01 alleged that roads were constructed
7 in the bottom of dry coulees and that a fuel storage facility did not include a required secondary
8 containment structure.

9 9. On March 26, 2012, Signal Peak submitted a Letter of Mitigating Circumstances
10 (March 2012 Letter) to the Department.

11 10. On April 11, 2012, the Department sent a letter in response to the March 2012
12 Letter notifying Signal Peak that the Department did not identify any justification for modifying
13 or vacating NON 12-17-01.

14 11. On April 26, 2012, Signal Peak submitted an Application to Extend the Period for
15 Abatement requesting the Department to extend NON 12-17-01's period of abatement by 90 days.

16 12. On April 30, 2012, the Department sent a letter notifying Signal Peak that NON
17 12-17-01 abatement deadline was extended from May 1, 2012 to June 6, 2012.

18 13. On May 24, 2012, Signal Peak sent a letter notifying the Department that
19 NON 12-17-01 had been abated.

20 14. The Department issued a Termination of Abatement Order to Signal Peak on May
21 29, 2012.

22 //

23 //

24 //

1 ***Constructing boreholes without Department approval***

2 15. ARM 17.24.413(1) requires in part, except to the extent that the Department
3 otherwise directs in the permit that specific actions be taken, the permittee shall conduct all
4 operations as described in the [permit] application as approved by the Department.

5 16. In Signal Peak's minor revision 134 (MR 134), the Department approved the use
6 of Boreholes 1 through 36 as indicated on Permit Map 308-4.

7 17. On January 9, 2012, Signal Peak submitted to the Department a letter requesting a
8 minor revision (MR 137) to the Permit to construct 13 additional boreholes, numbered 37
9 through 49.

10 18. During the February 2012 Inspections, the Department observed that Borehole 38
11 was constructed and in use, and that boreholes 37 and 39 through 43 had been drilled.

12 19. The Department's March 8, 2012, NON 12-17-01 notified Signal Peak in writing
13 that it was in violation of the Act and Permit by constructing boreholes 37 through 43 prior to
14 receiving Department approval.

15 20. On May 25, 2012, the Department approved MR 137.

16 21. By constructing boreholes 37 through 43 without receiving prior Department
17 approval, Signal Peak violated Permit conditions and ARM 17.24.413(1).

18 ***Failure to construct in accordance with permit conditions***

19 22. ARM 17.24.413(1) requires in part, except to the extent that the Department
20 otherwise directs in the permit that specific actions be taken, the permittee shall conduct all
21 operations as described in the [permit] application as approved by the Department.

22 //

23 //

24 //

1 23. Volume 1, section 17.24.308, page 308-12 of the Permit states "Elevated diesel and
2 gasoline fuel tanks will be located for use at the surface facilities area. These fuel tanks will be
3 installed with a concrete structure or berm that is made of impermeable material and that is capable
4 of containing the entire volume, plus 25 percent of each tank should a leak or spill occur."

5 24. During the February 2012 Inspections, the Department observed an elevated fuel
6 tank located near Borehole 40 that was not installed in accordance with the Permit.

7 25. Signal Peak violated Permit conditions and ARM 17.24.413(1) by failing to install
8 the fuel tank near Borehole 40 in accordance with the Permit.

9 ***Unapproved road and drill pad construction***

10 26. Pursuant to ARM 17.24.602(1): "... Construction must not proceed along dry
11 coulees, or intermittent or perennial drainage ways unless the operator demonstrates that no off-site
12 sedimentation will result and all the requirements of this subchapter are met, or in wet, boggy,
13 steep, or unstable areas."

14 27. Pursuant to ARM 17.24.605(7): "Natural channel drainage ways must not be altered
15 or relocated for road or railroad loop construction or reconstruction without the prior approval of
16 the department in accordance with ARM 17.24.635 through 17.24.637..."

17 28. Pursuant to ARM 17.24.609(3): "No support facility may be constructed in a
18 manner or located other than as indicated in the approved permit application or site approved by
19 the department."

20 29. During the February 2012 Inspections, the Department observed that Signal Peak had
21 constructed and developed roads and drill pads to access and operate boreholes 37 through 43 and
22 that roads were constructed in the bottom of dry coulees, altering natural drainage ways. In addition,
23 the Department observed that the design and location of the drill pad support facility associated with
24 the boreholes was not identified in the Permit or the pending minor revision (MR 137).

1 30. Signal Peak violated ARM 17.24.602(1) and 17.24.605(7) by constructing and
2 developing access roads to the borehole drill pads in the dry coulees and altering natural drainage
3 ways.

4 31. Signal Peak violated the Permit and ARM 17.24.609(3) by constructing the
5 non-permitted drill pad support facility for the boreholes.

6 ***Administrative penalties***

7 32. Section 82-4-254, MCA, provides that for every violation of the Act, rules
8 adopted under the Act, or provisions of a permit, the Department may assess an administrative
9 penalty of not less than \$100 or more than \$5,000 for the violation and an additional
10 administrative penalty within the same limits for each day during which the violation continues.

11 33. Pursuant to Section 82-4-1001, MCA, and ARM 17.24.1211 and 1212, the
12 Department has calculated an administrative penalty of \$47,925 for the violations cited herein.
13 The Penalty Calculation Worksheet is enclosed and is hereby incorporated by reference.

14 **III. ADMINISTRATIVE PENALTY ORDER**

15 This Notice of Violation and Administrative Penalty Order (Order) is issued to Signal
16 Peak pursuant to the authority vested in the State of Montana, acting by and through the
17 Department under the Act. Now, therefore, based on the foregoing Findings of Fact and
18 Conclusions of Law, and under authority of Section 82-4-254, MCA, the Department hereby
19 ORDERS Signal Peak to do the following:

20 34. Signal Peak is hereby assessed an administrative penalty in the amount of \$47,925
21 to resolve the violations cited in this Order.

22 35. Within 60 days of service of this Order, Signal Peak shall pay to the Department
23 an administrative penalty of \$47,925. The penalty must be paid by check or money order, made
24 payable to the "Montana Department of Environmental Quality," and shall be sent to:

John L. Arrigo, Administrator
Enforcement Division
Montana Department of Environmental Quality
1520 East Sixth Ave.
P.O. Box 200901
Helena, MT 59620-0901

IV. NOTICE OF APPEAL RIGHTS

36. As provided in Section 82-4-254(3), MCA, Signal Peak is entitled to a hearing on the stated violations before the Board of Environmental Review. A written request must be submitted to the Board within 30 days of service of this Order. Service by mail is complete three business days after mailing. Signal Peak's request for a hearing should state its reasons for objecting to the Department's determination of the violations or penalty amount and be directed to:

Board Secretary
Board of Environmental Review
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

37. Hearings are conducted as provided in the Montana Administrative Procedure Act, Title 2, chapter 4, part 6, MCA. Hearings are normally conducted in a manner similar to court proceedings, with witnesses being sworn and subject to cross-examination. Proceedings prior to the hearing may include formal discovery procedures, including interrogatories, requests for production of documents, and depositions. Because Signal Peak is not an individual, Signal Peak must be represented by an attorney in any contested case hearing. See ARM 1.3.231(2) and Section 37-61-201, MCA.

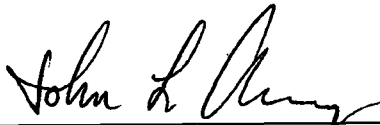
38. If Signal Peak does not request a hearing, or if it does not submit testimony at such hearing, Signal Peak forfeits its right to judicial review of the Department's determination of the violations or penalty.

1 39. If a hearing is not requested within 30 days after service of this Order, the
2 opportunity for a contested case appeal is waived.

3 IT IS SO ORDERED:

4 DATED this 21st day of June, 2012.

5 STATE OF MONTANA
6 DEPARTMENT OF ENVIRONMENTAL QUALITY

7 
8 _____
9 JOHN L. ARRIGO, Administrator
10 Enforcement Division

**Department of Environmental Quality - Enforcement Division
Penalty Calculation Worksheet**

Responsible Party Name:	Signal Peak Energy (SPE)
FID:	2162 Permit No. 93017 (Permit)
Statute:	Montana Strip and Underground Mine Reclamation Act (Act)
Date:	6/18/2012
Name of Employee Calculating Penalty:	Daniel R. Kenney
Maximum Penalty Authority:	\$5,000.00

Penalty Calculation #1

Description of Violation:
SPE constructed boreholes and drill pads without Department approval in violation of Permit conditions and ARM 17.24.413(1). The Department approved SPE's minor revision, MR 134, for Boreholes 1 through 36. In January 2012, SPE requested a minor revision, MR 137, to construct 13 additional boreholes, numbered 37 through 49. During inspections conducted in February 2012, the Department observed that Borehole 38 was constructed and in use, and that boreholes 37 and 39 through 43 had been drilled. At the time of the February 2012 inspections, the Department had not approved MR 137.

I. BASE PENALTY

Nature

Explanation:	
Unapproved construction of boreholes and drill pads have the potential to harm public health or the environment. The Department must ensure that boreholes and drill pads are constructed in accordance with the Act and the administrative rules. Without review of plans, the Department is unable to determine if adequate safeguards are in place to protect ground water. Further, the Department must ensure, through review, that the drill pads are constructed in ways that prohibit excessive or unnecessary soil disturbances and that adequate soils are available for future reclamation. Because the boreholes and drill pads were constructed prior to obtaining approval, the nature of the violation is one that poses harm to human health or the environment.	
Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
Pursuant to ARM 17.4.303(5)(a) construction without Department approval is a major gravity; therefore, gravity is Major.
Extent Explanation:
SPE deviated from the regulatory requirement by not receiving Department approval prior to constructing Boreholes 37 through 43. Because, SPE properly requested a minor revision for Boreholes 37-43, the Department has determined that this violation is a moderate deviation from the regulatory requirement; therefore extent is Moderate.

Harm to Human Health or the Environment

Gravity

Extent	Major	Moderate	Minor	
Major	0.85	0.70	0.55	
Moderate	0.70	0.55	0.40	
Minor	0.55	0.40	0.25	Gravity and Extent Factor: 0.70

Impact to Administration

Gravity

Major	Moderate	Minor	
.50	.40	.30	Gravity Factor:

BASE PENALTY (Maximum Penalty Authority x Gravity and Extent Factor):

\$3,500.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:

SPE's behavior in this violation exhibited a moderate degree of culpability. As a regulated entity, SPE is expected to have knowledge of its permit and the requirements of the Act. SPE had control of the circumstances and constructed the boreholes prior to receiving Department approval. SPE had control of the circumstances that resulted in the violations and could foresee that the actions would result in a violation. Therefore, the Base Penalty is increased by 20% for a moderate degree of Circumstances.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	\$700.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

Even though SPE constructed the boreholes prior to receiving Department approval, SPE responded to Notice of Noncompliance and Order of Abatement (NON 12-17-01) in a timely manner. Therefore, the Department is allowing a 5% reduction for this penalty factor.

Good Faith & Coop. Percent:	0.05
Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)	\$175.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

The Department is not aware of any amounts voluntarily expended by SPE to mitigate the violation and/or its impact; therefore, no reduction in the Base Penalty is calculated for Amounts Voluntarily Expended.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	\$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	\$3,500.00
Circumstances	\$700.00
Good Faith & Cooperation	-\$175.00
Amt. Voluntarily Expended	\$0.00
ADJUSTED BASE PENALTY	\$4,025.00

III. DAYS OF VIOLATION

Explanation:

During the February 2012 inspections, the Department observed that Boreholes 37 through 43 and associated drill pads had been constructed prior to Department approval. The Department, in exercising its enforcement discretion, elected to assign one day of violation for each of the seven boreholes and associated drill pads that were constructed prior to receiving Department approval.

Number of Days:	7
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ADJUSTED BASE PENALTY x NUMBER OF DAYS: \$28,175.00

Other Matters as Justice May Require Explanation:

Not applicable.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	\$0.00
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IV. ECONOMIC BENEFIT

Explanation:

SPE did not accrue an economic benefit by constructing the boreholes prior to receiving Department approval. Therefore, the Department will not assess an amount for this category.

ECONOMIC BENEFIT REALIZED:	\$0.00
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Responsible Party Name:	Signal Peak Energy (SPE)
FID:	2162 Permit No. 93017 (Permit)
Statute:	Montana Strip and Underground Mine Reclamation Act (Act)
Date:	6/18/2012
Maximum Penalty Authority:	\$5,000.00

Penalty Calculation #2

Description of Violation:
Failure to construct in accordance with permit conditions is a violation of ARM 17.24.413(1). Volume 1, section 17.24.308, page 308-12 of SPE's Permit states in part "...fuel tanks will be installed with a concrete structure or berm that is made of impermeable material and that is capable of containing the entire volume, plus 25 percent of each tank should a leak or spill occur." During the February 2012 Inspections, the Department observed an elevated fuel tank located near borehole 40 that was not installed in accordance with Permit conditions.

I. BASE PENALTY

Nature

Explanation:	
SPE's failure to properly install the fuel tank has the potential to harm the environment in the fact that should a fuel release or spill occur, the containment as installed would not prevent fuel from impacting soils.	
Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
Pursuant to ARM 17.4.303(5)(b), a failure to construct or operate in accordance with a permit or approval has a moderate gravity; therefore, gravity is Moderate.
Extent Explanation:
SPE installed the tank within a partially lined earthen berm. Had a release occurred, fuel most likely would not migrate laterally and be contained within the berm. However, exposed soils within the berm would be impacted by spilled fuel and migrate vertically causing moderate impacts to the environment. Therefore, extent is Moderate.

Harm to Human Health or the Environment

Gravity

Extent	Major	Moderate	Minor	
Major	0.85	0.70	0.55	
Moderate	0.70	0.55	0.40	
Minor	0.55	0.40	0.25	
Gravity and Extent Factor:				0.55

Impact to Administration

Gravity

Major	Moderate	Minor	
.50	.40	.30	Gravity Factor:

BASE PENALTY (Maximum Penalty Authority x Gravity and Extent Factor):

\$2,750.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:

SPE's behavior in this violation exhibited a moderate degree of culpability. As a regulated entity, SPE is expected to have knowledge of its permit and the requirements of the Act. SPE had control of the circumstances and should have foreseen that the failure to install the fuel tank in accordance with its Permit would result in a violation, yet failed to take reasonable precautions to prevent the violation. Therefore, the Base Penalty is increased by 20% for a moderate degree of Circumstances.

Circumstances Percent: 0.20

Circumstances Adjustment (Base Penalty x Circumstances Percent) \$550.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

SPE did not promptly report or voluntarily disclose facts related to the violation to the Department. Therefore, no reduction in the Base Penalty is calculated for Good Faith and Cooperation.

Good Faith & Coop. Percent: 0.00

Good Faith & Coop Adjustment (Base Penalty x G.F. & Coop. Percent) \$0.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

The Department is not aware of any amounts voluntarily expended by SPE to mitigate the violation and/or its impact; therefore, no reduction in the Base Penalty is calculated for Amounts Voluntarily Expended.

AVE Percent:

Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent) \$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	\$2,750.00
Circumstances	\$550.00
Good Faith & Cooperation	\$0.00
Amt. Voluntarily Expended	\$0.00
ADJUSTED BASE PENALTY	\$3,300.00

III. DAYS OF VIOLATION

Explanation:

The Department has determined that SPE violated ARM 17.24.413(1) for at least two days, the day before and the day of the Department's inspection when the violation was observed, by failing to comply with a permit requirement. Therefore, the Department is calculating a penalty based on two days of violation.

Number of Days: 2

ADJUSTED BASE PENALTY x NUMBER OF DAYS: \$6,600.00

Other Matters as Justice May Require Explanation:

Not applicable.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL: \$0.00

IV. ECONOMIC BENEFIT

Explanation:

SPE did not accrue an economic benefit by not installing the fuel tank in accordance with permit requirements. Therefore, the Department will not assess an amount for this category.

ECONOMIC BENEFIT REALIZED: \$0.00

Responsible Party Name:	Signal Peak Energy (SPE)
FID:	2162 Permit No. 93017 (Permit)
Statute:	Montana Strip and Underground Mine Reclamation Act (Act)
Date:	6/18/2012
Maximum Penalty Authority:	\$5,000.00

Penalty Calculation #3

Description of Violation:
Constructing and developing roads in dry coulees and altering natural drainages in violation of ARM 17.24.602(1) and 605(7). During its February 2012 inspections, the Department observed that SPE had constructed and developed roads to access and operate boreholes 37 through 43 and that roads were constructed and developed in the bottom of dry coulees, altering natural drainage ways. The Department had not granted SPE approval for constructing the roads.

I. BASE PENALTY

Nature

Explanation:	
SPE's construction of the roads in dry coulees and altering natural drainages has the potential to harm the environment.	
Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
Pursuant to ARM 17.4.303(5)(a), the construction or operation without a required permit or approval has a major gravity. Therefore, gravity is Major.
Extent Explanation:
The Department has determined that the fact SPE went ahead and constructed the roads and altered drainages without prior Department approval is a major deviation from the regulatory requirement. Therefore, extent is Major.

Harm to Human Health or the Environment

Gravity

Extent	Major	Moderate	Minor	
Major	0.85	0.70	0.55	
Moderate	0.70	0.55	0.40	
Minor	0.55	0.40	0.25	
				Gravity and Extent Factor: 0.85

Impact to Administration

Gravity

Major	Moderate	Minor	
.50	.40	.30	Gravity Factor:

BASE PENALTY (Maximum Penalty Authority x Gravity and Extent Factor):

\$4,250.00

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:

Signal Peak's behavior in this violation exhibited a moderate degree of culpability. As a regulated entity, Signal Peak is expected to have knowledge of its permit and the requirements of the Act. Signal Peak had or should have had control of the circumstances that resulted in the violation, could foresee that constructing the roads and altering drainages without approval would result in a violation, and failed to take reasonable precautions to prevent the violation. Therefore, the Base Penalty is increased by 20% for a moderate degree of Circumstances.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	\$850.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:

SPE did not promptly report or voluntarily disclose facts related to the violation to the Department. Therefore, no reduction in the Base Penalty is calculated for Good Faith and Cooperation.

Good Faith & Coop. Percent:	0.00
Good Faith & Coop Adjustment (Base Penalty x G F & Coop. Percent)	\$0.00

C. Amounts Voluntarily Expended (AVE) (up to 10% subtracted from Base Penalty)

Explanation:

The Department is not aware of any amounts voluntarily expended by SPE to mitigate the violation and/or its impact; therefore, no reduction in the Base Penalty is calculated for Amounts Voluntarily Expended.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	\$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	\$4,250.00
Circumstances	\$850.00
Good Faith & Cooperation	\$0.00
Amt. Voluntarily Expended	\$0.00
ADJUSTED BASE PENALTY	\$5,100.00
MAXIMUM STATUTORY PENALTY	\$5,000.00

III. DAYS OF VIOLATION

Explanation:

The Department has determined that SPE violated ARM 17.24.602(1) and 605(7) for at least two days, the day before and the day of the Department's inspection when the violation was observed, by constructing the roads and altering drainages without prior Department approval. Therefore, the Department is calculating a penalty

Number of Days:	2
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ADJUSTED BASE PENALTY x NUMBER OF DAYS: \$10,000.00

Other Matters as Justice May Require Explanation:

Not applicable.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	\$0.00
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IV. ECONOMIC BENEFIT

Explanation:

SPE did not accrue an economic benefit by constructing roads in dry coulees and altering natural drainages prior to receiving Department approval. Therefore, the Department will not assess an amount for this category.

ECONOMIC BENEFIT REALIZED:	\$0.00
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Responsible Party Name:	Signal Peak Energy (SPE)	
FID:	2162	Permit No. 93017 (Permit)
Statute:	Montana Strip and Underground Mine Reclamation Act (Act)	
Date:	6/18/2012	

V. HISTORY

Explanation:

SPE has incurred a variety of violations documented in orders within the past three years. Use of all of these historical violations in the calculation of Total History Percent would exceed the 30% maximum. Therefore, the following three violations are used to calculate History of Violation: (1) DEQ Docket No.SM-09-04 issued October 9, 2009 for NON 09-17-05: Failure to use temporary sediment control measures during access road and railroad loop construction. Nature = Potential to Harm Human Health or the Environment. (2) DEQ Docket No.SM-10-03 issued September 22, 2010 for NON 10-17-01: Failure to compact portions of the coal processing waste disposal site. Nature = Potential to Impact Harm Human Health or the Environment. (3) DEQ Docket No.SM-10-04 issued November 19, 2010 for NON 10-17-03: Failure to properly salvage and stockpile soil. Nature = Potential to Harm Human Health or the Environment.

Historical Violation: Harm to Human Health or the Environment - 10%

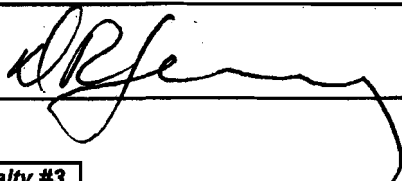
Historical Violation: Impact to Administration - 5%

Historical Violation #1 Percent:	0.10
Historical Violation #2 Percent:	0.10
Historical Violation #3 Percent:	0.10
Total History Percent (cannot exceed 30%):	0.30

Base Penalty #1	\$3,500.00
Base Penalty #2	\$2,750.00
Base Penalty #3	\$4,250.00
Total Base Penalties:	\$10,500.00

HISTORY ADJUSTMENT (Base Penalty x History Percent)	\$3,150.00
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Department of Environmental Quality - Enforcement Division
Penalty Calculation Summary

Responsible Party Name:	Signal Peak Energy (SPE)
FID:	2162 Permit No. 93017 (Permit)
Statute:	Montana Strip and Underground Mine Reclamation Act (Act)
Date:	6/20/12
Signature of Employee Calculating Penalty:	Daniel R. Kenney 

I. Base Penalty (Maximum Penalty Authority x Matrix Factor)

	Penalty #1	Penalty #2	Penalty #3
Maximum Penalty Authority:	\$5,000.00	\$5,000.00	\$5,000.00
Percent Harm - Gravity and Extent:	0.70	0.55	0.85
Percent Impact - Gravity:	0.00	0.00	0.00
Base Penalty:	\$3,500.00	\$2,750.00	\$4,250.00

II. Adjusted Base Penalty

Base Penalty:	\$3,500.00	\$2,750.00	\$4,250.00
Circumstances:	\$700.00	\$550.00	\$850.00
Good Faith and Cooperation:	-\$175.00	\$0.00	\$0.00
Amount Voluntarily Expended:	\$0.00	\$0.00	\$0.00
Adjusted Base Penalty:	\$4,025.00	\$3,300.00	\$5,100.00
Maximum Statutory Penalty:			\$5,000.00

Totals
\$10,500.00
\$2,100.00
-\$175.00
\$0.00
\$12,425.00

**III. Days of Violation or
Number of Occurrences**

7 2 2

Adjusted Base Penalty Total \$28,175.00 \$6,600.00 \$10,000.00

\$44,775.00

**Other Matters as Justice May
Require Total**

\$0.00 \$0.00 \$0.00

\$0.00

IV. Economic Benefit

\$0.00 \$0.00 \$0.00

\$0.00

V. History

\$3,150.00

TOTAL PENALTY

\$47,925.00

1 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
2 **OF THE STATE OF MONTANA**

3 **IN THE MATTER OF:**
4 **VIOLATIONS OF THE MONTANA**
5 **STRIP AND UNDERGROUND MINE**
6 **RECLAMATION ACT BY SIGNAL PEAK**
7 **ENERGY, LLC AT BULL MOUNTAIN**
8 **MINE #1, ROUNDUP, MUSSELSHELL**
9 **COUNTY, MONTANA [FID #2162,**
10 **DOCKET NO. SM-12-03]**

CASE NO. BER 2012-08 SM

11 **FIRST PREHEARING ORDER**

12 Mr. Steven T. Wade, Counsel for Signal Peak Energy, LLC (hereafter,
13 Appellant) has appealed the Notice of Violation and Administrative Penalty Order,
14 Docket No. SM-12-03, dated June 21, 2012, pertaining to violations of the Montana
15 Strip and Underground Mine Reclamation Act (the Act) and imposition of penalties
16 codified at Mont. Code Ann. Title 82, Chapter 4, Part 2, and violations of
17 administrative rules adopted under the Admin. R. Mont. Title 17, Chapter 24 and/or
18 the provisions of Signal Peak's operating permit(s).

19 The following guidelines and rules are provided to assist the parties in an
20 orderly resolution of this contested case.

21 1. REFERENCES: This matter is governed by the Montana
22 Administrative Procedure Act, Contested Cases, Mont. Code Ann. Tit. 2, ch. 4,
23 pt. 6, and Mont. Admin. R. 17.4.101, by which the Board of Environmental Review
(Board) has adopted the Attorney General's Model Rules for contested cases, Mont.
Admin. R. 1.3.211 through 1.3.225, and by Mont. Code Ann. Tit. 82, ch. 4, pt. 2.

24 2. FILING: Except for discovery requests and responses (which are not
25 routinely filed), original documents shall be sent for filing with the Board,
26 addressed as follows:
27

1 JOYCE WITTENBERG
2 Secretary, Board of Environmental Review
3 Department of Environmental Quality
4 1520 East Sixth Avenue
5 P.O. Box 200901
6 Helena, MT 59620-0901

7 One copy of each document that is filed should be sent to the Hearing
8 Examiner, addressed as follows:

9 KATHERINE J. ORR
10 Hearing Examiner
11 Agency Legal Services Bureau
12 1712 Ninth Avenue
13 P.O. Box 201440
14 Helena, MT 59620-1440

15 Although discovery documents are not normally filed, when a motion or brief
16 is filed making reference to discovery documents, the party filing the motion or
17 brief should also attach the relevant discovery documents.

18 3. SERVICE: Copies of all documents filed with the Board and
19 provided to the Hearing Examiner, including correspondence, must be served upon
20 the opposing party. A certificate of service should be provided.

21 4. EX PARTE COMMUNICATIONS: The Montana Administrative
22 Procedure Act in Mont. Code Ann. § 2-4-613, and the Attorney General's Model
23 Rule 18 in Mont. Admin. R. 1.3.222, prohibit *ex parte* communications with a
24 hearing examiner concerning any issue of fact or law in a contested case. In
25 addition to observing this rule, please contact the opposing party before you
26 communicate with the Hearing Examiner, even on purely procedural matters such as
27 the need for a continuance.

28 5. SCHEDULING: The undersigned requests the parties consult with
29 each other and propose a schedule to the undersigned upon which they agree by
30 August 17, 2012. The schedule should include the following dates:

31 (a) for joinder/intervention of additional parties;

1 (b) for disclosure by each party to the other parties of: (1) the
2 name and address of each individual likely to have discoverable information that the
3 disclosing party may use to support its claims or defenses; and, (2) a copy of, or a
4 description by category and location of, all documents and tangible things that are in
5 the possession, custody, or control of the disclosing party and that the disclosing
6 party may use to support its claims or defenses;

7 (c) for completion of discovery (if any party wishes to conduct
8 discovery);

9 (d) for exchange of lists of witnesses and copies of documents that
10 each party intends to offer at the hearing;

11 (e) for submitting any motions and briefs in support;

12 (f) for a Prehearing Conference to hear argument on any motions
13 and resolve other prehearing matters; and,

14 (g) for the contested case hearing, as well as the place of hearing.

15 DATED this 6th day of August, 2012.

16 

17 KATHERINE J. ORR
18 Hearing Examiner
19 Agency Legal Services Bureau
20 1712 Ninth Avenue
21 P.O. Box 201440
22 Helena, MT 59620-1440
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1 Dana David
Department of Environmental Quality
2 P.O. Box 200901
1520 E. Sixth Avenue
3 Helena, MT 59620-0901
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4 ddavid@mt.gov
Attorney for the Department
5
Steven T. Wade
6 Browning, Kaleczyc, Berry & Hoven, P.C.
800 N. Last Chance Gulch, Suite 101
7 P.O. Box 1697
Helena, MT 59624-1697
8 (406) 443-6820
steve@bkbh.com
9 *Attorney for Appellant*

Filed with the
**MONTANA BOARD OF
ENVIRONMENTAL REVIEW**
This 16th day of August, 2012
at 2:44 o'clock P.m.
By: Mary Galt

10 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
11 **OF THE STATE OF MONTANA**

12 **IN THE MATTER OF:**
13 **VIOLATIONS OF THE MONTANA**
14 **STRIP AND UNDERGROUND MINE**
15 **RECLAMATION ACT BY SIGNAL PEAK**
16 **ENERGY, LLC AT BULL MOUNTAIN**
MINE #1, ROUNDUP, MUSSELSHELL
COUNTY, MONTANA [FID #2162;
DOCKET NO. SM-12-03]

CASE NO. BER 2012-08 SM

17 **JOINT PROPOSED HEARING SCHEDULE**

18 Pursuant to the First Prehearing Order issued on August 6, 2012, counsel for the Montana
19 Department of Environmental Quality (Department) has consulted with counsel for Appellant,
20 Steven T. Wade, and the parties have agreed upon the following Proposed Schedule:

- 21 (a) September 21, 2012 – Joinder/intervention of additional parties;
22
23 (b) October 26, 2012 – Disclosure of individuals with discoverable information that
24 the disclosing party may use to support its claims or defenses and a copy of, or a
description by category and location of, all documents and tangible things that are

1 in the possession, custody, or control of the party and that the disclosing party
2 may use to support its claims or defenses;

3 (c) December 7, 2012 – Completion of discovery;

4 (d) December 21, 2012 – Exchange of lists of witness and copies of documents that
5 each party intends to offer at the hearing;

6 (e) January 4, 2013 – Filing of motions with supporting briefs;
7 -- 14 days after motion filed, but no later than January 18, 2013 – filing of
8 response briefs;
9 -- 14 days after response filed, but no later than February 1, 2013 – filing of reply
10 briefs;

11 (f) Week of February 18, 2013 – Prehearing conference, specific date and time to be
12 set by hearing officer;

13 The parties have no objection to holding the hearing in Helena.

14 Dated this 16th day of August, 2012.

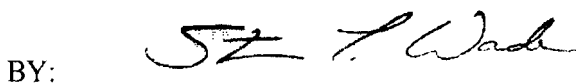
15 DEPARTMENT OF ENVIRONMENTAL QUALITY

16 BY: 

17 Dana David
18 Attorney for the Department

19 ~~Dated this _____ day of August, 2012.~~ *22*

20 SIGNAL PEAK ENERGY, LLC

21 BY: 

22 Steven T. Wade
23 Attorney for Signal Peak Energy, LLC
24

Certificate of Service

I hereby certify that on the 16th day of August, 2012, I sent a true and correct copy of the foregoing Agreed Proposed Prehearing Schedule by Interdepartmental delivery service, to Katherine Orr, Hearing Examiner

A handwritten signature in black ink, appearing to read "James J. Davis", is written over a horizontal line.



Montana Department of

ENVIRONMENTAL QUALITY

MEMO

TO: Katherine Orr, Hearing Examiner
Board of Environmental Review

FROM: Joyce Wittenberg, Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

DATE: August 21, 2012

SUBJECT: Board of Environmental Review Case No. BER 2012-09 OC

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:
THE REQUEST FOR HEARING BY
HAWTHORNE SPRINGS PROPERTY OWNERS
ASSOCIATION; H LAZY HEART, LLC;
PATCHY, INC.; AND OTHER RESIDENTS
REGARDING OPENCUT MINING PERMIT NO.
2258, ISSUED TO FARWEST ROCK
PRODUCTS, MISSOULA COUNTY.

Case No. BER 2012-09 OC

The BER has received the attached request for hearing. Also attached is DEQ's administrative document(s) relating to this request.

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Jane Amdahl
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Ed Coleman, Bureau Chief
Industrial & Energy Minerals Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

c: Joseph D. Houston, for Appellants

CHRISTIAN, SAMSON & JONES, PLLC

Attorneys at Law

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310 WEST SPRUCE
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LIANA J. MESSER
PAUL E. FICKES, LL.M. in Tax
JEFFREY T. DICKSON

*DAVID R. CHISHOLM- of Counsel

FAX COVER

DATE: August 17, 2012

NO. OF PAGES: 3

INCLUDES COVER SHEET

TO: Board of Environmental Review

FAX NUMBER: 406/444-4386

FROM: Joseph Houston

SENT BY: Karen

MESSAGE:

CONFIDENTIALITY NOTICE

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KIRBY S. CHRISTIAN
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DATE: August 17, 2012

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TO: Board of Environmental Review

FAX NUMBER: 406/444-4386

FROM: Joseph Houston

SENT BY: Karen

MESSAGE:

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LIANA J. MESSER
PAUL E. FICKES, LL.M. in Tax
JOSEPH D. HOUSTON

*DAVID R. CHISHOLM- of Counsel

August 17, 2012

Secretary
Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
PO Box 200901
Helena, MT 59620-0901

copy sent via facsimile: (406) 444-4386

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW

RE: Opencut Mining Permit # 2258; Farwest Rock Products
Request for Hearing

This 20th day of August, 2012
at _____ o'clock _____ m.
By: *[Signature]*

Dear Secretary:

This firm represents the Hawthorne Springs Property Owners Association, H Lazy Heart, LLC, Patchy, Inc., and other residents. Both individuals and entities have interests that are or may be adversely affected by the Department of Environmental Quality's decision to approve the opencut mining permit application for Farwest Rock Products, permit # 2258. The mining operation is occurring on property adjacent to the Hawthorne Springs residential subdivision and property owned by H Lazy Heart, Patchy, Inc., and others. Pursuant to Mont. Code Ann. § 82-4-427(1), Hawthorne Springs Property Owners Association, H Lazy Heart, and Patchy, Inc. request a hearing before the Board of Environmental Review.

Farwest Rock Products' Plan of Operation is incomplete and inaccurate. The mine site is located on a 357 acre parcel of property. There is a ridge on the northwest side of this property that separates the property from the Hawthorne Springs subdivision. Upon information and belief, this ridge was Farwest's first choice for its mining operation, which would have placed the mine within a half mile of the entire subdivision, and significantly impacted the property owners' view, enjoyment, and value of their property. By instead relocating its mine to the far east of its property, all or part of the Hawthorne Springs subdivision was excluded from the half mile area of notice in an attempt to nullify any of the property owners' requests for a public meeting prior to the issuance of the permit. Now that Farwest has obtained the permit, the permit and Plan of Operation appear insufficient to prevent Farwest from relocating or expanding its mining operation to the separating ridge, or within a half mile of the subdivision, without any notice requirements or possibility of a public meeting. Under the circumstances, the lack of a public meeting violates public meeting laws and constitutional due process.

In addition, the Plan of Operation does not contain all the statutory and regulatory requirements. The site map included with the Plan of Operation does not contain all of the features required by ARM 14.24.221, and no area map was provided. The Plan of Operation also

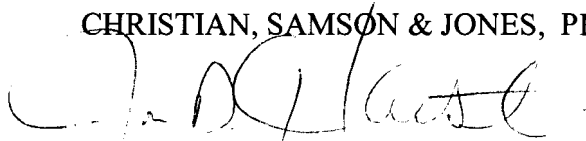


fails to indicate the uses of natural and man-made surface water features as required by ARM 14.24.217(1)(a). Not all affected wildlife species in and within 1,000 feet of the main permit are identified, including the 100 herd of Elk that frequent the property. Information and specific statements required by ARM 17.24.218 are also omitted. The Plan of Operation also misstates the types of noxious weeds present, as there is no mention of the whitetop, houndstounge, and Canadian thistle that exist on the property. There is also no description of weed control or prevention measures, fire suppression plans, and specific dust control, and air quality measures. Besides the regulatory requirements, Mont. Code Ann. § 82-4-434 specifically directs the department to not accept a plan of operation unless the plan provides, among other things, provisions related to the avoidance of range and wild fires; air quality permitting and protection; and minimization on noise and visual impacts to residential areas. As far as can be discerned, these issues, and others, are not adequately addressed in the Plan of Operation.

As adjacent property owners to the mining operation, Hawthorne Springs Property Owners Association, H Lazy Heart, and Patchy, Inc. have interests that are or may be adversely affected by the opencut mining permit issued to Farwest Rock Products. A hearing before the Board of Environmental Review is necessary to address the adverse effects and discrepancies in Farwest's Plan of Operation and Application, and to appeal the issuance of the opencut mining permit.

Sincerely,

CHRISTIAN, SAMSON & JONES, PLLC

A handwritten signature in black ink, appearing to read "Joseph D. Houston", is written over the printed name below.

Joseph D. Houston

cc: clients



Permit #: **2258****OPENCUT MINING PERMIT**Amendment #: **0**

Pursuant to the Opencut Mining Act (MCA Title 82, chapter 4, part 4), the State of Montana, Department of Environmental Quality (DEQ) is authorized to issue Opencut Mining Permits when it finds the requirements of the Act and its implementing rules (ARM Title 17, chapter 24, subchapter 2) can be carried out and will be observed. The Act further authorizes the DEQ to issue permit amendments in accordance with Sections 82-4-422[1], 82-4-432[11], 82-4-434[5], and 82-4-436, MCA.

The DEQ issues this permit to **Farwest Rock Products (Operator)**. The permit comprises a total of **21.1 acres** located in **Sections 6 & 7, Township 14 N, Range 20 W in Missoula County, Montana**, to be known as the **FWRP Pit site**. The following provisions apply to this permit:

1. The DEQ approves the Operator's **permit** application and incorporates it into the permit for all purposes. The Operator is hereby authorized to conduct Opencut operations in compliance with requirements of the permit, Act, and rules.
2. If the Operator violates the permit, Act, or rules the DEQ can take enforcement action which may include the assessment of penalties as specified in MCA 82-4-441.
3. The permit does not relieve the Operator's obligation to: *a)* comply with any other applicable federal, state, county, or local statutes, regulations, or ordinances, and *b)* obtain any other permits, licenses, approvals, etc. required for any part of the operation.
4. The Operator may allow another party to conduct Opencut operations only if the Operator: *a)* retains control over that party's activities and *b)* ensures there are no violations of the permit, Act, and rules. The Operator is accountable for violations at the permit site, even if the violations result from the activities of another person.
5. The Operator shall pay the annual fee on the total amount of materials mined at the site, including materials mined by other parties. The Operator's annual progress report shall indicate the total amount of materials mined.
6. The DEQ can only enforce requirements of the permit, Act, and rules. Therefore, Operator arrangements with another party (including the Landowner) should be stated in a separate written agreement between the two parties.
7. The Operator shall conduct reclamation: *a)* in accordance with the approved plan of operation; *b)* as concurrent with operations as feasible; and *c)* within one year of termination of the right to conduct operations, or the cessation of operations. If reclamation is not completed in the approved timeframe, after 30 days written notice the DEQ may order the Operator to cease operations. If operations do not cease, the DEQ may issue an order to reclaim, institute action to enjoin further operations, and sue for damages.
8. Unless the Operator is a governmental entity, a bond has been posted to ensure the site is reclaimed. If the site is not reclaimed as and when required, the DEQ may pursue forfeiture of the bond. If the bond is cancelled or invalidated, the Operator shall provide a valid bond within 30 days. If not provided, the DEQ may suspend the permit and require the Operator to cease operations.
9. The Operator may apply to amend the permit at any time. If approved, the amendment becomes part of the permit for all purposes. The DEQ may occasionally review the permit and require revisions.
10. The Operator shall allow the DEQ and its representatives to access the site at any time to determine if Opencut operations are being carried out in compliance with the permit, Act, and rules.
11. The permit is for **21.1 acres** and the reclamation bond is for **4.2 acres**. The Operator must provide revised information and an updated bond approved by the DEQ before commencing Opencut operations on any part of the **16.9 acres** of "Non-Bonded" area included in the permit.
12. This permit is effective upon approval below by the DEQ.

APPROVED BY: STATE OF MONTANA, DEPARTMENT OF ENVIRONMENTAL QUALITY



Opencut Mining Program Supervisor

July 20, 2012

Industrial & Energy Minerals Bureau

Title

Date



SPILL MANAGEMENT AND REPORTING POLICY

I. CONTAINMENT AND CLEANUP

All releases or spills of hazardous or deleterious substances or other wastes, regardless of size, must be properly and expeditiously managed, contained, and removed to protect public health and the environment. This policy is written to provide guidance to the public about when and how to report spills. This policy is intended to assist in the implementation of the following Montana laws and the administrative rules adopted thereunder: Comprehensive Environmental Cleanup and Responsibility Act (§75-10-701, *et seq.*, MCA); Hazardous Waste Act (§75-10-401, *et seq.*, MCA); Solid Waste Management Act (§75-10-201, *et seq.*, MCA); Underground Storage Tank Act (§75-11-501, *et seq.*, MCA); and the Water Quality Act (§75-5-101, *et seq.*, MCA).

II. DEQ NOTIFICATION REQUIREMENTS

Petroleum releases from regulated above ground (AST) and underground storage tanks (UST) must be reported to the DEQ within 24 hours of being detected as required by ARM 17.56.501. DEQ must be notified of releases of greater than 25 gallons of petroleum from an AST or UST. Petroleum releases less than 25 gallons in volume must be contained and cleaned up within 24 hours. If cleanup cannot be completed within 24 hours, owners and operators must report the release to DEQ. DEQ maintains a leak line for reporting releases from regulated UST and AST facilities at 1-800-457-0568. After normal business hours releases must be reported to the DES 24-hour phone number (406) 324-4777. Releases must be reported to a live person - voice mails are not adequate notification.

All other releases and spills should be reported immediately to the state's Disaster and Emergency Services (DES) 24-hour phone number (406) 324-4777. If no one can be reached at that number, the release or spill may be reported to the Montana Department of Environmental Quality (DEQ) duty officer at (406) 431-0014. In addition to the following reporting requirements, notification(s) may be required by permits issued by state, federal or local government agencies. **Notification to the National Response Center (NRC) may also be required. NRC can be reached at 800-424-8802. DES and DEQ are not responsible for making this notification.**

A. The following types of spills **must** be reported to DEQ/DES:

- Releases or spills of hazardous substances in amounts that meet or exceed the reportable quantities in 40 CFR Part 302. Notification to DES and NRC is required.
- Spills, overfills, and suspected releases from underground storage tanks and petroleum storage tanks. *ARM 17.56.501, et seq.*
- Releases or spills of any materials that would lower the quality of groundwater below water quality standards. *ARM 17.30.1045.*

B. The following types of spills **should** be reported to DEQ/DES:

- Spills that enter or may enter state water or a drainage that leads directly to surface water;
- Spills that cause sludge or emulsion beneath the surface of the water, streambanks or shorelines;
- Spills that cause a film, "sheen," or change the color of the water, streambanks or shorelines; or
- Spills of twenty-five (25) gallons or more of any petroleum product such as: crude oil, gasoline, diesel fuel, aviation fuel, asphalt, road oil, kerosene, fuel oil; produced water, injection water, or combination thereof; and derivatives of mineral, animal, or vegetable oils.

For additional information:

Montana Department of Environmental Quality
Enforcement Division

Phone (406) 444-0379

Fax (406) 444-1923

OPENCUT MINING PLAN OF OPERATION AND APPLICATION**Operator:** Farwest Rock Products**Site Name:** FWRP Pit**INSTRUCTIONS - How to submit a complete and accurate Plan & Application:**

- Before completing this form, read the document *How to Obtain and Comply with an Opencut Mining Permit* available at: <http://www.deq.mt.gov/opencut/forms/HowToObtain.pdf>.
- Fill in all blanks and provide a detailed answer for each question. Write "None" if that is the correct answer.
- This form includes automated calculations that require Microsoft Word 2003 or newer. As you enter data into this form, autocalculate fields bounded by a red box will autopopulate. If an autocalculate field is blank, required information was not entered into this form.
- Opencut Mining Permits are "living" documents, meaning that whenever a permit is amended, the updated information replaces the outdated information. As a result, this form must be filled in completely whether applying for a Permit or an Amendment.
- The DEQ strongly recommends completing this application form in electronic format. Doing so will make applying for a future amendment much easier. Operators should keep the original electronic files and backup copies. (Note: The DEQ does not retain Operator files in original electronic format, so it is essential that the Operator do so.)
- In the table below, indicate which Support Documents are included with this application, and which were included with a previously approved application and do not need to be revised or updated at this time.
If you believe you do not need to submit a required support document for "a", "c", or "f" because an exception applies, mark only the Exception box for that document.

ID	Included with:		SUPPORT DOCUMENTS	Plan Section
	This Application	Previously Approved Application		
REQUIRED				
a	<input type="checkbox"/>	<input type="checkbox"/>	Well Logs <u>Exception:</u> <input checked="" type="checkbox"/> No wells w/in 1,000 feet of main permit area	B9-2
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Map	C5-2
c	<input type="checkbox"/>	<input type="checkbox"/>	Area Map <u>Exception:</u> <input checked="" type="checkbox"/> All required features are on the Site Map	C5-3
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Boundary Coordinate Table Do <u>not</u> attach paper copy; email to DEQOpencut@mt.gov with "Subject" line: BCT(Operator, Site Name)	C5-4&5
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	County-Approved Noxious Weed Control Plan	E6-2
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reclamation Bond Spreadsheet <u>Exception:</u> <input type="checkbox"/> Government Operator	F
OPTIONAL				
g	<input type="checkbox"/>	<input type="checkbox"/>	Additional Well Data	B9-1
h	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Soil Photos	C2-1
i	<input type="checkbox"/>	<input type="checkbox"/>	NRCS Soil Data	C2-1
j	<input type="checkbox"/>	<input type="checkbox"/>	Additional Test Hole Data	C2-1
k	<input type="checkbox"/>	<input type="checkbox"/>	Spill Prevention and Response Plan	D1-2
l	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring Well Installation Plan	D1-6
m	<input type="checkbox"/>	<input type="checkbox"/>	Ground Water Monitoring Plan	D1-6
n	<input type="checkbox"/>	<input type="checkbox"/>	Consultation w/DNRC on Water Rights	D2-1e
o	<input type="checkbox"/>	<input type="checkbox"/>	Dewatering Data and Analysis	D2-2c
p	<input type="checkbox"/>	<input type="checkbox"/>	Pond Plan View	E3-8
q	<input type="checkbox"/>	<input type="checkbox"/>	Pond Cross-Sections and/or Bottom Contour Map	E3-9
r	<input type="checkbox"/>	<input type="checkbox"/>	Pond Guideline	E3-9
s	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Seed Mix Guideline	E6-6
t	<input type="checkbox"/>	<input type="checkbox"/>	Other:	
u	<input type="checkbox"/>	<input type="checkbox"/>	Other:	

- Sign and date the certification in Section G.
- Use the *Operator Application Checklist* to confirm the application is complete and accurate. Submit the checklist and all required application materials to the Opencut Mining Program in Helena as one package.

DEFINITIONS (from ARM 17.24.202)

Access road - an existing or proposed non-public road used in connection with Opencut operations; includes the road bed, cut and fill slopes, ditches, and other structures and disturbances related to access road establishment, use, and reclamation.

Facility-level area - access roads and areas where parking, equipment and material storage, soil and overburden stockpiling, fuel storage, mine material processing and stockpiling, other product production and storage, and water system and control structures are situated.

Main permit area - facility-level areas and mine-level areas, except access roads.

Mine-level area - areas where excavating, grading, and excess overburden and fines disposal occur.

RECEIVED JUN 23 2012
Received Opencut 6/23/2012

SECTION A – Application Information**A1.**

1. Indicate which of the following is being requested (check one): ☒ Permit ☐ Amendment

If for a Permit, proceed to #2 below and provide all the information requested in this document.

If for an Amendment:

a. Update all the information requested in this document.

b. The existing permit number is: _____

c. Identify all the purposes of the amendment:

☐ Change Reclamation Date ☐ Change Post Mining Land Use ☐ Change the Site Name

☐ Add to permit acreage for: ☐ None ☐ Access Road ☐ Mine Acreage ☐ Facility Acreage

☐ Non-Bonded (Undisturbed Until Bonded) Acreage ☐ Other:

☐ Add the following processing equipment: ☐ None ☐ Crusher ☐ Asphalt Plant ☐ Concrete Plant

☐ Pug Mill ☐ Wash Plant ☐ Screen ☐ Grizzly ☐ Other:

☐ Other:

2. Operator Name: Farwest Rock Products

Site Name: FWRP Pit

Address: PO Box 991

City: Frenchtown State: MT Zip Code: 59834

Office Phone #: none Cell# 406-728-8500 Fax #: none Email ljb250@yahoo.com

3. Name of the Person who will be familiar with this Plan of Operation & Application: Lunde Baston

Office Phone #: none Cell# 406-728-8500

4. Landowner Name: Stan Hendrickson

Address: PO Box 267

City: Lolo State: MT Zip Code: 59847

Home Phone #: 406-273-6767 Cell# 406-239-5808 Fax #: none Email: none

Below landowner information filled out only if applicable.

Landowner Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Home Phone #: _____ Cell# _____ Fax #: _____ Email: _____

5. County where the proposed site is located: Missoula

6. Legal Description for Main Permit Area, Permitted Access Roads, and Non-Bonded Areas:

Section(s) 6 & 7 Township 14 ☒ North or ☐ South Range 20 ☐ East or ☒ West

Section(s) & Township ☐ North or ☐ South Range ☐ East or ☐ West

7. Total Permit Acreage Breakdown (acres must be entered to the nearest **TENTH** of an acre)

	New or Existing Permit Acres	Amendment Acres (if any)	Total Permitted Acres
Mine – Level Acres	20.7	0	20.7
Facility – Level Acres	0	0	0.0
Access Road Acres	.4	0	0.4
Totals	21.1	0.0	21.1

8. Will the permit include any Non-Bonded area at this time? ☒ Yes ☐ No

If No, skip to #9 below.

If Yes, provide the Non-Bonded Acreage Breakdown below:

	Non-Bonded Acres	Bonded Acres*	Total Permitted Acres**
Mine – Level Acres	16.6	4.1	20.7
Facility – Level Acres	0	0.0	0.0
Access Rd Acres	0.3	0.1	0.4
Totals	16.9	4.2	21.1

* Must match the "Bonded Acreage Breakdown" column on the Reclamation Bond Spreadsheet as well as the acreage on the bond form submitted to the Department.

** Must match the "Total Permitted Acres" column on the Reclamation Bond Spreadsheet as well as the acreage on the bond form submitted to the Department.

- a. Operator understands that Non-Bonded acreage cannot be disturbed for any Opencut operations until the Operator submits a *Request to Commence Operations in Non Bonded Area* form, and a reclamation bond for the undisturbed area, and these are approved by the DEQ.
☒ Operator Understands

9. Estimated Quantity of Mine Material to be Excavated from the Entire Permit Area : 1,000,000 cubic yards.
10. Estimated Date the Proposed Operation is Expected to Begin: 7/12. Note: Conducting Opencut operations without an approved permit or amendment would be a violation of the Opencut Mining Act, its implementing rules, and the existing permit.
11. What processing equipment will be used in the permit area?
☐ None ☒ Crusher ☐ Asphalt Plant ☐ Concrete Plant ☐ Pug Mill ☐ Wash Plant ☒ Screen ☒ Grizzly
☐ Other:
12. What type of materials will be mined from the permit area?
☒ Gravel ☒ Sand ☐ Scoria ☐ Soil ☐ Clay ☐ Bentonite ☐ Peat

SECTION B – PRE-MINE INFORMATION

B1. DIRECTIONS TO SITE

1. Describe in detail how to get from the nearest public road to the main permit area (include mileposts, landmarks, and distances; include information on how to obtain keys or combinations for locks).
Answer: From Hwy 93 North take a left onto Waldo Lane also known as Frenchtown Frontage Rd. Travel West 2.9 miles, then on your right will be the Entrance to Far West rock Products operation. The address will be 13272 Frenchtown Frontage Rd, Missoula MT 59808.

B2. PRIMARY PURPOSE OF THIS SITE

1. What is the primary purpose of this Opencut operation?
☒ Long term material source (typically 5 or more years)
☐ Short term projects (typically less than 5 years)
☐ Public road or construction project*
☐ Private road or construction project
☐ Other project

* If a public project, please provide the following optional information:

Government entity or agency issuing the contract: _____

Agency Contact Name: _____

Phone #: _____

Agency Project Name: _____

Agency Project Number.: _____

B3. TOPOGRAPHY [MCA 82-4-403 (11) (b)]

1. Describe in detail the terrain in and within 1,000 feet of the main permit area (for example: hills, valleys, ridges, drainages, cliffs, and benches).
Answer: The permit area is located in a cattle pasture consisting of rolling hills, small valley's, and flat land.

B4. LAND USES [MCA 82-4-403(11)(b)]

1. Indicate current land uses within the proposed main permit area.
☐ Opencut Operation ☐ Cropland/Hayland ☒ Pasture/Rangeland ☐ Industrial/Commercial ☐ Residential
☐ Forest/Timberland ☐ Other:
2. Indicate current land uses within 1,000 feet of the main permit area.
☐ Opencut Operation(s) ☐ Cropland/Hayland ☒ Pasture/Rangeland ☐ Industrial/Commercial ☐ Residential
☐ Forest/Timberland ☐ Other:

B5. STRUCTURES, FACILITIES, & SURFACE DISTURBANCES [MCA 82-4-434(3)(n)] & [ARM 17.24.217(1)(e)]

1. Are there any manmade structures, facilities, or surface disturbances in or within 1,000 feet of the main permit area?

☐ Yes ☒ No

If No, skip to B6

If Yes, indicate the type of manmade structures, facilities, or surface disturbance(s):

- ☐ Opencut Operation ☐ Farming ☐ Industrial/Commercial ☐ Residential ☐ Construction Project
☐ Roads ☐ Power Lines or Facilities ☐ Oil & Gas Structures ☐ Other:

B6. SURFACE WATER FEATURES [ARM 17.24.217(1)(a)]

1. Are there surface water features in the main permit area or within 1,000 feet of the main permit area? ☒ Yes ☐ No
 Note: This includes ground features that may contain water at any time, including seasonal ponds, ephemeral drainages, runoff channels, ditches, floodways, etc.

If No, skip to B7

If Yes, indicate the type of surface water features present:

- ☐ Lake/Pond ☐ River ☐ Stream/Creek ☒ Ephemeral drainage ☐ Spring ☐ Irrigation Ditch/Canal
☐ Other:

B7. VEGETATION [ARM 17.24.222(1)(a)]

1. Describe the dominant grasses, forbs, shrubs and trees within the main permit area.

Answer: The vegetation consists of pasture grasses including bluebunch wheatgrass, prairie Junegrass, fescues.

2. Are there Noxious Weeds present within the main permit area? ☒ Yes ☐ No

The State Noxious Weeds List and the County-Listed Noxious Weeds can be found at:

<http://agr.mt.gov/weedpest/noxiousweeds.asp>

If No, skip to B8

If Yes, indicate the types of noxious weeds present in the main permit area:

- ☒ Spotted Knapweed ☐ Russian Knapweed ☐ Leafy spurge ☐ Tansy ragwort ☐ Canada thistle
☐ Dalmatian toadflax ☐ Houndstongue ☐ Whitetop ☐ Field Bindweed ☐ Other:

B8. WILDLIFE [ARM 17.24.222(1)(e)]

1. Indicate the fish and wildlife species in and within 1,000 feet of the main permit area.

Answer: white tail deer, coyotes, fox and small rodents

B9. WATER WELLS [ARM 17.24.217(1)(b)&(c)] & [ARM 17.24.221(5)]

1. In the table below list the locations, total depths, static water levels, and uses of water wells in and within 1,000 feet of the main permit area.

- Obtain the required information from the Montana Natural Resource Information System (NRIS) at <http://maps2.nris.mt.gov/mapper>. The guideline *Identifying Well Logs within a Specified Radius*, available at <http://deq.mt.gov/opencut/forms/IdentifyWellLogs.pdf>, describes how to locate wells and download the required logs.
- The DEQ also recommends obtaining well information from the Montana Department of Natural Resources and Conservation (DNRC), Board of Oil and Gas website at <http://www.bogc.dnrc.mt.gov/MBOGCdotNET/frnFilterNavigation.aspx> to determine the location of any oil and gas wells in the vicinity of the main permit area.
- Additional information may be available from landowners or by conducting field measurements.
- Well locations must be reasonably accurate. In cases where well locations are unavailable or appear inaccurate, field confirmation may be required.
- If there are no wells in and within 1,000 feet of the main permit area, write "None" in the table below.
- Provide depths and static water levels in feet below the ground surface.
- Locations of existing and proposed wells in and within 1,000 feet of the main permit area must be shown and labeled on the Site Map or Area Map.

Well I.D. on Site Map	Well Owner	Distance & Direction from Main Permit Area Boundary	Total Well Depth (feet)	Static Water Level (feet)	Use	Log Attached	Comments
,	none					<input type="checkbox"/> Yes <input type="checkbox"/> No	

						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	
						<input type="checkbox"/> Yes <input type="checkbox"/> No	

Note: If there are additional wells, attach the Program's *Additional Well Data* form available at (<http://deq.mt.gov/opencut/forms/AdditionalWellData.xlsx>) and check box 6g on page 1.

2. Are the above identified Well Logs attached? ☐ Yes ☐ No Well Logs Are Available
If Yes, check box 6a on page 1. If No, check the *Exception* box for 6a on page 1 and skip to #4 below.
3. Do the Well Logs indicate that any of the wells located within 1,000 feet of the main permit area are used for public water supply?
☐ Yes ☒ No
4. Has the Operator identified any Oil or Gas wells located in or within 1,000 feet of the main permit area?
☐ Yes ☒ No
If Yes, the Operator may be required to contact the DNRC Board of Oil and Gas and obtain information about additional wells, buried pipelines, and petroleum release sites that may be present in the vicinity.

B10. ADDITIONAL INFORMATION [ARM 17.24.222(1)]

1. Are there pre-mine site characteristics or circumstances that you wish to provide additional information about?
☐ Yes ☒ No

If Yes, describe:

SECTION C – SITE PREPARATION AND PLANNING

C1. WATER TABLE LEVELS [ARM 17.24.217(1)(c)]

Provide information below for the main permit area.

- The seasonal high water table is the highest level that water typically rises to each year.
 - The seasonal low water table is the lowest level that water typically falls to each year.
1. The estimated maximum depth of mining is: 30 feet below ground surface
2. The estimated seasonal high water table level in the main permit area is: 300 feet below ground surface
3. The estimated seasonal low water table level in the main permit area is: 500 feet below ground surface
4. How did you determine the seasonal high & low water table levels?
☒ Well Logs ☒ NRIS Well Data ☒ Landowner Observation ☐ Field Observation ☐ Other:

Seasonal high water table:	300 feet
Maximum depth of mining;	30 feet
Difference = 270 feet	

- a. If the difference is ≥ 3 proceed to Section C2.
- b. If the difference is ≤ 0 a pond and/or wetland will be left for final reclamation and the Operator must include "pond" or "wetland" as a postmining land use in Section E2 and complete Section E3.
- c. If the difference is >0 and <3 it is likely that ground water could occur in some portion of the pit. Therefore, explain how the operator will maintain a minimum of 3-feet of separation between the seasonal high water table and the reclaimed ground surface (i.e. will the operator backfill the site to maintain a minimum of 3-feet separation of earthen material from ground water, construct a permanent drainage mechanism, etc).

Explain:

C2. SOIL AND OVERBURDEN [MCA 82-4-434(3)(c)] & [ARM 17.24.217(1)(d)] & [ARM 17.24.219(1)(b)]

1. In the table below, provide soil and overburden thickness data obtained from at least 3 test holes excavated within the proposed permit area. An existing observation point (e.g. road cut, bank, etc.) that exposes both the soil and overburden thickness may be substituted for a test hole. If warranted, due to the size and nature of a site, the DEQ may require the collection of data from additional test holes.
- Saving available soil is critical for successful reclamation, so determining the soil thickness throughout the permit area is very important. Therefore, the DEQ recommends that Operators collect additional soil thickness data from shallow hand-dug holes spaced at a density of at least one hole per acre.
 - Soil is usually darker than overburden, may contain roots, and typically extends deeper than just the top few inches of rich organic matter. The number of roots and degree of darkening decrease with depth. Typically, the boundary between soil and overburden is placed at the lowest point that exhibits darkening. Soil in many areas is rocky, but that does not alter the need to save it for use in reclamation.
 - The DEQ recommends taking sidewall photographs of test holes before backfilling; include a ruler in photos for scale. If photos are attached, check box 6h "Soil Photos" on page 1.
 - Soil survey maps and information are available from the Natural Resources Conservation Service at: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. The DEQ recommends that Operators obtain the maps and information for each proposed site and attach copies to this Plan. If soil survey information is attached, check box 6i "NRCS Soil Data" on page 1.
 - Test hole and observation point locations must be shown on the Site or Area Map [ARM 17.24.221(2e)].

Date test pit was dug: 3/6/12 Logged by: Lunde Baston *If test hole is dry answer "none".

Soil Test Hole I.D. on Map	Soil Thickness (inches)	Overburden Thickness (inches)	Total Depth (ft)	*Depth to Water (ft)	Comments (i.e. very rocky overburden, type of soil, etc)
P1T1	11	0		none	topsoil contains dirt and rock
P1T2	11	0		none	topsoil contains dirt and rock
P1T3	4	0		none	Very little topsoil present mostly rocks
P2T1	14	0		none	topsoil contains dirt and rock
P2T2	14	0		none	topsoil contains dirt and rock
P2T3	14	0		none	topsoil contains dirt and rock
P2T4	14	0		none	topsoil contains dirt and rock
P2T5	14	0		none	topsoil contains dirt and rock

Note: If there are additional test holes, attach the Program's *Additional Test Hole Data* form found at (<http://deq.mt.gov/opencut/forms/AdditionalTestHoleData.xlsx>) and check box 6j on page 1.

2. In the table below, provide minimum, maximum, and typical soil and overburden thicknesses based on the data collected at the site. **Note:** If overburden is a mine material or will be used as binder, an appropriate quantity must first be saved to satisfy the soil plus overburden replacement thickness requirement described in Sections C2-3 & C2-4 and Section D4-1b (i.e. The Operator must strip and retain enough overburden, if available, from Mine-Level Areas so that up to an 18-inch thickness of overburden + soil can be replaced for reclamation to rangeland or dryland uses, and up to a 36-inch thickness of overburden + soil can be replaced for reclamation to cropland or irrigated land.).

Soil	Minimum Soil Thickness (inches)	Maximum Soil Thickness (inches)	Typical Soil Thickness (inches)	Soil Thickness (inches) to be Saved for Reclamation
Mine -Level Area	4	14	12	12*
Facility-Level Area	0	0	0	0*
Permitted Access Road	0	0	0	0*

Overburden	Minimum Overburden Thickness (inches)	Maximum Overburden Thickness (inches)	Typical Overburden Thickness (inches)	Overburden Thickness (inches) to be Saved for Reclamation
Mine-Level Area	0	0	0	0*

3. Operator will strip, stockpile, and save 12 inches of Mine-Level soil, 0 inches of Facility-Level soil and 0 inches of Access Road soil for use in on-site reclamation. *
- The total volume of soil to be stripped, stockpiled and saved for reclamation is 33,396 cubic yards of Mine-Level soil, 0 cubic yards of Facility-Level soil, and 0 cubic yards of Access Road soil (unless road will remain as a postmining land use). **
 - Volume of soil in 1 acre: 1,613 cubic yards of Mine-Level soil per acre, 1,000 cubic yards of Facility-Level soil per acre, and 0 cubic yards of Access Road soil per acre to be stripped, stockpiled and saved for reclamation.
4. Operator will strip, stockpile and save 0 inches of overburden for use in on-site reclamation. *
- The total volume of overburden to be stripped, stockpiled and saved for reclamation is 0 cubic yards. **
 - Volume of overburden in 1 acre: 0 cubic yards of overburden per acre to be stripped, stockpiled, and saved for reclamation.

* - These soil & overburden thickness values must be used in the Reclamation Bond Spreadsheet.

** - The total volume of soil and overburden to be stockpiled is automatically calculated using the following formula:

Example - For 14 inches of soil on a 12 acre site:

$$\frac{(12 \text{ acres} \times 43,560 \text{ ft}^2) \times (14" \text{ soil} \div 12" \text{ in one foot})}{27 \text{ ft}^3} = 22,586 \text{ cubic yards of soil to stockpile}$$

C3. ACCESS ROADS [MCA 82-4-403(1)] & [ARM 17.24. 217(a)] & [17.24.218(1)(b)]

- If new road(s) will be constructed to obtain access to Opencut materials, they are considered "affected land" and must be included in the permit.
 - Will any new road(s) be constructed to access the permit area? ☒ Yes ☐ No
 - Will any existing access road(s) be included in the permit at the request of the landowner? (i.e. Is question A on the *Landowner Consultation* form marked "Yes"?). ☐ Yes ☒ No
If Yes to "a" or "b", continue with #2 below
If No to both "a" and "b", skip to #6 below
- Operator understands that each access road included in the permit must be: a) appropriately bonded and b) delineated on the Site Map. ☒ Operator understands
- The length and width of the access road to be permitted is: Length: 1953.6 feet, Width: 8 feet, This is the access road which connects the permitted pit (Pit 1) to the non bonded pit (Pit 2). This road is not a public access road it will only have the traffic from one site to the other, which material will be hauled by a dump truck. Traffic will only be going in one direction at a time, with only one vehicle on the road at a time. There will also be a short 119 foot long X 12 foot wide road with a culvert to access Pit 1. The culvert will be 20 feet long and 1 foot in diameter to allow for possible water flow through the drainage. On the site map the short access road to pit 1 is from point 10 to point 3.
- Check the appropriate box(s) below to indicate surface water features within 500 feet of permitted access road(s).
☐ Lake/Pond ☐ River ☐ Stream/Creek ☒ Ephemeral drainage ☐ Spring ☐ Irrigation Ditch/Canal
☐ Other:
 Describe the direction & distance of surface water feature(s) from the access road: The short bonded access road will have a culvert placed in the drainage to allow for possible water flow. The access road between Pit 1 and Pit 2 will maintain a 50 foot buffer zone from the drainage.
- Permitted access roads that will not be left at the conclusion of Opencut operations must be reclaimed as follows:
 - Remove the materials used for road construction, widening, or improvement (such materials may include culverts, gravel, and pavement).
 - Backfill and grade the former road area in a manner that leaves stable surfaces which blend into the surrounding topography and drainages.
 - Rin all compacted ground, replace soil, plant seed, and support revegetation as necessary.

☒ Operator will comply with statements "a" through "c" above.

6. The Operator will comply with the landowner's requests regarding items A, B & C of the *Landowner Consultation* form.
☒ Operator will comply

C4. HOURS OF OPERATION [MCA 82-4-434](3)(m)] & [ARM 17.24.218(1)(d)]

1. In accordance with ARM 17.24.218(1)(d), the DEQ may impose reasonable limits on hours of operation to reduce adverse impacts on residential areas. The Operator must propose hours of operations by checking box "a or b" below (thereby adopting the hours stated), or by checking box "c" and providing the required information.

a. ☐ Permitted hours and activities are as follows:

- Monday–Friday: 7:00 am–7:00 pm Activities: All permitted activities allowed

or

b. ☐ Permitted hours and activities are as follows:

- 24 hours a day, 7 days a week, 365 days a year. Activities: All permitted activities allowed

or

c. ☒ Permitted hours and activities* are as follows:

- Mon.–Fri: 7 am–7 pm Activities: * All permitted activities
- Saturday: 7 am–7 pm Activities: * All permitted activities
- Sunday: 7 am–7 pm Activities: * All permitted activities

Additional information:

* Typical activities may include, all permitted activities, loading, hauling, maintenance, mining, crushing, etc.

C5. MAPPING [MCA 82-4-403(11)(b)] & [ARM 17.24.212(3)] & [ARM 17.24.221]

1. This *Plan of Operation & Application* must be accompanied by a complete and accurate site map at a scale of 400 (or less) feet to one inch. (Alternative scales may be accepted by the Department as long as the map is easily readable). An Area Map is also required if needed to show all pertinent site features. The map(s) must be displayed on an aerial background and must be attached to this *Plan of Operation & Application* [ARM 17.24.221(7)]. Operators should follow the Map Guideline at: <http://deq.mt.gov/opencut/forms/MapGuide.pdf>.

2. Is a Site Map, prepared in accordance with the *Map Guideline*, attached? ☒ Yes
☐ No

If Yes, check box 6b on page 1.

If No, this application is incomplete and cannot be approved until a Site Map is provided.

3. Is an Area Map, prepared in accordance with the *Map Guideline*, attached? ☐ Yes
☒ No

If Yes, check box 6c on page 1. If not required, check the *Exception* box for 6c on page 1.

If No and an Area Map is required to show all pertinent features, this application is deficient and cannot be approved until an Area Map is provided.

4. In accordance with the *Map Guideline*, WGS 84 Decimal Degree* coordinates defining permit boundaries must be provided on the Program's *Boundary Coordinate Table* (<http://deq.mt.gov/opencut/forms/BoundaryCoordinateTable.xlsx>). The Program will not accept boundary coordinates on any other form.

5. If an access road is to be permitted, provide coordinates that define the centerline of the access road. Coordinates must be provided for each durable marker described in Section C6 below, must include 5 digits past the decimal point and must be provided on the Department's form. All longitudinal coordinates in North America are preceded by a minus sign.*

* **Decimal degree coordinates are displayed to five decimal places**

Example: 46.58939 Latitude and -112.00479 Longitude

Boundary Coordinate Table has been emailed to DEQOpencut@mt.gov ☒ Yes ☐ No

If No, this application is deficient and cannot be approved.

If Yes, check box 6d on page 1 and go to Section C6.

C6. MARKERS [ARM 17.24.218(1)(a)]

1. The following requirements apply to marking the permit boundary:
 - Markers must be in place when the application is received by the DEQ so the site is clearly defined for field inspection. DEQ staff cannot inspect sites that are not marked.
 - Markers should be durable (stout steel or wood posts are recommended), and painted or flagged to be highly visible. Each boundary marker must remain in place until the adjacent permit area is reclaimed and released.
 - Markers must be placed to delineate the physical extent of the following permit areas:
 - The main permit area
 - Any areas being permitted as Non-Bonded
 - The location of new access roads to be constructed
 - Markers must be placed in corners and along boundary segments and curves, such that the next marker is visible.
2. Are all permit areas marked in accordance with the above requirements? ☒ Yes ☐ No

If Yes, proceed to Section C7

If No, explain why:

Note: Unless the site is active farmland, the application for an unmarked site is deficient and cannot be approved until the permit boundary is appropriately marked.

C7 ADDITIONAL INFORMATION

1. Is there additional mining or site preparation information that you wish to provide? ☐ Yes ☒ No

If Yes, describe:

SECTION D – WATER PROTECTION, MINING & PROCESSING

D1. WATER PROTECTION [MCA 82-4-434(3)(l)] & [ARM 17.24.218(1)(e)] & [ARM 17.24.219(1)(c)(ii)]

1. Operator must:
 - a. Protect on-site and off-site surface water and ground water from adverse changes in quality and quantity that could be caused by Opencut operations.
 - b. Prevent, minimize, or mitigate adverse impacts to on-site and off-site surface and ground water systems and structures that could be caused by Opencut operations.
 - c. Properly establish, use, and reclaim hydrologic structures and systems used for Opencut operations.
 - d. Keep waste and stationary equipment above the seasonal high water level of surface and ground water and dispose of all petroleum, solvent, and chemical wastes in compliance with applicable state laws and rules.
 - e. Manage fuel storage as follows:
 - i. Install or construct secondary containment structures for non-mobile, single-wall, fuel storage tanks in accordance with the current codes adopted by the State Fire Marshall. This requirement applies to such tanks placed and used in and within 500 feet of access roads and 1,000 feet of the main permit area.
 - ii. Routinely inspect and maintain tanks, fittings, hoses, filters, and dispensers to prevent leaks and spills.
 - iii. Retrieve, handle, and dispose of spilled fuel and contaminated materials and soil in a lawful manner.
 - iv. Report a fuel spill that reaches state waters or is greater than 25 gallons to the Montana Spill Hotline (406-324-4777). **Note:** "state waters" includes any surface water or ground water.
☒ Operator will comply with statements "a" through "e" above
2. Is a spill prevention and response plan attached? ☐ Yes ☒ No

If Yes, check box 6k on page 1 and skip to #3 below.

If No, describe in detail the spill prevention and response measures to be used at this site.

Answer: There will be no fuel stored on site, all fuel will be transported from an off site location to the equipment. If a spill does occur it will be dug up, reported then hauled to the appropriate disposal site.

3. How will equipment at this site be fueled?

- ☒ Mobile Fuel Truck ☐ Fueled Off-Site ☐ Non-Mobile On-Site Fuel Tank: ☐ Single Wall* or ☐ Double Wall
☐ Other:

* If single wall, secondary containment must be provided; see #1e above.

4. Will stormwater drain internally (i.e. remain within the permit boundary)? ☐ Yes ☒ No

If Yes, skip to #5 below.

If No, indicate below what types of erosion control methods [Best Management Practices (BMPs)], will be used to ensure stormwater and sediment does not leave the permitted site.

- ☒ Silt Fence ☐ Wattles ☐ Straw Bales ☐ Erosion Control Blankets ☐ Tracking of Slope
☐ Other BMP's:

5. Are the following ground water related plans or reports attached?

- a. Monitoring Well Installation Plan ☐ Yes ☒ No If Yes, check box 6l on page 1.
b. Ground Water Monitoring Plan ☐ Yes ☒ No If Yes, check box 6m on page 1.
c. Other: ☐ Yes ☒ No If Yes, check an "Other" box at 6t or 6u on page 1

D2. WATER MANAGEMENT & USE [MCA 82-4-434(3)(l)] & [ARM 17.24.218(1)(e)]

1. Water use, diversion and capture.

a. Indicate the proposed use(s) of water:

- ☒ Dust Control (i.e. roads, etc.) ☐ Crusher ☐ Wash Plant ☐ Pug Milling ☐ Concrete Batch Plant
☐ Asphalt Plant ☐ Other:

b. Is the water source in or within 1,000 feet of the main permit area? ☐ Yes ☒ No

If No, skip to "1c" below

If Yes, identify the source of the water to be used and show its location on a map.

- ☐ Well ☐ Pond ☐ Irrigation Ditch ☐ Pit ☐ Other:

c. Will water be stored on-site? ☒ Yes ☐ No

If No, skip to "1d" below

If Yes, what will the water be stored in?

- ☐ Water Storage Tank ☐ Detention/Retention Pond ☐ Lined Detention/Retention Pond
☒ Other: Water truck

d. Describe the measures to be taken to protect the water rights of other parties:

Answer: There are no wells located with in 1000ft of mine site . All well logs show a depth of 200 to 300 ft below surface. If water is found water rights will be filed upon and the proper measures taken.

e. Either attach or provide below a summary of your Consultation with DNRC on Water Rights. Is a summary attached? ☐ Yes ☒ No

If Yes, check box 6n on page 1.

If No, explain why the DNRC has not been consulted as required by ARM 17.24.218(1)(e)(i).

Answer: The DNRC has been contacted, I, Lunde Baston, spoke with Amy Groen on 3/26/12 no water right are being filed at this time.

2. Will dewatering be conducted at this site? ☐ Yes ☒ No

If No, skip to Section D3 below.

If Yes, show the location of all pertinent features on the site map and provide the following information:

a. How will the site be dewatered?

- ☐ Surface water flow from site via a ditch, drainage channel, etc.
☐ Pumping from: ☐ Pond ☐ Pit ☐ Wells ☐ Other:
☐ Other:

b. What is the maximum rate at which dewatering will be conducted? gallons per minute (gpm)

c. What is the lowest elevation to which the water level will be drawn down? feet

i. Either attach, or provide below, data and analysis supporting the above water level draw down depth.

ii. Is Dewatering Data and Analysis attached? ☐ Yes ☐ No

If Yes, check box 6o on page 1.

If No, the data and analysis are presented here:

- d. Dewatering will be conducted during which month(s):
 e. Where will the water be discharged?
☐ Pond ☐ Pit ☐ Ditch ☐ Creek ☐ Ground Surface ☐ Wells ☐ Other:

D3. MINING, HAULING AND FACILITIES [ARM 17.24.218(1)(c)]

1. Will any of the processing equipment identified in #11 of Section A be moved on-site and off-site as needed, or is it expected to remain on-site during the life of the permit?
☐ No Processing Equipment ☐ Remain on-site ☒ Move on-site and off-site as needed
 - a. If "Move on-site and off-site as needed" was checked, identify which equipment:
☐ None ☒ Crusher ☐ Asphalt Plant ☐ Concrete Plant ☐ Wash Plant ☐ Pug Mill ☒ Screen
☒ Grizzly ☐ Other:
2. What type of excavating or hauling equipment will be used to mine this site?
☒ Dozer ☐ Backhoe ☒ Excavator ☒ Loader ☒ Dump/Haul Truck ☒ Skidsteer ☐ Scraper ☐ Drag Line
☐ Dredge - Type: ☐ Other:
3. Describe in detail how and when soil and overburden will be stripped and stockpiled.
 - a. When will soil and overburden be stripped and stockpiled?
Answer: Prior to any gravel production the soil will be stripped and stored in piles on north end of the Pit 1 area. The non-bonded area will not be disturbed until bonded, at that point the soil will be stored in the North east corner of the Pit 2 area.
 - b. How will soil and overburden be stripped and stockpiled?
Answer: Soil and overburden will be removed by a dozer and stockpiled with the loader and dozer.
4. Describe the distinct mining phases that will occur at this site, including any areas being permitted as Non-Bonded (i.e. describe in great detail how the entire permitted site will be mined, including where mining will begin and how it will progress across the site, soil and overburden stockpile locations, pond excavation, etc.).
Answer: The area indicated as pit 1 will be stripped of topsoil. The topsoil/overburden will be stored in the entire north boundary of pit 1. Then the material will be pushed with a dozer to the loader, to ensure there is no highwall. Everything will be excavated or dozed to a 30 foot depth creating 3:1 slopes. There will be a 50 foot buffer zone from Pit 1 to the drainage. The access road between pit 1 and pit 2 will be constructed to create access to pit 2. Pit 2 is the non-bonded location, none of the site boundaries are located in the drainage which contains water. There will be a 50 foot buffer zone between Pit 2 and the drainage. The mining procedure in pit 2 will be the same as pit 1. In pit 2 mining will start at the far East of the boundaries this will always leave a berm, bank or large hump so runoff can never enter the drainage.
5. Is the site expected to be worked continuously or intermittently (i.e. on occasion when material is needed)?
☒ Worked continuously (i.e. year round) ☐ Worked intermittently (i.e. a few times a year) - Explain:
6. Any slope steeper than 3:1 is considered to be a highwall. Will there be any highwalls at the site? ☐ Yes ☒ No
 - a. If No, explain how the site will be mined without creating highwalls.
☒ Site will only be mined by pushing material along slopes of 3:1 or flatter, thereby never creating a highwall.
☐ Other:
 - b. If Yes:
 - i. The maximum length of highwall on-site at any given time will be:
 _____ linear feet. **Note:** This number must be used on the *Reclamation Bond Spreadsheet*.
 - ii. The maximum height of highwall on-site at any given time will be:
 _____ feet. **Note:** This number must be used on the *Reclamation Bond Spreadsheet* and will typically be consistent with the maximum depth of mining (see Section C1-1).

D4. MINE MATERIAL COMMITMENTS [MCA 82-4-434(3)(c)] & [ARM 17.24.219(1)(b)]

1. The Operator will comply with the following requirements:
 - a. Prior to conducting any Opencut operations in a Mine-Level Area, Facility-Level Area, or Access Road included in the permit, soil must be stripped to the thicknesses identified in Section C2 - 2 & 3. The only exception is that soil need not be stripped from soil stockpile areas. (**Note:** stripping soil may create low spots that collect water, necessitating the establishment of drainage ways, or the construction of raised roadbeds and work areas.)

- b. The Operator must strip and retain enough overburden, if available, from Mine-Level Areas so that up to an 18-inch thickness of overburden + soil can be replaced for reclamation to rangeland or dryland uses, and up to a 36-inch thickness of overburden + soil can be replaced for reclamation to cropland or irrigated land. At a minimum, the Operator must replace soil and overburden to the thicknesses identified in Sections C2-2 through C2-4 of this Plan.
- c. All stripped soil and overburden must be: i) hauled directly to areas prepared for reclamation and re-soiling, or ii) promptly stockpiled and protected from erosion, contamination, compaction, and unnecessary disturbance. At the first seasonal opportunity, the Operator must shape and seed with an approved perennial seed mix, any stockpile that will remain for 2 or more years.
- d. The Operator must not use soil off-site, give it away, or sell it without written approval from the DEQ.
- e. Soil and overburden must be handled separately and the Operator will avoid mixing these materials, or handling them when wet or frozen.
- f. A minimum 10-foot wide buffer zone stripped of soil must be maintained along the edge of highwalls. This practice ensures that soil will not be lost to mining.
- g. Mine material stockpiles must be kept out of drainage bottoms and off of slopes steeper than 3:1. All excavated and/or processed mine material must be: i) removed from the site, ii) buried on-site, or iii) left for the landowner in accordance with the *Landowner Consultation* form and Section E7 of this Plan.
- h. Burn pile residue, metal, plastic, tires, and other wastes must be disposed of off-site and in a lawful manner.
- i. All clean fill (i.e. dirt, sand, fines, gravel, and oversize rock) that cannot or will not be buried during final reclamation must be removed from the permit area prior to bond or liability release request.

☒ Operator will comply with statements "a" through "i" above

D5. ASPHALT & CONCRETE RECYCLING [ARM 17-24-218(1)(g)(i)]

1. **Asphalt Recycling** – Typically, recycling involves accumulating materials containing asphalt, crushing these materials periodically, and stockpiling the resulting crushed asphalt product as-is or blended with other suitable materials. These recycled products are commonly used to surface roads and operations permitted to operate an asphalt plant may also use these as feed into the plant.

Asphalt is considered to have potential to impact water quality. As a result:

- An operation that imports construction or demolition debris containing asphalt must be permitted to store the debris awaiting recycling. Note: Imported debris may be a mixture of various materials (e.g. asphalt, concrete, soil, gravel, etc.). However, if the debris contains asphalt, it must be permitted.
- Similarly, if a site permitted to operate an asphalt plant will stockpile asphalt produced on-site (e.g. excess or reject material), the operation must be permitted for asphalt storage.

- a. Will asphalt be stockpiled at the site? ☐ Yes ☒ No

If No, skip to #2 below

If Yes, the Operator must comply with the following requirements for stockpiled asphalt:

- i. The maximum amount of asphalt awaiting recycling that will be on-site at any time is _____ cubic yards.
- ii. This maximum value must be used in the *Reclamation Bond Spreadsheet* to calculate the cost to either recycle (i.e. crush) the asphalt, or dispose of it off-site in a lawful manner.
- iii. Asphalt must be stored in the "asphalt stockpile area" shown on the site map.
- iv. Asphalt must be kept out of groundwater and surface water (runoff channels, puddles, ponds, etc.); the only water that should come in contact with the asphalt stockpile is rain and snow.
- v. Asphalt must not be buried or otherwise disposed of on-site. During the final reclamation process, on-site asphalt stockpiles must be: a) removed from the site and disposed of in a lawful manner, or b) recycled into useful products which are removed from the site or used on-site to surface roads that are included in the approved postmining land use.

☐ Operator will comply with statements "i" through "v" above.

2. **Concrete Recycling** – Hardened concrete is not considered to have potential to impact water quality. As a result, concrete debris from construction or demolition projects may be imported to the site and stockpiled pending recycling or use as mined-area backfill. Similarly, sites permitted to operate a concrete plant may stockpile excess or reject product that becomes hardened on-site.

- a. Will hardened concrete be stored at the site? ☐ Yes ☒ No

If No, skip to Section D-6 below

If Yes, the Operator must comply with the following requirements for hardened concrete:

- i. When concrete is deposited at the site, any protruding metal must be cut off and collected. Any metal exposed during subsequent handling, transfer, crushing, or recycling must promptly be freed and collected. As a result, no protruding metal should be visible at any time. Salvaged metal must periodically be transported off-site for recycling or other lawful disposal.
- ii. Concrete must be stored in the "concrete stockpile area" shown on the site map
- iii. Concrete present at the site during the final reclamation process must be: a) removed from the site and disposed of in a lawful manner, b) recycled into useful products, c) buried on-site under at least 3 feet of overburden and soil suitable for sustaining the postmining vegetation, or d) if the post-mining land use includes a pond, the concrete may be placed below the seasonal low water level to improve the aquatic habitat.

☐ Operator will comply with statements "i" through "iii" above.

Note: If asphalt is present in concrete stockpiles, the site must be permitted for asphalt recycling (see Section D-5-1 above.)

D6. MINE MATERIAL BACKFILL & EXCESS MATERIAL DISPOSAL [ARM 17.24.218(1)(g)]

1. Are there any planned backfill or excess material disposal location(s) (e.g. to reclaim highwalls that will not be cut and filled during mining, bringing offsite backfill material to the pit, etc.)?

☒ No ☐ Yes-Planned Backfill ☐ Yes-Excess Material Disposal Location(s)

If No, skip to Section D7 below

If Yes, show the planned backfill and/or excess material locations on the site map and provide the following information:

- a. Location(s) to be backfilled and where the backfill will come from:

Answer:

- b. Material type(s) to be used as backfill:

☐ Pit Run ☐ Reject Fines ☐ Gravel ☐ Oversize Rock ☐ Backhaul (Clean Fill Only) ☐ Other:

- c. Estimated quantity of material needed for backfill:

_____ acres of backfill, * _____ feet deep (depth of area in feet) * 0.1 Compaction percent = 0 cubic yards of material required for backfill (Note: A corresponding volume must be included on the Reclamation Bond Spreadsheet for planned highwall or pit backfill).

- d. Provide a detailed description of how the backfill will be placed and compacted.

Answer:

D7. ADDITIONAL IMPACTS [ARM 17.24.217(1)(e)] & [ARM 17.24.218(1)(e)] & [ARM 17.24.218(1)(h)]

1. Indicate the methods and materials you will use to mitigate impacts of the structures and facilities listed in Section A1, item 11 from the neighboring properties.

☒ None ☐ Buffer zone ☐ Berms ☐ Fences ☐ Vegetative screens ☐ Equipment enclosures
☐ Restricted hours ☐ Dust mitigation ☐ Speed limits ☐ Paving ☐ Revegetation ☐ Other:

2. What other man-made features will be affected by Opencut operations?

☒ None ☐ Fences ☐ Ditches/Irrigation Systems ☐ Aboveground Utilities (i.e. power lines)
☐ Underground Utilities ☐ Roads ☐ Other:

If None, skip to #3 below.

- a. What methods and materials will be used to protect, repair, or replace the above features or structures?

Answer:

3. Are there additional Opencut operation impacts not addressed in other parts of this Plan? ☐ Yes ☒ No

If Yes, describe:

D8. ADDITIONAL COMMITMENTS [MCA 82-4-434(3)(g)&(h)] & [MCA 82-4-437(1)&(2)] & [ARM 17.24.218(1)(h)(i)]

1. The Operator will comply with the following requirements:

- a. Key personnel and subcontractors involved in Opencut operations must be informed of the requirements of this Plan and must be provided a copy of this Plan. In addition, they must be shown each boundary marker location and informed of their importance.
- b. Proper precautions must be taken to prevent wildfires.
- c. Appropriate protection must be provided for identified cultural resources that could be affected by Opencut

operations. If any other cultural resources are found, the Operator must: i) temporarily halt work, or move to another area, and ii) promptly notify the State Historic Preservation Office (406-444-7715) and the DEQ (406-444-4970).

- d. By March 1st of each year, the Operator must complete and return the Annual Progress Report (APR) form that the Program sends early in the year. The Operator must report the requested information regarding mining conducted during the preceding calendar year. In addition, the Operator must calculate the fee for the preceding year's production (per cubic yard of material mined) and submit payment to the DEQ along with the APR.

☒ Operator will comply with statements "a" through "d" above

D9 ADDITIONAL INFORMATION

1. Is there any other information you wish to provide for Section D? ☒ Yes ☐ No

If Yes, describe: The method of mining in pit2 will start on the far east side of the boundaries and procede north always leaving a large berm or mound that runoff cannot enter the drainage. As a second erosion control method silt fencing will be used on the far west side of boundaries.

SECTION E – RECLAMATION PLAN

E1. RECLAMATION TIMEFRAME [MCA 82-4-434(3)(k)] & [ARM 17.24.219(1)(f)(i & ii)]

1. Reclamation must be:
- Conducted as concurrent with the Opencut operations as feasible and in accordance with this Plan.
 - Completed on an area no longer needed for Opencut operations within one year after the cessation of such operations.
 - Completed on an area that the Operator no longer has the right to use for Opencut operations within one year after the termination of such right.
 - Completed within a specified length of time.

☒ Operator will comply with statements "a" through "d" above

The estimated date of final reclamation should be based on various business and environmental factors, including:

- The estimated demand for mine materials, the expected rate of production, and the volume and grade of permitted mine material.
- The time required to establish productive vegetation comparable to that growing on similar undisturbed land nearby. Typical minimum timeframes for revegetation are:
 - At least 2 years to establish vegetation and control noxious weeds on grassland and forest areas.
 - At least 1 year for the first successful harvest on cropland.

Final reclamation of the site is complete when the postmining land use has been achieved, including successful revegetation and noxious weed control.

The estimated Final Reclamation Date is: Month 9, Year 2025

Note: If the postmining land use will not be achieved by this date, the Operator must submit an amendment application to extend the final reclamation date.

E2. POSTMINING LAND USES [MCA 82-4-434(3)(a)] & [ARM 17.24.219(1)(a)]

1. The site will be reclaimed to the postmining land use(s) below. If there is more than one postmining land use, show those areas on a separate final reclamation map.

☐ Permitted Access Road(s) ☐ Internal Road(s): Length: & Width:

☒ Rangeland/Pasture ☐ Cropland/Hayland

☐ Year-round Pond: ☐ Wildlife ☐ Recreation ☐ Fishery ☐ Other:

☐ Seasonal Pond: Purpose- ☐ Wetland ☐ Landowner Equipment Storage Area* ☐ Landowner Material Stockpile Area ☐ Residential** ☐ Industrial/Commercial** ☐ Berms ☐ Fences ☐ Vegetative Screens

☐ Other:

*Landowner Equipment Storage Areas must be shown on a map (include approximate acreage) and have a description of why it is to be left (see 2i below).

**Residential and Industrial/Commercial land uses may require submittal of planning documents and approvals.

Note: If site plans change, the Operator must submit an amendment application to update the postmining land use(s).

2. What facilities and structures will remain after reclamation of the site is completed?

☒ None ☐ Office ☐ Scale ☐ Gravel or Paved Surface Area ☐ Concrete Structures ☐ Other:

If **None**, skip to Section E3 below, otherwise:

- i. Describe the purpose of leaving these facilities or structures intact. **Answer:**
- ii. Will the remaining facilities or structures be consistent with the postmining land use? ☐ Yes ☐ No

If **No**, this application is deficient and cannot be approved.

E3. PONDS [ARM 17.24.219(1)(c)]

1. If Section E2 above does not designate a pond, seasonal pond, or wetland as a postmining land use, skip to Section E4; otherwise proceed to #2 below.
2. Are the pond(s) seasonal or year round? ☐ Seasonal ☐ Year Round
3. Indicate the number of pond(s) to be constructed:
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Other:
4. Indicate the maximum pond depth:
☐ 10-feet ☐ 15-feet ☐ 20-feet ☐ 25-feet ☐ 30-feet ☐ 35-feet ☐ 40-feet ☐ 45-feet ☐ 50-feet ☐ 55-feet
☐ Other:
5. Is the location of each pond and its final proposed shape shown on the reclamation map, and/or other map?
☐ Yes ☐ No

If **No**, this application is deficient and cannot be approved.

6. Indicate the maximum slope of the following pond margin areas:
 Above High Water: ☐ 3:1 ☐ 4:1 ☐ 5:1 ☐ 6:1 ☐ Other:
 Between High and Low Water: ☐ 3:1 ☐ 4:1 ☐ 5:1 ☐ 6:1 ☐ Other:
 Below Low Water: ☐ 3:1 ☐ 4:1 ☐ 5:1 ☐ 6:1 ☐ Other:

Note: Proposed slopes steeper than 3:1 may require a slope stability study prepared by a Professional Engineer or other appropriately qualified professional.

7. Indicate below the physical features that will be included with this pond and show their location on the final reclamation map.
☐ Islands ☐ Inlets/Bays ☐ Peninsulas ☐ Submerged habitat features ☐ Boat Ramp ☐ Other:
8. Has the Operator attached a detailed Plan View of the final pond design, including the above features? ☐ Yes ☐ No
 If **Yes**, check box 6p on page 1.
 If **No**, this application is deficient and cannot be approved.
9. Operator has attached at least two Cross-Sections showing each proposed pond and/or a Contour Map showing the bottom of the pond(s) with a contour interval appropriate for the pond depth. ☐ Yes ☐ No
 If **Yes**, check box 6q on page 1.
 If **No**, this application is deficient and cannot be approved.
10. Will the DEQ's *Pond Guideline* be followed (including variations in pond shape, sinuosity, varying slopes and depths, and recommended wetland vegetation)? ☐ Yes ☐ No

If **Yes**, Check box 6r on page 1 and attach the guideline to this *Plan of Operation & Application*.

If **No**, the DEQ must assess whether the postmining pond will constitute a productive land use [MCA 52-4-434(2)]. Therefore, explain in detail how the pond design will meet this requirement. Note: Ponds must have a sinuous shape, varying slopes and depths, wetland vegetation, wildlife features, etc. to achieve a productive postmining land use.
Answer:

E4. SITE CLEANUP AND GRADING [ARM 17.24.219(1)(c)]

1. The Operator must comply with the following requirements:
 - a. Leave reclaimed surfaces in a stable condition, graded to drain to low areas, and blended into the surrounding topography and drainageways. Note: Irregular contours are preferred for livestock and wildlife habitat; areas of unvarying slope should be minimized; and drainageways must be reclaimed similar to surrounding natural conditions.
 - b. Leave reclaimed surfaces with 5:1 or flatter slopes for hayland and cropland, 4:1 or flatter slopes for sandy surfaces, and 3:1 or flatter slopes for other areas. (The DEQ may approve steeper slopes on a case by case basis.)

- c. Leave reclaimed surfaces at least 3 feet above the seasonal high water table level for dryland reclamation and at least 3 feet below the seasonal low water table level for pond reclamation. (The DEQ may approve seasonal ponds for certain situations.)
- d. Retrieve and properly use, stockpile, or dispose of all refuse and spilled mine materials (e.g. chips, oversize, etc) found in the main permit area and along access roads as such materials will impair revegetation.
- ☒ Operator will comply with statements "a" through "d" above
2. Indicate the grade of the steepest slope that will remain after the site is reclaimed.
☒ 3:1 ☐ 4:1 ☐ 5:1 ☐ 6:1 ☐ Other:
3. Describe the overall reclaimed site grading plan (i.e. how it will look, where water will concentrate or drain to, etc.).
Answer: The reclaimed site shall look as much like the original topography as possible

E5. SOIL AND OVERBURDEN SURFACE PREPARATION AND REPLACEMENT [ARM 17.24.219(1)(d)&(e)]

1. Compacted soil and overburden must be tilled to allow air and water movement, root penetration, and the subsurface drainage necessary for plant growth. Will the Operator alleviate compaction by deep-tilling or ripping all compacted surfaces to a depth of at least 12 inches before re-soiling? ☒ Yes ☐ No
- Note:** The DEQ recommends the following:
- Ripping or deep tilling is not required for non-compactable materials such as sand and gravel.
 - Ripper shanks should be spaced about equal to the ripping depth.
 - Rip along contours where possible and when soil and overburden are dry enough to shatter.
 - Protect ripped areas from re-compaction.
- If No, explain in detail how you will alleviate overburden and soil compaction, or why you will not:
2. Indicate the method(s) that will be use to limit the presence of large rocks (greater than 4 inches) in replaced soil as their presence may inhibit successful revegetation and agricultural production.
☒ Screening ☐ Rolling ☐ Blading off and removal of large rocks ☐ Other:

E6. REVEGETATION [MCA 82-4-434(3)(i)&(j) & [ARM 17.24.219(1)(b)(ii)&(e)]

1. Operator must comply with the following requirements:
- Establish vegetation capable of sustaining the designated postmining land use(s).
 - Use certified weed-free seed and comply with local weed district requirements.
 - Seed during the late fall or early spring seeding season (unless otherwise approved) and seed along contours for drill seeding.
 - Ensure that areas seeded or planted to perennial species can be, and are, appropriately protected and managed from the time of seeding or planting through two growing seasons, or until site stabilization and revegetation are achieved, whichever is longer.
 - Revegetation success on non-cropland areas is achieved when vegetation capable of sustaining the designated postmining land use has been established. Revegetation success on cropland areas is achieved when a crop has been harvested from the entire area and the yield is comparable to those of crops grown on similar undisturbed sites under similar growing conditions.
 - Except for those postmining land uses that do not require vegetation, each surface area of the mined premises that will be disturbed will be revegetated when its use for the Opencut operation is no longer required.
- ☒ Operator will comply with statements "a" through "f" above
2. The county-approved, site-specific, Noxious Weed Control Plan must be followed during the operation, throughout reclamation, and until the Opencut permit is released by the DEQ.
- Is the required copy of the County-Approved Noxious Weed Control Plan attached? ☒ Yes ☐ No Other:
- If Yes, check box 6e on page 1.
- If No, this application is incomplete and cannot be approved.
3. Will the Operator apply fertilizer, compost, mulch, or other soil amendments? ☐ Yes ☒ No
- If No skip to #4 below
- If Yes:
- | | |
|---|--|
| Type of fertilizer to be applied: _____ | Rate at which fertilizer will be applied: _____ lbs/acre |
| Type of compost to be applied: _____ | Rate at which compost will be applied: _____ lbs/acre |
| Type of mulch to be applied: _____ | Rate at which mulch will be applied: _____ lbs/acre |
4. Indicate the method to be used to relieve soil compaction and prepare the seedbed.
☒ Tilling ☐ Disking ☐ Harrowing ☐ Other:

5. The primary method of seeding will be: ☐ Drilling ☒ Broadcasting*

***Note:** Broadcast seeding must be at double the rate used for drilling (i.e. 24lbs/acre or more)

6. The DEQ's *Seed Mix Guideline* is available at: <http://deq.mt.gov/Opencont/forms/SeedMixGuide.pdf>
Will seed mixes described in the seed mix guideline be used? ☒ Yes ☐ No

If Yes, check box 6s on page 1, attach a copy of the guideline, and indicate below which seed mix(s) will be used.

☒ **Native Grazing/Pasture** ☐ **Non-Native Grazing/Pasture** ☐ **Native Rangeland** (for Moist/Riparian Regions)
☐ **Native Rangeland** (for Arid Regions) ☐ **Wetland Seed Mix** (for Pond Edges)

If No, describe the seed mix species and rates of seeding (pure live seed per acre) that will be used.

TOTAL SEEDING RATE	0 pounds pure live seed/acre

Additional Information:

7. Indicate the measures to be used to manage and protect the site until reclamation vegetation is adequately established.
☒ Noxious Weed Control (mandatory) ☐ Fencing (include cost of fencing on the Reclamation Bond Spreadsheet)
☒ No Grazing (Operator should secure written commitment from landowner) ☐ Other:

8. Indicate the method(s) or types of erosion control that will be used at this site for final reclamation to inhibit erosion and promote plant growth:

☒ Seeding/Harrowing along contour ☐ Wattles ☐ Straw Bales ☐ Erosion Control Blankets
☐ Mulch ☐ Equipment Tracking (orientated to trap moisture) ☒ Slopes 3:1 or flatter ☐ Other:

E7. MATERIAL REMAINING FOR LANDOWNER [ARM 17.24.218(1)(f)] & [17.24.218(f)(ii)]

1. Does Question C of the *Landowner Consultation* form indicate that mine material produced at the request of the Landowner will remain at the conclusion of Opencut operations? ☐ Yes ☒ No

If No, skip to Section E8

If Yes, does the Operator agree to leave an appropriate amount of soil stockpiled, shaped, and seeded within 100 feet of each remaining mine material stockpile. ☐ Yes ☐ No

Thickness of soil required to be stripped from the site is 0 inches * _____ acres (estimated number of acres that will remain for the soil stockpile area) = 0 cubic yards of soil that must remain for the landowner stockpile area.

If No, explain in detail why soil will not be stockpiled near the landowner's mineral stockpile(s) as required by ARM 17.24.218(1)(f).

Answer:

2. In order for mineral stockpiles to remain, the landowner must be able to access those stockpiles. Therefore, indicate how the remaining mineral stockpiles will be accessed by the landowner.

☐ Remaining or existing road ☐ Located adjacent to public road ☐ Other:

3. By the time of final reclamation, the Operator must consolidate each type of mine material into a single stockpile and place these at the closest point allowing access. ☐ Yes ☐ No

If No, this application is deficient and cannot be approved.

4. Operator has shown the landowner stockpile area and a road on the reclamation map or area map to the stockpile.

☐ Yes ☐ No

If Yes, the approximate acreage of the landowners mineral and soil stockpile areas to remain is: acres.

If No, this application is deficient and cannot be approved.

E8. ADDITIONAL INFORMATION

2. Is there additional information relevant to reclamation that you wish to provide? ☐ Yes ☒ No
If Yes, describe:

SECTION F – RECLAMATION BOND CALCULATION [MCA 82-4-43] & [ARM 17.24.203] & [ARM 17.24.220] & [ARM 17.24.224(2)(c)]

Government Operators: Skip to Section G.

Non-Government Operators:

1. Attach a proposed *Reclamation Bond Spreadsheet*. The purpose of this *Reclamation Bond Spreadsheet* is to provide a reasonable estimate of the cost for the DEQ to reclaim the site in accordance with the *Plan of Operation & Application* at the time of the site's maximum permitted disturbance. As a result, the estimated costs include equipment mobilization and project administration. The DEQ will review the proposed bond calculation and make a final determination as to the required bond amount.

Is the required *Reclamation Bond Spreadsheet* attached? ☒ Yes ☐ No

If Yes, check box 6f on page 1.

If No, this application is deficient and cannot be approved.

2. Bond is not posted for acreage permitted as Non-Bonded until the acreage is needed for Opencut operations. Prior to commencing any such operations, the Operator must submit a *Request to Commence Operations in Non-Bonded Area* form (<http://deq.mt.gov/opencut/forms/ReqToCommence.pdf>), a new map, and post additional bond on the undisturbed acreage. No activity, including equipment parking, can begin on acreage described on the *Request to Commence Operations in Non-Bonded Area* form until the form, bond, and map are approved by the DEQ.

☒ Operator Understands

3. Operator understands that the Department may adjust the bond yearly. ☒ Operator Understands

4. Is there additional information relevant to the *Reclamation Bond Spreadsheet* that you wish to provide? ☒ Yes ☐ No
If Yes, describe: The short access road is .03 acres, which to be included on the bond spreadsheet was rounded up to .1 acres.

SECTION G – CERTIFICATION [MCA 82-4-432(1)(f)] & [ARM 17.24.222(3)]

Operator affirms it has the legal right to mine the lands described, and that the contents of all attachments to this application become a part of the terms thereof. I have read and understand this *Plan of Operation & Application*. I certify that the statements, descriptions, and information given are accurate and that the *Plan of Operation & Application* and all supporting documents will be followed unless officially amended through the DEQ.

Name (print or type): Lunde Baston

Title: Owner

Signature: 

Date: 6-22-2012

Farwest Rock Products
S 6,7 T14N R20W
Site Map: FWRP Pit
Aerial Photo Map
July 5, 2012

Blue Flag=Bonded Area (4.2 acres)
Black Square=Unbonded Area (16.9 acres)

— 50 foot buffer Zone from drainage to mine
site and roads will be undisturbed

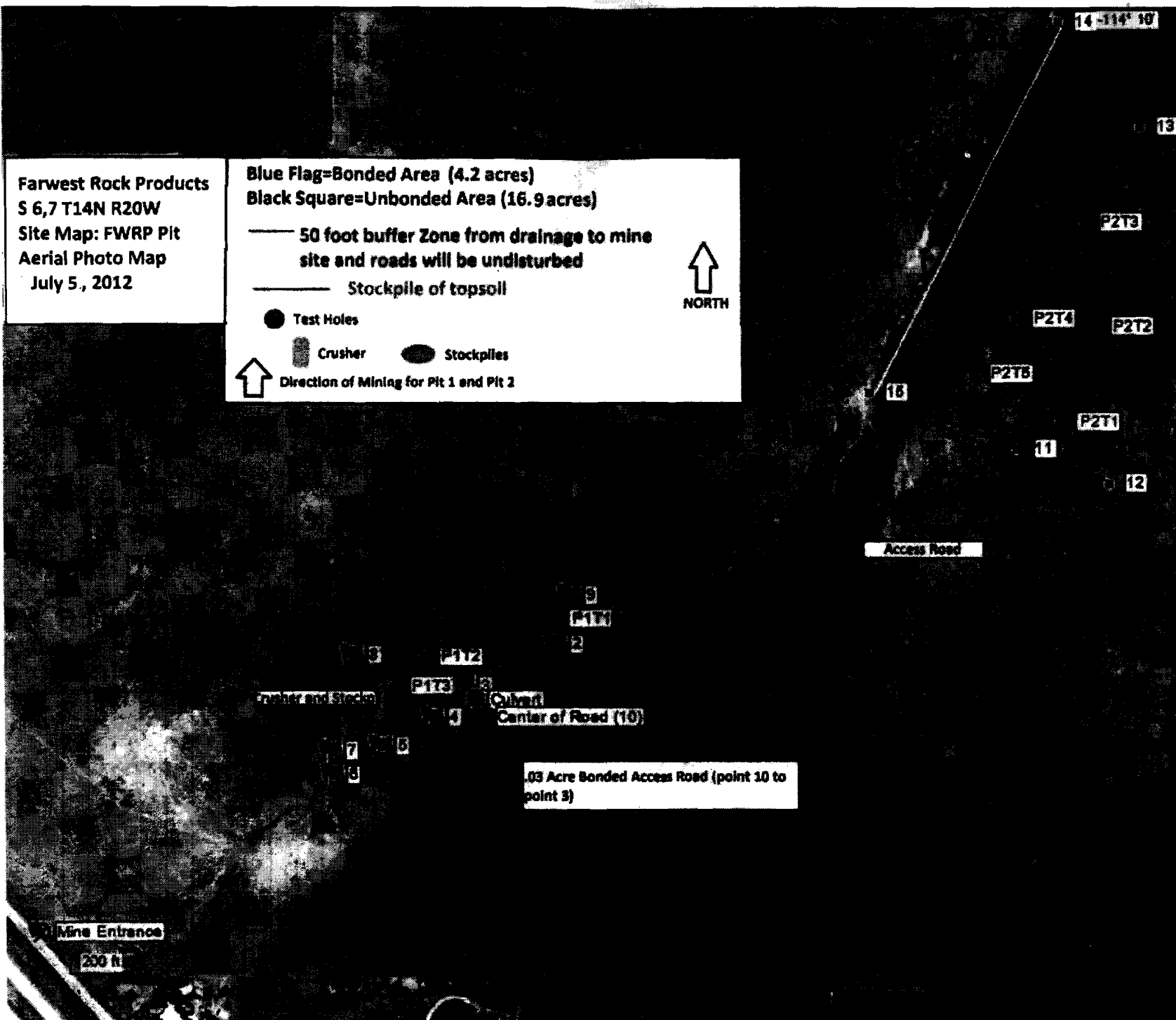
— Stockpile of topsoil

● Test Holes

Crusher

Stockpiles

↑ Direction of Mining for Pit 1 and Pit 2



RECEIVED JUL 06 2012

Received Onenent 7/6/2012

BOUNDARY COORDINATE TABLEPurpose of this Boundary Coordinate Table: **Permit Application**

1) Use this form to submit Boundary Coordinates for only the following features: **a)** Permit Boundary; **b)** Non-Bonded Area Boundary; **c)** Release Request Area Boundary; and **d)** Access Road Centerline. The coordinates must be in geographic sequence, so that the boundary is created by connecting Map ID#1 to Map ID #2 to Map ID #3, etc. The Map ID# for each coordinate must be shown on the map provided to the Department. Coordinates must be submitted in WGS 84 Decimal Degrees.

2) The "Longitude" column must contain negative numbers.

3) Email the completed Microsoft Excel table to: DEQOpencut@mt.gov with "Subject" line: **BCT (Operator-Site Name)**. Do not include a printed version of this table with the paper application submitted to the Program's Helena office.

Operator Name: **Farwest Rock products**Site Name: **FWRP Pit**

Permit # (if an Amendment, Request to Commence, or Release Request):

Date Submitted: **6/21/2012**

MAP ID#	LATITUDE	LONGITUDE	BOUNDARY TYPE (required)	DESCRIPTION (not required)
Center	46.98913	-114.17552	Permit Center Point	Approximate Center of Site
1	46.98989	-114.17376	Permit Boundary	Bonded Pit
2	46.98963	-114.17417	Permit Boundary	Bonded Pit
3	46.98926	-114.17535	Permit Boundary	Bonded Pit
4	46.98898	-114.17576	Permit Boundary	Bonded Pit
5	46.98872	-114.17644	Permit Boundary	Bonded Pit
6	46.98846	-114.17708	Permit Boundary	Bonded Pit
7	46.98868	-114.17710	Permit Boundary	Bonded Pit
8	46.98953	-114.17679	Permit Boundary	Bonded Pit
9	46.99006	-114.17398	Permit Boundary	Bonded Pit
10	46.98898	-114.17514	Access Road Centerline	Access Road (non bonded)
11	46.99137	-114.16814	Access Road Centerline	Access Road (non bonded)
12	46.99108	-114.16697	Non-Bonded Boundary	Non Bonded Pit
13	46.99423	-114.16651	Non-Bonded Boundary	Non Bonded Pit
14	46.99515	-114.16756	Non-Bonded Boundary	Non Bonded Pit
15	46.99187	-114.17006	Non-Bonded Boundary	Non Bonded Pit
16		-		
17		-		
18		-		
19		-		
20		-		
21		-		
22		-		
23		-		
24		-		
25		-		
26		-		
27		-		
28		-		
29		-		
30		-		

MISSOULA
COUNTYMISSOULA COUNTY WEED DISTRICT
2825 SANTA FE COURT
MISSOULA, MT 59808-1685Web site: missoulaeduplace.org

Office: (406) 258-4200

FAX: (406) 258-3916

Hi Lundy,

The FWRP Pit will be open for 5 years or longer so the top soil stockpiles should be seeded immediately after they are created. The following seed mix is appropriate for the site and post mine use as grazing. Legal S 6&7 in T14N R20W. Disturbed acres 5.4.

Pryor Slender Wheatgrass	2 lbs PLS per acre
Critana Thickspike Wheatgrass	5 lbs PLS per acre
Goldar Bluebunch Wheatgrass	7 lbs PLS per acre
Covar Sheep Fescue	3 lbs PLS per acre

Note: The seeding rates are for drill seeding if the top soil stockpiles are to be broadcast seeded the seeding rates for all but Slender Wheatgrass should be doubled.

The area of the working pit should be maintained vegetation free with a product such as Roundup. The topsoil stockpiles should be maintained weed free with a product such as 2,4-D amine at a 2 lb rate. A 20 ft. weed free buffer around the pits should also be maintained with product such as Milestone. Noxious Weed Control should be done annually as conditions warrant. Haul roads should be maintained weed free also. Topsoil should be replaced to a depth of 12".

Bill Otten
Weed Prevention Coordinator
Missoula County Weed District
2825 Santa Fe Court
Missoula Mt, 59808
406-258-4218
botten@missoulaeduplace.org

Approved 4/19/12
Will [signature]

Reclamation Bond Spreadsheet

INSTRUCTIONS: Enter your data in the shaded boxes. See page 3 for detailed instructions.

Operator: **Farwest Rock Products**
 Site: **FWRP Pit**
 Prepared by: **Lunde Baston, Owner**
 Date: **4/5/2012**

Total Permitted Acres = **21.1** acres*

*Must match the total permitted acres section in A7 of the Opencut Mining Plan of Operation & Application (Application).

Comments:

The sit fence is for the non-bonded pit area 2. It will be included in the reclamation bond spread sheet when mining occurs in pit 2.

BONDED ACREAGE BREAKDOWN

Must match the "Bonded Acres" column in section A8 of the Opencut Mining Plan of Operation & Application.

Mine Area	4.1	acres
Facility Area		acres
Access Roads	0.1	acres
Partial Release Area		acres
Total Bonded Area =	4.2	acres**

**The Total Bonded Area must be identical to the Bond submitted by the Operator to the Department.

Highwall reduction, backfilling, soil and overburden replacement

Lineal Feet & Height must match section D3-6 of Opencut Mining Plan of Operation & Application

Highwall cut/fill (describe)	linear feet	height	slope ratio	cubic yards	
			3:1	0	total
			3:1	0	0

Highwall backfill (e.g. to reclaim highwalls that will not or cannot be cut and filled during mining, etc.)

Description	linear feet	height	slope ratio	cubic yards	
			3:1	0	total
			3:1	0	0

Pit backfill (e.g. bringing offsite material to the site for backfill, etc.)

Description	acres	depth	compaction %	cubic yards	
				0	total
				0	0

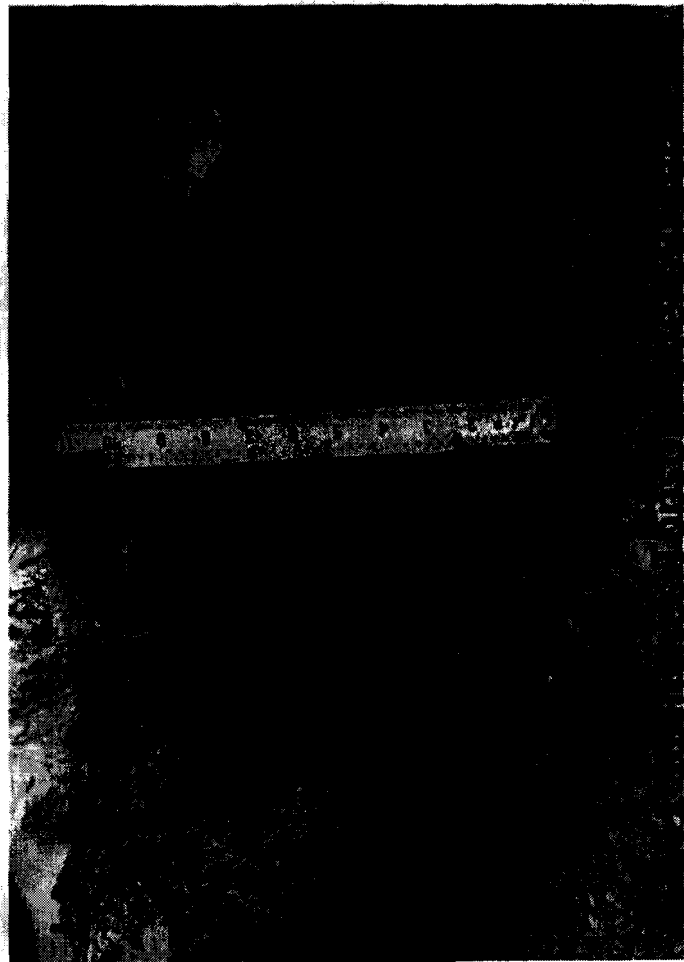
Mine soil and OB replacement	12	inches soil		inches overburden	total	12
Facility soil replacement		inches soil			total	0
Access road soil replacement	12	inches soil			total	12

ITEM	UNIT	AMOUNT	RATE	TOTAL
Highwalls and backfill		0 cu yds	\$1 per cubic yard	\$0
Mine area grading		4.1 acres	\$200 per acre	\$820
Mine area ripping		4.1 acres	\$100 per acre	\$410
Mine soil and OB replacement	12 inches	4.1 acres	\$135 per inch/per acre	\$6,642
Facility area grading		0.0 acres	\$100 per acre	\$0
Facility area ripping		0.0 acres	\$100 per inch/per acre	\$0
Facility soil replacement	0 inches	0.0 acres	\$135 per inch/per acre	\$0
Access road area grading		0.1 acres	\$100 per acre	\$10
Access road area ripping		0.1 acres	\$100 per inch/per acre	\$10
Access road soil replacement	12 inches	0.1 acres	\$135 per inch/per acre	\$162
Seeding or other revegetation		4.2 acres	\$200 per acre	\$840
Fencing		linear ft	\$1 per linear foot	\$0
Weed control		4.2 acres	\$100 per acre	\$420
Partially released acres		0.0 acres	\$300 per acre	\$0
Cost to crush onsite asphalt		cu yds	\$4 per cubic yard	\$0
Culvert for short access road 20ft x12in		1.0	\$250	\$250
				\$0
				\$0
				\$0

Estimated Mobilization cost to move equipment to the site (DEQ's cost): **\$3,000** **\$3,000**
 Estimated Administration Costs = 10% of total bond cost or \$5,000 (whichever is greater) **\$5,000** **\$5,000**

Total Area Bonded = **4.2** Rate Per Bonded Acre = **\$4,181.90** TOTAL BOND = **\$17,564**

Received Opencut 6/22/2012



PT12 11inches

Topsoil/Overburden

PT12 11inches

Topsoil/Overburden

SEED MIX GUIDELINE

2258

The following seed mixes are recommended for opencut mine site reclamation on Montana's plains, foothills, intermountain valleys, and wetland areas. The use of one of the site-specific seed mixes listed below may be appropriate depending on site conditions, the postmining land use, compatibility with surrounding vegetation, or landowner preference. The drill rates given are based on 12 pounds of pure live grass seed per acre, with an additional 1 to 2 pounds of forbs. The use of the forbs is highly recommended as they will fill the niche usually occupied by noxious weeds and other weedy species. The use of highly competitive introduced grasses, particularly crested wheatgrass and smooth brome, is not recommended unless the area to be seeded is in, or next to, an area where such species are already established. A nurse crop is recommended on highly erodible sites and, if used, should be seeded at 10 lbs/acre. The use of wheat, oat, or barley (in order of preference) is recommended for cover crop and nurse crop seeding.

- The Operator must purchase certified seed on a pure live seed (PLS) basis.
- Contact your local county extension agent or the Natural Resource Conservation Service (NRCS) for assistance with formulating alternative seed mixes.
- The seeding rate must be doubled for broadcast seeding.

NATIVE GRAZING/PASTURE MIX - For general use throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slender wheatgrass	2
Western wheatgrass	3
Thickspike wheatgrass	2.5
Bluebunch wheatgrass	2.5
Green needlegrass	2
Western Yarrow*	0.5

NON-NATIVE GRAZING/PASTURE MIX - For general use throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Intermediate wheatgrass	3
Orchardgrass	3
Timothy	2
Tall Fescue	2
Alfalfa	2

NATIVE RANGELAND MIX - For moist/riparian areas

<u>Species</u>	<u>Lbs PLS/Acre</u>
Mountain brome	2
Bluejoint reedgrass	1
Tufted hairgrass	1
Canada wild rye	2
Western wheatgrass	3
Bluebunch wheatgrass	2
Western yarrow*	1

NATIVE RANGELAND MIX - For arid regions

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slender wheatgrass	1
Thickspike wheatgrass	5
Western wheatgrass	3
Sandbergs bluegrass	2
Prairie junegrass	1
Yellow prairie coneflower*	1

WETLAND SEED MIX - For pond edges throughout the state

<u>Species</u>	<u>Lbs PLS/Acre</u>
Slough grass	2
Basin Wildrye	2
Baltic rush	1
Nebraska sedge	2
Creeping spike rush	2
Beaked sedge	2
Bluejoint reedgrass	1

- * - Listed forbs may be substituted for other forb species depending on availability/pricing. Alternative forbs include but are not limited to Purple Coneflower, Yellow Prairie Coneflower, Western Yarrow, Lewis Flax, Rocky Mountain Bee Plant, Scarlet Globemallow, Alfalfa and Prairie Sagewort.

RECEIVED APR 201

LANDOWNER CONSULTATION

The Opencut Mining Act requires the Operator to consult the Landowner regarding the Plan of Operation [MCA 82-4-432(2)(d)]. Unless the Operator is the Landowner, this form is required to obtain an Opencut mining permit or an amendment that adds acreage or changes the postmining land use.

OPERATOR SECTION: All fields must be completed.

Operator: Farwest Rock Products

Site: FWRP Pit

County: Missoula

Section 6 Township 14 ☒ N or ☐ S Range 20 ☐ E or ☒ W and Section 7 Township 14 ☒ N or ☐ S Range 20 ☐ E or ☒ W

The Operator shall conduct reclamation: i) in accordance with the approved plan of operation; ii) as concurrent with operations as feasible; and iii) within one year of termination of the right to conduct operations, or the cessation of operations.

LANDOWNER SECTION: All fields must be completed. In accordance with MCA 82-4-403(1): i) an existing private road may be included in the permit only with the Landowner's consent; and ii) new roads that must be constructed to obtain access to Opencut materials are "affected land" and must be included in the permit.

A. Does the Landowner want existing access road(s) to be included in the Opencut mining permit? ☐ Yes ☒ No

Note: An existing road may include a dirt trail or two-track used by the Landowner prior to the permit (or amendment) application, even if the Operator will improve or widen the road.

If No, the road and its condition remain a private matter between the Landowner and the Operator.

B. Does the Landowner want permitted access road(s) left at the conclusion of Opencut operations? ☐ Yes ☒ No

If Yes, describe the length, width, and location of each permitted road to be left:

Road 1 - Length: _____ feet Width: _____ feet,

Location: _____

Road 2 - Length: _____ feet Width: _____ feet,

Location: _____

C. Does the Landowner want stockpile(s) of mine material left at the conclusion of Opencut operations? ☐ Yes ☒ No

Notes: i) mine materials must be left in a location that will be accessible by road; ii) the total volume of mine material left is typically 10,000 cubic yards or less (to help ensure it can be consumed and the site reclaimed within 5-10 years); and iii) once consumed, the Landowner is responsible for reclaiming the area using a soil stockpile also left by the Operator for that purpose.

If Yes, describe the type and volume of mine material(s) to be left:

1. Type of mine material(s) to be left: ☐ Gravel ☐ Sand ☐ Other: _____

2. Total volume of mine material to be left in cubic yards: _____

3. If the total is more than 10,000 cubic yards, identify potential local uses consistent with it being consumed within 5-10 years: _____

Landowner acknowledges and affirms the following:

- The Operator is applying for a permit to conduct operations on land in accordance with: i) the Opencut Mining Act (Title 82, chapter 4, part 4, MCA); ii) its implementing rules (ARM Title 17, chapter 24, subchapter 2); and iii) the site-specific Plan of Operation.
- The Landowner: i) owns the land and all its earthen materials; ii) has been consulted by the Operator about the proposed Plan of Operation; and iii) understands the DEQ may require the Operator to revise that Plan before the permit or amendment is approved.
- If the Montana Department of Environmental Quality (DEQ) approves the permit, the following will apply to the permit area:
 - The Operator will have the exclusive right to conduct Opencut operations.
 - The Operator may allow another party to conduct permitted Opencut operations only if the Operator retains control over that party's activities and the Operator remains responsible for any violations that may occur.
 - The Landowner may not authorize Opencut operations by another party until that party obtains the Operator's permission.
- The DEQ can enforce requirements of the Act, rules, and permit. Any other arrangements or understandings between the Landowner and Operator are private matters that should be stated in a separate written agreement between those two parties.
- DEQ personnel have the right to access the site to inspect the permit area. The Operator and DEQ's agents or contractors have the right to access the site to complete reclamation in accordance with the Plan of Operation.
- The Operator may request full or partial release of the permit once the site or a portion of it has been reclaimed according to the Plan of Operation. DEQ will notify the Operator and the Landowner of its decision regarding each release request.
- DEQ typically releases a site reclaimed to cropland after one successful crop; a site reclaimed to perennial vegetation is typically released after two complete growing seasons or when revegetation is achieved, whichever is longer.
- It is the Landowner's responsibility to disclose this form to any purchaser of the site prior to closing, and to advise the purchaser of the status of the Opencut Mining permit.

Landowner (print or type): Stan Hendricksen

Phone: 406-273-6767

Address: PO Box 267 Lolo, MT 59847

Email: none

Landowner Signature: *Stan Hendricksen*

Date: 4/14/12

Received Opencut 5/30/2012

ZONING COMPLIANCE

In accordance with Opencut Mining Act sections 82-4-431(6) & 432(2)(b), sand and gravel operations must meet applicable local zoning regulations. As a result, this form is required unless the Operator is proposing to mine **bentonite, clay, scoria, peat, or soil**.

In accordance with section 17.24.223 of the rules implementing the Act, this form is required for a sand or gravel operation to apply for a **permit or an amendment adding acreage or changing the postmining land use**.

OPERATOR SECTION: All fields must be completed.

Operator: Farwest Rock Products

Site: FWRP Pit

County: Missoula

Section(s) 6 & 7 Township 14 ☒ North or ☐ South Range 20 ☐ East or ☒ West

Section(s) & Township ☐ North or ☐ South Range ☐ East or ☐ West

Operator has provided the local governing body with a site location map and Plan of Operation for the proposed sand and gravel operation identified above: ☒ Yes or ☐ No If No, this form is not complete or acceptable.

Notes for Operator: A) If box 2a below is checked, the DEQ cannot approve the proposed Opencut mining permit or amendment application. B) If question 5 below is marked Yes, this submittal is not complete until the Operator provides a copy of the approved local license or permit.

LOCAL GOVERNING BODY SECTION: Complete all items unless so directed by *italics* below.

In accordance with section 82-4-432(2)(b) of the Opencut Mining Act and section 17.24.223 of the rules implementing the Act, **the local governing body having jurisdiction over the area to be mined must certify that the proposed mine site and Plan of Operation comply with applicable local zoning regulations** adopted under MCA Title 76, chapter 2. The certification must be submitted on this DEQ form.

1. Check **one** box:

a. ☒ Site is **not** zoned.

or

b. ☐ Site is zoned as: _____

IMPORTANT: If box 1a is checked, skip questions 2, 3, 4 & 5. If box 1b is checked, answer questions 2 & 3.

2. For the **zoned** site, check **one** box:

a. ☐ Proposed mine site and operations do **not** comply with local zoning regulations.

or

b. ☐ Proposed mine site and operations **comply** with local zoning regulations.

3. For the **zoned** site, check **one** box:

a. ☐ Local zoning regulations do **not** require a local license or permit for proposed operations.

or

b. ☐ Local zoning regulations **require** a local license or permit for proposed operations.

IMPORTANT: If box 3a is checked, skip questions 4 & 5. If box 3b is checked, answer questions 4 & 5.

4. Local zoning regulations require the following type of local license or permit:

5. Has the local governing body approved and issued the required local license or permit?

☐ Yes or ☐ No

CERTIFICATION BY LOCAL GOVERNING BODY:

Name of Local Governing Body: Office of Planning and Grant

Official's Name: Jamie Erbacher

Title: Planner II

Signature: Jamie Erbacher

Date: 03/26/12



Land Use Permit

Office of Planning & Grants

Date Issue:

Permit #: L20120036 *** DESC NOT FOUND ***

Applicant / Agent Information

APPLICANT LUNDE BASTON 03/23/2012 Phone: 406-728-8500

PO BOX 991

FRENCHTOWN MT 59834

License:

OWNER HENDRICKSON STAN 03/23/2012 Phone: 406-273-6767

PO BOX 267

LOLO, MT 59847

License:

Parcel Information

Zoning: UNZONED

Square Footage of Property: 0 In Acres: 356.91

Property Address: 13272 FRENCHTOWN FRONTAGE RD MSS

Legal Description: LOT 1 PT OF LOT 2 E1/2 NW1/4 NE1/4 LESS R/W 7-14-20

Section: 07 **Township:** 14N **Range:** 20W

Property Use

Jurisdiction City N County Y

Setback Requirements (All measurements are in feet unless otherwise noted.)

Frontyard: 0

Rearyard: 0

Sidyard: 0

Accessory to dwelling unit: 0

Structure

Area of Existing Primary: 0

Area of Existing Accessory: 0

Proposed Structure Area: 0

of Existing Dwelling Units: 0

of New Dwelling Units: 0

Maximum Allowed Structure Height: 0

Measured Structure Height: 0

Hillside Standards Apply: N

Absolute: N

Modified: N

Permitted Wall Height:

Measured Wall Height:

Use

New Use: NEW GRAVEL PIT

Previous Use: VACANT

Landscaping Required: N

of Parking Spaces Required: 0

of Existing Parking Spaces: 0

of New Spaces: 0

Floodplain:

Zone X Out of Floodplain

Panel:

LOMA:

LOMR:



Land Use Permit
Office of Planning & Grants

Conditions & Approvals

1: APPLICANT IS RESPONSIBLE FOR CONSTRUCTION OF THE PROJECT AS SHOWN ON SUBMITTED AND APPROVED PLANS.

Item: 00080 Office of Planning & Grants

03/23/2012 JE Action: REC PERMIT APP RECIEVED

03/26/2012 JE Action: APP APPLICATION

APPROVED AS SUBMITTED.

THIS PERMIT DOES NOT OBVIATE THE NEED TO OBTAIN PERMITS FROM OTHER LOCAL AND STATE AGENCIES. Septic permits are issued by the City-County Health Departmtent.

Planning Official: ERBACHER

Applicant's Signature

HK for JE

Total Penalties: \$0.00

Fee Total: \$200.00

435 Ryman Street, Missoula, MT (406) 258-4657 Fax: (406) 258-4903
Website: www.co.missoula.mt.us/opgweb Email: zoner@co.missoula.mt.us

SURFACE LANDOWNERS LISTOperator: FarWest Rock ProductsSite: FWRP Pit

An Opencut mining permit or amendment application must include this form if the application is for either:

- A. A new permit (MCA 82-4-432 [5]); or
- B. An amendment increasing the acreage by 50% or more of the amount of permitted acreage in the original permit (MCA 82-4-4432 [11])

If applicable, the Operator must submit this form to DEQ at two separate points during the application process.

First, as part of the application. For the application, the operator provides the names of the surface owners of land located within one-half mile of the boundary of the proposed Opencut permit or amendment area, using the most current known owners of record as shown in the records of the county clerk and recorder in the county where the Opencut operation is proposed (MCA 82-4-432[2][e]). **Note:** The Landowner(s) of the proposed permit area must be included on this list, unless the Operator is the

Second, as part of the public notice. For the public notice, the Operator provides the names and addresses of the surface owners mailed the public notice, and also provides the date each landowner was sent public notice (MCA 82-4-432 [6b & d]).

This is the X Application or Public Notice submittal (check one)

#	Surface Landowner Name*	Mailing Address (Required for public notice)	Public Notice Date
1	Roger Hatton	13162 Frenchtown Frontage Msla MT 59808	
2	Leo Miller	P.O. Box 813 Frenchtown MT 59834	
3	Nickie Fontaine and Billy Woods	11920 Chula Vista Ln Msla MT 59808	
4	Roger Sharbono	11900 Chula Vista Ln Msla MT 59808	
5	Rick Simon	11860 Chula Vista Ln Msla MT 59808	
6	Stan Hendrickson	P.O. Box 267 LoLo MT 59847	
7	Bryce Simpson	P.O. Box 654 Frenchtown MT 59834	
8	Cory Huebner and Virginia Huebner	PO Box 564 Frenchtown MT 59834	
9	Chis Kruse	11911 Chula Vista Ln Missoula MT 59808	
10	Robert Shope	2883 County RD 301 Parachute, CO 81635	
11	Brian Bidlake	14141 Bidlake Court Missoula MT 59808	

*- For parcels held in common or joint ownership and for which all owners are located at one address, one notice may be mailed to that address; otherwise each owner must be notified separately. Each owner is considered in determining the number of property owners and the number of property owners who have requested a public meeting. Each owner may submit a meeting

If necessary, attach sheet(s) listing additional landowners

Are additional sheets attached? X YES NO If YES, how many additional sheets are attached? One

OPERATOR AFFIRMS THE LANDOWNERS ARE THE MOST CURRENT KNOWN OWNERS OF RECORD AS SHOWN IN THE RECORDS OF THE COUNTY CLERK AND RECORDER IN THE COUNTY WHERE THE OPENCUT OPERATION IS PROPOSED. IF SUBMITTED IN CONJUNCTION WITH THE PUBLIC NOTICE REQUIREMENT, OPERATOR ALSO AFFIRMS THAT NOTICE WAS COMPLETED PURSUANT TO MCA 82-4-

Name (print or type) Lunde BastonTitle: OwnerSignature: Date: 5-30-2012 *Revised*

SURFACE LANDOWNERS LISTOperator: FarWest Rock ProductsSite: FWRP Pit

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This is the X Application or Public Notice submittal (check one)

#	Surface Landowner Name*	Mailing Address (Required for public notice)	Public Notice Date
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2	Alfred and Rosemary Deschamps	15400 Mill Creek RD Frenchtown MT 59834	
3	H Lazy Heart LLC	13751 Bunchgrass Lane Missoula MT 59808	
4	Robert and Glenna Halstead	5440 State Route 18 East Wakemean Ohio 44889	
5	Dennis and Phyllis Sauter	12605 Loiselle Lane Missoula MT 59808	
6	Roger and Maggie Hoffman	32441 Bible LN Alberton MT 59820	
7			
8			
9			
10			
11			

*- For parcels held in common or joint ownership and for which all owners are located at one address, one notice may be mailed to that address; otherwise each owner must be notified separately. Each owner is considered in determining the number of property owners and the number of property owners who have requested a public meeting. Each owner may submit a meeting

If necessary, attach sheet(s) listing additional landowners

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Name (print or type) Lunde BastonTitle: OwnerSignature: Date: 5-30-2012*Revised*

SURFACE LANDOWNERS LISTOperator: FarWest Rock ProductsSite: FWRP Pit

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4	Roger Sharbono	11900 Chula Vista Ln Msla MT 59808	4/24/2012
5	Rick Simon	11860 Chula Vista Ln Msla MT 59808	4/24/2012
6	Stan Hendrickson	P.O. Box 267 LoLo MT 59847	4/25/2012
7	Bryce Simpson	P.O. Box 654 Frenchtown MT 59834	4/24/2012
8	Cory Huebner and Virginia Huebner	PO Box 2074 Missoula MT 59806	4/26/2012
9	Chris Kruse	11911 Chula Vista Ln Missoula MT 59808	4/24/2012
10	Robert Shope	2883 County RD 301 Parachute, CO 81635	4/24/2012
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Name (print or type) Lunde BastonTitle: OwnerSignature: Date: 5-30-2012 *Revised*

SURFACE LANDOWNERS LIST

Operator: FarWest Rock ProductsSite: FWRP Pit

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Name (print or type) Lunde BastonTitle: OwnerSignature: Date: 5-30-2012 *Revised*

OPERATOR APPLICATION CHECKLISTOperator: Farwest Rock ProductsSite: FWRP Pit**INSTRUCTIONS**

1. Read the document *How to Obtain and Comply with an Opencut Mining Permit*.
2. Obtain current application forms at <http://www.deq.mt.gov/Opencut/Opencutpermitforms.mcp.x>.
(If outdated forms are received the Operator will be required to resubmit using current forms.)
3. Use the Completeness Checklist below to confirm which documents you need to submit.
4. Use the Acceptability Checklist below to confirm your documents are complete, accurate, and consistent.
5. Submit this signed checklist and all required application materials to the Opencut Mining Program in Helena.

COMPLETENESS CHECKLIST

All the following documents are required for a complete application, unless an exception listed below applies. Check the boxes at far left to indicate which documents you are submitting. If you believe an exception applies, mark the box at that exception and leave the box at far left empty.

1. ☒ **Operator Application Checklist** - This form
2. ☒ **Opencut Mining Plan of Operation and Application** for: a) ☒ permit or b) ☐ amendment (check one)
3. ☒ **Support Documents** - Use the checklist on page 1 of the *Opencut Mining Plan of Operation and Application* to verify that all support documents required or referenced in that *Plan* are attached.
Exception: ☐ Not required for amendment changing only final reclamation date, hours of operation, or similar procedural aspects that do not alter physical characteristics of site.
4. ☒ **Landowner Consultation** - Required for all land on which Opencut operations are proposed, including the main permit area, permitted access roads, and Non-Bonded areas.
Exception: ☐ Not required if the Operator is also the Landowner.
Exception: ☐ Not required for amendment if not adding acreage and not changing postmining land use.
5. ☒ **Zoning Compliance** - Attach copy of any license or permit required by the local governing body.
Exception: ☐ Not required to mine bentonite, clay, scoria, peat, or soil.
Exception: ☐ Not required for amendment if not adding acreage and not changing postmining land use.
6. ☒ **Surface Landowners List**
Exception: ☐ Not required for amendment adding less than 50% of the permitted acreage.
7. ☒ **Reclamation Bond & Spreadsheet**
Exception: ☐ Not required for amendment changing only final reclamation date, hours of operation, or similar procedural aspects that do not alter physical characteristics of site.
Exception: ☐ Not required for government operators.

ACCEPTABILITY CHECKLIST

1. **General:** Use the table below to verify that all required documents are filled in completely and consistently.
 - For documents 1-2, select Yes or No in each choice cell below, as appropriate.
 - For documents 3-7: a) if an exception box above is marked, select No for that entire row below; or b) if no exception box is marked (i.e. the document is required), select Yes or No in each choice cell below, as appropriate

Document	Required* Document	All Required Info Provided	Identical information is provided in each document:					Signed & Dated
			Operator Name	Site Name	Section Township & Range	Total Permit Acreage	Acreage Breakdown	
1 Application Checklist	Y	Y	Y	Y	N/A	N/A	N/A	Y
2 Plan of Operation & Application	Y	Y	Y	Y	Y	Y	Y	Y
3 Support Documents	Y	Y	Y	Y	Y	N/A	N/A	Y
4 Landowner Consultation	Y	Y	Y	Y	Y	N/A	N/A	Y
5 Zoning Compliance	Y	Y	Y	Y	Y	N/A	N/A	Y
6 Surface Landowners List	Y	Y	Y	Y	Y	N/A	N/A	Y
7 Reclamation Bond & Spreadsheet	Y	Y	Y	Y	Y	Y	N/A	Y

* - All required info is provided; blanks filled-in; boxes checked; or "none" indicated if that is the correct response.

2. Opencut Mining Plan of Operation and Application:

Section A – Application:

- ☒ Answers are complete, accurate, and consistent with maps, support documents, and the rest of the application.
- ☒ #6 - Section Township & Range includes main permit area, permitted access roads, and Non-Bonded areas.

Section B – Pre-mine Information:

- ☒ Answers are complete, accurate, and consistent with maps, support documents, and the rest of the application.
- ☒ The water well table in Subsection B9 is completed; a substitute table is not acceptable.

Section C – Site Preparation and Planning:

- ☒ Answers are complete, accurate, and consistent with maps, support documents, and the rest of the application.
- ☒ Both soil data tables in Subsection C2 are completed; substitute tables are not acceptable.
- ☒ Hours of operation in Subsection C4 were developed with consideration of neighboring land uses.
- ☒ Maps include Operator name, site name, legal description, bar scale, date of drafting, and north arrow.
- ☒ Maps have been double-checked against requirements of the Map Guideline.
- ☒ Microsoft Excel Boundary Coordinates Table has been emailed to DEQOpencut@mt.gov.
- ☒ The main permit area, permitted access roads, and Non-Bonded areas are marked on the ground.

Section D – Water Protection, Mining & Processing:

- ☒ Answers are complete, accurate, and consistent with maps, support documents, and the rest of the application.
- ☒ Proposed measures will protect groundwater quality and quantity (Subsections D1 & D2 in particular).
- ☒ Proposed measures will protect surface water quality and quantity (Subsections D1 & D2 in particular).
- ☒ Proposed measures will prevent significant physical harm to the affected land or adjacent land, structures, improvements, or life forms.
- ☒ Noise and visual impacts on residential areas will be minimized to the degree practicable through berms, vegetation screens, and reasonable limits on hours of operation.

Section E – Reclamation Plan:

- ☒ Answers are complete, accurate, and consistent with maps, support documents, and the rest of the application.
- ☒ All postmining land uses are identified and will constitute a productive use of the site (Subsection E2).
- ☒ Descriptions of proposed ponds are complete, thorough, and consistent with maps, support documents, and the rest of the application (Subsection E3).
- ☒ Revegetation measures are appropriate for the site (Subsection E6).
- ☒ The type and volume of mine material to remain for the Landowner constitutes a productive use of that stockpile area; the material will be accessible by road; and an adequate volume of topsoil will remain for the Landowner to eventually reclaim the stockpile area (Subsection E7).

Section F – Reclamation Bond Calculation:

- ☒ The *Reclamation Bond Spreadsheet* is complete, accurate, and consistent with the rest of the application, including the maps.
- ☒ If asphalt storage and recycling is proposed in Subsection D5, the *Reclamation Bond Spreadsheet* includes costs for crushing the maximum amount of asphalt debris permitted to be on-site. ☒ Not Applicable
- ☐ If creation or importation of supplementary soil or overburden is required, the *Reclamation Bond Spreadsheet* includes funds for those purposes. ☒ Not Applicable
- ☒ *Reclamation Bond* amount is equal to or greater than total estimated on the *Reclamation Bond Spreadsheet*.

Section G – Certification:

- ☒ The Certification is signed and dated.

Approve below and submit this checklist and all required documents to the Program in Helena as one package.

Name (print or type): Lunde Baston Title: Owner

Signature: _____

Date: 4-13-2012

1 **BEFORE THE BOARD OF ENVIRONMENTAL REVIEW**
2 **OF THE STATE OF MONTANA**

3 **IN THE MATTER OF:**
4 **THE REQUEST FOR HEARING BY**
5 **HAWTHORNE SPRINGS PROPERTY**
6 **OWNERS ASSOCIATION; H LAZY**
7 **HEART, LLC; PATCHY, INC.; AND**
8 **OTHER RESIDENTS REGARDING**
9 **OPENCUT MINING PERMIT NO. 2258,**
10 **ISSUED TO FARWEST ROCK**
11 **PRODUCTS, MISSOULA COUNTY.**

CASE NO. BER 2012-09 OC

12 **FIRST PREHEARING ORDER**

13 On August 20, 2012, Mr. Joseph D. Houston, Counsel for Hawthorne
14 Springs Property Owners Association; H Lazy Heart, LLC; Patchy Inc., and Other
15 Residents, (hereafter, Appellants) filed their request for hearing to appeal Opencut
16 Mining Permit No. 2258, issued to Farwest Rock Products under the Opencut
17 Mining Act, Montana Code Ann. Title 82, Chapter 4, Part 4 and administrative rules
18 adopted under the Act in Title 17, Chapter 24, Subchapter 2, Administrative Rules
19 of Montana (ARM).

20 Accordingly, the following guidelines and rules are provided to assist the
21 parties in an orderly resolution of this matter.

22 1. REFERENCES: This matter is governed by the Montana
23 Administrative Procedure Act, Mont. Code Ann. Tit. 2, ch. 4, pt. 6, and ARM
24 17.4.101, by which the Board of Environmental Review (Board) has adopted the
25 Attorney General's Model Rules for contested cases, ARM 1.3.101, 1.3.102,
26 1.3.201 through 1.3.233, and by Mont. Code Ann. Tit. 82, ch. 4, pt. 4.

27 2. FILING: Except for discovery requests and responses (which are not
routinely filed), **original** documents shall be sent for filing with the Board,
addressed as follows:

1 MS. JOYCE WITTENBERG
2 Secretary, Board of Environmental Review
3 Department of Environmental Quality
4 1520 East Sixth Avenue
5 P.O. Box 200901
6 Helena, MT 59620-0901

7 One copy of each document that is filed should be sent to the Hearing
8 Examiner addressed as follows:

9 KATHERINE J. ORR
10 Hearing Examiner
11 Agency Legal Services Bureau
12 1712 Ninth Avenue
13 P.O. Box 201440
14 Helena, MT 59620-1440

15 Although discovery documents are not normally filed, when a motion or brief
16 is filed making reference to discovery documents, the party filing the motion or
17 brief should also attach the relevant discovery documents.

18 3. SERVICE: Copies of all documents filed with the Board and
19 provided to the Hearing Examiner, including correspondence, must be served upon
20 the opposing party. A certificate of service should be provided.


21 4. EX PARTE COMMUNICATIONS: The Montana Administrative
22 Procedure Act in Mont. Code Ann. § 2-4-613, and the Attorney General's Model
23 Rule 18 in ARM 1.3.222, prohibit *ex parte* communications with a hearing examiner
24 concerning any issue of fact or law in a contested case. In addition to observing this
25 rule, please contact the opposing party before you communicate with the Hearing
26 Examiner, even on purely procedural matters such as the need for a continuance.

27 5. SCHEDULING: The undersigned requests the parties to consult with
each other and to propose a schedule to the undersigned upon which they agree by
September 17, 2012. The schedule should include the following dates:

(a) for joinder/intervention of additional parties;

- 1 (b) for disclosure by each party to the other parties of: (1) the
2 name and address of each individual likely to have discoverable
3 information that the disclosing party may use to support its
4 claims or defenses; and, (2) a copy of, or a description by
5 category and location of, all documents and tangible things that
6 are in the possession, custody, or control of the disclosing party
7 and that the disclosing party may use to support its claims or
8 defenses;
- 9 (c) for completion of discovery (if any party wishes to conduct
10 discovery);
- 11 (d) for exchange of lists of witnesses and copies of documents that
12 each party intends to offer at the hearing;
- 13 (e) for submitting any motions and briefs in support;
- 14 (f) for a prehearing conference to hear argument on any motions
15 and resolve other prehearing matters; and
- 16 (g) for the contested case hearing, as well as the place of hearing.

17 DATED this 3rd day of August, 2012.

18 
19 _____
20 KATHERINE J. ORR
21 Hearing Examiner
22 Agency Legal Services Bureau
23 1712 Ninth Avenue
24 P.O. Box 201440
25 Helena, MT 59620-1440
26
27

1 **CERTIFICATE OF SERVICE**

2 I hereby certify that I caused a true and accurate copy of the foregoing First
3 Prehearing Order to be mailed to:

4 Ms. Joyce Wittenberg
5 Secretary, Board of Environmental Review
6 Department of Environmental Quality
7 1520 East Sixth Avenue
8 P.O. Box 200901
9 Helena, MT 59620-0901
10 **(original)**

11 Ms. Jane Amdahl
12 Legal Counsel
13 Department of Environmental Quality
14 P.O. Box 200901
15 Helena, MT 59620-0901

16 Mr. Ed Coleman, Bureau Chief
17 Industrial & Energy Minerals Bureau
18 Department of Environmental Quality
19 P.O. Box 200901
20 Helena, MT 59620-0901

21 Mr. Joseph D. Houston
22 Christian, Samson & Jones, PLLC
23 310 West Spruce
24 Missoula, MT 59802

25 DATED: August 31, 2012 

VJW
2 Frenchtown Frontage Road / P.O. Box 991
Frenchtown, Montana 59834 (406) 728-8500
ljb250@yahoo.com



FARWEST ROCK PRODUCTS

September 3, 2012

Dear Board of Review please enter my appearance Pro Se, Case No. BER 2012-09 OC

Lunde Baston, Farwest Rock Products
PO Box 991
Frenchtown, MT 59834

406-728-8500
ljb250@yahoo.com

CC Jane B Amdahl
Chris Cronin
Joseph D. Houston, Christian, Sampson and Jones PLLC
310 W. Spruce
Missoula, MT 59802

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 7th day of Sept., 2012
at _____ o'clock _____ m.
By: [Signature]



MEMO

TO: Katherine Orr, Hearing Examiner
Board of Environmental Review

FROM: Joyce Wittenberg, Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

DATE: September 5, 2012

SUBJECT: Board of Environmental Review Case No. BER 2012-10-MFS

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:
THE REQUEST FOR HEARING BY EARTH
JUSTICE, MONTANA ENVIRONMENTAL
INFORMATION CENTER, SIERRA CLUB,
AND NATIONAL WILDLIFE FEDERATION
REGARDING THE ADMINISTRATIVE ORDER
ON CONSENT ISSUED TO PPL MONTANA,
LLC.

Case No. BER 2012-10 MFS

The BER has received the attached request for hearing. Also attached is DEQ's administrative document(s) relating to this request.

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Ed Hayes
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Warren McCullough, Bureau Chief
Industrial & Energy Minerals Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

c: Jenny K. Harbine, for Appellants

BER 2012-10 MFS

Jenny K. Harbine
Earthjustice
313 East Main St.
Bozeman, MT 59715
(406) 586-9699
Fax: (406) 596-9695
jharbine@earthjustice.org

*Counsel for Appellants Montana Environmental
Information Center, Sierra Club, and
National Wildlife Federation*

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 4th day of sep
at 4:31 o'clock P.m.
By: [Signature]

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:)	Case No. _____
ADMINISTRATIVE ORDER ON CONSENT)	
REGARDING IMPACTS RELATED TO)	
WASTEWATER FACILITIES COMPRISING)	REQUEST FOR HEARING
THE CLOSED-LOOP SYSTEM AT)	
COLSTRIP STEAM ELECTRIC STATION,)	
COLSTRIP, MONTANA)	

Pursuant to Mont. Code Ann. § 75-20-223, Montana Environmental Information Center, Sierra Club, and National Wildlife Federation (collectively, "Appellants") hereby request a hearing before the Board of Environmental Review. Appellants and their respective members are adversely affected by the Department of Environmental Quality's ("DEQ") August 3, 2012 "Administrative Order on Consent" between DEQ and PPL Montana, LLC as Operator of the Colstrip Steam Electric Station. As provided by § 75-20-223(1)(b), together with this request for hearing, Appellants are filing an affidavit setting forth the grounds for this request.

Respectfully requested this 4th day of September, 2012,

[Signature]
Jenny K. Harbine
On behalf of Appellants

**OFFICIAL
RECORD**

RECEIVED
JUL 30 2012
DEQ DIRECTORS
OFFICE

**ADMINISTRATIVE ORDER ON CONSENT REGARDING IMPACTS
RELATED TO
WASTEWATER FACILITIES
COMPRISING THE CLOSED-LOOP SYSTEM AT
COLSTRIP STEAM ELECTRIC STATION,
COLSTRIP MONTANA**

BETWEEN

**PPL MONTANA, LLC AS OPERATOR OF THE
COLSTRIP STEAM ELECTRIC STATION**

AND

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Attachment A – Colstrip Units 1-4 Waste Water Facility Descriptions

Attachment B – Summary of Reports Completed on Assessment, Modeling, and Abatement Actions Completed Since 2004

Administrative Order on Consent

This Administrative Order on Consent ("AOC") is entered into by PPL Montana, LLC ("PPLM") as operator of the Colstrip Steam Electric Station (Colstrip Units 1, 2, 3, and 4) and the Montana Department of Environmental Quality ("DEQ" or "Department"), acting pursuant to its statutory authority including the authority vested in it by the Montana Water Quality Act, Section 75-5-101, *et seq.*, MCA, and specifically Section 75-5-612, MCA, and pursuant to the Department's general enforcement authority under the Montana Major Facility Siting Act, Section 75-20-101, *et seq.*, MCA.

I. Background

A. The Department is the agency with the duty and authority to administer and enforce the Montana Major Facility Siting Act and the Montana Water Quality Act.

B. PPLM is a Delaware limited liability company with offices at 303 N. Broadway, Ste. 400, Billings, Montana. PPLM is the operator of a 2276 MW steam electric generating station located in Colstrip, Montana. The Colstrip Steam Electric Station ("SES") is co-owned by PPLM, Puget Sound Energy, Inc., PacifiCorp, Portland General Electric Company, Avista Corporation and NorthWestern Corporation. As operator, PPLM has access to the plant property and the right to grant access to others to implement the work plans developed hereunder.

C. The Colstrip SES consists of four units, Units 1 and 2 that are 333 MW each and Units 3 and 4 that are 805 MW each. Construction on Units 1 and 2 began

in 1972 and they came on-line in the mid-1970s. Units 3 and 4 were constructed later; Unit 3 came on-line in 1983 and Unit 4 came on-line in 1985.

D. On July 22, 1976, the Montana Board of Natural Resources and Conservation ordered the issuance of a Certificate of Environmental Compatibility and Public Need ("Certificate") for the proposed Colstrip Units 3 and 4. In making the order, the Montana Board of Natural Resources and Conservation made 97 findings of fact including the following:

1. That the Board of Health and Environmental Sciences, (BHES) has, after a hearing held pursuant to notice, certified to the Board of Natural Resources and Conservation that the facilities as proposed will not violate state and federally established air and water quality standards and implementation plans, a duly certified copy of the Board of Health's Findings of Fact, Conclusion of Law and hereto, marked as Exhibit "A" for identification, and by this reference fully and completely incorporated herein and made a part hereof. (Finding of Fact, No. 8).
2. That the Board of Health and Environmental Sciences, the duly authorized agency empowered to determine whether or not the proposed facility will violate state and federally established standards and implementation plans insofar as air and water quality are concerned, has, after hearing duly noted and held, issued twenty-one (21) pages of Findings of Fact regarding air

and water resources and impacts which Findings of Fact and Conclusions of Law are fully and completely incorporated and adopted herein. (Finding of Fact, No. 60).

3. Seepage from the wastewater ponds will be minimal and will be collected by wells and returned to the ponds (Finding of Fact, No. 61).
4. Effluents emanating from Colstrip 1-4 are not anticipated to impair the quality of the ground and surface water of the area and will not violate applicable standards, however, careful monitoring of seepage and complete sealing of sludge ponds will ensure that water quality of the area is not degraded. (Finding of Fact, No. 64).
5. The units as proposed will use a closed loop water system which does not discharge effluents from the plants into ground water or surface water or large evaporation ponds and therefore will have no effect on the ground or surface water in the area (Finding of Fact, No. 65).
6. The facility as proposed will not violate any applicable water quality standards. (Finding of Fact, No. 66).
7. That neither withdrawal of the water from the Yellowstone River under the conditions prescribed by the BHES, nor the minimum seepage from the ponds will have any effect on the plants, animals, wildlife, fish or vegetation in the areas directly and

indirectly effected (sic) by such withdrawal. (Finding of Fact, No. 68).

8. Seepage from the surge ponds will be monitored by observation wells constructed at appropriate sites to ensure that any seepage will not exceed the estimated minimum amounts around the rim and through the foundation of the dam (Finding of Fact, Nos. 70 and 71).
9. That waste materials from scrubber units and boilers will be conveyed to sealed ash disposal ponds and eventually dried and the disposal ponds reclaimed. (Finding of Fact, No. 88).
10. That all effluents from seepage from the waste disposal ponds have been analyzed, and to insure no adverse effects on the area the waste disposal ponds will be sealed and monitoring wells installed. (Finding of Fact, No. 89).
11. That the ash and sludge disposal program projects temporary retention ponds located in a 40-acre area south of the plants and then the wastes are slurred (sic) to permanent disposal ponds. The first two permanent disposal areas developed (112 and 147 acres each) will be located 10,000 feet northwest of the plants in Section 20, 21, 28 and 29, T2N, R41E. A third pond is proposed in Sections 5, 6, 7 and 8, T1N, R42W. When these ponds are filled, they will be dried up, covered with soil and reclaimed. (Finding of Fact, No. 90).

12. That the disposal ponds will not impair the quality of the ground or surface water of the area or violate any applicable standards. (Finding of Fact, No. 91).
13. That all three permanent ponds will service the 37 year life of the plant. (Finding of Fact, No. 92).

E. Based on the foregoing Findings of Fact, the Board of Natural Resources and Conservation reached 18 Conclusions of Law, including the following:

1. The only authorized state air and water quality agency, the Board of Health and Environmental Sciences, has certified that the proposed facility, Colstrip Units #3 and #4 and associated facilities will not violate state and federally established standards and implementation plans. (Conclusion of Law, No. 10).
2. That the seepage from the existing surge pond and any enlarged or additional surge ponds be monitored, as specified by the State Board of Health and Environmental Sciences, and that every feasible engineering means be taken by the Applicants to minimize such seepage. (Conclusion of Law, No. 12(c)).
3. The sludge pond or ponds shall be completely sealed. If the conventional means such as compaction and bentonite application do not seal the pond(s), as indicated by monitoring wells the Applicants shall install and operate, then extreme measures even up to complete sealing by a plastic membrane

- shall be taken (Conclusion of Law 12(d) "later modified by stipulation" as further explained below).
4. The reclamation of the sludge ponds, when they are filled and dried out, shall follow the basic reclamation requirements and standards applicable to the proper covering of highly saline backfill in coal areas (Conclusion of Law 12(e)).
 5. That all monitoring programs heretofore instituted in regard to Colstrip Units 1 and 2, and in the Application proposed, be implemented and instituted so as to provide a continual flow of factual data insofar as air, surface and ground water are concerned. (Conclusion of Law, No. 12(h)).
 6. That the Applicants enter into a written agreement with the Board of Health and Environmental Sciences for the payment of the monitoring facilities and operation thereof required by said Board in their certification heretofore issued, and for any further monitoring required in the conditions set forth herein by the State Board of Natural Resources and Conservation. (Conclusion of Law, No. 12(i)).

F. Conclusion of Law 12(d) states that the sludge ponds will be sealed. However, under Finding of Fact 61, seepage from wastewater ponds was anticipated and would be collected and returned to the ponds.

G. Conclusion of Law 12(d) was subsequently interpreted in litigation between the Board of Natural Resources and Conservation and the prior operator of

Colstrip Units 3&4. The Montana First Judicial District Court interpreted Conclusion of Law 12(d) as follows: "The clear meaning of condition 12(d), taken in the context of the Board's findings that some seepage was expected (see BNR findings numbers 61, 64, 68, 71 and 89 and BHES finding XXXIX), is that the pond as constructed for Relators may leak in small amounts but if the leakage is detected by the monitoring wells, the Relators will have to resort to more stringent measures, up to and including the installation of a plastic liner." (Findings of Fact and Conclusions of Law, p. 8, ¶ 3 (June 29, 1983), *State of Montana v. Board of Natural Resources and Conservation*, Cause No. 49348, District Court of the First Judicial District of the State of Montana, in and for the County of Lewis and Clark).

H. The requirements of Conclusion of Law 12(d) were further clarified as the result of litigation involving the Board of Natural Resources and Conservation, Northern Plains Resource Council, the prior operator of the Colstrip Units 3&4 and landowners adjacent to the Units 3&4 Effluent Holding Pond ("EHP"). The parties entered into a stipulation that generally describes the circumstances under which Conclusion of Law 12(d), as it pertains to the Cow Creek and South Cow Creek drainages, will be satisfied at the Units 3&4 EHP. To that end, Paragraph 9 of the stipulation provides as follows: "If MPC [Montana Power Company] complies with all terms and conditions of this Stipulation, such compliance constitutes full compliance with both the first and second sentences of Condition 12(d) of the Colstrip 3&4 Certificate for the Section 5 and 6 sludge pond."

I. The 12(d) stipulation generally requires PPLM to construct monitoring wells in specific areas near Units 3 & 4 EHP (ash disposal ponds) and other ponds in

the Cow Creek drainage and prepare an interception plan so as to contain any impacts on PPLM lands, install an interception system in designated locations if conditions warrant, pay for third-party monitoring activities of the Cow and Pony Creek drainages, provide replacement wells on land owned by Genie Land Company, distribute monitoring data to all parties to the stipulation and implement a monitoring program for certain persons' water supplies. PPLM has taken and is continuing to take the required actions, including action taken to address and recover seepage discovered in 2004 from the south and west sides of Units 3 & 4 EHP.

J. To minimize impacts to water resources, the units authorized by the Certificate were constructed utilizing what was intended to be a closed loop water system and the ash disposal ponds were to be sealed.

K. A brief history and description of each of the ponds comprising the closed-loop system at the plant are included in Attachment A. The Certificate refers to ponds by geographic location in relation to the Colstrip SES, but does not attempt to identify every pond that is subject to the Certificate's requirements. The ponds subject to the Certificate include those used exclusively by Units 3 & 4 and those used jointly by Units 1 & 2 and Units 3 & 4. Although not all of the ponds listed in Attachment A may be subject to the Certificate, all ponds listed in Attachment A will be subject to the provisions of this AOC.

L. The Colstrip plant also has a freshwater pond (called the Surge Pond or Castle Rock Lake) that provides fresh water drawn from the Yellowstone River for water supply to the plant and the town of Colstrip.

M. While many of the systems and actions discussed in Attachment A were effective, the migration of the seepage continued beyond these initial recovery systems in certain areas. In October 2003, PPLM retained an environmental consultant to, among other tasks, characterize the ground water affected by pond seepages and develop numerical models that can be used as a tool to evaluate hydraulic control alternatives to prevent continued migration of ground water affected by pond seepage at the Stage I and II EHP for Colstrip Units 1 and 2. PPLM's environmental consultants have completed a variety of studies and assessments as identified on Attachment B. Further work founded on these reports and other reports for the areas affected by seepage described in Article III will be conducted under Article VI and the Department will take action under Article XII on PPLM's submissions with respect to such further work because the Department and PPLM have concluded that a comprehensive, risk-based approach incorporating all tools and requirements applicable under Montana's generally applicable environmental laws, including adaptive management practices available thereunder, is needed to address ground water contamination from seepage.

II. Effective Date

This AOC shall become effective on the date it is executed by the parties.

III. Scope of the Administrative Order on Consent

A. This AOC applies to the following areas:

1. Areas at and downgradient of Units 1&2 Stage I and Stage II evaporation ponds northwest of the main plant site.
2. Areas at and downgradient of the main plant site.
3. Areas at and downgradient of Units 3&4 EHP southeast of the main plant site.
4. (a) Areas at and downgradient of past pipeline spills and
(b) Other miscellaneous areas that are mutually agreed upon by the parties to address in this AOC.

IV. Definitions

A. Remedial Design/Remedial Action Work Plan – plan for designing and implementing the selected remedy.

B. Control Actions - remedial actions directed exclusively toward reducing, containing or controlling the seepage or migration of regulated substances including but not limited to sulfate, boron, selenium, potassium, sodium, magnesium, total dissolved solids, and salinity measured by specific electrical conductance through the environment. Control actions shall include affirmative source mitigation measures.

C. Institutional Controls – restrictions on the use of real property agreed to by the landowner that mitigates the risk posed to public health, safety, and welfare and the environment. Institutional Controls include but are not limited to:

1. deed restrictions;
2. easements;
3. reservations;
4. covenants, either restrictive or affirmative; and
5. other mechanisms or physical restrictions for controlling present and future land use, including controlled ground water areas that are placed upon real property to mitigate the risk to public health, safety, and welfare and the environment.

D. Reasonably Anticipated Future Uses - likely future land or resource uses that take into consideration:

1. local land and resource use regulations, ordinances, restrictions, or covenants;
2. historical and anticipated uses of the facility;
3. patterns of development in the immediate area; and
4. relevant indications of anticipated land use from the owner of the facility, owners of property affected or potentially affected by the facility, and local planning officials.

E. Interim Response Action – a prompt action to respond to an immediate circumstance, such as, an acute threat to human health or a recent spill.

F. Constituents of Interest ("COI") – those parameters found in soil, ground water or surface water that (1) result from Site operations and the wastewater facilities and (2) exceed background or unaffected reference areas concentrations.

G. Cleanup Criteria –

1. for each constituent of interest in ground or surface water, except for the evaluation for ecological receptors, the applicable standard contained in the most current version of Circular DEQ-7 Montana Numeric Water Quality Standards ("DEQ-7"), the EPA maximum contaminant level, the risk-based screening level contained in the most current version of Montana Risk-Based Guidance for Petroleum Releases, whichever is more stringent; and, for constituents of interest for which there is not a DEQ-7 standard, a maximum contaminant level, or a risk-based screening level contained in the Montana Risk-Based Guidance for Petroleum Releases, the tap water screening level contained in the most current version of EPA Regional Screening Levels for Chemical Constituents at Superfund Sites, except that no criterion may be more stringent than the background or unaffected reference areas concentrations; and
2. for each constituent of interest in ground or surface water that may impact an ecological receptor, an acceptable ecological risk determined using the most current versions of standard EPA

ecological risk assessment guidance if the criteria set pursuant to 1. above are not adequate to protect ecological receptors, except that no criterion may be more stringent than the background or unaffected reference areas concentrations;

3. for each constituent of interest in soil, the more stringent of:
 - (a) a cumulative human health risk of 1×10^{-5} for carcinogens or a cumulative hazard index of 1 for non-carcinogenic constituents of interest, except that no criterion may be more stringent than the background or unaffected reference areas concentrations;
 - (b) an acceptable ecological risk, determined using the most current versions of standard EPA ecological risk assessment guidance if the criteria set pursuant to (a) above are not adequate to protect ecological receptors, except that no criterion may be more stringent than the background or unaffected reference areas concentrations;
or
 - (c) the risk-based screening level contained in the most current version of Montana Risk-Based Guidance for Petroleum Releases, except that no criterion may be more stringent

than the background or unaffected reference areas concentrations.

H. Compliance Monitoring Points – locations established as points to determine the effectiveness of a remedial action on an ongoing basis.

I. Confirmatory Sampling – Sampling to confirm cleanup effectiveness.

J. Operation and Maintenance Plan – a plan describing required operation and maintenance tasks to keep Control Actions in place.

K. Limited Remediation Area - a portion of a Site for which active remediation would be difficult due to structural features or components such as underground piping, wiring, conduits, supporting structures, and other equipment which, if disturbed or removed, would substantially diminish the integrity of essential operating equipment and/or endanger the safety of workers or other individuals.

L. Health and Safety Plan – a plan to address risks that contaminants at the Site pose to workers engaged in remedial actions at the Site.

M. Seepage - all seeps, leaks, spills, and discharges from the wastewater facilities listed in Attachment A.

N. Site - area under investigation and, if needed, remediation, as specifically defined in each work plan submitted hereunder.

O. Permits - any regulatory authorization, amendment, permit, consent, certification or approval required to be issued by the Department for actions to be taken under this AOC.

V. Public Participation

A. Within 10 days of submission of a Site Report to the Department under Article VI A., the Department will set a public meeting date and notify PPLM. PPLM shall then, within 10 days, publish a notice of meeting in the local newspaper and the *Billings Gazette*. The notice must advise the public of the time and place of the community meeting and of a 30-day public comment period, which will extend at least 10 days following the meeting, the manner in which comments may be submitted, and the manner that copies of the Site Report may be reviewed. The Department shall post the Site Report on its website upon receipt of the report and shall conduct the community meeting. The Department will respond to substantive public comment as part of its action on the submission.

B. Within 10 days of submission of the Cleanup Criteria and Risk Assessment Report for each site to the Department under Article VI B., the Department will set a public meeting date and notify PPLM. PPLM shall then, within 10 days, publish a notice of meeting in the local newspaper and the *Billings Gazette*. The notice must advise the public of the time and place of the community meeting and of a 30-day public comment period, which will extend at least 10 days following the meeting, the manner in which comments may be submitted, and the manner that copies of the Report may be reviewed. The Department shall post the Report on its

website upon receipt of the report and shall conduct the community meeting. The Department will respond to substantive public comment as part of its actions on the submission.

C. Within 10 days of submission of the Remedy Evaluation Report for each site to the Department under Article VI C., the Department will set a public meeting date and notify PPLM. PPLM shall then, within 10 days, publish a notice of meeting in the local newspaper and the *Billings Gazette*. The notice must advise the public of the time and place of the community meeting and of a 30-day public comment period, which will extend at least 10 days following the meeting, the manner in which comments may be submitted, and the manner that copies of the Report may be reviewed. The Department shall post the Report on its website upon receipt of the report and shall conduct the community meeting. The Department will respond to substantive public comment as part of its action on the submission.

D. A single community meeting may be held to obtain comment on both the Cleanup Criteria and Risk Assessment Report and the Remedy Evaluation Report for an individual site if PPLM elects to submit these reports at the same time.

E. Within 10 days of submission of the Final Remediation Action Report for each site to the Department under Article VI E., the Department will set a public meeting date and notify PPLM. PPLM shall then, within 10 days, publish a notice of meeting in the local newspaper and the *Billings Gazette*. The notice must advise the public of the time and place of the community meeting and of a 30-day public comment period, which will extend at least 10 days following the meeting, the manner

in which comments may be submitted, and the manner that copies of the Report may be reviewed. The Department shall post the Report on its website upon receipt of the report and shall conduct the community meeting. The Department will respond to substantive public comment as part of its action on the submission.

F. Within 10 days of submission of a Facility Closure Plan to the Department under Article IX B., the Department will set a public meeting date and notify PPLM. PPLM shall then, within 10 days, publish a notice of meeting in the local newspaper and the *Billings Gazette*. The notice must advise the public of the time and place of the community meeting and of a 30-day public comment period, which will extend at least 10 days following the meeting, the manner in which comments may be submitted, and the manner that copies of the Plan may be reviewed. The Department shall post the Plan on its website upon receipt of the report and shall conduct the community meeting. The Department will respond to substantive public comment as part of its action on the submission.

VI. Investigation and Remediation

A. Site Report.

1. For each area covered by this AOC as stated under Article III, PPLM shall develop and submit to the Department a Site Report based on available data, on a schedule developed under Article X. If the parties are unable to agree on a schedule within a time deemed reasonable by the Department, the Department may unilaterally create and require a schedule, subject to PPLM's

right to invoke the Dispute Resolution provisions of Article XIII.

The Site Report shall contain, at a minimum, the following:

- (a) Identification of releases, if any, for each area and the source of the releases;
- (b) A description of the investigations performed to date, including a list of the reports resulting from the investigations and a summary of the findings and results from the investigations;
- (c) Water models and results of modeling.
- (d) A description of completed and ongoing remedial actions (including the sampling parameters and frequency of any ongoing monitoring) and an effectiveness assessment of the remedial actions;
- (e) For each area that contains a pond, a description of the construction of the ponds and of pond contents through time;
- (f) For each pond, an estimate of seepage to ground water beneath the pond;
- (g) Identification of data gaps, if any; and

(h) Recommendations for additional site characterization, if any.

2. The Department shall take action on the Site Report pursuant to Article XII.
3. After completion of the Site Report, if additional site characterization and/or ground water modeling of an area covered by this AOC as stated under Article III is deemed necessary by either PPLM with the Department's concurrence or the Department, PPLM shall submit a Site Characterization Work Plan for that area as provided in Article XI within a reasonable time frame required by the Department after consultation with PPLM, under Article X. The Site Characterization Work Plan shall set forth the scope of work and schedule for additional site investigation of an area covered by this AOC as stated under Article III. The Department shall take action on the Site Characterization Work Plan pursuant to Article XII.
4. PPLM shall implement the Site Characterization Work Plan as approved by the Department and shall, per the schedule in the Site Characterization Work Plan, submit a Supplemental Site Report to the Department. The Department shall take action on the Supplemental Site Report pursuant to Article XII.

B. Cleanup Criteria and Risk Assessment Report

1. PPLM shall submit a Cleanup Criteria and Risk Assessment Report for each of the four areas covered by this AOC as stated under Article III within a reasonable timeframe required by the Department after consultation with PPLM under Article X. The Cleanup Criteria and Risk Assessment Report may be submitted at the same time as the Remedy Evaluation Report required under Article VI C.
2. The Cleanup Criteria and Risk Assessment Report shall identify, at a minimum the following: a) the Cleanup Criteria for the COIs; b) identification of transport mechanisms for the COIs; c) identification of potential receptors; d) identification of exposure pathways; and e) if there are COIs, recommendation of any additional site characterization needed to determine what, if any, human health or environmental risks are posed by releases from the Site.
3. The Cleanup and Risk Assessment Report shall also include an assessment of the risk posed by COIs that exceed soil or water screening levels. The Cleanup and Risk Assessment Report shall also evaluate environmental and human health risks based on Cleanup Criteria defined in Article IV G.

4. The Department shall take action on the Cleanup Criteria and Risk Assessment Report per Article XII.
5. If the approved Cleanup Criteria and Risk Assessment Report concludes that remedial measures are necessary, i.e., the report identifies one or more COIs that exceed Cleanup Criteria as defined in Article IV G, PPLM shall submit a Remedy Evaluation Report as provided in Article VI C.
6. If the approved Cleanup Criteria and Risk Assessment Report concludes that the remedial measures are not necessary, i.e., the report does not identify COIs that exceed Cleanup Criteria as defined in Article IV G, the Department shall provide PPLM with a Closure Letter that states that, based upon the approved Report, there is no need for no further action. If future data indicate additional or unanticipated contamination, the Department may require additional action pursuant to Article VI G.

C. Remedy Evaluation Report

1. If the approved Cleanup Criteria and Risk Assessment Report shows that remedial measures are necessary at an area covered by this AOC, PPLM shall submit a Remedy Evaluation Report evaluating remedial alternatives for that area. The Remedy Evaluation Report shall be submitted within a reasonable

timeframe required by the Department after consultation with PPLM under Article X. The Remedy Evaluation Report may be submitted at the same time as the Cleanup Criteria and Risk Assessment Report required under Article VI B.

2. The Remedy Evaluation Report must contain the following:
 - (a) A description of the areas where remedial action is necessary;
 - (b) Identification and summary of feasible remedial alternatives. Feasible remedial alternatives include active remedial actions, and/or, where allowed by applicable law, control or elimination of pathways by use of Institutional Controls and with consideration of Reasonably Anticipated Future Uses of the PPLM property and/or of adjacent property where the landowner voluntarily agrees to implement institutional controls;
 - (c) Pros and cons of each remedial alternative and a summary of how each alternative satisfies the Cleanup Criteria defined in Article IV G;
 - (d) Identification of a preferred remedy, including rationale for such identification;

- (e) Identification of sampling or treatability studies;
- (f) A demonstration that exposures to risk to public health, safety, or welfare and the environment from the facility, not otherwise addressed pursuant to subparagraph (c) above, if any, will be substantially mitigated by the plan; and
- (g) A Schedule for submission of a Remedial Design/ Remedial Action Work Plan.

-
3. The Department shall take action on the Remedy Evaluation Report per Article XII and shall select a remedy or a modified remedy as part of that Department action.

D. Implementation of Selected Remedy

1. Within a reasonable timeframe required by the Department after consultation with PPLM under Article X, PPLM shall submit a Remedial Design/Remedial Action Work Plan for implementing the selected remedy that shall include the following, as necessary:
 - (a) Narrative description and detailed design of the selected remedy;

- (b) Description of any required compliance monitoring and confirmatory soil sampling;
- (c) Description of emergency preparedness procedures;
- (d) Health and Safety plan;
- (e) Engineering certification of the remediation design;
- (f) A timetable for implementing the remedy;
- (g) A statement that applicable health and safety regulations will be met during implementation of the remediation proposal;
- (h) A description of how short-term disturbances during implementation of the remediation proposal will be minimized and reclaimed;
- (i) Identification of any Permits applicable under 75-20-401, MCA, necessary to conduct the proposed remedies;
- (j) A commitment to provide an Annual Progress Report if implementation of the remedy exceeds one (1) year and periodic status reports as requested by the Department;
- (k) Any anticipated Operation and Maintenance requirements;

- (l) A commitment to obtain approval from the Department for any deviation from the approved work plan; and
 - (m) Such other information as is appropriate based on conditions unique to the Site.
 - 2. The Department shall take action on the Remedial Design/Remedial Action Work Plan per Article XII.
 - 3. PPLM shall implement the Remedial Action per the approved Remedial Design/Remedial Action Work Plan.
-

E. Final Remedial Action Report

- 1. Upon completion of the remedial measures per the approved Remedial Design/Remedial Action Work Plan, PPLM shall submit a Final Remedial Action Report that shall include the following, as necessary:
 - (a) Description, documentation and certification of completed remedial actions, including Institutional Controls, if any;
 - (b) Documentation of and justification for any deviation from the Remedial Design/Remedial Action Work Plan;
 - (c) A description and results of any Confirmatory Sampling;

- (d) Photographs of the site during remediation;
- (e) Location and description of any Limited Remediation Areas;
- (f) Protocols for ensuring that Control Actions or Limited Remediation Areas are not impacted by any future construction or other Site disturbance;
- (g) Protocols for periodic inspection of Control Actions and/or Limited Remediation Areas in any areas subject to natural disturbance (e.g. flooding); and
- (h) Operation and Maintenance Plans, if necessary, including a map showing the Compliance Monitoring Points, sampling schedules and reporting procedures and calculations for financial assurance per Article VIII.

2. The Department shall take action on the Final Remedial Action Report pursuant to Article XII conditioned on acceptable financial assurance being provided pursuant to Article VIII.

VII. Interim Response Action

Where PPLM determines that prompt action is required at a Site, PPLM may undertake such action at any time, including prior to submitting a Site Report or a Site Characterization work plan. PPLM shall orally notify the Department if it intends to

implement an Interim Response Action, explaining the need for and nature of the Interim Response Action and a preliminary schedule of immediate actions to be taken. PPLM may proceed to take the action without first obtaining Department approval so long as PPLM submits an e-mail to the designated Department representative within 24 hours of initiating an Interim Response Action. Within 60 days after completing an Interim Response Action, PPLM shall submit a written report to the Department of the actions taken, and how the Interim Response Action shall relate to ongoing actions or actions to be taken under Article VI. The Department shall take action on the report pursuant to Article XII hereof. The Department may also require PPL to take additional Interim Response Action, Investigation and Remediation under Article VI, and/or follow-up monitoring.

VIII. Financial Assurance

To ensure the operation and maintenance of remedial and closure actions carried out under this order, PPLM shall provide financial assurance in the amount required by the Department and by any one method or combination of methods approved by the Department, and such approval shall not be unreasonably withheld, including but not limited to insurance, third-party guarantee, performance or other surety bond, or letter of credit. Such financial assurance shall be subject to annual review by the Department, with a comprehensive review at least every five years. The amount of the assurance may be increased or decreased based on the projected costs for the operation and maintenance of remedial and closure actions. Any disagreement between the parties with respect to the amount of the financial

assurance will be subject to the dispute resolution per Article XIII. The Department shall make available, through its website or similar means, the basis and/or calculations used to determine the amount of the financial assurance.

The parties agree that provision of the financial assurance will be addressed in phases, with the first phase addressing obligations for current and continuing remedial actions including monitoring, a second phase to incrementally address obligations resulting from actions taken pursuant to the process described in Article VI, and a third phase to address the Facility Closure Plan and amendments thereto addressed in Article IX. The parties agree that the first phase of financial assurance will be addressed by the parties upon execution of this AOC.

IX. Facility Closure

A. PPLM shall develop a Facility Closure Plan for each Site that provides for control, minimization or elimination, to the extent necessary to protect human health and the environment, of post-closure escape of COIs to the environment.

B. PPLM shall submit a proposed Facility Closure Plan for each Site under a schedule defined per Article X. Proposed Facility Closure Plans for each Site shall be submitted not later than 5 years from the date of execution of this AOC.

C. The Facility Closure Plan shall include proposed actions to inform and obtain input from the community consistent with Article V. The Department shall take action on the Facility Closure Plan pursuant to Article XII except that the 75 day

timeframes are extended to 90 days and the 30 day timeframes are extended to 60 days.

D. The Closure Plan shall include an estimate of closure and post-closure costs. PPLM shall provide financial assurance for these costs per Article VIII above.

E. PPLM shall update the approved Facility Closure Plan for each Site either every five years or when a major change or modification is made to the facility. The schedule for such updates shall be included in the Five-Year Plans and Annual Plans submitted under Article X. If the Department determines that there is significant public interest in the change or modification, it may seek public comment pursuant to the procedures contained in Article V F.

X. Annual Planning Meetings

The parties will meet at least annually to discuss the status of work under Article VI hereunder and planned future activities. Sixty days prior to each meeting PPLM shall develop and submit an updated Five-Year Plan and Annual Plan. The Five-Year Plan shall contain projected long-term schedules for actions under Article VI above. The Annual Plan shall contain the status of activities underway and detailed schedules for scope of work for projects to begin in that year, including schedules for completion of Site Reports. The Department shall take action under Article XII on the schedules submitted hereunder.

XI. Submissions

A. All work plans, reports, notices, inquiries, correspondence and other documents relating to this AOC and the implementation of its terms which are to be directed to either PPLM or the Department shall be sent in writing to the individuals designated in Article XVI . All work plans and reports shall be certified by a licensed professional engineer or qualified PPLM employee, consultant or representative.

B. All work plans, reports, notices, inquiries, correspondence and other documents relating to this AOC shall be transmitted in their entirety by first class mail, overnight delivery, facsimile, hand delivery or electronic correspondence [e-mail] where practicable. Any work plan, notice, report or other document required to be submitted to the Department or PPLM under this AOC shall be deemed to have been submitted on the date that it is received.

C. Any time period specified in this AOC within which a specific requirement is to be met shall begin to run on the date that PPLM or the Department, as appropriate, receives a work plan, report, notice, inquiry, correspondence or other document requiring the next action regardless of the date of submission of any such document.

XII. Department Action on Submissions

A. Unless otherwise expressly provided to the contrary in this Agreement, whenever PPLM is required under this AOC to submit a work plan, report or other document (the "Submission") to the Department for action, such submissions shall be processed in accordance with this Article. The Department shall make a good faith effort to respond in writing to any Work Plan submitted by PPLM hereunder within 30

days and any Report submitted by PPLM hereunder within 75 days, and identify the Department's substantive concerns, if any, or provide the Department's approval, conditional approval, or disapproval. The Department may, at its discretion provide conditional approval rather than disapproval, in order to avoid unnecessary delays.

B. If the Department disapproves of PPLM's Submission, the Department shall include a detailed statement of reasons supporting the disapproval. PPLM shall thereafter, within 60 days submit to the Department a response addressing the concerns identified by the Department. Within 30 days after the receipt of PPLM's response, the Department shall either (1) finally approve the submission as originally made or as revised, together with reasonable conditions, if any, dealing with concerns identified by the Department as part of the prior disapproval and PPLM's response thereto, or (2) disapprove the Submission, giving a detailed statement of its reasons in writing. However, the Department may, if it determines that additional public participation is required, treat its decision regarding PPLM's response as a new Submission for purposes of public participation under Paragraph A of this Article and under Article V.

C. If the Department fails to take action as stated above after receiving a Submission from PPLM pursuant to this AOC, the dispute resolution provisions of Article XIII shall be automatically triggered.

D. Not later than 30 days after receiving the Department's conditional approval or disapproval, PPLM may invoke dispute resolution in accordance with Article XIII.

E. Unless PPLM invokes dispute resolution process, PPLM shall:

1. comply with the work plan finally approved by the Department, including any conditions of approval; or
2. if the Department has disapproved the submission, submit a new work plan, report, or other document that remedies or corrects the deficiencies indicated in the disapproval. The submission shall then be reviewed pursuant to Paragraphs B through E of this Article.

XIII. Dispute Resolution

In the event of any dispute arising under this AOC, PPLM and the Department agree to attempt to resolve the dispute as follows:

A. PPLM may at any time formally invoke the dispute resolution process by sending written notice to the Department.

B. For a period of 30 days after the receipt of the written notice provided under subparagraph (A) of this paragraph, PPLM's Environmental Management Representative and the Department will confer in an attempt to resolve the dispute informally.

C. In the event the Parties are unable to resolve the dispute within the 30-day period above, a PPLM representative senior to the Environmental Management Representative and the Department's Permitting and Compliance Division

Administrator, shall confer for a period of up to 15 days in an attempt to resolve the dispute. In the event that the parties are unable to resolve the dispute within this period, the Department's Director shall issue a final decision.

D. The Parties may, by mutual agreement, extend any deadlines specified in this Article.

E. The Parties may, by mutual agreement, arrange for the participation of a neutral mediator in an attempt to resolve a dispute under the provisions of this Article.

F. During the pendency of any dispute, PPLM shall not be obligated to perform the action(s) in dispute except for interim response actions pursuant to Article VII.

G. Upon conclusion of the dispute resolution process, PPLM shall:

1. comply with the work plan finally approved by the Department, including any conditions of approval; or
2. if the Department has disapproved the submission, submit a new work plan, report, or other document that remedies or corrects the deficiencies indicated in the disapproval. The submission shall then be reviewed pursuant to paragraph B through E of Article XII.

XIV. Department's Right to take Action

Nothing in this AOC will prevent the Department from taking emergency action or requiring PPLM to take such action where the Department determines any condition, on, at, or from a Site poses an imminent threat to human health or the environment. Nothing in this AOC precludes the Department's actions to enforce compliance with statutes and regulations. Nothing in this AOC will prevent PPLM from defending against any such actions taken by the Department.

XV. Effect on Existing Obligations

Compliance with this AOC shall constitute the means, as between the parties, for attaining and assuring compliance with PPLM's obligation under its Certificate and water quality laws and rules within the scope of this AOC. Nothing set forth in this AOC is intended, or shall be construed, to authorize any violation of any statute or rule issued or administered by the Department.

XVI. Designated Contacts and Correspondence

A. The Department designates Tom Ring as its contact person under this AOC. PPLM designates Gordon Criswell as its contact person under this AOC.

B. All correspondence with the Department concerning this AOC will be addressed to:

Tom Ring
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

And copies to:

Warren McCullough
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Lisa Boettcher
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

C. All correspondence with the PPLM concerning this AOC will be addressed to:

Gordon Criswell
PPL Montana
303 North Broadway, Suite 400
Billings, MT 59101

And copies to:

Steve Christian
PPL Montana Colstrip Steam Electric Station
Warehouse and Willow Roads
P.O. Box 38
Colstrip, MT 59323-0038

Michael Holzwarth
PPL Montana Colstrip Steam Electric Station
Warehouse and Willow Roads
P.O. Box 38
Colstrip, MT 59323-0038

XVII. Force Majeure

A. In the event that PPLM is prevented from complying in a timely manner with any time limit or other requirement imposed in this AOC solely because of a strike, fire, flood, act of God, or other circumstances entirely beyond PPLM's control,

and which PPLM by the exercise of all reasonable diligence, is unable to prevent or mitigate, then PPLM may request from the Department an extension of time.

B. PPLM will be entitled to the benefits of this paragraph only if PPLM notifies the Department within 5 days by telephone and within 15 days in writing of the date it becomes aware of the event impeding performance. The written submission will include all related documentation, as well as a notarized affidavit from a responsible corporate official specifying the reasons for the delay, the expected duration of the delay, and the efforts which have been made and are being made by PPLM to minimize the length of the delay. The failure of PPLM to comply with the requirements of this paragraph specifically and in a timely fashion will render this paragraph null and of no effect as to the particular incident involved.

C. The Department will decide whether to grant all or part of the extension requested on the basis of all documentation submitted by PPLM and other information available to the Department. Only a letter that has been signed by the Department and its counsel will constitute an extension under this paragraph.

D. In any subsequent litigation, PPLM shall have the burden of proving that the Department's refusal to grant the requested extension was unreasonable based upon the information available to the Department.

XVIII. No Admission

No action taken by PPLM to contain or remove a release pursuant to this AOC may be construed as an admission of liability for the release.

XIX. Entire Order

This AOC shall constitute the entire agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.

XX. Modifications

Except as provided in Paragraph XVII (Force Majeure), no changes, additions, modifications or amendments of this AOC shall be effective unless they are set out in writing and signed by the parties hereto.

XXI. Changes in Law

If new state laws or rules are enacted with standards different from those in existence today, the new standards shall apply prospectively to any remediation that has not been completed (i.e., the Final Remedial Action Plan Report has not been approved). Where remediation has been completed in compliance with the AOC, PPLM shall not be required to take additional remediation actions unless the Department demonstrates that new information has been obtained about a COI which revises exposure assumptions beyond the environmental and human health risk levels previously determined to be acceptable by the Department in the approved Human Health and Environmental Risk Assessment Report.

XXII. Enforcement

The parties agree that a violation of this AOC, including a failure to comply with any plans or schedules approved by the Department under the AOC, constitutes violation of an Order under Section 75-5-617, MCA, or Section 75-20-408, MCA.

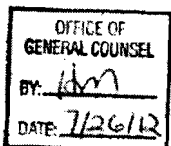
XXIII. Binding Effect

This agreement shall bind these parties' successors.

IN WITNESS WHEREOF, the parties hereto have caused this AOC to be executed by the duly authorized representatives. The undersigned representatives of PPLM certify under penalty of law, that they are authorized to execute this AOC on behalf of PPLM; that PPLM consents to the entry of this AOC and that PPLM hereby knowingly waives its right to appeal this AOC under Section 75-5-612, MCA, or any other provision of law.

FOR PPL MONTANA, LLC:

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY:



Peter J. Simonich
7/27/2012
Date

Richard P. H. O.
8/3/2012
Date

Attachment A

Table 2-1

Units 1-4 Waste Water Facility Descriptions

[Evaluation of 2010 Hydrologic Monitoring Data from Colstrip Units 1 through 4 Process Pond System
Colstrip Steam Electric Station. April 2011 Report.]

Attachment A

Table 2-1

Units 1-4 Waste Water Facility Descriptions

[Evaluation of 2010 Hydrologic Monitoring Data from Colstrip Units 1 through 4 Process Pond System
Colstrip Steam Electric Station. April 2011 Report.]

Attachment A PPL Montana, Colstrip Units 1-4 Waste Water Facility Descriptions					Revision 2, 4/17/2012
Waste Water Facility	Total Capacity (acre-feet)	Surface Area (acres)	Years in-service	Lining	Pond Function /Comments
Units 1 & 2 Flyash Pond	490	27	1975 - present	see below	Originally received scrubber slurry on an short-term basis until the solids could be dredged to the Stage I or Stage II Evaporation Ponds for final disposal. Clear water from this pond flowed into the Clearwell where it was sent back to the scrubbers for re-use. In 1997, an extension to the existing Sediment Retention Pond (SRP) area groundwater collection was installed in this area. In 2002 and 2003, additional expansion was added to the groundwater collection in this area.
Clearwell	49	3	1975 - present	Clay originally, double-lined RFP with leachate collection system installed in 2006	This section of the pond was removed from scrubber service in May of 2005. In 2006, this area was double-lined with 45 mil RFP and a leachate collection system installed between the liners and under both liners. This area is currently being used as the 1&2 Bottom Ash Pond Clearwell.
A side (west)	245	14	1975 - present	Clay	This section of the pond was removed from scrubber service in May of 2005. It is currently being used as a clean water storage pond (stormwater runoff, etc).
B side (east)	196	10	1975 - present	Clay originally, double-lined RFP with leachate collection system installed in 2004.	This section of the pond was double-lined with 45 mil RFP and a leachate collection system between the liners and under both liners and placed in-service in 2004. Normally this section of the pond receives scrubber return water from the STEP but can receive scrubber slurry during emergency conditions (i.e. scrubber slurry pipeline out of service). Periodically, solids will be dredged to Stage II Evaporation Pond for final disposal.
1&2 Scrubber Pipeline	na	na	1975 - present	Lined Steel Pipe, changed to HDPE in 2001	Transports scrubber slurry 3 miles from the scrubbers to the Stage I & II Evaporation ponds and returns clearwater back to the scrubbers. Line was originally lined-steel, changed out to HDPE in 2001. Failure of pipeline reported in 2000 (4), and 2002.
Units 1&2 Wash Tray Pond	50	8	1975 - 1980	Clay	Originally served as a scrubber pond for the wash tray loop. This pond was abandoned in 1980 when a separate loop for the scrubber wash tray was determined to be unnecessary. This area was converted to the 1&2 Bottom Ash Pond in 1988.
Units 1 & 2 Bottom Ash Pond w/ Clearwell	24	4	1975 - present	Clay, new clearwell double-lined RFP with leachate collection installed in 2006	Collection area for bottom ash and drain collection pit effluent. Clearwater flows into the clearwell section of this pond and is returned to the plant bottom ash system for re-use. In 1988, the bottom ash ponds were relocated to the area just north of the 1&2 Flyash Pond B side. In 2006, the 1&2 Flyash Pond Clearwell was double-lined with 45 mil RFP (with leachate collection between the liners and below both liners) and converted to the new 1&2 Bottom Ash Pond Clearwell.
Units 1 & 2 Brine Waste Disposal Ponds	50	4	1976 - 2005	Hypalon	Disposal location for brine from Wastewater Concentrator (RCC). The Wastewater Concentrator is no longer in-service (removed in 2000), so these ponds no longer collect brine.
D1 - D3 ponds	30	2	D1 & D2 1976 - 1994, D3 1980 - 1994	Hypalon	In 1980-1981, a failure of the D3 Pond was identified and repaired. In 1985, the Brine Pond Collection system was installed to collect impacted groundwater. These ponds were closed in 1994. The solids were removed and stored in F cell of the 3&4 EHP. The liner was also removed. The depressions from these ponds were left to provide a clean water collection area for precipitation which would allow for clean water recharge into the area.
D4 pond	30	2	1984 - 2005	Hypalon, with a underdrain system	This pond has an Underdrain Collection system and is used as a excess water storage area. In November 2005, a problem was identified with the liner and the pond was drained and removed from service. In 2006, the pond was closed with solids stored within a lined section and capped with a 45 mil RFP. In 2007, a soil cover was placed over the liner cap and seeding completed.
Units 1 & 2 Cooling Tower Blowdown Pond (Pond C)	400	20.5	1978 - present	Clay	Originally received cooling tower blowdown and raw water which was used as make-up to the Wastewater Concentrator. In 1987, the pond was split into two sections (North and South). The South Pond was relined with clay and erosion control was added in the form of a geotextile material and scoria.
North pond	195	10	1978 - present	Clay	In 2004, this pond began receiving groundwater collection water (Brine Pond and 10S/10M collection systems) to be used for a highway construction project. In 2005, raw water and storm water runoff was sent to this pond for additional raw water storage because of the anticipated drought conditions. This pond is used to store stormwater runoff for water management purposes.
South pond	205	10.5	1978 - present	Clay with geotextile and scoria on banks added for erosion control in 1987	Since 2000, this pond has been receiving raw water and storm water runoff to provide road watering for dust control. In 1999, a groundwater collection system was installed on the south end of this pond.

Attachment A					Revision 2, 4/17/2012
PPL Montana, Colstrip Units 1-4 Waste Water Facility Descriptions					
Waste Water Facility	Total Capacity (acre-feet)	Surface Area (acres)	Years in-service	Lining	Pond Function /Comments
Units 1 & 2 Stage I Evaporation Pond (E Pond)	2350	114	1975 - 1997	Partial clay	Received scrubber slurry from Units 1&2 for final disposal. This pond was full in 1997 and the reclamation program for this pond was completed in 2002. There has been limited grazing on this reclamation since 2003. In 1995, a groundwater collection system was installed west of this pond. In 1999 and 2001, this west groundwater collection system was expanded. In 2000, a groundwater collection system was installed south of this pond. In 2006, wells were installed in the pond boundary to evaluate dewatering of the scrubber material.
Units 1 & 2 Stage II Evaporation Pond	4370	176	1992 - present	High Density Polyethylene (HDPE)	Receives scrubber slurry from Units 1&2 for final disposal. Started receiving slurry in 1994. Clearwater is collected in the Clearwell and returned to the scrubbers for re-use. In 1999, a groundwater collection system was installed east of this pond. This area's groundwater collection system has been expanded in recent years.
Cells A-E	3933	166	1992 - present	High Density Polyethylene (HDPE); B cell double-lined RFP with leachate collection in 2006	Cells A, E, and the clearwell were lined during initial construction. Cell B was double-lined with 45 mil RFP and a leachate collection system installed between the liners and under both liners. Cell B will become the new clearwell in 2011 after the paste plant is in operation. Cells C and D will be lined when needed. In 1999, D cell weirbox outlet developed a leak that was repaired. In 2000, the C cell weirbox outlet developed a leak that was repaired. In 2006, a small hole in the liner on the north side of E cell was found just under the water level. The water that leaked was recovered on the north side of the E/C dike. The hole was repaired.
Cell B	257	12.9	2008 - present	Double-lined RFP with leachate collection system	Receives clear water from the Paste Plant and returns it to the scrubbers for re-use.
Clearwell	437	10	1992 - present	High Density Polyethylene (HDPE)	Receives clear water from the settling portion of the Evaporation pond and returns it to the scrubbers for re-use. In October 2007, water was observed under the south side of this lined pond. A capture system was installed and repairs to the liner were completed in June 2008.
Cell D	621	22	2011-present	Double-lined RFP with leachate collection system	Receives clear water or paste from the STEP system as needed.
Units 3 & 4 Auxiliary Scrubber Drain Pond (Duck Pond)	0.51	0.23	1983 - present	Hypalon	Miscellaneous scrubber building drains.
Units 3 & 4 North Plant Area Drain Pond	4.5	1	1984 - present	Hypalon originally, now High Density Polyethylene (HDPE)	Receives raw water pretreatment filter backwash, cooling tower overflow, and miscellaneous north plant drainage. Water from this pond is sent to the bottom ash system or the circulating water system.
Units 3 & 4 Wash Tray Pond	85	8	1983 - 1995	Clay In 1988 the bank on the southern half of the pond was covered with geotextile and baked shale to reduce bank erosion.	Originally served as a scrubber pond for the wash tray loop. This pond was abandoned in 1995 when a separate loop for the scrubber wash tray was determined to be unnecessary. The wash tray loop is now fed from the EHP pond return water and the bleed goes to the scrubber recycle tank. The pond remains, but no longer utilized.
Units 3 & 4 Scrubber Drain Collection Pond (DC Pond)	72	6	1983 - 1999	Clay	Received miscellaneous scrubber plant drains and washdown. This pond received scrubber slurry at times. In 1989, this pond was relined with 3" of clay and the east and south banks were shored up to address dredging and bank erosion issues. An access ramp was also added. In 1999, this pond was taken out of service and the scrubber drains/washdown were sent to the 384 EHP. In 2009, this pond was used to store the cleanup of materials from the 1&2 bottom ash secondary settling pond. The solids remain in this pond, but the water was pumped back to the 1&2 B Flyash pond. The pond remains, but not currently utilized.
Units 3 & 4 Bottom Ash Pond w/ Clearwell	38.4	7.6	1983 - present	Clay	Collection area for bottom ash and main plant sumps. Clearwater flows into the clearwell section of this pond and is returned to the plant bottom ash system for re-use. In 1991, the initial settlement cells of this pond were relined with clay and reshaped. In 1999, a groundwater collection system was installed in this area. In 2002 and 2003, this groundwater collection system was expanded.

Attachment A					Revision 2, 4/17/2012
PPL Montana, Colstrip Units 1-4 Waste Water Facility Descriptions					
Waste Water Facility	Total Capacity (acre-feet)	Surface Area (acres)	Years in-service	Lining	Pond Function /Comments
Units 3 & 4 Effluent Holding Pond w/Clearwell (EHP, 5-6 Pond)	17000	367	1983 - present	A slurry wall to bedrock on the perimeter of the pond with clay over shale and sandstone outcrops within the pond perimeter	Receives Units 3 & 4 scrubber slurry. Clearwater flows into the clearwell and is returned to the scrubbers for re-use. In 1989, a groundwater interception trench was installed down gradient of the main dam. In 2000, 2001, 2002 and 2004, the groundwater collection system downgradient of the main dam was expanded. In 1999, a gasket failure on the interception trench system failed resulting in a leak that was repaired. Also in 1999, a seep was observed downgradient of the Saddle Dam and a Saddle Dam groundwater collection system was installed in 2000. This Saddle Dam groundwater collection system was expanded in 2001. In late 2003, the scrubber slurry was routed to a paste plant for thickening. The paste was then sent to the pond at about 65% solids and the clearwater was sent to the clearwell. The paste strategy was put in place to help reduce the potential for seepage from the pond. In 2002, a groundwater collection system was installed west of this pond. In 2003, 2005, and 2008 the west side groundwater collection system was expanded. In 2009, groundwater collection was expanded on the east side near well 560A.
Units 3 & 4 Effluent Holding Pond w/Clearwell (EHP, 5-6 Pond) continued	410	31.4	2008 - present	Clearwell was relocated to B cell in 2009, using 10' of dried paste as the bottom liner and 45 mil RFP as the upper liner with leachate collection between.	In 2004, a groundwater collection system was installed in South Fork Cow Creek (south of this pond). In 2005, the South Fork Cow Creek groundwater collection system was expanded and a groundwater collection system was installed south of the 3&4 EHP. Also in 2005, a 45 mil RFP liner (with underdrain system) was added to F cell of this pond for impacted groundwater collection storage and water management. In 2009, the clearwell was relocated to B cell (which contains dry paste) and lined with 45 mil RFP and underdrain collection system.
Units 3 & 4 Effluent Holding Pond cell F (EHP, 5-6 Pond) continued	520	53.6	2005 - present	F cell was lined in 2005 using 10' of dried paste as the bottom liner and 45 mil RFP as the upper liner with leachate collection between. It is a water storage cell.	In 2004, a groundwater collection system was installed in South Fork Cow Creek (south of this pond). In 2005, the South Fork Cow Creek groundwater collection system was expanded and a groundwater collection system was installed south of the 3&4 EHP. Also in 2005, a 45 mil RFP liner (with underdrain system) was added to F cell of this pond for impacted groundwater collection storage and water management. In 2009, the clearwell was relocated to B cell (which contains dry paste) and lined with 45 mil RFP and underdrain collection system.
Units 3&4 Scrubber - EHP Pipeline	na	na	1983 - present	na	Transports scrubber slurry 3 miles from the scrubbers to the EHP and returns clearwater back to the scrubbers. Line was originally fiberglass, changed out to HDPE from 1988 - 1998. Failure of pipeline reported in 1987, 1988 (3), 1989, 1990 (2), 1992, 1993 (7), 1994 (2), 1995, 1997, and 2000. In 2000, a groundwater collection system was installed downgradient from Drain Pit #3 along the pipeline. In 2001, a groundwater collection system was installed downgradient from Drain Pit #5 along the pipeline.
Units 1 - 4 Sediment Retention Pond (Thompson Lake)	16	3.6	1975 - present	Originally Hypalon lined, then relined with High Density Polyethylene (HDPE) in 1989.	Receives plant storm water drainage and occasional scrubber overflow or cooling tower basin overflow. This water is pumped to the 1&2 Flyash Pond A or B side, depending on quality. In 1989, this pond was relined with HDPE to address gas bubbles that were causing the original hypalon liner to rise and risk its integrity. In 1995, a groundwater collection system was installed in this area.
Units 1 - 4 North Plant Sediment Retention Pond	4	0.6	1975 - present	Clay	Receives surface drainage from north plant and warehouse areas.
Units 1 - 4 Surge Pond (Castle Rock Lake)	Summer elevation 3280, Winter elevation 3264		1975 - present	None, concrete cutoff wall on dam.	Fresh water supply from the Yellowstone River for plant and town.
Unit 4 Cooling Tower Canal	na	na	1985 - present	concrete	Route circulating water from Unit 4 cooling tower to the circulating water pumphouse. In 1989, frost damage occurred to the concrete, resulting in replacement of the original canal to a pre-fabbed underground concrete structure.

Attachment B

Updated Summary of Reports

PPL Montana, Summary of Reports Completed on Assessment, Modeling, and Abatement Actions
Colstrip Units 1-4 Completed Since 2004

Area	Report	Date
All Areas	Annual Water Monitoring Reports	each year
All Areas	Water Resources Monitoring Plan Rev. 4	May-08
All Areas	Water Resources Monitoring Plan Rev. 5	Sep-11
Plant Site	Work Plan for Ground Water Model Development	Apr-05
Plant Site	Plant Site Area Groundwater Model	Dec-05
Plant Site	East Fork Armells Creek Synoptic Run Report	Oct-05
Plant Site	Units 1&2 D4 Brine Pond Work Plan	Nov-05
Plant Site	Report on Initial Ground Water Model Report	Jan-06
Plant Site	800 Series Wells Work Plan	Mar-06
Plant Site	Units 1&2 D4 Brine Pond Closure	Aug-06
Plant Site	68A Capture System Work Plan	Oct-06
Plant Site	North /Northwest Plantsite Groundwater Evaluation Work Plan	Oct-06
Plant Site	Units 1&2 A Flyash Pond Storage Strategy	Oct-06
Plant Site	31M Capture System Expansion Work Plan	Mar-07
Plant Site	31M Capture System Expansion Work Plan Addendum	May-07
Plant Site	Trailer Court Area Monitoring & Capture Work Plan	Aug-07
Plant Site	Units 3&4 Neutralization Sump Work Plan	Nov-07
Plant Site	East Fork Armells Creek Synoptic Run Report	Oct-07
Plant Site	Plant Site - 2004, 2005, 2006 Update Report	Oct-07
Plant Site	Trailer Court Area Monitoring & Capture Work Plan Update	Mar-08
Plant Site	2008 Armells Creek Synoptic Run Work Plan	Mar-08
Plant Site	41SP Area Work Plan	Apr-08
Plant Site	41SP Area Work Plan Supplement	May-08
Plant Site	2008 Armells Creek Synoptic Run Report	Jul-08
Plant Site	OT-7, OT-12, & CA-19 Work Plan	Jul-08
Plant Site	42S Area Work Plan	Sep-08
Plant Site	3&4 Bottom Ash Pond Oil Cleanup	Nov-08
Plant Site	Units 3&4 Neutralization Sump Report	Mar-09
Plant Site	41SP Area Geophysics Work Plan	Mar-09
Plant Site	2009 Armells Creek Synoptic Run Work Plan	Mar-09
Plant Site	41SP Report	Jun-09
Plant Site	2009 Armells Creek Synoptic Run Report	Jul-09
Plant Site	3&4 Bottom Ash Pond Hydrocarbon Sampling	Jul-09
Plant Site	41SP Capture Work Plan	Sep-09
Plant Site	Trailer Park Report	Jan-10
Plant Site	Colstrip Units 3 & 4 Bottom Ash Clearwell Sampling	Jan-10
Plant Site	Work Plan for 2010 synoptic run East Fork Armells Creek	Feb-12
Plant Site	2010 East Fork Armells Creek Synoptic Run and Groundwater Sampling Report	Jul-10
Plant Site	Selenium analysis 2007 info	Jul-10

**PPL Montana,
Colstrip Units 1-4**
**Summary of Reports Completed on Assessment, Modeling, and Abatement Actions
Completed Since 2004**

Area	Report	Date
Plant Site	Colstrip SES Area Potentiometric Maps	Nov-10
Plant Site	2011 Work Plan for the Synoptic Run EFAC	Feb-11
Plant Site	Wash Tray Pond Work Plan	Jun-11
Plant Site	Colstrip SES Units 3 & 4 Wash Tray Evaluation	Jun-11
Plant Site	WECO haul road widening	Jul-11
Plant Site	PPL Colstrip SES Units 1-4 2011 East Fork Armells Creek Synoptic Run	Sep-11
Plant Site	2011 Colstrip SES Units 3 and 4 Technical Memo on Well 112R	Dec-11
Plant Site	WECO haul road widening	Jan-12
Plant Site	Colstrip SES 2012 Synoptic Run EFAC Work Plan	Mar-12
Plant Site and Units 1&2 Stage I&II Evap Ponds	Data Analysis and Statistical Evaluation of Unimpacted Groundwater Quality	May-07
Plant Site and Units 1&2 Stage I&II Evap Ponds	Plantsite and Stage I/II Evaporation Pond Conceptual Model Update Report	Dec-07
Evaporation Ponds	Preliminary Site Conceptual Model Report	Jul-04
Units 1&2 Stage I & II Evaporation Ponds	Report on Initial Ground Water Model	Mar-05
Units 1&2 Stage I & II Evaporation Ponds	Groundwater Collection Wells Work Plan	Apr-05
Units 1&2 Stage I & II Evaporation Ponds	Stage I Evap Pond Water in Solids Investigation Work Plan	Apr-05
Units 1&2 Stage I & II Evaporation Ponds	Water Balance Study on Reclamation Cap Work Plan	May-05
Units 1&2 Stage I & II Evaporation Ponds	Stage I Evaporation Pond Dewatering Test Work Plan	Aug-05
Units 1&2 Stage I & II Evaporation Ponds	Additional Monitoring near old B&R Work Plan	Feb-06
Units 1&2 Stage I & II Evaporation Ponds	Moose Lodge Well Work Plan	Feb-06
Units 1&2 Stage I & II Evaporation Ponds	STEP E Cell/C Cell seepage control	Feb-06
Units 1&2 Stage I & II Evaporation Ponds	STEP Liner Inspection Work Plan	Mar-06
Units 1&2 Stage I & II Evaporation Ponds	Colstrip 1&2 Scrubber Slurry Paste Process Report	Mar-06
Units 1&2 Stage I & II Evaporation Ponds	STEP Liner Leak Detection Report	Apr-06

**PPL Montana,
Colstrip Units 1-4**
**Summary of Reports Completed on Assessment, Modeling, and Abatement Actions
Completed Since 2004**

Area	Report	Date
Units 1&2 Stage I & II Evaporation Ponds	906D Capture Work Plan	Oct-06
Units 1&2 Stage I & II Evaporation Ponds	Stage I Pond Dewatering Work Plan	Oct-06
Units 1&2 Stage I & II Evaporation Ponds	368D Area Capture Work Plan	Oct-06
Units 1&2 Stage I & II Evaporation Ponds	958D Capture Work Plan	Oct-06
Units 1&2 Stage I & II Evaporation Ponds	STEP A Cell Liner Repair	Dec-06
Units 1&2 Stage I & II Evaporation Ponds	Additional Monitoring in 366S Area Work Plan	May-07
Units 1&2 Stage I & II Evaporation Ponds	Colstrip 1&2 Scrubber Slurry Paste Process Report	May-07
Units 1&2 Stage I & II Evaporation Ponds	Human Health Risk Assessment Work Plan	May-07
Units 1&2 Stage I & II Evaporation Ponds	Ecological Risk Assessment Work Plan	May-07
Units 1&2 Stage I & II Evaporation Ponds	STEP Main Dam Sump Area Work Plan	Sep-07
Units 1&2 Stage I & II Evaporation Ponds	STEP Clearwell Work Plan	Oct-07
Units 1&2 Stage I & II Evaporation Ponds	Stage I&II Evaporation Ponds - 2004, 2005, 2006 Update Report	Oct-07
Units 1&2 Stage I & II Evaporation Ponds	STEP (906D Area) Work Plan	Oct-07
Units 1&2 Stage I & II Evaporation Ponds	377A Area Work Plan	Dec-07
Units 1&2 Stage I & II Evaporation Ponds	STEP Clearwell Liner Repair Work Plan	Mar-08
Units 1&2 Stage I & II Evaporation Ponds	Stage I&II Evaporation Ponds Expanded Groundwater Model Work Plan	Jul-08
Units 1&2 Stage I & II Evaporation Ponds	377A Area Expanded Work Plan	Jul-08
Units 1&2 Stage I & II Evaporation Ponds	Stage I Evaporation Pond Cap Report	Jul-08
Units 1&2 Stage I & II Evaporation Ponds	STEP B Cell Upper Liner Repair	Jan-09

**PPL Montana,
Colstrip Units 1-4**
**Summary of Reports Completed on Assessment, Modeling, and Abatement Actions
Completed Since 2004**

Area	Report	Date
Units 1&2 Stage I & II Evaporation Ponds	STEP Area Groundwater Collection Well Spill Report	Jan-09
Units 1&2 Stage I & II Evaporation Ponds	366S Area Report	Feb-09
Units 1&2 Stage I & II Evaporation Ponds	906D Area Report	Mar-09
Units 1&2 Stage I & II Evaporation Ponds	Geophysics Work Plan in 377A Area	Mar-09
Units 1&2 Stage I & II Evaporation Ponds	377A Area Report	May-09
Units 1&2 Stage I & II Evaporation Ponds	SOEP Cap Work Plans	May-09
Units 1&2 Stage I & II Evaporation Ponds	Vegetation Study 2009 Report	Jan-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES STEP 2003D final technical Memorandum 2010	Jul-10
Units 1&2 Stage I & II Evaporation Ponds	Work plan for Colstrip SES STEP 2003D well area	Jul-10
Units 1&2 Stage I & II Evaporation Ponds	2010 Work Plan for the Colstrip SES STEP cell "C" monitoring wells	Sep-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES STEP technical memo from the pump testing of well 958D	Oct-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES Units 1 & 2 technical Memo on 2003D conversion and 2008D installation	Nov-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES Units 1 & 2 technical Memo on 2003D conversion and 2008D installation	Dec-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip Units 12 STEP Technical Memorandum for well 2012D installation	Dec-10
Units 1&2 Stage I & II Evaporation Ponds	Colstrip Units 12 STEP future cell C monitoring well technical memorandum	Dec-10
Units 1&2 Stage I & II Evaporation Ponds	Vegetation Study 2010 Report	Feb-11
Units 1&2 Stage I & II Evaporation Ponds	Stage One Pond 2010 Soil Cap Study	Feb-11
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES Units 1 and 2 work plan for the 985A area	May-11
Units 1&2 Stage I & II Evaporation Ponds	Colstrip SES Units 1&2 STEP D Cell Work Plan	Jun-11
Units 1&2 Stage I & II Evaporation Ponds	2011 Colstrip SES Units 1 & 2 985A Technical Memorandum	Oct-11

**PPL Montana,
Colstrip Units 1-4**
**Summary of Reports Completed on Assessment, Modeling, and Abatement Actions
Completed Since 2004**

Area	Report	Date
Units 1&2 Stage I & II Evaporation Ponds	2011 Colstrip SES Units 1 & 2 STEP 985A Work Plan	Nov-11
Units 1&2 Stage I & II Evaporation Ponds	Stage One Evaporation Pond 2011 Soil Cap Study	Mar-12
Units 1&2 Stage I & II Evaporation Ponds	Vegetation Study 2011 Report	Mar-12
Units 3&4 EHP	Hydrologic/Water Quality Study of Cow and Pony Creek	each year
Units 3&4 EHP	Groundwater Collection Storage Pond Work Plan	May-05
Units 3&4 EHP	Additional Monitoring in South Fork Cow Creek Work Plan	Jun-05
Units 3&4 EHP	Soil & Vegetation Study Work Plan	Jul-05
Units 3&4 EHP	Preliminary Site Conceptual Model Report	Dec-05
Units 3&4 EHP	Additional Wells (DP-5 & 586M Areas) Work Plan	Apr-06
Units 3&4 EHP	SP-15 North Capture System Expansion Work Plan	May-06
Units 3&4 EHP	South Fork Cow Creek Capture System Expansion Work Plan	Jul-06
Units 3&4 EHP	Monthly 3&4 EHP Seep Update Reports	2/2005 - 12/2006
Units 3&4 EHP	Numerical Model Work Plan	Apr-07
Units 3&4 EHP	North SP-15 Area Work Plan	Sep-07
Units 3&4 EHP	Saddle Dam Area Work Plan	Oct-07
Units 3&4 EHP	Units 3&4 EHP Data Report 2004 - 2006	Oct-07
Units 3&4 EHP	Revised Saddle Dam Work Plan	Oct-07
Units 3&4 EHP	Revised North SP-15 Area Work Plan	Oct-07
Units 3&4 EHP	560A Area Work Plan	Dec-07
Units 3&4 EHP	EHP Main Dam Abutment Work Plan	Mar-08
Units 3&4 EHP	EHP Paste Infiltration Test Report	Apr-08
Units 3&4 EHP	560A Area Expanded Investigation Work Plan	May-08
Units 3&4 EHP	624D Area Work Plan	Jul-08
Units 3&4 EHP	North SP-15 Report	Aug-08
Units 3&4 EHP	624D Area Groundwater Work Plan	Aug-08
Units 3&4 EHP	SP-15 North/South Work Plan	Sep-08
Units 3&4 EHP	581D Work Plan	Sep-08
Units 3&4 EHP	WA-136 Area Work Plan	Sep-08
Units 3&4 EHP	560A Area Status Report	Nov-08
Units 3&4 EHP	624D Area Status Report	Nov-08
Units 3&4 EHP	3&4 EHP Paste Seal Test Report	Nov-08
Units 3&4 EHP	602S Area Work Plan	Feb-09
Units 3&4 EHP	EHP Area Work Plans	Mar-09
Units 3&4 EHP	North and South SP15 Report	Mar-09
Units 3&4 EHP	Plant Identification Study	May-09
Units 3&4 EHP	560A/1051A Status Report	Jun-09

PPL Montana,
Colstrip Units 1-4 **Summary of Reports Completed on Assessment, Modeling, and Abatement Actions**
Completed Since 2004

Area	Report	Date
Units 3&4 EHP	Boron in Vegetation and Cattle Grazing	Jun-09
Units 3&4 EHP	Well Installation, Testing, and Sampling - PW 734, PW 735, and PW 736	Jul-09
Units 3&4 EHP	Well 581D Abandonment/Replacement	Sep-09
Units 3&4 EHP	EHP Area Geophysics and Joint Trent Analysis Work Plan	Sep-09
Units 3&4 EHP	625A/626A Work Plan	Sep-09
Units 3&4 EHP	560A/1051A Additional Work - Work Plan	Sep-09
Units 3&4 EHP	602S Area 2009 Report	Nov-09
Units 3&4 EHP	1073A Work Plan	Nov-09
Units 3&4 EHP	1051A Area 2009 Report	Dec-09
Units 3&4 EHP	Vegetation Study 2009 Report	Jan-10
Units 3&4 EHP	1073A Area Capture Options	Jan-10
Units 3&4 EHP	560A/1051 Area Status Memo	Jan-10
Units 3&4 EHP	Colstrip Units 3 & 4 EHP 560A/1051 Area Status Memo	Jan-10

Reclamation and Revegetation Surety Bond

SURETY BOND NO. _____

_____, as Principal, and _____, a corporation organized and existing under the laws of the State of _____ and duly authorized to transact business in the State of Montana, as Surety, are held and firmly bound to the State of Montana, acting through the Department of Environmental Quality, in the penal sum of _____ (\$_____USD) DOLLARS, for the payment of which sum, well and truly to be made, we bind ourselves, and each of our legal representatives, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal holds a Certificate of Compliance issued by the Department of Environmental Quality on _____, for the construction, operation, maintenance, and decommissioning of a _____ kV transmission line. The transmission line will originate at _____ near _____, and extend _____ to _____, crossing _____ border _____ of _____. This Surety Bond covers that portion of the transmission line located within the State of Montana.

NOW, THEREFORE, the conditions of this obligation are such that if the above bonded Principal shall, in conducting such operations faithfully perform the requirements of the Certificate of Compliance and Title 75, Chapter 20, MCA, relating to reclamation and revegetation of the project area, then this obligation shall be exonerated and discharged and become null and void; otherwise to remain in full force and effect. The requirements assured by this bond include those requirements imposed on the Principal as a result of those activities that occurred prior to issuance of this bond and before the date the bond is canceled or released or substitute bond is approved. If this bond is forfeited, the State of Montana shall be entitled to the entire amount of this bond without regard to actual damages. Reasonable attorneys' fees and costs shall be awarded to the prevailing party in an action to enforce the terms of the bond.

If the Principal fails or refuses to fulfill its reclamation and revegetation obligations pursuant to the Certificate of Compliance, the Department of Environmental Quality shall declare this surety bond to be forfeited and the surety shall pay to the Department of Environmental Quality, within thirty (30) days after receipt of notice of forfeiture by certified mail, ten (10) per cent of the bond amount with any interest on the amount accruing to the Department of Environmental Quality for use in interim reclamation activities pending payment in full of the entire bond amount by the surety. Interest accruing on all principal paid by the surety to the Department of Environmental Quality shall be the sole and exclusive property of the Department of Environmental Quality and shall not be refunded to the surety.

Line items prepared by the Department of Environmental Quality to determine the total amount of the surety bond required are not limitations on how the Department of Environmental Quality may spend any of the bond proceeds paid by the surety.

PROVIDED, however, the Surety shall not be liable under this bond for an amount greater in the aggregate than the sum designated in the first paragraph hereof, and shall not be liable as respects any obligation related to operations performed after the expiration of one hundred twenty (120) days from the date of the mailing by the Surety of a cancellation notice directed to the Principal and the Department of Environmental Quality, Helena, Montana. The bond shall remain in full force and effect as respects any obligations related to operations performed prior to the effective date of such cancellation, even if operations continue after the effective date of such cancellation, unless the principal files a substitute bond, approved by the Department of Environmental Quality, or unless the Department of Environmental Quality shall otherwise release the Surety.

Signed, sealed and dated this _____ day of _____, _____.

Principal Signature

Principal Name

Principal Title

Principal Address

Principal City, State Zip

Principal Phone Number

Surety# _____
Surety Date: _____
Surety Amount: _____

SURETY COMPANY

Signed, sealed and dated this _____ day of _____, _____.

Surety Signature

Surety Name

Title

Surety Address

Surety City, State Zip

Surety Phone Number

(Surety Seal)

.....

DEQ

Signed, sealed and dated this _____ day of _____, _____.

State Signature: Warren D. McCullough

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
State Name

CHIEF -- ENVIRONMENTAL MANAGEMENT BUREAU
Title

PO BOX 200901 OR 1520 E 6TH AVE
State Address

406-444-4953
State Phone Number

HELENA, MT 59620-0901 OR 59601
State City, State, Zip

ASSIGNMENT OF CASH BOND

CERTIFICATE OF COMPLIANCE

Page 1 of 2

AFFIDAVIT OF ASSIGNOR

STATE OF _____)
County of _____) ss.

(Agent) as _____ (Title) of _____ (Assignor) of _____ (Address) having first been duly sworn, deposes and says:

That he/she is a duly-authorized agent of the above-described Assignor, and is empowered to transfer and assign over to the Assignee all the Assignor's right title, and interest in and to the Cash Bond # _____ held by the Montana Department of Environmental Quality for Certificate of Compliance No. _____ in the amount of: _____ Dollars (\$ _____ USD). That by this assignment, Assignor relinquishes and disclaims any interest in and to any part of the above-described Cash Bond.

The above-described Cash Bond is hereby assigned to:
_____ (Assignee) of _____ (Address).

Date X
Signature of Assignor's Agent

On this _____ day of _____, _____, before me, the undersigned, a Notary, Public for the State of _____, personally appeared _____, known to me to be the _____, of the _____ corporation that executed the within instrument, and acknowledged to me that said corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year last above written.

(Seal) X
Notary Public for the State of _____
Residing at _____
My Commission Expires _____

ASSIGNMENT OF CASH BOND

CERTIFICATE OF COMPLIANCE

Page 2 of 2

AFFIDAVIT OF ASSIGNEE

STATE OF _____)
County of _____) ss.

_____ (Agent) as _____ (Title) of _____ (Assignor) of _____ (Address) having first been duly sworn, deposes and says:

That he/she is a duly-authorized agent of the afore-described Assignee, and is empowered to accept all the Assignor's right, title, and interest in and to the afore-described Cash Bond held by the Montana Department of Environmental Quality for reclamation of the afore-described Certificate of Compliance.

Date

X

Signature of Assignee's Agent

On this _____ day of _____, _____, before me, the undersigned, a Notary Public for the State of _____, personally appeared _____, known to me to be the _____, of the corporation that executed the within instrument, and acknowledged to me that said corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year last above written.

X

(Seal)

Notary Public for the State of _____

Residing at _____

My Commission Expires _____

Jenny K. Harbine
Earthjustice
313 East Main St.
Bozeman, MT 59715
(406) 586-9699
Fax: (406) 596-9695
jharbine@earthjustice.org

*Counsel for Appellants Montana Environmental
Information Center, Sierra Club, and
National Wildlife Federation*

Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 4th day of September, 2012
at 2:21 o'clock P.m.
By: [Signature]

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF:
ADMINISTRATIVE ORDER ON CONSENT
REGARDING IMPACTS RELATED TO
WASTEWATER FACILITIES COMPRISING
THE CLOSED-LOOP SYSTEM AT
COLSTRIP STEAM ELECTRIC STATION,
COLSTRIP, MONTANA

Case No. _____

**AFFIDAVIT OF MONTANA
ENVIRONMENTAL INFORMATION
CENTER, ET AL.**

Pursuant to Montana Code Annotated 75-20-2223, Appellants Montana Environmental
Information Center ("MEIC"), Sierra Club, and National Wildlife Federation ("NWF")
(collectively, "Appellants") hereby submit an affidavit setting forth the grounds for their request
for hearing, which is timely filed with this affidavit.

On behalf of Appellants, Derf Johnson declares as follows:

1. Appellants hereby seek review of the "Administrative Order on Consent
Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at
Colstrip Steam Electric Station, Colstrip, Montana" ("AOC") between PPL Montana, LLC
("PPLM") as operator of the Colstrip Steam Electric Station and the Montana Department of
Environmental Quality ("DEQ"). The AOC was signed by DEQ on August 3, 2012 and

constitutes a final order of the Department pursuant to MCA 75-20-223(1)(a).

BACKGROUND

2. The Colstrip coal-fired power plant, 120 miles east of Billings in southeastern Montana, is among the largest U.S. coal plants, with four generating units representing a combined capacity of approximately 2,100 megawatts. Each year, Colstrip burns more than 10 million tons of coal, generating approximately 1.6 million tons of coal ash. The coal combustion process concentrates coal's impurities, and the resulting coal ash contains carcinogens, neurotoxins, and other poisons—including arsenic, cadmium, lead, and selenium.

3. To manage Colstrip's coal combustion waste, PPLM maintains a number of constructed impoundments at the plant. See Hydrometrics, Inc., Evaluation of 2010 Hydrologic Monitoring Data From Colstrip Units 1 Through 4 Process Pond System ("2010 Hydrologic Report"), Table 2-1 (Apr 2011) (Attachment A to AOC). One cluster of impoundments is located in the general area of the plant itself on the southeast edge of the town of Colstrip. This cluster includes bottom ash impoundments for all four coal-fired units at the Plant. Bottom ash is a coal combustion waste left after the coal has been burned. PPLM pumps ash slurry (a sludgy mix of ash and water combined from several points in the operation) to the bottom ash impoundments where it is allowed to settle.

4. A second cluster of impoundments, located approximately three miles southeast of the Plant at the head of the Cow Creek drainage, contains the effluent holding ponds for Units 3 and 4 ("3 and 4 EHP"). The 3 and 4 EHP—covering at least 367 acres—receive several different water waste streams from Units 3 and 4 at the Plant, including: excavated settled-out sludge from the bottom ash ponds located at the Plant Ponds; fly ash (captured small, air-borne particles of ash produced in combustion) slurry from Units 3 and 4; and flue gas desulfurization

waste, which is waste from the scrubbers where water is used to remove pollutants from the Plant's air emissions.

5. A third cluster of impoundments, located approximately two miles northwest of the Plant and town, contains the effluent holding ponds, or stage two evaporation ponds, for Units 1 and 2 ("1 and 2 STEP"). The 1 and 2 STEP—covering 176 acres—receive fly ash and scrubber sludge from Units 1 and 2.

6. A number of impoundments also receive contaminated groundwater that PPLM pumps from many different locations in the area.

7. The various waste streams to the impoundments described above—and in turn the impoundments themselves—contain a number of pollutants including boron, sulfates, chlorides, dissolved solids, magnesium and selenium. See 2010 Hydrologic Report, p. 2-1; AOC Response to Comments SC/MEIC4a. These pollutants leak from the waste impoundments into groundwater.

8. All impoundments receiving waste from Colstrip Units 3 and 4 are subject to Colstrip's MFSA certificate of compatibility, which requires that the impoundments be "completely sealed." See Board of Natural Res. and Conservation, Findings of Fact, Opinion, Decision, Order and Recommendations, Conclusion of Law 12(d) (July 22, 1976) (emphasis in original).

9. Colstrip's owners have conducted groundwater monitoring since as a condition of the facility's construction, and have expanded that monitoring as the result of subsequent litigation. See Board of Natural Res. and Conservation, Findings of Fact, Opinion, Decision, Order and Recommendations, Finding of Fact 71 and Conclusion of Law 12(d) (July 22, 1976); AOC Responses to Comments SC/MEIC10b, SC/MEIC14. As the impoundments have

continued to leak, PPLM has installed hundreds of capture wells, or “pump-back wells,” around or near the waste impoundments, 1 and 2 STEP, and 3 and 4 EHP. See 2010 Hydrologic Report. These wells pump contaminated water from several aquifers back into some or all of the impoundments in the system. PPLM has converted numerous monitoring wells that show contamination to “pump-back wells.” See, e.g., 2010 Hydrologic Report, p. 8-1. The number of pump-back wells has increased such that as of the date of this affidavit, PPLM is pumping approximately 423 gallons per minute of groundwater from various aquifers and drainages in the area.

10. Over the last decade, PPLM also has installed synthetic liners of varying designs and effectiveness under some of its wastewater facilities. Others remain lined with clay. See AOC, Attachment A. As DEQ conceded in responses to comments on the AOC, “even lined ponds may leak.” AOC Responses to Comments, NPRC/WORC7.

11. Notwithstanding PPLM’s pumping of groundwater and lining of certain impoundments, contaminants continue to leak from the impoundments and travel beyond the perimeter of capture wells, where they are detected in PPL’s groundwater monitoring wells. AOC Responses to Comments, SC/MEIC2. By PPL’s and DEQ’s own admission, this alleged “closed-loop” system has not prevented ongoing groundwater contamination originating from the Colstrip waste impoundments. See id.; AOC, p. 9. Moreover, DEQ has conceded that the Units 3 & 4 impoundments have likely been leaking since their inception. See AOC Responses to Comments, CM3. Given their similar design, the same is likely true of the Units 1 and 2 impoundments.

12. In the last decade, PPLM began providing an alternative source of water to Colstrip residents whose drinking water was impacted by contamination originating from the

coal ash impoundments and related facilities. See 2010 Annual Report, p. 1-1, 7-5. PPLM has continued to monitor the contaminated drinking water wells, which still exhibit high levels of total dissolved solids, boron and other pollutants. See 2010 Annual Report, p. 7-5 & App. G.

13. Over the lifetime of Colstrip's leaking coal ash impoundments, DEQ has imposed on PPLM a single fine totaling only \$3,700. See AOC Responses to Comments, CM 6. That fine was imposed in connection with a slurry pipeline leak in March of 2000. Id. Based on information and belief, DEQ has imposed no fines or penalties as a result of the leaking impoundments.

ADMINISTRATIVE ORDER ON CONSENT

14. On or about February 9, 2010, DEQ released a draft AOC addressing the ongoing groundwater contamination from Colstrip's leaking waste impoundments. The AOC states that DEQ is "acting pursuant to ... the authority vested in it by the Montana Water Quality Act, Section 75-5-101, et seq., MCA and specifically Section 75-5-612, MCA and pursuant to the Department's general enforcement authority under the Montana Major Facility Siting Act, Section 75-20-101, et seq., MCA." AOC, p. 1.

15. Appellants and Colstrip-area ranchers submitted comments to DEQ stating their belief that the AOC is not a valid enforcement action. See Comments, attached. With few changes from the draft, DEQ finalized the AOC on August 3, 2012.

16. The AOC applies to all of Colstrip's wastewater facilities described above in paragraphs 3 through 5 (i.e., areas associated with the plant site, the Units 3 and 4 EHP, and the Units 1 and 2 STEP), as well as areas down gradient of past pipeline spills and other areas agreed upon by DEQ and PPL. AOC, § III.

17. The AOC generally establishes a process by which PPLM will develop and

submit to DEQ a series of studies and work plans, but the AOC establishes no timetable for compliance and imposes no measures to ensure that compliance is achieved. The AOC requires no payment of penalties and ultimately does not even require PPLM to cease contaminating groundwater or to remedy existing contamination.

18. The AOC first requires PPLM to develop a site report for each of the areas covered under the AOC. The site reports are to be based on available data, and will describe the results of water modeling, investigations, remedial actions, as well as estimates of seepage to groundwater from each pond and recommendations for further data-gathering. See AOC § 6.A.1. The AOC establishes no deadline for the development and submission of these reports. Id.

19. If a site report identifies the need for additional information, PPLM must develop a “Site Characterization Work Plan” for that area “within a reasonable time frame required by the Department after consultation with PPLM.” AOC § VI.A.3. The Site Characterization Work Plan establishes the schedule for additional site investigation; the AOC does not. Id.

20. After the Site Characterization Work Plan is implemented, PPLM will submit a “Supplemental Site Report” to DEQ under the schedule established by PPLM in the Site Characterization Work Plan. AOC § VI.A.4.

21. Following the Site Report and Supplemental Site report, if any, “within a reasonable time required by the Department after consultation with PPLM,” PPLM must submit a “Cleanup Criteria and Risk Assessment Report” for each of the areas covered by the AOC. AOC § VI.B. This report identifies cleanup criteria, pollutant-transport mechanisms, potential “receptors,” exposure pathways, and additional site characterization needed to identify human health or environmental risks. Id.

22. If the Cleanup Criteria and Risk Assessment Report concludes that remedial

measures are necessary, PPLM must submit a Remedy Evaluation Report “within a reasonable time required by the Department after consultation with PPLM.” AOC § VI.C. This report identifies “feasible remedial alternatives,” which may include actual remedial action to reduce or contain seepage, or the use of “institutional controls” such as easements or deed restrictions that limit pathways for human exposure. Id.; see also AOC §§ IV.B, IV.C.

23. After DEQ takes action on the Remedy Evaluation Report, “within a reasonable time required by the Department after consultation with PPLM,” PPLM must submit a “Remedial Design/Remedial Action Work Plan” for implementing the selected remedy. AOC § VI.D.

24. Although there are no deadlines for PPLM to submit the above-described documents, under the process established by the AOC, DEQ is to take action on “work plans” within approximately 4 months after they are submitted, and “reports” within approximately 6 months after they are submitted. See AOC § XII.A-B. Any time DEQ disapproves any report or work plan, this time frame could effectively be doubled.

25. Further, for each DEQ action, PPLM may invoke a dispute-resolution process if it is not satisfied with DEQ’s decision, during which time PPLM need not perform the action in dispute. AOC §§ XII.D, XIII.F.

26. Only after PPLM has prepared these numerous reports and work plans, DEQ has approved or conditionally approved them, and the dispute resolution process, if invoked, is concluded in each case, does the AOC provide for implementation the selected remedy. AOC § VI.D.3. However, it is unclear whether remedial actions identified through the AOC process will actually remedy ongoing ground and surface water contamination. Although PPLM must describe “how each alternative satisfies the Cleanup Criteria” (generally, the applicable Montana

water quality standards), the AOC does not explicitly require DEQ and PPLM to select a remedy that satisfies those criteria. AOC § VI.C. Further, the AOC provides that the cleanup criteria may not be more be “more stringent than the background or unaffected reference areas concentrations,” but the AOC fails to identify background or reference levels.

27. The AOC requires PPLM to provide financial assurance “[t]o ensure the operation and maintenance of remedial and closure actions” under the order, but fails to establish the amount of such financial assurance. AOC § VIII.

28. Finally, the AOC requires PPLM to develop “Facility Closure Plans” to address the need for “control, minimization or elimination, to the extent necessary to protect human health and the environment,” of contamination in the event that the waste water facilities covered by the AOC are closed. AOC § IX (emphasis added). The AOC does not require the closure plan to identify remedial action necessary to ensure ongoing compliance with water quality standards or nondegradation requirements. However, the Facility Closure Plans are the only reports or plans for which the AOC establishes a deadline for submission. The plans must be submitted within 5 years from the date of the AOC. Id.

29. The AOC provides that “[c]ompliance with this AOC shall constitute the means, as between the parties, for attaining and assuring compliance with PPLM’s obligation under its Certificate and water quality laws and rules within the scope of this AOC.” AOC § XV. This provision does not define which legal obligations are “within the scope” of the AOC.

HARM TO APPELLANTS

30. Appellant MEIC is a member-supported advocacy and public education organization based in Helena, Montana, that works to protect and restore Montana’s natural environment. MEIC is a Montana nonprofit corporation, founded in 1973 by Montanans

concerned with protecting and restoring Montana's natural environment. MEIC has worked extensively on addressing the impacts of water pollution in Montana. As a government agency watchdog, MEIC routinely reviews agency actions to assure that agencies and regulated entities comply with federal laws and regulations. MEIC and its membership are intensively involved in monitoring state and federal actions regarding the regulation and disposal of coal ash. MEIC is involved in a nationwide coalition that is advocating through public education and court action for federal regulation of coal ash disposal. MEIC also has a long history of advocating for state enforcement of pollution-control laws with respect to coal ash disposal practices at Colstrip, including by commenting on the draft AOC. In short, MEIC has a deep institutional commitment to protecting and restoring ground and surface water quality in and around Colstrip.

31. Appellant Sierra Club is a nationwide conservation organization with more than 1.3 million members and supporters, approximately 2,000 of whom belong to the Montana Chapter. Sierra Club has advocated for regulation of coal ash disposal at the federal level and in Montana. As part of its public education efforts, Sierra Club co-authored, "In Harm's Way: Lack Of Federal Coal Ash Regulations Endangers Americans And Their Environment" (Aug. 26, 2010), which reported on a hydrogeologic investigation of groundwater and surface water contamination from coal ash disposal sites around the country. Sierra Club also advocates for regulation of coal ash disposal associated with the Colstrip plant, including by attending public hearings, submitting public comments, and engaging in efforts to educate Montana residents about the health and ecological dangers of improper coal ash disposal.

32. The National Wildlife Federation's mission is to inspire American's to protect wildlife for our children's future. NWF is a national member-supported non-profit conservation, education, and advocacy organization. NWF is associated with conservation organizations in 47

states and territories, including Montana Wildlife Federation in Montana. NWF is dedicated to conserving and protecting wildlife, water and other natural resources. NWF has been engaged in DEQ's efforts to address the leaking coal ash disposal ponds at the Colstrip coal-fired power plant in Colstrip, Montana since the first public hearing concerning the draft AOC that occurred in Colstrip on February 24, 2010, during which NWF staff provided oral comments. NWF also submitted detailed written comments on the draft AOC in April of 2010. NWF has an interest in this issue due to the fact that highly contaminated effluent is leaking into the groundwater, contaminating and polluting both ground and surface water near the power plant. This contamination, which the AOC fails to redress, has the potential to harm local wildlife, fish and plant species. In addition, NWF has worked on the national level to advocate for stronger regulations proposed by the Environmental Protection Agency concerning coal ash storage and disposal.

33. Appellants' members live, work, hunt and recreate in and around Colstrip. Ground and surface water contamination originating from the Colstrip waste impoundments threaten the health, livelihood, and enjoyment of Appellants' members in the Colstrip vicinity.

**FIRST CLAIM
(Failure to Meet Minimal Enforcement Standards)**

34. Given ongoing violations of PPLM's MFSA certificate of compatibility and the Montana Water Quality Act, Montana law requires DEQ to take enforcement action.

35. The MFSA provides for an action in mandamus if DEQ "refuses for an unreasonable time ... to enforce" a requirement or rule under the MFSA after it has received a sworn statement notifying DEQ of the violations. Mont. Code Ann. § 75-20-404. On August 29, 2012, Appellants submitted affidavits to DEQ as required by that statute.

36. Further, under the Montana Water Quality Act, "[w]henEVER, on the basis of

information available to the department, the department finds that a person is in violation of this chapter ..., the department shall initiate an enforcement response.” Id. § 75-5-617 (emphasis added); see also id. § 75-5-616 (DEQ “shall take actions ... to ensure that violations of this chapter are appropriately prosecuted”) (emphasis added).

37. The AOC does not constitute enforcement because it does not require PPLM to cease its ongoing MFSA and Montana Water Quality Act violations, establish specific actions or a timetable for compliance, or pay any penalty, and therefore does not satisfy definitions of “enforcement” in Montana law. See, e.g., Mont. Code Ann. § 75-5-611(6) (enforcement action must require “the prevention, abatement, or control of pollution, the assessment of administrative penalties, or both” and “state the date or dates by which a violation must cease”); id. § 75-5-611(1) (a notice letter issued in lieu of administrative order must state “the specific nature of corrective action that the department requires” and “the time within which the corrective action is to be taken”); id. § 75-5-612 (authorizing enforcement actions “to prevent, abate, and control ... the pollution of state waters”). Indeed, DEQ characterizes the AOC as “compliance assistance...rather than enforcement.” AOC Responses to Comments SC/MEIC8.

38. DEQ’s failure to undertake a valid enforcement action is arbitrary, capricious, and violates DEQ’s obligations under the MFSA and Montana Water Quality Act.

SECOND CLAIM **(Unlawful Constraint of Future Enforcement)**

39. Not only does the AOC fail to constitute enforcement under the MFSA and Montana Water Quality Act, it constrains DEQ’s future enforcement authority under those statutes.

40. The AOC includes the general statement that “[n]othing set forth in this AOC is intended, or shall be construed, to authorize any violation of any statute or rule issued or

administered by the Department.” AOC § XV. However, the AOC also states that “[c]ompliance with this AOC shall constitute the means, as between the parties, for attaining and assuring compliance with PPLM’s obligation under its Certificate and water quality laws and rules within the scope of this AOC.” AOC § XV. In other words, DEQ is contractually waiving its authority to undertake any future enforcement action for legal violations “within the scope” of the AOC. This is particularly troubling because, although DEQ cites its general enforcement authority under the Montana Water Quality Act and MFSA as the source of the agency’s authority for the AOC, it fails to identify any particular violations under either statute that are “within the scope” of the AOC, thereby creating uncertainty as to the scope of matters for which DEQ has waived its enforcement authority.

41. Furthermore, the AOC sets forth a process by which PPLM will submit reports and work plans, but it does not require PPLM to cease its ongoing violations of its MFSA certificate of compatibility or the Montana Water Quality Act. At most, it will require PPLM to select remedial action years from now, but even then, the AOC does not direct that the remedial action must actually be designed to halt ongoing contamination or clean-up existing contamination. Because the process identified by the AOC constitutes the exclusive means for DEQ to obtain compliance with the MFSA and Montana Water Quality Act violations, contamination due to PPLM’s leaking coal ash impoundments may continue indefinitely.


42. The AOC is not a valid enforcement action because it constrains DEQ’s future ability to enforce PPLM’s ongoing violations of the Montana Water Quality Act and the MFSA certificate of compatibility.

REQUEST FOR RELIEF

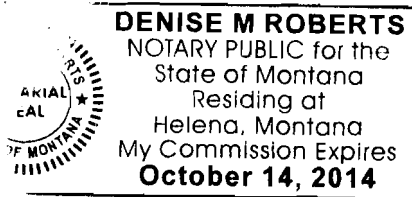
Based on the foregoing legal violations, Appellants request that the Board of Environmental Review:

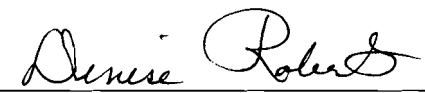
1. Declare that the AOC is not valid enforcement of the Montana Water Quality Act and MFSA;
2. Vacate and remand the AOC to DEQ for preparation of a lawful enforcement action; and
4. Provide any and all other relief that the Board determines to be appropriate.

Respectfully submitted on this 4th day of September, 2012,


Derf Johnson
*On behalf of Appellants Montana Environmental
Information Center, Sierra Club, and National
Wildlife Federation*

Subscribed and sworn before me this 4th day of September, 2012.




Notary Public for the State of Montana
Residing at Helena
My commission expires:

Comment Concerning Proposed AOC

1. Background

The National Wildlife Federation (NWF) is a national member-supported non-profit conservation, education, and advocacy organization. NWF is associated with conservation organizations in 47 states and territories, including Montana Wildlife Federation in Montana. NWF is dedicated to conserving wildlife and other natural resources, and believes that hunting, fishing, and trapping are legitimate recreational pursuits and useful wildlife management practices. NWF works to promote responsible management of wildlife on public lands.

2. Argument

a. The Proposed AOC does not adequately ensure that the Colstrip Station will be in compliance with the Open Dumping Provision of the Resource Conservation and Recovery Act ("RCRA").

RCRA prohibits "any solid waste management practice or disposal of solid waste...which constitutes the open dumping of solid waste."¹ This open dumping ban is a federal regulatory program under subtitle D of RCRA. Regulations of the United States Environmental Protection Agency ("EPA") establish criteria for classification of solid waste disposal facilities and practices.² If a practice fails to meet such criteria set forth in these regulations, then it is considered open dumping and in violation of RCRA § 4005.³ Criteria include the requirement that "a facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary."⁴ The EPA regulations define "underground drinking water source" as "an aquifer supplying drinking water for human consumption, or an aquifer in which the ground water contains less than 10,000 mg/l total solid dissolved solids."⁵ In addition, these regulations define "contaminate" to mean "introduce a substance that would cause (i) the concentration of that substance in the ground water to exceed the maximum contaminant level specified in appendix I, or (ii) an increase in the concentration of that substance in the ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in appendix I."⁶

Selenium is one of the chemicals listed in appendix I of 40 C.F.R. 257, which provides the maximum contaminant levels ("MCLs") promulgated under the Safe Drinking Water Act. Data collected from water samples in the Stage I and Stage II evaporation ponds for coal combustion waste at the Colstrip Stream Electric Station show that selenium levels in these

¹ 42 U.S.C. § 6945(a) (Aspen Supp. 2009).

² 40 C.F.R. § 257 (2009).

³ 40 C.F.R. § 257.1(a)(2) (2009).

⁴ 40 C.F.R. § 257.3-4(a) (2009).

⁵ 40 C.F.R. § 257.3-4(c)(4)(i-ii) (2009).

⁶ 40 C.F.R. § 254.3-4(c)(2)(i-ii) (2009).

Filed with the

MONTANA BOARD OF
ENVIRONMENTAL REVIEW

This 9th day of September, 2012
at 4:31 o'clock P.m.
By: [Signature]

ponds exceeded the 0.01 mg/l MCL for selenium listed in RCRA appendix I.⁷ Thus, if seepage from the evaporation ponds with such concentrations of selenium were to reach ground water, evidence of such seepage may put PPLM at risk of a violation of RCRA § 4005.

The proposed AOC does not adequately prevent or remediate past and potential future seepages from wastewater ponds that may constitute open dumping under RCRA. By accepting the 12(d) stipulation and allowing for seepage from the wastewater ponds so long as monitoring and remediation is reported by PPLM,⁸ the Montana Department of Environmental Quality (“DEQ”) fails to take adequate precautionary measures in its approach to potential contamination of groundwater from the Colstrip Station. Therefore, DEQ should provide more specificity concerning the preventive measures it will institute at the Colstrip Station to prohibit any leakage that would constitute an open dumping violation under RCRA.

b. By permitting Colstrip to unreasonably degrade the water around the plant, DEQ is not in compliance with the mandate of the Montana Constitution to “maintain and improve a clean and healthful environment.”

Under the Montana Supreme Court’s interpretation of the State Constitution, the proposed settlement fails to fulfill the Department’s constitutional obligation to maintain and improve a clean and healthful environment. MT. Const. Article II, § 3; MT. Const. Article IX, § 9. Under the Montana Water Quality Act, the “Department may not authorize degradation of high-quality waters unless it has been affirmatively demonstrated by a preponderance of the evidence to the department” that “degradation is necessary, [...] will result in important economic or social development” in which the benefits will exceed the costs, and “existing and anticipated uses of state waters will be fully protected.” 75-5-503(3), MCA. 75-5-317(2), MCA, lists categories of activities that are “nonsignificant because of their low potential for harm to human health or the environment,” which include “everyday activities of humans” such as fording streams, land application of animal waste, or incidental leakage of water from a public water supply system. MCA 75-5-317(1)-(2).

In *MEIC v DEQ*, 296 Mont. 207, 211 (Mont. 1999) the plaintiffs challenged a mining company’s exemption as a nonsignificant activity under 75-5-317(2)(j) to do pumping tests because the tests were releasing carcinogens into the water. The plaintiffs claimed the exemption was unconstitutional because the exemption permitted the degradation of high quality waters protected by the Montana Constitution. *Id.* at 211. The Court held that “a clean and healthy environment” is a “fundamental right” and the state must show a “compelling state interest” in order to violate that right. *Id.* at 225. The court further concluded that it was the “legislature’s obligation [under the Constitution] to . . . prevent unreasonable degradation of natural

⁷ Environmental Integrity Project and Earthjustice, *Out of Control: Mounting Damages from Coal Ash Waste Sites*, Feb. 24, 2010, at 32, available at http://www.environmentalintegrity.org/news_reports/documents/OutofControl-MountingDamagesFromCoalAshWasteSites.pdf.

⁸ See Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at Colstrip Steam Electric Station at 7, 17-22 (2010).

resources.” *Id.* at 230. Permitting discharges that contained “carcinogenic parameters greater than the concentrations of those parameters in the receiving water has a significant impact,” on the environment and therefore DEQ was required to apply “Montana’s policy of nondegradation set forth in 75-5-303.” 231. Therefore, Montana may give exemptions under 75-5-317, MSA, for non-significant activities, but if the activity does create a significant impact on the environment there must be nondegradation review under 75-5-303 MSA or a compelling state interest for 75-5-317(2)(j).

When the DEQ permits unreasonable degradation of Montana’s resources, it should provide a compelling state interest or perform a nondegradation cost-benefit analysis under 75-5-303(3). Like the mining company in *MEIC v DEQ*, Colstrip is exempt from the requirement to obtain a discharge permit. PPL is exempt under the Montana Water Quality Act only to the extent that Montana exempts facilities under the provision of the Montana Major Facility Siting Act, MSA 75-5-401(5)(k), and PPL is in compliance with its permit. Because PPL has not had to comply with the stringent requirements of a water discharge permit under 75-5-303, it has unreasonably degraded the groundwater around the plant.

Although *MEIC* dealt with an exemption under 75-5-317 and Colstrip has an exemption under 75-5-401(5)(k), logically the analogous principle should apply: where DEQ has given a company an exemption from discharge and then the discharge unreasonably degrades Montana’s water quality, this breaches Montanans’ right to a clean and healthful environment. Therefore, DEQ must provide a compelling state interest for permitting the exemption or do a nondegradation cost benefit analysis review under 75-5-303, MSA. Statutory exemptions to polluting corporations should not prevail over the fundamental right to a clean and healthful environment. Therefore, the DEQ should provide a compelling state interest for exempting PPL from water discharge permits under the Montana Water Quality Siting Act.

The Montana Constitution does not permit DEQ to enter into the AOC with Colstrip. The Montana Constitution confines DEQ’s discretion and only permits DEQ to enter into agreements that do not unreasonably degrade Montana’s environment. The Montana legislature has on “obligation [under the Montana Constitution] to ... prevent unreasonable degradation of natural resources.” *MEIC v DEQ*, 296 Mont. at 230. The Montana legislature “may constitutionally delegate its legislative functions to an administrative agency, but it must provide, with reasonable clarity, limitations upon the agency’s discretion.” *Petition to Transfer Territory From High School District NO. 6 v. Lame Deer High School District*, 15 P.3d 447, 450 (Mont. 2000). Therefore, the Constitution should be an interpretive guide to cabin the agency’s discretion. The AOC states that DEQ’s authority to create the AOC is derived from its power under 75-5-612, MSA, to “take appropriate enforcement action on its own initiative to prevent, abate and control” pollution and violations.⁹

⁹ See Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at Colstrip Steam Electric Station at 1 (2010). Hereinafter AOC.

While it is obviously proper for DEQ and polluters to initiate abatement pollution, the proposed AOC, by lacking clear and enforceable cleanup standards or deterrents to future contamination, threatens to have the opposite effect. Because the AOC accepts the 12(d) stipulation permitting seepage from the wastewater ponds so long as monitoring and remediation is reported by PPLM, the AOC lacks any real bite.¹⁰ Without hard numbers for the Colstrip facility to meet, there is no assurance that this AOC will actually ensure the Montana environment is protected. It will allow PPL to continue polluting the groundwater and negatively impact Montana wildlife to the extent that it violates the Montana Constitution. Because this AOC condones the continued pollution of Montana's water, it violates Montanan's Constitutional right to a healthy and clean environment.

c. The AOC is deficient because it fails to consider impacts to vegetation and wildlife.

The language of the Montana Constitution is both "anticipatory and preventative," and did not "intend to merely prohibit that degree of environmental degradation which can be conclusively linked to ill health or physical endangerment." *MEIC v DEQ*, 296 Mont. at 230. The Constitution "does not require that dead fish float on the surface of our state's rivers and streams before its farsighted environmental protections can be invoked." *Id.* This means that the DEC has a constitutional duty to prevent environmental degradation before it occurs and a duty to not just protect human health.

i. Because there is a significant connection between discharge from the Colstrip plant and surface water near the plant, the proposed AOC address impacts on local wildlife and fish.

i. Chemicals released from coal ash ponds have negative impacts on fish.

In a study published in the *Journal of Ecotoxicology and Environmental Safety* the researchers investigated the impacts of coal ash ponds on Green Sunfish in North Carolina.¹¹ Green Sunfish are also present in Yellowstone River which receives water from *Armels Creek and Pine Creek*.¹² Both these creeks have a significant hydrological connection with discharge from the Colstrip plant.¹³ The researchers found evidence that the selenium, copper and arsenic released from ash ponds increased skin, eye and gill aberrations and increased nutritional stress

¹⁰ See AOC at 7, 17-22 (2010).

¹¹ (Volume 50, Issue 3, November 2001, p225-232) Timothy W. Lohner^a, Robin J. Reash^a, V. Ellen Willet^b and Jana Fletcher^b http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WDM-458W5FX35&_user=918210&_coverDate=11/30/2001&_rdoc=1&_fmt=high&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1286998386&_rerunOrigin=google&_acct=C000047944&_version=1&_urlVersion=0&_userid=918210&md5=8d5083a1fe2ddc2840bfaeb8f5fc808f

¹² http://fieldguide.mt.gov/detail_AFCQB11020.aspx.

¹³ Research Observations and Comments for Administrative Order on Consent Regarding Impacts Related to Wastewater Facilities Comprising the Closed-Loop System at Colstrip Steam Electric Station, Colstrip, Montana at paragraphs 1, 3 (hereinafter "Expert Report").

in Green Sunfish.¹⁴ Because Montana fishermen catch Green Sunfish, there is also the possibility of human ingestion.

Coal ash ponds throughout the country release contaminants that cause problems with fish and wildlife.¹⁵ For example, the CP&L Roxboro Steam Electric Plant in North Carolina discharged constituents into a reservoir, causing selenium to accumulate in the fish.¹⁶ This selenium accumulation affected reproduction and caused declines in fish populations.¹⁷ In Texas, coal ash discharges into the Brady Branch Reservoir increased selenium concentration in the inhabitant fish, leading the Texas department of health to issue a fish consumption advisory for the reservoir in an attempt to limit the amount of human consumption of the fish in the reservoir.¹⁸ Furthermore, elevated amounts of aluminum, manganese, and iron were found in the groundwater near the Oak Ridge Y-12 Plant in Tennessee.¹⁹ There, many fish were deformed, and several portions of nearby streams did not contain any fish at all.²⁰

ii. PPLM's pond-contaminated ground water contains chemicals that are harmful to wildlife.

Data from the PPLM environmental engineering department in Colstrip found high concentrations of many chemicals:

Waters in the various CCW disposal areas, specifically in four areas of the Stage I and Stage II evaporation ponds have extremely high average concentrations of TDS (14,600 mg/L to 22,700 mg/L), sulfates (10,100 mg/L to 21,700 mg/L), and boron (68.5 mg/L to 122 mg/L). Selenium concentrations were 2 to 3 times the primary MCL (0.103 mg/L to 0.174 mg/L) and levels of molybdenum (where measured—0.121mg/L) exceeded the World Health Organization MCL for drinking water (0.07 mg/L).²¹

Moreover, the contaminants in the ground water are affecting humans in addition to wildlife, and boron concentrations were particularly high in the Moose Lodge well, a former source of water supply to the residents of Colstrip:

Moose Lodge (PW-704) was the most severely contaminated well The latest boron levels are more than 6 times the EPA's Child Health Advisory of 3.0 mg/L and 20 to 40 times health-based standards for boron in drinking water used by other regulatory agencies By the late 1990s, concentrations of sulfate at Moose Lodge were around

¹⁴ Lohner, Reash, Willet report, *supra*.

¹⁵ Compendium of 19 alleged Coal Combustion Waste Damage Cases (2007), <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480a4cddb>.

¹⁶ *Id.* at 17-18.

¹⁷ *Id.*

¹⁸ *Id.* at 30-32.

¹⁹ *Id.* at 33-36.

²⁰ *Id.*

²¹ Out of Control: Mounting Damages from Coal Ash Waste Sites (2010), http://www.environmentalintegrity.org/news_reports/documents/OutOfControl-MountingDamagesFromCoalAshWasteSites.pdf at 60-62 (hereinafter "Mounting Damages").

6000 mg/L. This is 12 times the EPA's health-based Drinking Water Advisory and 24 times the secondary MCL. TDS levels were around 9500 mg/L, 19 times the secondary MCL. The Moose Lodge well was replaced and is no longer used for water supply. In 2003, three other private wells showed contamination by TDS or chloride.²²

Furthermore, an expert report on the Colstrip Steam Electric Station found that "[t]he water quality analysis for the various plant and process ponds, monitoring wells, capture wells, and affected creeks showed extremely high concentrations of sulfate, anywhere from 8 to 30 times higher than the EPA National Secondary Drinking Water Regulations." It also found that there were "several individual instances of elevated arsenic levels found in ground water"²³

iii. There is a significant likelihood that the pond-contaminated ground water interacts with surface water.

There are also other potential dangers to wildlife. There have been incidents where contaminated water has come to the surface on PPL property and on private property near the plant. In some instances this water has created a temporary wetland which attracts wildlife. For these reasons, the AOC should address the impact on local wildlife, including monitoring and remediation.

The expert report on the PPLM Colstrip plant found "evidence from a work plan created for three wells located within the Colstrip townsite that the ground water is likely to be influencing surface water flow."²⁴ Therefore, the report speculated that "contaminants in ground water originating from process storage ponds at Colstrip are influencing surface water quality, though there is not enough information available to assess the degree of that influence."²⁵ Specifically, "ground water may have a direct influence on the East Fork of Armells Creek which runs through Colstrip"²⁶

Other studies have shown that the temporary ponds have leached boron and other constituents into groundwater beneath an adjacent residential area.²⁷ The contamination extends close to the town, and the local Moose Lodge well had "boron levels at more than 6 times the EPA's Health Advisory for child ingestion of boron in drinking water, and sulfate at 12 times the health-based EPA's Drinking Water Advisory for sulfate in drinking water."²⁸ The Unit 3 and 4 Effluent Holding Pond is located 3 miles from Colstrip.²⁹ It opened in 1983 and has had

²² *Id.* at 13.

²³ Expert Report, *supra* note 18, at paras. 1,3.

²⁴ *Id.* at paragraph 10.

²⁵ *Id.*

²⁶ *Id.*

²⁷ Mounting Damages *supra* note 16, at 60.

²⁸ *Id.*

²⁹ *Id.*

problems with contamination.³⁰ “In 2004, a leak of polluted water was discovered on private property about one mile to the south of the EHP.”³¹

There have been several documented spills on the plant:³²

- From 1976 to 1995 contaminated groundwater had migrated 200 to 300 feet north from the Stage I pond and by 2003 the contaminant plume had extended a distance of 400 or 500 feet north (an additional 200 to 300 feet in eight years).
- From 1976 to 2003, contaminated groundwater from the Stage I pond had also migrated more than 1,000 feet southeast.
- By 1993, water from the Stage I and Stage II ponds had seriously contaminated shallow groundwater to the southeast of the Stage II Dam where residents of Colstrip lived and used wells for drinking water.

Additionally, PPLM itself has reported several spills from its various ponds: Units 1 and 2 Stage Two Evaporation Pond spills occurred in 1999 (less than 100 gallons), 2000 (less than 50 gallons), and 2006 (less than 2000 gallons).³³ Unit 1 and 2 A Pond: 2700 gallons of water spilled in 2003 through an abandoned pipe; the pipe was permanently plugged after the spill.³⁴ Units 3 and 4 Effluent Holding Pond: spills in 1999 (1 million gallons), 2004 (9 million gallons), 2005 (4.5 million gallons).³⁵

Different studies have shown that “[w]ith respect to exposure through groundwater transport, 23 CCW constituents showed risk above the screening criteria for human or ecological exposure. The screening analysis confirms the results of the 1998 risk analysis that showed significant risks through the groundwater-to-drinking-water pathway and suggests that risks are also significant for exposure to human and ecological receptors through the groundwater-to-surface-water pathway (which was not evaluated in 1998).”³⁶

c. The proposed AOC upholds a Major Facility Siting permit that violates the Montana Water Quality Act.

Montana law prohibits any pollutants from being discharged into groundwater, without exception. Thus, even though PPLM’s Colstrip plant is regulated under the Major Facility Siting Act, PPLM is still not permitted to discharge pollutants into ground water, especially given the potential effects on humans and wildlife that are discussed above. The 12(d) stipulations to PPLM’s Major Facility Siting permit allow some seepage from the ponds, which could

³⁰ *Id.*

³¹ *Id.*

³² *Id.* at 61.

³³ Request for Information under Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e) (2009), <http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/surveys/ppl-colstrip.pdf> at 3-4.

³⁴ *Id.*

³⁵ *Id.*

³⁶ <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064808ea358> at 44.

contaminate ground water. Accordingly, because the proposed AOC is upholding the terms of a permit that allows some discharge into ground water, and various Montana laws do not allow such discharge, the proposed AOC is in violation of Montana law.

i. Montana law prohibits pollutants from being discharged into groundwater.

The Montana Water Quality Act (MWQA) “applies to drainage or seepage from all sources, including that from artificial, privately owned ponds or lagoons, if such drainage or seepage may reach other state waters in a condition which may pollute the other state waters.”³⁷

Its policy is to protect water from pollution: “[i]t is the public policy of this state to: (1) conserve water by protecting, maintaining, and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses; (2) provide a comprehensive program for the prevention, abatement, and control of water pollution; and (3) balance the inalienable rights to pursue life’s basic necessities and possess and use property in lawful ways with the policy of preventing, abating, and controlling water pollution”³⁸

Moreover, the MWQA prohibits discharge of any pollutants into surface water or groundwater: “(1) It is unlawful to: (a) cause pollution, as defined in 75-5-103, of any state waters or to place or cause to be placed any wastes where they will cause pollution of any state waters.” State waters are defined as “a body of water, irrigation system, or drainage system, either surface or underground.”³⁹

Furthermore, it is the DEQ’s responsibility to “issue, suspend, revoke, modify, or deny permits to discharge sewage, industrial wastes, or other wastes into state waters, consistently with rules made by the board”⁴⁰ And the DEQ itself states in the proposed AOC itself states that the DEQ is acting pursuant to its statutory authority under section 75-5-612, which authorizes DEQ “to take appropriate enforcement action on its own initiative to prevent, abate, and control: (1) *the pollution of state waters*; (2) *any violation of a condition or limitation imposed by a permit issued under 75-5-402(1)*; or any violation of rules relating to pretreatment standards.”⁴¹

PPLM operates under a Major Facility Siting permit, and thus is exempt from certain requirements of the MWQA. For example, “[d]ischarges of sewage, industrial wastes, or other wastes into state ground waters from the following activities or operations are not subject to the ground water permit requirements adopted [include] projects reviewed under the provisions of

³⁷ 75-5-104, MCA.

³⁸ 75-5-101, MCA.

³⁹ 75-5-612(1)(a), MCA.

⁴⁰ 75-5-402(1), MCA.

⁴¹ 75-5-612, MCA.

the Montana Major Facility Siting Act, Title 75, chapter 20.”⁴² Moreover, “*except for the permit exclusions identified in 75-5-401(5) [which includes Major Facility Siting permits]*, it is unlawful to carry on any of the following activities without a current permit from the department: (a) construct, modify, or operate a disposal system that discharges into any state waters; (b) construct or use any outlet for the discharge of sewage, industrial wastes, or other wastes into any state waters; or (c) discharge sewage, industrial wastes, or other wastes into any state waters.”⁴³ However, the provisions of the act which prohibit polluting ground water do not have any exceptions; “drainage or seepage from all sources” must comply with those provisions.⁴⁴ Accordingly, PPLM is still subject to the provisions of the MWQA which prohibit seepage of pollutants into ground water.

Montana ground water law also prohibits the contamination of ground water: “Waste and contamination of ground water prohibited. (1) No ground water may be wasted. The department shall require all wells producing waters that contaminate other waters to be plugged or capped. It shall also require all flowing wells to be so capped or equipped with valves that the flow of water can be stopped when the water is not being put to beneficial use. Likewise, both flowing and nonflowing wells must be so constructed and maintained as to prevent the waste, contamination, or pollution of ground water through leaky casings, pipes, fittings, valves, or pumps either above or below the land surface.”⁴⁵

Moreover, the Montana Major Facility Siting Act emphasizes the importance of protecting Montana’s environmental resources:

It is the constitutionally declared policy of this state to maintain and improve a clean and healthful environment for present and future generations, to protect the environmental life-support system from degradation and prevent unreasonable depletion and degradation of natural resources, and to provide for administration and enforcement to attain these objectives. Policy of MFSA: (5) The legislature also finds that it is the purpose of this chapter to: (a) *ensure protection of the state's environmental resources, including but not limited to air, water, animals, plants, and soils*; (b) ensure consideration of socioeconomic impacts; (c) *provide citizens with the opportunity to participate in facility siting decisions*; and (d) establish a coordinated and efficient method for the processing of all authorizations required for regulated facilities under this chapter.

ii. After being revised by stipulations, PPLM’s 1976 Major Facility Siting permit allows some seepage from the ponds.

As the proposed AOC explains, the Board of Health and Environmental Science’s original findings of fact conflicted with one of their findings of law. Finding of fact 61 stated

⁴² 75-5-401(5)(k), MCA.

⁴³ 75-5-612(2), MCA.

⁴⁴ 75-5-104, MCA; 75-5-101, MCA; 75-5-612(1)(a), MCA; 75-5-402(1), MCA.

⁴⁵ 85-2-505, MCA. This provision includes exceptions that are not applicable here.

that the “[s]eepage from the waste water ponds will be minimal . . . ,” while finding of law 12(d) stated that “[t]he sludge pond or ponds shall be completely sealed.” A Montana district court reconciled the two by stating that “the pond as constructed for Relators may leak in small amounts but if the leakage is detected by the monitoring wells, the Relators will have to resort to more stringent measures, up to and including the installation of a plastic liner.”⁴⁶ And later 12(d) stipulations required PPLM to construct monitoring wells in specific areas near Units 3 and 4 EHP and other ponds and prepare an interception plan to contain any impacts on PPLM lands, install an interception system in designated locations if conditions warrant, pay for third-party monitoring activities, provide replacement wells, distribute monitoring data to all parties, and implement a monitoring program.⁴⁷

iii. The proposed AOC violates the Montana Water Quality Act because it upholds permit terms that allow seepage from the ponds into groundwater.

The proposed AOC states that “the parties agree that a violation of this AOC constitutes violation of an Order under Section 75-5-617, MCA, or Section 75-20-408, MCA.” Section 75-5-617 provides DEQ with the authority to issue a letter or order requiring compliance or bring a judicial action. Section 75-20-408 states that anyone not in compliance with the Major Facility Siting Act “is liable for a civil penalty of not more than \$10,000 for each violation.” This results to a fine of up to \$10,000 for every day the violation is there. Even though there is documented evidence of PPLM’s seepage, PPLM has never been charged under this section.

3. Conclusion

The proposed AOC is unconstitutional and does not adequately protect Montana’s fish and wildlife. Moreover, it violates RCRA open dumping provisions and the MWQA. PPLM and DEQ should reach an alternative agreement.

⁴⁶ *State of Montana v. Board of Natural Resources and Conservation* (1983).

⁴⁷ AOC *supra*, note 9 at 9.

Signatures

/S/

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EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

April 12, 2010

Tom Ring
Department of Environmental Quality
PO Box 200901
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Filed with the
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
This 4th day of Sept. 2012
at 4:31 o'clock P.m.
By: [Signature]

By First-Class Mail and Electronic Mail to DEQColstrip@mt.gov.

Dear Mr. Ring:

On behalf of Sierra Club and Montana Environmental Information Center, we submit the following comments on the Draft Administrative Order on Consent ("AOC") for the wastewater facilities at the Colstrip Steam Electric Station. With this letter, I submit an expert report prepared by environmental and civil engineer Alan Gay. Mr. Gay's conclusions are incorporated by reference into this letter.

The ash disposal ponds and associated wastewater facilities (hereinafter, "waste ponds") at the Colstrip Steam Electric Station operate in well-documented violation of state and federal law. Since the waste ponds were constructed, they have been leaking highly contaminated effluent into groundwater, polluting both ground and surface water in the vicinity of the power plant. Rather than penalize the plant operator—PPL Montana, LLC ("PPLM")—for ongoing seepages and order it to cease discharging and to remediate the affected area, the Department of Environmental Quality ("DEQ") has turned a blind eye to the contamination for decades. Meanwhile, PPLM has reaped enormous profits while the area polluted by its poorly designed wastewater facilities has continued to grow.

The coal combustion waste stored in Colstrip's waste ponds consists of highly toxic compounds, including arsenic, cadmium, chromium, lead, mercury, selenium, and thallium. See Exhibit 1 (Testimony of Lisa Evans, Earthjustice, before the Subcommittee on Energy and Environment (Dec. 10, 2009). These substances can cause cancer, nervous system damage, and organ failure. Id. Arsenic, which has been detected in the groundwater in the vicinity of the Colstrip waste ponds, causes liver, kidney, lung, and bladder cancer. Id. EPA has estimated that children drinking arsenic-contaminated drinking water associated with coal ash disposal have an excess cancer risk of 2 in 50. Id.

At Colstrip, these contaminants leach into groundwater through inadequately lined waste ponds. In addition, these harmful substances pose a significant environmental and human health risk due to the threat of dam failure, which would release a massive flood of toxic waste water on nearby residences and into the Yellowstone River and its tributaries. Indeed, EPA has designated several dams holding massive impoundments at Colstrip as "high hazard," meaning that their "failure or misoperation will probably cause loss of human life."

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DEQ proposes to enter into an agreement with PPLM that would allow PPLM to continue contaminating groundwater for years to come and does nothing to address the significant environmental and human health threat due to dam failure. The Draft AOC is not an enforcement measure at all. It does not seek penalties for PPLM's violations of its MFSA permit, the Clean Water Act, or the Montana Water Quality Act. Nor does it set forth a plan to eliminate those violations in the short term. Instead, it permits ongoing contamination of ground and surface waters through a purported "closed-loop system" that has been proven, time and again, to be inadequate. For all of these reasons, Sierra Club and Montana Environmental Information Center urge DEQ not to finalize the draft AOC. Instead, DEQ should require PPLM to immediately eliminate sources of contamination and remediate existing ground and surface water contamination.

I. THE COLSTRIP WASTE PONDS OPERATE IN VIOLATION OF STATE AND FEDERAL LAW

A. PPLM's MFSA Certificate of Compatibility Requires PPLM to Seal its Waste Ponds

The Colstrip Units 3 and 4 waste ponds are subject to a requirement that they be "completely sealed" under PPLM's Major Facility Siting Act ("MFSA") certificate of compatibility. See MFSA Cert., Conclusion 12(d). The certificate requires that PPLM install plastic membranes if other measures, including compaction and bentonite application, do not seal the ponds. Id. The First Judicial District Court held that "[t]he clear meaning of condition 12(d) ... is that the pond as constructed ... may leak in small amounts[,] but if the leakage is detected by the monitoring wells, [PPLM] will have to resort to more stringent measures, up to and including the installation of a plastic liner." Draft AOC at 7 (quoting State of Montana v. Bd. Of Natural Res. and Conservation, Cause No. 49348, Findings of Fact and Conclusions of Law, at 8, ¶ 3 (1st Dist. Mont., June 29, 1982)).

There is no question that the ponds are not "completely sealed." See Draft AOC at 9, ¶ M; Gay Report at 1-3. Indeed, PPLM's "closed-loop system" operates on the assumption that the ponds will leak. A network of monitoring wells was installed around Colstrip's wastewater facilities to detect contaminants in groundwater. When contaminants turned up, however, PPLM and its predecessors simply drilled new monitoring wells further afield and converted the contaminated wells into "pump-back" wells. Colstrip's operators pump million of gallons of groundwater from these wells and place it back into the leaking holding ponds. When the system fails to contain the contamination, as has been the case since the system has been in place, and contamination is detected in the new monitoring wells, Colstrip's operators convert those wells to pump-back wells, and so on.

While the faulty "closed-loop system" currently in place clearly violates PPLM's MFSA certificate, the draft AOC reports that the "Conclusion of Law 12(d)" was "later modified" by a stipulation between Montana Power Company (PPLM's predecessor in interest), DEQ, and private parties. Draft AOC at 6. The stipulation purports to replace the requirement that PPLM seal its waste ponds with a requirement to monitor groundwater and intercept contamination as appropriate. Draft AOC at 7. Provided electrical conductivity and boron concentrations in

groundwater increase only gradually, rather than exhibiting an “abrupt increase,” the stipulation does not require PPLM to take any remedial action. Even in the event of an “abrupt increase,” the stipulation requires only additional efforts to intercept and pump the contaminated groundwater; it does not require PPLM to address the source of the contamination by lining, dewatering, and/or capping the leaking waste ponds. The stipulation does not provide for monitoring of any additional harmful constituents present in Colstrip’s waste ponds and does not limit contamination to below primary or secondary drinking water standards or water quality criteria. The stipulation also does not require PPLM to seal its waste ponds to prevent ground or surface water contamination. In other words, the stipulation, if it had any legal effect, would simply ratify the inadequacies of the status quo. Accordingly, the stipulation itself violates PPLM’s certificate of compatibility.

However, this stipulation could not, and did not, modify PPLM’s obligations under its MFSA permit. First, the MFSA sets forth specific procedures for certificate amendments that were not followed here. See Mont. Code Ann. §§ 75-20-213, 75-20-219. Among other things, prior to amending a certificate, DEQ must “determine whether the proposed change in the facility would result in a material increase in any environmental impact of the facility.” Id. § 75-20-219(1). Montana law requires public notice of a certificate amendment and provides the right to members of the public adversely affected by any certificate amendment to challenge the amendment in a contested case proceeding. See id. §§ 75-20-219, 75-20-223. DEQ and PPLM are not entitled to circumvent these statutory procedures by entering into a stipulation with private parties. Because the MFSA amendment procedures were not followed, the stipulation has no legal effect on PPLM’s obligations with respect to its certificate of compatibility.

Second, parties cannot stipulate to violate the law. The Colstrip waste ponds are subject to a pollution prohibition under both the Montana Water Quality Act and the terms of its MFSA certificate. PPLM must also comply with federal open dumping provisions and the Clean Water Act. The section 12(d) stipulation does not alter these legal requirements.

As described above, the “closed-loop system” for the Colstrip waste ponds violates the MFSA certificate of compatibility requirement that Colstrip’s operators seal the ponds to prevent seepage.

B. The Montana Water Quality Act Prohibits Groundwater Pollution

The Colstrip waste ponds leak pollutants into groundwater in violation of the Montana Water Quality Act. The Montana Water Quality Act prohibits “pollution ... of any state waters” as well as the placement of wastes “where they will cause pollution of any state waters.” Mont. Code Ann. § 75-5-605(1)(a). “State waters” include groundwater. Id. § 75-5-103(33). Pollution is broadly defined as:

- (i) contamination or other alteration of the physical, chemical, or biological properties of state waters that exceeds that permitted by Montana water quality standards ...; or

(ii) the discharge, seepage, drainage, infiltration, or flow of liquid, gaseous, solid, radioactive, or other substance into state water that will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, or welfare, to livestock, or to wild animals, birds, fish, or other wildlife.

Id. § 75-5-103(29)(a). The provisions of the Montana Water Quality Act expressly apply “to drainage or seepage ... from artificial, privately owned ponds or lagoons, if such drainage or seepage may reach other state waters in a condition which may pollute the other state waters.” Id. § 75-5-104.

In violation of the Montana Water Quality Act, the Colstrip waste ponds leak harmful pollutants into groundwater. Groundwater monitoring has demonstrated concentrations of selenium and arsenic that exceed Montana water quality standards. See Gay Report at 1, ¶ 2 – 2, ¶ 3. In addition, high concentrations of boron, sulfate, and other contaminants have rendered groundwater unsuitable for drinking and some agricultural uses. See Exhibit 2 (EPA, Regulatory Determinations Support Document for Selected Contaminants from the Second Drinking Water Contaminant Candidate List, Ch. 3 (June 2008)). For these reasons, the Colstrip “closed-loop system” violates the Montana Water Quality Act’s groundwater pollution prohibition.

C. The Federal Resource Conservation and Recovery Act Prohibits Contamination of Drinking Water

Seepages from the Colstrip waste ponds also violate the federal Resource Conservation and Recovery Act (“RCRA”). RCRA forbids “open dumping” and the operation or establishment of an “open dump.” 42 U.S.C. § 6945(a). As required by statute, EPA has promulgated criteria defining solid waste management practices that constitute open dumping to ensure “no reasonable probability of adverse effects on health or the environment.” 42 U.S.C. § 6944(a); see 40 C.F.R. Parts 257 (criteria for solid waste disposal facilities). Those regulations prohibit contamination of any underground drinking water source beyond the solid waste boundary of a disposal site. 40 C.F.R. § 257.3-4(a). The definition of “underground drinking water source” includes any aquifer in which the groundwater contains less than 10,000 mg/l total dissolved solids. Id. § 257.3-4(c)(4).

Federal RCRA regulations define illegal open dumping as the disposal of solid waste that causes or contributes to the exceedance of the maximum contaminant level (“MCL”) for specified pollutants in groundwater. Id. § 257.3-4(c)(2). Among others, the regulations prohibit MCL exceedances for arsenic, selenium, cadmium and other heavy metals that are typically found in coal combustion waste. 40 C.F.R. Part 257, App. I.

Groundwater in the vicinity of the Colstrip waste ponds generally exhibits less than half the maximum concentration of total dissolved solids necessary to qualify as an “underground drinking water source” under RCRA. See 2008 Hydrological Report at 3.5, table 3.2, and 3.6, table 3.3. Although PPLM’s monitoring data is not extensive, there have been at least some observed exceedances of MCLs of selenium and arsenic caused by the Colstrip waste ponds. See

Gay Report, at 1, ¶ 2 – 2, ¶ 4. Thus, the ponds contaminate an underground drinking water source in violation of RCRA.

D. The Montana Water Quality Act and Federal Clean Water Act Prohibit Unpermitted Discharges to Surface Waters

The Colstrip waste ponds discharge pollutants to surface waters in violation of the Montana Water Quality Act, Mont. Code Ann. § 75-5-605, and the federal Clean Water Act, 33 U.S.C. §§ 1311(a), 1342(a). After pollutants seep from the ponds into groundwater, the pollutants are carried down gradient and, in some cases, into surface waters. See Gay Report at 3, ¶ 10. “[C]ontaminants in groundwater originating from process storage ponds at Colstrip are influencing surface water quality.” Id. At a minimum, contaminated groundwater is entering the East Fork of Armells Creek, which flows into the Yellowstone River. See id.

PPLM is prohibited from causing pollutant discharges to surface waters without a permit. Mont. Code Ann. § 75-5-605; 33 U.S.C. §§ 1311(a), 1342(a). EPA has determined that the Clean Water Act “regulate[s] discharges to surface water which occur via ground water because of a direct hydrologic connection between the contaminated ground water and nearby surface water.” 66 Fed. Reg. 2,960, 3,016 (Jan. 12, 2001); see also Idaho Rural Council v. Bosma, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001) (“the [Clean Water Act] extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States.”).

PPLM has not obtained a permit to discharge pollutants to surface water. Accordingly, its discharges to the East Fork of Armells Creek and other surface water bodies through groundwater are unlawful.

E. PPLM Must Obtain an Industrial Stormwater Permit

Montana regulations require industrial dischargers of stormwater to obtain an MPDES permit for such discharges. ARM 17.30.1105. Because PPLM has failed to do so, its operations violate state law and it is subject to administrative and civil penalties for each day of violation. Just like the Colstrip waste ponds, industrial stormwater from the plant’s facilities contaminates ground and surface water with heavy metals and other pollutants. Because these discharges are unpermitted, they have not been subjected to monitoring requirements or control measures, thus exacerbating ground and surface water pollution in the vicinity of the power plant. DEQ must require PPLM to obtain a stormwater permit in connection with the present AOC or in a separate enforcement action.

II. DEQ MUST ENFORCE EXISTING LEGAL REQUIREMENTS RATHER THAN PERMIT ONGOING VIOLATIONS

A. DEQ Must Order PPLM to Cease Contamination of Ground and Surface Waters

The draft AOC may not be finalized, as it would not alter the status quo from the state of ongoing legal violation. Instead, the draft AOC proposes several years of additional monitoring, reporting, and planning while the polluted area continues to grow under the existing “closed-loop system.” The draft AOC does not require PPLM to seal the waste ponds and eliminate seepage even if more extensive monitoring corroborates existing evidence that the waste ponds are responsible for water quality violations. Most egregiously, the draft AOC would allow PPLM to address inevitable contamination of adjacent privately owned property by adopting “institutional controls”—for example, condemning easements or purchasing private property—to limit human exposure to contamination.

Instead of the laggardly approach to remediation outlined in the draft AOC, DEQ must exercise its regulatory authority to order PPLM to immediately eliminate the source of ground and surface water contamination. See, e.g., Mont. Code Ann. § 75-5-616 (DEQ “shall take actions ... to ensure that violations of this chapter are appropriately prosecuted”) (emphasis added); id. § 75-5-612 (authorizing enforcement action “to prevent, abate, and control ... the pollution of state waters”). EPA’s 2007 Human and Ecological Risk Assessment of Coal Combustion Wastes concluded that only composite liners—high-density polyethylene (HDPE) membranes combined with either geosynthetic or natural clays—effectively reduce risks from all constituents to below risk criteria. Exhibit 3 at ES-7 (EPA, Draft Human and Ecological Risk Assessment of Coal Combustion Waste, at ES-7 (Aug. 6, 2007)); see also Gay Report at 2, ¶5. None of Colstrip’s waste ponds appear to have HDPE composite liners.

Since December 2003, PPLM has used a “paste” consisting of concentrated scrubber slurry to “reduce seepage” from the Units 3 and 4 effluent holding ponds. However, PPLM’s own data demonstrate that the paste method is no more effective at preventing groundwater contamination than clay. See Gay Report at 2-3, ¶ 7. EPA has determined that landfills and ponds with clay liners do not provide adequate protection. “Risks from clay-lined units are lower than those from unlined units, but 90th percentile risks are still well above the risk criteria for ... arsenic, boron and molybdenum for surface impoundments.” Exhibit 3 at ES-7.

PPLM has not demonstrated that it cannot comply with the legal requirement to seal its ponds. Indeed, PPLM installed double liners at several of its ponds in 2004 and 2006.¹ Other ponds, including the Units 3 and 4 bottom ash pond and parts of the Units 3 and 4 effluent holding pond, are lined with nothing more than clay. PPLM should be required to install state-of-the-art liners under existing waste at all of its ponds that have the potential to contaminate ground and surface water. PPLM’s MFSA certificate, the Montana Water Quality Act, RCRA, and the Clean Water Act require nothing less.

In addition, DEQ must require PPLM to more extensively test contamination from all Colstrip wastewater facilities for an expanded list of constituents commonly found in coal combustion waste, including arsenic, cadmium, nitrate/nitrite, molybdenum, cobalt, mercury, and boron. See Gay Report at 2, ¶ 4. Although the draft AOC would require PPLM to prepare a

¹ These liners are reinforced flexible polypropylene (“RFP”) liners rather than HDPE. However, the installation evidences the feasibility of lining existing ponds.

comprehensive “site report” at some undetermined future date, PPLM should immediately institute a more robust monitoring and reporting protocol.

B. The Draft AOC Would Violate Montanans Constitution Right to a Clean and Healthful Environment

The draft AOC permits ongoing ground and surface water pollution in violation of Montanans’ right to a clean and healthful environment guaranteed by Article II, Section 3 and Article IX, Section 1 of the Montana Constitution. These constitutional provisions are meant to provide environmental “protections which are both anticipatory and preventative.” Mont. Env’t Info. Ctr. v. DEQ, 1999 MT 248, ¶77, 296 Mont. 207, ¶77, 988 P.2d 1236, ¶77. The constitutional right to be free of unreasonable environmental degradation is expressly implemented by the Montana Water Quality Act and Major Facility Siting Act. Mont. Code Ann. §§ 75-5-102, 75-20-102. Because it would allow ongoing violations of these laws, the draft AOC is constitutionally impermissible.

C. DEQ Should Require PPLM to Dewater and Cap Existing Ponds and Switch to Dry Handling Procedures

The draft AOC fails to propose any measures to address the imminent and substantial endangerment posed by the threat of dam failure, which would threaten human life and dump millions of gallons of solid waste into the Yellowstone River and its tributaries. The Units 1 and 2 STEP Dam has been classified as “High Hazard ... due to the high potential for loss of life and extensive property damage in the event of a failure.” Exhibit 4 at 43 (GEI Consultants, Inc., Final Coal Ash Impoundment-Specific Site Assessment Report, PPL Montana, Colstrip Power Plant (Sept. 2009)). In addition, the Units 1 and 2 Bottom Ash Ponds and “A” Pond, and the Units 3 and 4 effluent holding pond dams pose, at a minimum, a “Significant Hazard” based on the risk of environmental damage and potential loss of human life. Id. As Mr. Gay determined:

The Units 3 & 4 EHPs and Clearwells comprise a total of 367 acres and 17,000 acre/feet. It is estimated the cumulative capacity of these ponds is in excess of 5.5 billion gallons of process water. There are two dams in place holding the water in these ponds. Saddle Dam is located on the east side of these holding ponds and Main Dam is located on the north. These dams are the only barrier between the holding ponds and several creeks that flow north east to the Yellowstone River.

Gay Report at 2, ¶6.

As residents of Harriman, Tennessee painfully learned on December 22, 2008, the threat posed by poorly regulated coal ash impoundments is real. There, a massive dam at the Tennessee Valley Authority’s (“TVA”) Kingston Fossil Plant burst, releasing more than a billion gallons of coal ash over 300 acres of river, wetlands, and residential property. Exhibit 1 at 4 (Evans testimony). Catastrophic failure of any of Colstrip’s coal ash impoundments would unleash similar devastation.

DEQ should address the significant threat of dam failure at Colstrip by requiring Colstrip's operators to switch to dry handling. In response to the Kingston spill, TVA has announced a 10-year plan to convert its wet ash impoundments to dry ash. TVA has stated that "under current permitting its proposed conversion plan would cut the [Kingston] plant's water use by some 25 million gallons per day with an approximate 80 percent reduction in the discharge of arsenic, boron, chloride, fluoride, sulfur, and selenium from the ash pond." Exhibit 5 (J. Rickman, New Coal Ash Rules May Focus On Conversion To Dry Storage, The Energy Daily).

A similar conversion at Colstrip would not only alleviate the risk of catastrophic dam failure, it would also limit seepage of contaminants into groundwater exacerbated by wet storage. See Exhibit 3 at ES-1-2. In addition to requiring dry handling of Colstrip's wastes, DEQ should require PPLM to dewater, line, and cap existing ponds to reduce groundwater seepage from the decades of coal ash slurry and wastewater currently stored. Groundwater that has already been contaminated should be pumped, treated, and restored to the aquifer.

III. AT MINIMUM, THE AOC MUST ESTABLISH ENFORCEABLE STANDARDS AND TIMETABLES

The Draft AOC should not be finalized because it sets up a framework of open-ended study and negotiation while PPLM's waste ponds continue to pollute. DEQ should instead require PPLM to immediately eliminate known sources of ground and surface water contamination and remediate presently affected areas. See Mont. Code Ann. §§ 75-5-611, 75-5-612, 75-5-616. If the AOC is finalized, however, it must at minimum include clear standards and timetables to achieve the earliest possible remedial action by PPLM.

An administrative order—including an administrative order on consent—must require "the prevention, abatement, or control of pollution, the assessment of administrative penalties, or both" and "state the date or dates by which a violation must cease." Id. § 75-5-611(6); see also id. § 75-5-611(1) (a notice letter issued in lieu of administrative order must state "the specific nature of corrective action that the department requires" and "the time within which the corrective action is to be taken"). The draft AOC is not a valid enforcement action because it requires no specific remedial actions and no deadlines for any of the actions it orders.

DEQ must clearly establish a remedial goal of preventing and remediating groundwater contamination rather than merely containing it. To that end, Sierra Club and Montana Environmental Information Center agree that PPLM should provide a comprehensive site assessment addressing all Colstrip wastewater facilities. However, most if not all of the information necessary for such a report is already available. Such a report should be required in a timeframe on the order of weeks. Further, it does appear that a comprehensive "Cleanup Criteria Report" and "Remedy Evaluation Report" are warranted. Again, however, most of the information for these reports is readily available. DEQ should require that PPLM immediately begin simultaneous work on all of these reports and submit them for public comment on the soonest possible date certain.

CONCLUSION

For the reasons set forth above, Sierra Club and Montana Environmental Information Center respectfully urge DEQ not to finalize the draft AOC, and instead initiate an enforcement action that will result in timely elimination of waste pond seepages and remediation of contaminated groundwater. Please do not hesitate to contact me should you have any questions.

Sincerely yours,

/s/ Jenny Harbine

Enclosures