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

AGENDA

FRIDAY, MAY 13, 2011
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. Interested persons, members of the public, and the media are welcome to attend. The Board will make reasonable accommodations for persons with disabilities who wish to participate in this meeting. Please contact the Board Secretary by telephone (406-444-2544) or by e-mail at jwittenberg@mt.gov no later than 48 hours prior to the meeting to advise her of the nature of the accommodation you need.*

9:00 A.M.

I. ADMINISTRATIVE ITEMS

A. REVIEW AND APPROVE MINUTES

1. March 25, 2011, Board meeting.

II. BRIEFING ITEMS

A. CONTESTED CASE UPDATE

1. Cases assigned to Hearing Examiner Katherine Orr

a. **In the matter of 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.** On January 12, 2010, the Department filed a status report in the case stating that the parties agree that the case should continue to be stayed.

b. **In the matter of the Notice of Violations of the Montana Water Quality Act by North Star Aviation, Inc. at Ravalli County Airport, Ravalli County, BER 2009-10 WQ.** On March 11, 2011, Hearing Examiner Katherine Orr issued an *Order Requesting Submission of Proposed Hearing Schedule*. DEQ's attorney filed a mutually-agreed *Proposed Schedule* on March 23, 2011. A *Third Scheduling Order* was issued on April 27, 2011. A hearing is set for September 21, 2011.

c. **In the matter of the request for hearing regarding the revocation of certificate of approval ES#34-93-C1-4 for the Fort Yellowstone Subdivision, Park County, BER 2009-20/22 SUB.** A hearing is scheduled for June 22, 2011. On April 15, 2011, the Board received *DEQ Motion for Summary Judgment* and Intervenor Gardiner-Park County Water and Sewer District's *Motion to Strike Appellants' Defense and Enter Judgment in Favor of the DEQ on its Revocation Action*.

d. **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, 301 Missouri Avenue, Fort Peck, Valley County, BER 2010-08 UST**. On January 4, 2011, the Department filed *The Department's Motion for Summary Judgment*. The Board received the Respondent's *Response to Motion for Summary Judgment* and the Department's *Reply Brief in Support of the Department's Motion for Summary Judgment* on January 28, 2011. On March 3, 2011, Hearing Examiner Katherine Orr issued an *Order Vacating Hearing Date* to allow the hearing examiner additional time to rule on the Motion for Summary Judgment.

e. **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**. Hearing Examiner Katherine Orr

issued the *Second Scheduling Order* on February 2, 2011, setting a hearing date of June 20, 2011.

f. **In the matter of the appeal and request for hearing by Holcim Incorporated regarding the DEQ's Notice of Final Decision for MPDES Permit No. MT 0000485, BER 2010-13 WQ.** On April 1, 2011, the Board received a Notice to the Board from the appellant's attorney stating that the parties have reached resolution and proposes to file a status report on or before July 1, 2011.

g. **In the matter of the appeal and request for hearing by Ronald and Debbie Laubach regarding the DEQ's final decision to amend the MATL's certificate of compliance, BER 2010-15 MFS.** On March 3, 2011, Hearing Examiner Katherine Orr issued an *Order Vacating Hearing and Resetting Prehearing and Hearing Dates*, setting the hearing for March 29, 2011. On March 16, 2011, Ms. Orr issued an *Order Denying Motion to Dismiss*, concerning the motion to dismiss the Laubach appeal, and on March 22, she issued an *Order Vacating Hearing and Resetting Prehearing and Hearing Dates*, scheduling the hearing for April 21, 2011. On April 12, 2011, the Board received *Intervenor MATL's Motion in Limine and Supporting Brief*. On April 15, 2011, the Board received *Intervenor MATL's and DEQ' Agreed Statement of Facts and Conclusions of Law*. The Board received *Intervenor MATL's Revised List of Witnesses and Exhibits* on April 20, 2011. On April 21, 2011, a contested case hearing was held.

h. **In the matter of the appeal and request for hearing by Maurer Farms, Inc.; Somerfeld & Sons Land & Livestock, LLC; Larry Salois, POA; Jerry McRae; and Katrina Martin regarding the DEQ's final decision to amend the MATL's certificate of compliance, BER 2010-16 MFS.** Ms. Orr issued a *Third Amended Scheduling Order* on March 1, 2011, setting a hearing on MATL's *Motion for Summary Judgment* for April 12, 2011. On March 7, 2011, the Board received *Appellants' Supplemented Response to MATL's First Discovery Requests*. On March 16, 2011, the Board received the appellant's *Motion for Summary Judgment and Brief*. On March 25, 2011, the Board received DEQ's *Brief Opposing Appellants' Motion for Summary Judgment* and *MATL's Response to Maurer Farms, et al.'s, Motion for Summary Judgment*. The Board received the appellant's *Reply Brief in Support of Motion for Summary Judgment* on April 1, 2011, and again on April 5, 2011. A hearing on the *Appellants' Motion for Summary Judgment* was held on April 12, 2011.

i. **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, BER 2010-17 SM.** On January 11, 2011, Hearing Examiner Katherine Orr issued an *Order Granting Extension of Time*, giving the parties until January 28, 2011, to reach a settlement or file a proposed schedule. On March 25, 2011, Counsel for the DEQ notified the hearing examiner and stated that the parties are in settlement discussions.

j. **In the matter of the appeal and request for hearing by Meat Production Inc., a.k.a. Stampede Packing Co., regarding the DEQ's notice of final decision for Montana Ground Water Pollution Control System (MGWPCS) Permit No. MTX000100, BER 2010-18 WQ.** On March 1, 2011, Hearing Examiner Katherine Orr issued a *First Scheduling Order* setting a hearing for July 11, 2011.

k. **In the matter of violations of the Montana Public Water Supply Laws by Bellecreeke, LLC, at Belle Creeke Dental, PWSID #MT0004553, Butte, Silver Bow County, BER 2010-20 PWS.** On March 22, 2011, at the request of DEQ counsel, Hearing Examiner Katherine Orr issued a *Third Order Granting Extension of Time* giving the parties until March 10, 2011, to file a hearing schedule, giving the parties through April 8, 2011. On April 8, 2011, Counsel requested an extension to file a prehearing schedule. On April 27, 2011, a *Fourth Order Granting Extension of Time* was issued.

l. **In the matter of violations of the Opencut Mining Act by Deer Lodge Asphalt, Inc., at the Olsen Pit, Powell County, Montana, BER 2011-02 OC.** On March 22, 2011, Hearing Examiner Katherine Orr issued the *First Prehearing Order* giving the parties through April 4, 2011, to file a proposed schedule. DEQ's attorney filed an *Agreed Proposed Schedule* on April 4, 2011. On April 27, 2011, a *First Scheduling Order* was issued. A hearing is set for August 17, 2011.

2. Cases not assigned to a Hearing Examiner

a. **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 2010-19 SM.** At its January 28, 2011, meeting, the Board voted to hear this matter itself. Interim Hearing Examiner Katherine Orr issued the *First Prehearing Order* on December 23, 2010, giving the parties until January 13, 2011, to file a proposed schedule.

b. **In the matter of violations of the Montana Strip and Underground Mine Reclamation Act by Carbon County Holdings, LLC, at Carbon County Holdings, Carbon County, BER 2011-01 SM.** At its January 28, 2011, meeting, the Board voted to hear this matter itself. Interim Hearing Examiner Katherine Orr issued the *First Prehearing Order* on January 25, 2011, giving the parties through February 7, 2011, to file a proposed schedule.

B. OTHER BRIEFING ITEMS

1. Legislation Briefing

The Department will present an overview of legislation passed by the 2011 Legislature that will affect the Board.

III. ACTION ITEMS

A. OTHER ACTION

1. Updated Rationale for EC & SAR Standards

The Department will report to the Board on comments, data, and studies received during the Board's triennial review of the electrical conductivity (EC) and Sodium Adsorption Ratio (SAR) standards adopted by the Board in 2003. The report will include references to studies published since 2003 and public input from the 60-day comment period ending in June 2010. The Department will recommend, based on this information, that the Board determine that the existing EC and SAR standards are adequate and appropriate and that additional rulemaking need not be undertaken.

B. INITIATION OF RULEMAKING AND APPOINTMENT OF HEARING OFFICER

The Department will propose that the Board initiate rulemaking to:

1. Amend rules implementing the Montana Pollutant Discharge Elimination System Permit Program. Amend 17.30.12, rules establishing effluent limitations, standards of performance, and treatment requirements in order to maintain compliance with federal regulations governing states with delegated authority to implement the federal Clean Water Act's permitting program. The proposed revisions fall into the following categories: (1) eliminating existing incorporations by reference adopted prior to 1989 and adopting the text of some of those federal regulations into state rules; (2) adopting the text of relatively recent federal regulations that impose treatment requirements on cooling water intake structures; (3) updating incorporations by reference of federal rules that are too cumbersome to publish into state rules; (4) repeal existing incorporations by reference that are either duplicative or inapplicable to state permit programs; (5) clarifying existing language.

2. Amend ARM 17.8.801, 17.8.804, 17.8.818, 17.8.820, 17.8.822, 17.8.825, 17.8.901, 17.8.904, and 17.8.1007 to incorporate provisions for major source permitting regarding the emissions of fine particulate matter (PM-2.5).

3. Amend ARM 17.30.617 to designate the mainstem Gallatin River from the Yellowstone National Park boundary to the confluence of Spanish Creek as an Outstanding Resource Water (ORW) and to amend ARM 17.30.638 to add a new subsection clarifying that discharges to ground water with a direct hydrologic connection to an ORW are within the statutory mandate prohibiting any permanent change in the water quality of an ORW resulting from point source discharges. The Department will request that the Board issue a notice of supplemental rulemaking to extend the comment period.

C. REPEAL, AMENDMENT, OR ADOPTION OF FINAL RULES

1. In the matter of the amendment of ARM 17.30.201, water discharge permit fee schedule and ARM 17.30.1341 to add a general permit category for pesticides. The proposed amendments are intended to correct some clerical errors, provide some clarification, expand some definitions and add a new non-stormwater general permit fee category (pesticides).

D. FINAL ACTION ON CONTESTED CASES

1. **In the matter of violations of the Opencut Mining Act by M.K. Weeden Construction, Inc., at the Stahl Pit, Fergus County, BER 2011-03 OC.** The Board received the appeal on March 15, 2011. Interim hearing Examiner Katherine Orr issued a *First Prehearing Order* on April 7, 2011, giving the parties through April 18, 2011, to file a proposed schedule. On April 12, 2011, DEQ's attorney filed a *Motion for Extension of Time* stating the parties had agreed to settle the matter. On April 26, 2011, the Board received a stipulation to dismiss. An order to dismiss the case will be presented for Board approval.

E. NEW CONTESTED CASES

1. **In the matter of violations of the Opencut Mining Act by Concrete Materials of Montana, LLC, at the Mauritzson Site, Yellowstone County, BER 2011-04 OC.** The Board received the appeal on April 11, 2011. The Board may appoint a permanent hearing examiner or decide to hear the matter. On April 27, 2011, a *First Prehearing Order* was issued.

2. **In the matter of violations of the Public Water Supply Laws by Jore Corporation at Jore Corporation, Lake County, BER 2011-05 PWS.** The Board received the appeal on April 22, 2011. The Board may appoint a permanent hearing examiner or decide to hear the matter.

3. **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.** The Board received the appeal on April 25, 2011. 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

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

MINUTES
MARCH 25, 2011

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, March 25, 2011, in Room 111 of the Metcalf Building, 1520 East Sixth Avenue, Helena, Montana.

Attendance

Board Members Present: Chairman Joseph Russell and Larry Mires

Board Members Present via Telephone: Robin Shropshire, Larry Anderson, and Joe Whalen

Board Members Absent: Heidi Kaiser and Marvin Miller

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 and Jane Amdahl – Legal; Judy Hanson – Permitting & Compliance Division; Jenny Chambers – Water Protection Bureau; Jon Dilliard, Eugene Pizzini, Steve Kilbreath, Rachel Clark, and Shelley Nolan – Public Water Supply & Subdivisions Bureau; David Klemp, Julie Merkel, Charles Homer, Eric Merchant, Dan Walsh, and Debra Wolfe – Air Resources Management Bureau; Bob Bukantis – Water Quality Planning Bureau; John Arrigo – Enforcement Division

I.A.1 Review and approve January 28, 2011, meeting minutes.

Chairman Russell called for a motion to approve the January 28, 2011, meeting minutes. Mr. Mires so MOVED. Ms. Shropshire SECONDED the motion. The motion CARRIED with a unanimous VOTE.

III.A.2 In the matter of DEQ's request for the Board to initiate rulemaking to amend ARM 17.36.922 and 17.36.924.

Due to DEQ Staff scheduling conflicts, the Board chose to hear this matter early, but waited to take action until reaching its regularly-scheduled place on the agenda, to allow for possible public comment.

Mr. Kilbreath briefed the Board on this proposed rulemaking, which pertains to the DEQ hearing appeals of local health board variance decisions. He responded to questions from Board members and discussion took place.

Upon reviewing this item, the department noted a few errors in the notice that could be easily corrected.

Chairman Russell called for public comment regarding the proposed rulemaking. There was no response. He called for a motion to initiate the rulemaking with the corrections noted by the department and to appoint Ms. Orr as the Presiding Officer. Mr. Whalen so MOVED. Ms. Shropshire SECONDED the motion. The motion CARRIED with a 4-0 VOTE.

II.A.1.a In the matter of 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. *No discussion took place regarding this matter.*

II.A.1.b In the matter of Notice of Violations of the Montana Water Quality Act by North Star Aviation, Inc., at Ravalli County Airport, Ravalli County, BER 2009-10 WQ.

Ms. Orr said there had been a notice of appearance of counsel for North Star Aviation and that the parties had been asked to submit a prehearing schedule.

II.A.1.c In the matter of the request for hearing regarding the revocation of certificate of approval ES#34-93-C1-4 for the Fort Yellowstone Subdivision, Park County, BER 2009-20/22 SUB. *No discussion took place regarding this matter.*

II.A.1.d 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, 301 Missouri Avenue, Fort Peck, Valley County, BER 2010-08 UST. *No discussion took place regarding this matter.*

II.A.1.e 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. *No discussion took place regarding this matter.*

II.A.1.f In the matter of the appeal and request for hearing by Holcim Incorporated regarding the DEQ's Notice of Final Decision for MPDES Permit No. MT 0000485, BER 2010-13 WQ. *No discussion took place regarding this matter.*

II.A.1.g In the matter of the appeal and request for hearing by Ronald and Debbie Laubach regarding the DEQ's final decision to amend the MATL's certificate of compliance, BER 2010-15 MFS.

Ms. Orr said she had issued an order denying MATL's motion to dismiss on March 16. She said the parties requested that the hearing date of March 29 be postponed, and that the hearing is now scheduled for April 21.

II.A.1.h In the matter of the appeal and request for hearing by Maurer Farms, Inc.; Somerfeld & Sons Land & Livestock, LLC; Larry Salois, POA; Jerry McRae; and Katrina Martin regarding the DEQ's final decision to amend the MATL's certificate of compliance, BER 2010-16 MFS.

Ms. Orr said the appellants had filed a motion for summary judgment on March 16, and that a hearing on the matter is scheduled for April.

II.A.1.i 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 2010-17 SM. *No discussion took place regarding this matter.*

II.A.1.j In the matter of the appeal and request for hearing by Meat Production Inc., a.k.a. Stampede Packing Co., regarding the DEQ's notice of final decision for Montana Ground Water Pollution Control System (MGWPCS) Permit No. MTX000100, BER 2010-18 WQ. *No discussion took place regarding this matter.*

II.A.1.k In the matter of violations of the Montana Public Water Supply Laws by Bellecreeke, LLC, at Belle Creeke Dental, PWSID #MT0004553, Butte, Silver Bow County, BER 2010-20 PWS.

Ms. Orr said she issued a third order granting extension on March 22.

II.A.2.a 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 2010-19 SM. *No discussion took place regarding this matter.*

II.A.2.b In the matter of violations of the Montana Strip and Underground Mine Reclamation Act by Carbon County Holdings, LLC, at Carbon County Holdings, Carbon County, BER 2011-01 SM. *No discussion took place regarding this matter.*

II.B.1 In the matter of the January 20, 2011, letter from EPA regarding EPA's action on revisions to Montana's surface water quality standards.

Mr. Bukantis explained that the letter was EPA's approval of the water quality standards package submitted last year. He said the letter did identify a few minor errors in DEQ-7 that will be corrected in the next version, which is in the works.

A brief discussion took place regarding HR872, and Ms. Chambers provided further information.

III.A.1 In the matter of DEQ's request for the Board to initiate rulemaking to amend 17.38.101 and 17.38, Subchapter 5.

Mr. Pizzini provided an overview of the requested rule amendments regarding a reduction in certain engineering review fees, deviation from the checklist process, and clarification of the water hauler rules. He noted two errors in the proposed rulemaking notice, which he said would be corrected in the final notice.

Discussion took place and Mr. Pizzini responded to questions from the Board.

Chairman Russell called for a motion to initiate the rulemaking, to appoint Ms. Orr as the Presiding Officer, and to make the corrections previously noted by Mr. Pizzini. Ms. Shropshire so MOVED. Mr. Mires SECONDED the motion. Chairman Russell called for public comment regarding the proposed rulemaking. There was no response. The motion CARRIED with a 5-0 roll-call VOTE.

III.B.1 In the matter of final action regarding the amendment of air quality rules in ARM 17.8, Subchapter 6.

Ms. Wolfe provided review of the recent open burning rulemaking process, saying the Board had initiated the rulemaking at its meeting in December 2010 and that a hearing was held in January 2011. She said the department supports the amendments.

Chairman Russell called for public comment regarding the rulemaking. There was no response. He called for a motion to adopt the rule as presented, and to accept the Presiding Officer's Report and the House Bill 521 and 311 analyses. Ms. Shropshire so MOVED. Mr. Whalen SECONDED the motion. The motion CARRIED with a 4-0 VOTE.

III.B.2 In the matter of final action regarding the amendment of air quality rules in ARM 17.8, Subchapter 7.

Ms. Wolfe provided an overview of the rulemaking. She said the Board initiated the rulemaking, and a public hearing was held in January.

Chairman Russell called for public comment regarding the rulemaking. There was

no response. He called for a motion to adopt the rules and to accept the Presiding Officer's report and the 521 and 311 analyses. Mr. Mires so MOVED. Mr. Whalen SECONDED the motion. The motion CARRIED with a 4-0 VOTE.

III.C.1 In the matter of final action regarding violations of the Public Water Supply Laws by Gregory C. MacDonald at Highwood Mobile Home Park, PWSID #MT0004681, Cascade County, BER 2010-14 PWS.

Ms. Orr provided a briefing of the recent events in the case.

Chairman Russell called for a motion to authorize him to sign the order dismissing the case. Ms. Shropshire so MOVED. Mr. Mires SECONDED the motion. The motion CARRIED with a 4-0 VOTE.

III.D.1 In the matter of violations of the Opencut Mining Act by Deer Lodge Asphalt, Inc., at the Olsen Pit, Powell County, BER 2011-02 OC.

Ms. Orr provided information on this new contested case.

Chairman Russell called for a motion to appoint Ms. Orr as the permanent hearings examiner for this matter. Mr. Whalen so MOVED. Mr. Mires SECONDED the motion. The motion CARRIED with a 4-0 VOTE.

III.E.1 In the matter of the Montana Underground Storage Tank Act by Juniper Hill Farm, LLC, at Lakeside General Store, Lewis and Clark County, BER 2009-18 UST.

Ms. Orr explained that after the Board signed an order in December 2010 imposing penalties, Juniper Hill Farms filed a request for rehearing. She provided her perspective regarding the matter and noted that the Board had before it both a proposed order granting the request and a proposed order denying the request.

Chairman Russell called for a motion that the Board not take up this matter again. Ms. Shropshire so MOVED. Mr. Mires SECONDED the motion. After a brief clarification that the Board would sign the order denying the request for rehearing, the motion CARRIED with a 4-0 VOTE.

IV. General Public Comment

Chairman Russell called for public comment. There was no response; no members of the public were present.

Mr. Livers reminded the Board that the next Board meeting is scheduled for May 13. He also noted that the Governor's Office reappointed Ms. Kaiser, Mr. Mires, and Chairman Russell.

V. Adjournment

Chairman Russell called for a motion to adjourn. Mr. Mires so MOVED. Mr. Whalen SECONDED the motion. The motion CARRIED with a unanimous VOTE.

The meeting adjourned at 10:36 a.m.

Board of Environmental Review March 25, 2011, minutes approved:

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

_____
DATE

A Review of the Rationale for EC and SAR Standards

Montana Department of Environmental Quality

April 2011

Background

On April 15, 2010, the Board of Environmental Review (Board) gave notice of its intent to review Montana's water quality standards through the triennial review process, as required by the federal Clean Water Act, 33 U.S.C. § 1313(c). Included in this review was a solicitation for public input on the standards for EC and SAR in the Tongue and Powder River Basins of Montana. This document provides an analysis of new information obtained during the triennial review process relating to the standards for EC and SAR.

In 2003, the Board of Environmental Review (the Board) adopted new rules to establish numeric water quality standards for electrical conductivity (EC) and sodium adsorption ratio (SAR) for the Tongue River, Rosebud Creek, Powder River, and Little Powder River watersheds. The Board determined that rules were necessary to ensure that the designated uses of these waters for agricultural purposes would be protected during the development of coal bed methane (CBM). EPA approved the new rules later in 2003.

In 2006, the Board adopted numeric nondegradation criteria by designating EC and SAR as harmful parameters, This designation resulted in treatment of EC and SAR for purposes of nondegradation review in the same manner as all other constituents for which there are numeric standards.

The Board also made several other administrative and implementation changes to the rules. EPA approved the changes later that year. Subsequently, several Wyoming gas producers sued the department and the Board in state district court, claiming that there was insufficient scientific basis for the standards. The State prevailed in that proceeding, a decision which was later upheld by the Montana Supreme Court.

The Wyoming producers also sued EPA for approving Montana's standards in federal district court in Wyoming. That court found for the plaintiffs, and the standards were remanded to EPA for reconsideration. During EPA's reconsideration of the standards on remand, the Board initiated a triennial review of Montana's water quality standards. In the public notice initiating the review, the board specifically requested comment on the standards and nondegradation requirements for EC and SAR. The board also requested that, if any suggestions

for revisions to those standards and nondegradation requirements were made, the technical basis for the request should be provided. To facilitate public input on this issue, the department compiled about 40 new studies and research efforts that had been conducted since the Board's original rulemaking in 2003. These studies were made available to the public online, and a 60 day public comment period was held to solicit input from interested persons.

Need for standards

Water produced during CBM development has an average EC value of 2,200 μS/cm and a SAR value often greater than 40. These values, especially the SAR values, are well above almost all of the ambient water quality values of the rivers and streams in CBM country. In addition, the SAR value of CBM water is well above the value that will adversely impact irrigated agriculture[1,2].

The numeric standards chosen by the Board in 2003 were based on the analysis and recommendations of the Department, the available scientific data, and public comments received during rulemaking. The Department also hired Dr. James Oster, a soil scientist from the USDA Salinity Lab in Riverside, California, to assist its technical staff during rulemaking.

Studies conducted since the Board's adoption of numeric standards have confirmed the need for and value of Montana's regulatory approach. Paige and Munn, 2010[3], found that

- Salinity and sodicity issues with CBM produced water, in addition to issues of volume and flow, remain unresolved on the Wyoming side of the Powder River Basin as development enters a second decade.

- There are identified needs to develop effective standards and management strategies to put the CBM product water to beneficial use and minimize impacts to soil, vegetation and water resources

- Different approaches to regulate and dispose of the produced water have been developed by the four states along the Front Range; Wyoming, Montana, Colorado and New Mexico

- Attempts by the Wyoming Department of Environmental Quality to develop an Agricultural Protection Policy based on end of pipe water quality standards remain controversial, and have been unsuccessful to date

Milligan, Reddy, and Legg, 2010, found that in the Powder and Tongue River watersheds, produced water SAR exceeded the limit for irrigation water[4].

Several public commenters stressed the need for protective numeric standards. The EC & SAR standards are intended to protect riparian plants and plants and crops that are irrigated with water from the rivers and streams and their tributaries. EC directly affects a plant's ability to uptake water while the SAR affects the soils in which the plants grow.

Electrical Conductivity

Electrical Conductivity (EC) is a measure of the amount of dissolved solids (salts) in water and is generally expressed as microsiemens per centimeter (μS/cm). As the EC in the soil water increases a threshold is reached where further increases in EC cause decreases in plant growth. The EC in the soil water is directly affected by the EC of the irrigation water, and it is important to distinguish between the two.

The EC of the soil water may be higher than the EC of the irrigation water because plants and evaporation remove water from the soil but do not remove salts. Unless salts are removed or leached from the soil by excess water, the concentration of salts in the soil will build up as irrigation water is added over time.

The water in excess of the plant and evaporative needs applied to a given area of soil is termed the leaching fraction. This excess water may be supplied by irrigation and by precipitation. However, that portion of the water that is used by plants or which evaporates does not directly add to the leaching fraction. Precipitation or irrigation that occurs when the soils are saturated with water or that is stored in the soil when excess water is applied does directly add to the leaching fraction.

Sodium Adsorption Ratio

The sodium adsorption ratio (SAR) is a measure of the abundance of sodium relative to the abundance of calcium and magnesium in water. It is directly related to the amount of sodium that is adsorbed by soils. A high SAR in irrigation water has the potential to impair soil structure and thus the permeability of the soil leading to a lack of soil moisture. This is particularly so when the EC of the soil water or applied water is insufficient to counteract the negative effects of adsorbed sodium on soil structure. The SAR of irrigated soils equilibrates with the SAR and the EC of the applied irrigation water over time. That is, if the average SAR of the irrigation water is 5 and the EC is 1500 μS/cm the SAR and EC of the soils at and near the soil surface will also be about 5 and 1500 μS/cm within a few years.

Derivation of EC standards

The Board adopted numeric standards for EC that are applicable during the irrigation season when the protection of water quality for agricultural use is a concern and a maximum value for EC applicable when irrigation is not a concern. The time period between March 1 and October 31 was chosen for the irrigation season standards, because that is the time that irrigation in the affected area normally occurs.

Several commenters suggested a detailed explanation of the scientific basis for the numeric standards. The department effort was led by a PhD water chemist, and included support under contract with Dr. James D. Oster, a widely published extension soil and water scientist and college professor. In order to derive standards for EC during the irrigation season, the Board considered the type of plants being irrigated in the affected area, the sensitivity of those plants to EC, the leaching fractions that are occurring, the correction factors that should be applied due to precipitation, and an adjustment for the rainfall effect.

The plants being irrigated in the affected area are summarized in Table 1. The list of crop types in the table was compiled by the Department in 2001 after receiving more than 200 responses to several surveys asking the agricultural community what type of plants they cultivate each year[5]. Column 2 of the table lists the soil water salinity thresholds (as EC) for each of these plants from Maas and Grattan[6], for example, 1000 for common beans. Another source, Ayers & Westcott 1985, contains these same values[1]. When these thresholds are exceeded plant or crop yields begin to decrease. The standards for EC are intended to protect the most salinity sensitive plants listed in Table 1 that are produced in the affected area.

The most salinity sensitive crops irrigated with water from the Tongue River are strawberry, common beans, and carrots, with an EC threshold of 1000. The most salinity sensitive crops being irrigated with water from the Powder River are corn and alfalfa, with an EC threshold of 1700 and 2000 respectively. While alfalfa is the dominant crop on both the Tongue and Powder rivers, the naturally high quality of Tongue River water allows for the more sensitive crops to be grown, and the Board wanted to preserve that opportunity for farmers to continue growing sensitive crops even though alfalfa might tolerate higher concentrations of EC. There were about 325 acres of beans grown on the Tongue in 2009[7], and about 275 of these acres were irrigated[8].

The marginal quality of Powder River water limits the opportunity to irrigate these more sensitive crops, so alfalfa (the dominant crop) was chosen as the target crop. There were about 16,800 acres of alfalfa on the Powder in 2009[7], and about 4,300 acres were irrigated[8]. In comparison, there were less than 100 acres of beans grown on the Powder in 2009[7], and only 13 acres of irrigated beans were identified[8].

Table 1. Threshold of salinity (as electrical conductivity, EC) impacts to the growth of plants commonly grown in the Powder and Tongue River Basins, from Maas & Grattan, 1999.

Assumed leaching fractions associated with each cultivation practice are shown. For each plant and leaching fraction, an increase in irrigation water salinity beyond the table value will cause plant yield decreases.

		Irrigation water EC_w (µS/cm): Threshold for no-impact to growth			
		Rosebud Creek[#]	Tongue River[#]	Powder & Little Powder Rivers	Tributaries
Name of Plant or crop	ECE Threshold	(Conventional Flood Irrigation)	(Conv. Flood & Sprinkler)	(Flood Irrigation[¢])	(Water Spreader)
		15% Leaching Fraction	15% L.F.	30% L.F.	0% L.F.
Strawberry	1000	(667) 1000	(667) 1000	1000	
Common-Beans1	1000	(667) 1000	(667) 1000	1000	
Carrots	1000	(667) 1000	(667) 1000	1000	
Radish	1200	(795) 1193	(795) 1193	1155	
Onions, Bulb	1200	(795) 1193	(795) 1193	1155	
Lettuce	1300	(860) 1290	(860) 1290	1250	
Clover (all types)	1500	(990) 1485	(990) 1485	1445	500
Orchard Grass	1500	(990) 1485	(990) 1485	1445	500
Corn & Sweet Corn	1700	(1126) 1689	(1126) 1689	1640	
Alfalfa	2000	(1330) 2000	(1330) 2000	2000	500

[#] On the Tongue River and Rosebud Creek, precipitation correction factor of 1.5 has been applied to values in the right hand, unbracketed column. Left hand column values are uncorrected.

[¢] On the Powder and Little Powder Rivers, no precipitation correction factor has been applied.

See text for details of how these EC standards were developed.

Leaching fractions

The standards for irrigation season also vary depending upon the type of irrigation used in the various watersheds and the differing leaching fractions that occur as a result of these irrigation practices. For the Tongue River, a leaching fraction of 15% is assumed as a basis for the EC standards. This is assumed because a leaching fraction of 15% is typical of conventional sprinkler and flood irrigation, which is used in the basin[9]. There has been a progressive shift, in

many areas, from flood irrigation practices to sprinkler irrigation[10]. The Board assumed a 30% leaching fraction for the Powder River standards, because the work of deMooy and Franklin[11] identifies the actual leach rate at the four to five foot root depth for alfalfa as 31% in the Powder River Valley. Finally, the Board also used a leaching fraction to derive EC standards for Rosebud Creek because there is some conventional flood irrigation in the lower reaches[12].

The leaching fractions discussed above are averages and it is assumed that leaching is uniform throughout a field. In practice the leaching fraction is not uniform throughout a field and local impacts due to salinity can occur.

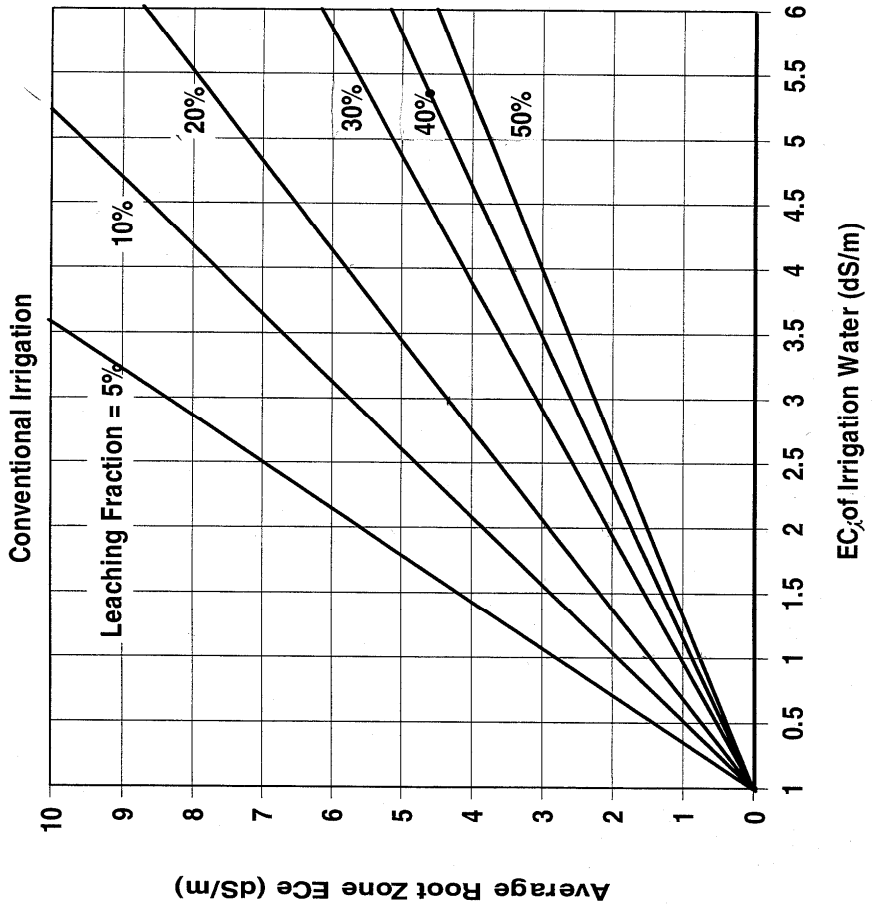

Figure 1. Assessing the maintenance leaching fraction under conventional irrigation methods.

Figure 1. Relationships between leaching fractions, irrigation water and soil water ECs (from Hanson, Grattan, and Fulton, 1999[13])

Figure 1 illustrates the permissible value of EC in the irrigation water based upon a maximum permissible level of EC in the soil water and a leaching fraction. The figure is originally from Ayers & Westcott 1985[1]. At 15% leaching fraction, the relationship between soil water and irrigation water EC is defined by equation 5 from that source:

$$EC_w = EC_E / 1.5$$

Thus, the 1000 dS/cm soil water requirement for full yield for common beans, one of the most sensitive crops grown on the Tongue, equates to an irrigation water EC_w of 667.

Hanson, Grattan and Fulton, 1999, the more recent study from which Figue 1 is drawn, is described by Dr. James Bauder, one of the leading Montana experts in the field, as the authoritative source for salinity and drainage calculations[14].

Precipitation Correction Factor

Figure 1 was used to calculate the "uncorrected" EC values given in parentheses for each leaching fraction listed in Table 2. These values represent the values of EC in the irrigation water that will cause no decrease in yield for sensitive crops that are grown in the Powder River Basin if precipitation is ignored. These values differ for the various leaching fractions.

In the Tongue River basin, where there is sufficient available water to fully support the needs of a crop, the diluting effect of precipitation must also be considered in order to correctly calculate EC values for irrigation water that will protect irrigated plants.

The average annual total precipitation at Brandenburg, Montana, chosen for its central location in the Tongue River basin, for the period from 5/1/1956 to 12/31/2009 is 14.44 inches[15]. This value is within the range of the numbers reported for other stations in the Tongue and Powder River valleys for which there is data for the same time period. Average annual precipitation at these stations range from 15.51 inches at Lame Deer and 15.06 inches at Colstrip, to 14.38 inches at Forsythe and 13.34 inches at the Miles City ariport[15].

The diluting effect of this precipitation is dependent on the amount of irrigation water that is applied. According to deMooy and Franklin, the effective infiltration of precipitation in the region is about 80%[8]. That is, some of the precipitation simply runs overland to the nearest drainage without soaking into the soil. This is especially true during thunderstorms, which are common in the region. An effective precipitation of about 11.5 inches (0.80 X 14.44 = 11.55) is a reasonable value for calculating the correction factor.

In the Tongue River Valley plant growth and evaporation require about 31 inches of water per growing season[16]. No net evaporation occurs outside the irrigation season[17]. Sprinkler and conventional flood irrigation throughout the valley is generally applied in amounts that result in leaching fractions of about 15%. At a leaching fraction of 15% an additional 4.65 inches (15% of 30 inches) is needed during the growing season for a total of 35.6 inches. Of this, about 11.55 inches is normally supplied by effective precipitation, which has no salts. The remaining 24 inches of crop agronomic need is assumed to be met by the application of irrigation water. One operator on the Tongue confirms that he applies about two feet of water to his crop served by sprinklers[18].

Using the following formula, the salt content of about 24 inches of irrigation water is diluted by 11.5 inches of precipitation to calculate a correction factor of 1.5. For these reasons, the Board used a precipitation factor of 1.5 to derive the EC standards for the Tongue River basin.

Correction Factor = $(Depth_{(precipitation)} + Depth_{(Irrigation\ water)}) / Depth_{(Irrigation\ water)}$

The correction factors are applied to the "uncorrected" threshold values (in parenthesis) for EC in the irrigation water to calculate the corrected threshold values. For example Table 1 lists the irrigation water EC thresholds as 1000 μS/cm (667 X 1.5 = 1000) for no impact on the yield of strawberry, common beans (a commercial crop in the area) and carrots at a leaching fraction of 15%.

The no impact levels for irrigation water EC for the Tongue River are also applied to Rosebud Creek due to the conventional flood irrigation in the lower reaches of Rosebud Creek.

The Tongue River Reservoir stores water all year round. Storage of nonirrigation season flows are released at the beginning of the irrigation season and are available for beneficial use. For this reason, the irrigation season limits apply year round in the Reservoir. The same rationale used to determine irrigation season standards for the Tongue River and Rosebud Creek apply to the standards set for the Tongue River Reservoir.

On the Powder River, water quality is highly variable. Irrigators on the Powder exercise selective use of water when it is of adequate quality. The challenge on the Powder is to protect the use of better water quality when that use is exercised.

Flood irrigation with a leaching fraction of 30% was assumed based on deMooy & Franklin's 1977 study of irrigation of Powder River soils[8]. Alfalfa is the commonly grown most sensitive crop and require that soil water EC be maintained below 2,000. Some silage corn is also grown: it requires an EC_E below 1700 to avoid adverse effect on production. Because alfalfa dominates

crop acreage on the Powder, and because more sensitive crops cannot be successfully grown due to variable water quality, it was used as the target crop.

The EC_W for alfalfa on the Powder is 2000, based on an EC_E of 2000, because at a leaching fraction of 30%, the relationship between EC_E and EC_w is one to one (Fig 1).

This value compares favorably to the reported threshold used by Powder River irrigators when applying water to their heavier soils. One farmer reports that he generally doesn't divert water for irrigating these soils when EC exceeds about 2000 dS/cm[19]. Because he can easily measure real-time EC with a salinity meter, he uses this value as an indication of elevated SAR. The USGS uses this same approach to report real-time SAR, using a regression equation that correlates EC and SAR at a number of water quality monitoring stations[20]. Another irrigator reports that he goes by the USGS real-time data at Morehead, and doesn't apply water that exceeds about 1500 on a new alfalfa crop[21].

Calculation of a valid correction factor on the Tongue was possible because sufficient irrigation water is available to fully meet the agronomic need of the crop. The Powder River is only marginally supportive of agricultural uses[22]. There is not sufficient irrigation water of acceptable quality available to fully meet this need. The opportunistic use of Powder River water for irrigation generally doesn't support full yields, and salts are more likely to accumulate in the soil. For these reasons, the 31 inch value for seasonal agronomic water uptake on the Tongue is not applicable to the Powder.

When water quality is adequate, the beneficial use of river water for irrigation is exercised. When water quality is not adequate, it is not exercised. The calculated EC of 2000 is the appropriate standard, and a valid correction factor cannot be applied.

The tributaries

Two commenters addressed the need for standards protective of irrigation use on the tributary streams of the basin. EC and SAR levels in runoff events on tributaries have a high level of variability and can be elevated for extended periods of time[23].

The methodology for arriving at the EC standard on the tributaries is contained in the department's July 2002 Technical Basis. The approach has not changed, but is restated here, with the calculations, documentation, and cites to the authoritative literature.

Irrigation on the tributaries consists largely of gates and canals on lower mainstems, and spreader dike systems on ephemeral tributaries[24]. A leaching

fraction of 30% is not reasonable for these systems[5]. Leaching will occur only under wet spring conditions when the total infiltrated water from rain, snowmelt, and operation of the system exceed evapotranspiration by about 14 inches. This occurs about once out of every 8 to 10 years. In the intervening years salts in the water applied accumulate in the upper 3 feet of soil increasing the salinity of the soil water.

One irrigator on Hanging Woman Creek, a tributary to the Tongue, reports that he normally only gets a single seasonal opportunity of a few days duration to access good water; some years this happens twice[24]. The most common month for this better quality water to be available is February, when he turns the water out on frozen fields.

The increase in salinity can be calculated based on the following assumptions: 1) Alfalfa is the major crop grown with these systems. 2) The rate of water application is 6 inches per year. 3) The average initial soil salinity is 0.25 dS/m. 4) The water holding capacity of the soil is 2 inches per foot[8]. 5) The salinity is measured on water extracts obtained on saturated soil pastes that have a water content that is two times higher than that of the soil. 6) No leaching. 7) No significant removal of salt in the harvested alfalfa.

The full calculations and citations to the literature are included in Appendix 1. The EC of the applied water should not exceed 500 μS/cm in order to prevent salt accumulation in 8 years to 2.3 dS/m and in 10 years to 2.8 dS/m. These levels can reduce the yield of alfalfa by 2.2 and 5.9% respectively. If the average EC of the applied water was 600 μS/cm, the average root-zone salinity could reach levels in 8 to 10 years that range from 2.6 – 3.2 dS/m. For alfalfa these salinities correspond to yield declines that range from 4.8 to 9.3%. Thus, 500 μS/cm was selected as a value protective of target crop production.

Discharges of CBM produced water into ephemeral tributaries may result in perennialization of the stream bed. This is a concern unique to the tributaries, particularly in view of recent findings. Hendrickx and Buchanan, 2009, found that perrenialization of ephemeral tributaries causes elevated water tables, waterlogging, and elevated salinity in the root zones of vegetation and crops along the tributaries[25].

<u>Derivation of maximum EC standard for November through February in order to protect riparian plant communities</u>

One commenter questioned the need for a nonirrigation season standard. Non-irrigation season limits are adopted to protect riparian vegetation. Montana's narrative water quality standards prohibit concentrations of materials that are harmful to plant life (ARM 17.30.637 (1)(d)).

Water moving through the alluvium provides water for plant growth in the riparian zone. The riparian zone is continually exposed to water. In addition, in some places the water in the alluvium will tend to "wick" to the surface and evaporate leaving the salts at or near the soil surface. An increase in the salinity of the water may result in an increase in the accumulation of salt. Such an increased accumulation could impact the riparian plant communities.

Warrence, Bauder, and Pearson found that common riparian species such as service berry, dogwood, gooseberry, chokecherry, and aspen are sensitive to salinity, and vulnerable to effects at EC's greater than 2000 µS/cm[26]. One of the main effects of salinity is the delay of germination and seedling development. This means that roots of emerging seedlings are exposed to a greater degree of stress than indicated by usual salinity measurements which are usually averaged from soil samples taken throughout the soil profile. Plant loss during this seedling stage can reduce the plant population density to below optimal levels and significantly reduce yields. Montana DEQ[27] identifies chokecherry and dogwood as common riparian species on the Tongue, so an EC of 1500 dS/cm will provide nonirrigation season protection.

Other common riparian species such as snowberry, horsetail, watercress, willow, cattail, and cottonwood were found to be moderately sensitive, and susceptable to impacts at EC's greater than 4000 dS/cm[26]. Montana DEQ[28] identifies snowberry and willow as common riparian species on the Powder, so an EC of 2500 dS/cm will provide nonirrigation season protection.

Derivation of SAR standards

A high SAR in irrigation water has the potential to impair soil structure and thus the permeability of the soil.

One commenter pointed out that three-fourths of the TY irrigation district is on the Yellowstone River drainage, which contains a higher proportion of clay soils. These soils do not have adequate ability to disperse the level of sodium in CBM produced water.

Soils in the Tongue and Powder River drainages are generally loams and silty clay loams[29]. The higher the clay content, the greater the soil's vulnerability to dispersion. Soils in the Yellowstone river floodplain irrigated by the T&Y Irrigation District are some of the most sensitive soils in the region. These soils are dominated by Yamacall loam and Kobase silty clay loam, but contain widely distributed Harlake and Lallie silty clays, which are probably the soils most susceptible to the effects of elevated SAR.

Montana DEQ, TetraTech, and EPA 2003[27, 28, 30] found clay dominated soils widespread in the Tongue, Powder, and Rosebud drainages, containing clay fractions up to 70%. However, The TRIP (AMPP) study conducted by Fidelity E

& P and the MT Oil & Gas Conservation Division found that clay soils are rare in the Tongue River drainage[34].

Suarez, Wood, And Lesch, 2006[31], found that for bare clay soil an increase from SAR 2 to SAR 4 resulted in a significant decrease in infiltration rate. For loam soil the increase in infiltration time was significant at the SAR 6 level, and that for cropped soil the increases in infiltration time were statistically significant at SAR 6.

In 2008[32], the reseachers found reductions in water infiltration in both clay & loam soils at SAR above 2, and found that the reductions become more severe with increasing SAR.

Some studies suggested that laboratory soil study protocols may yield inconsistent results. Harvey, 2009[33], suggested that crushing, drying and sieving soil samples destroyed natural soils structure, although the Tongue River AMPP Study, 2008[34], in which he participated, prepared soil samples for laboratory study in a similar fashion.

Suarez, Wood & Lesch, 2008[32], found that hydraulic conductivity measurements taken from undisturbed cores at the end of the experiment were highly variable, suggesting that in situ infiltration measurements may be preferred when evaluating SAR effects.

The researchers also found existing irrigation water quality criteria related to sodium and salinity are based primarily on short-term laboratory column studies[32]. These earlier studies measured infiltration or hydraulic conductivity of disturbed soil under continuously saturated conditions. They suggested that application of these standards to field conditions is uncertain, as it does not account for wetting and drying conditions, formation of crusts and impact of rain events, etc. Finally, the three investigators concluded that the study results show a greater sensitivity to SAR than indicated in laboratory column studies and existing water quality criteria.

Schafer, Fehringer, Brown, 2007, found no statistically significant changes in EC & SAR in study soils irrigated with Tongue River water, which they described as loam soils with a maximum clay content of about 40%[34]. This study found that there has been no apparent damage from irrigation with Tongue River water on less sensitive soils.

Suarez, Wood, and Lesch 2006, examined soils with a clay content of 54% in arriving at their conclusions that reductions in infiltration occurred at SAR's as low as 4[31].

Bauder, 2006, examined soils that varied in clay content from a low of about 28% for loam soils, up to 62% for clay soils. He found that dispersion/soil structure

loss was specific to areas where soil was more than 30% smectite-clay, had higher cation exchange capacity values, and higher exchangeable sodium percentage values[35]. This study examined the apparent collapse of a newly planted alfalfa crop following irrigation and then significant rainfall on very sensitive soil.

Other studies have investigated the application of CBM produced water directly to soils through land application/disposal and managed irrigation projects. While different from the application of river water containing produced water, they shed light on the effects of elevated SAR on soil structure.

Ganjegunte, Vance, and King, 2005[36], found that EC and SAR of soil saturated paste extracts were significantly higher than control sites for five areas experiencing land application of CBM water, and that there was a significant buildup of Na in irrigated soils as well as Na mobilization within the soil profiles. They concluded that irrigation with CBM produced water significantly impacts certain soil properties.

They state that applications of CBM water significantly increased soil EC, SAR, and ESP values (up to 21, 74, and 24 times, respectively) compared with nonirrigated soils. They observed that differences in soil chemical properties between an irrigated and nonirrigated coarse-textured soil were less than that of fine-textured soils, emphasizing texture as an important factor for salinity buildup.

They found that pretreatment of CBM water using a sulfur burner and application of gypsum and elemental soil amendments reduced soil pH but did not prevent the build-up of salts and sodium. Finally, the researchers suggested that current CBNG water management strategies are not as effective as projected.

Johnston, Vance and Ganjegunte, 2008[37], reported that CBM water with no amendments significantly increased sodium concentration within the soil profile. They found that plots treated with water acidified using a sulfur burner and mixed with gypsum water treatment and having sulfur and gypsum soil amendments were most effective in maintaining low SAR values at surface soil layer. Finally, they observed that in all treatment combinations, both EC and SAR increased significantly in the top two sampling depths.

The recent literature affirms that an SAR of 3 is an appropriate value to ensure that irrigation water will not cause dispersal and resulting decreases in infiltration in most soils in the Tongue and Yellowstone River basins.

SAR during the nonirrigation season

Warrance, Bauder, and Pearson[26] report that the two main risks of high sodium levels in soil water are toxic effects and impacts on plant growth from changes in soil structure. Excess sodium present in soil water can cause soil dispersal,

especially in soils with high clay contents. Soil dispersal causes loss of soil structure and surface crusting. Surface crusting leads to reduced hydraulic conductivity, reduced water infiltration, and increased water runoff. These conditions can make seedling establishment very difficult, if not impossible. Decreased drainage from sodium-induced soil dispersal can also increase the sodicity in the root zone. If water containing salts is not allowed to drain below the root zone, the salt concentration of soil water will increase as plants take up water by transpiration and as evaporation occurs.

The authors found that sensitive riparian species require an SAR between 1.6 and 8 to protect against adverse impact from waterlogging and anaerobic conditions in riparian soils. Monthly average SAR limits of 4.5 on the Tongue and Rosebud Creek, and 6.5 on the Powder were chosen to protect these riparian species during the nonirrigation season.

The Rainfall effect

The effects of elevated sodium adsorption ratios increase as the salinity of the water decreases[13]. This relationship is shown in Figure 2.

Leaching of salts with excess irrigation water or from precipitation will lower the EC of the soil solution while its SAR will remain about the same. SAR of the soil water is controlled by the composition of the exchangeable ions – calcium, magnesium, sodium and potassium -- adsorbed on the soil. The number of adsorbed ions is far greater -- from 10 to 30 times greater -- than the number of ions dissolved in the soil water. Further, the total number of adsorbed ions does not change as a result of leaching. Consequently the reduction in EC as a result of leaching can only have a small impact on the composition of the adsorbed ions and the SAR of the soil solution. It requires only a very small fraction of adsorbed sodium to be replaced by calcium, magnesium and potassium to maintain the SAR level in the soil water that was present before leaching occurred. In other words, the exchangeable ion composition buffers the composition of the soil water with the result that while leaching will reduce the EC of the soil water, the reduction in SAR will be far smaller. As a result, leaching as a result of a rainstorm can cause SAR problems in the surface soil because the stabilizing effects of salinity on aggregate stability is lost when the EC is reduced[9].

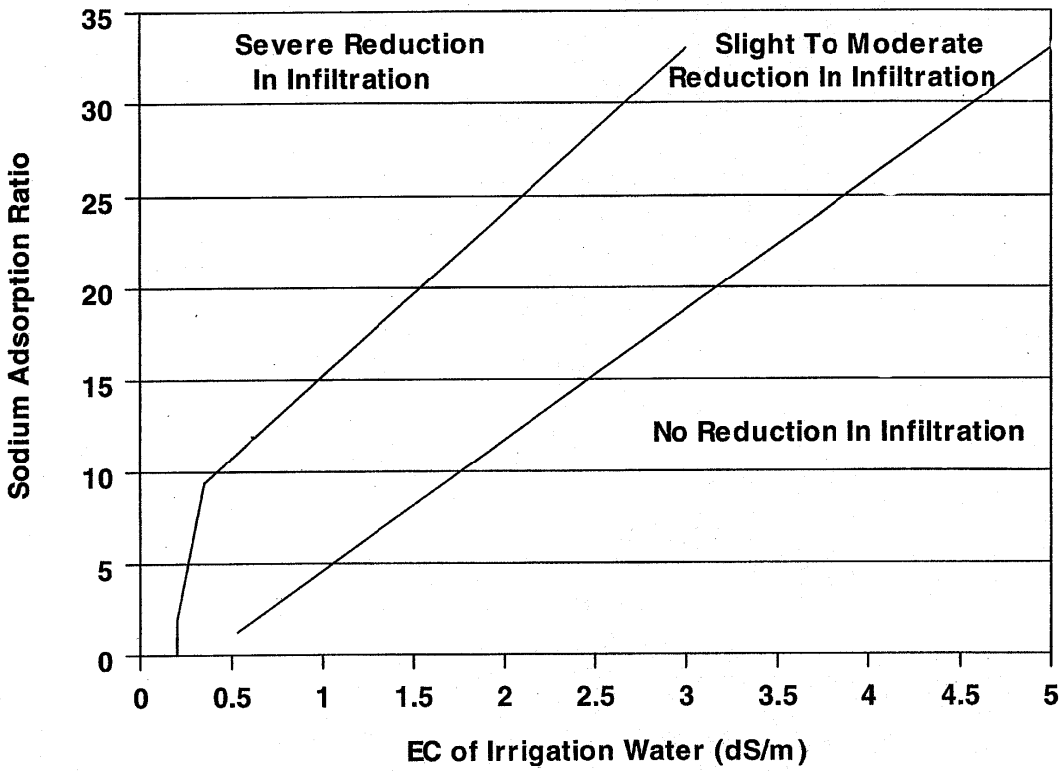

Figure 2. Relationship between EC and SAR and the effect on infiltration of water into the soil[13]

The lower line and the area below it reflect conditions of EC and SAR for which there will be no reduction in infiltration under normal field conditions. This line can be mathematically expressed as SAR=(EC x 0.0071) – 2.475[38]. Several commenters suggested using this formula to establish the applicable SAR standard. However, at an EC of 350 μS/cm or less the formula would indicate that the allowable SAR would be less than zero. At EC's above 1000 μS/cm a SAR limit would be greater than 5. A maximum of 5 is justified to consider the effects of rain fall on the EC and the SAR. When rainfall reduces the salinity in a soil irrigated with water with a SAR greater than 5, there is a risk that infiltration rates will be reduced. For example, from Figure 2, a soil irrigated with water at 2000 dS/cm, could experience a decrease in EC down to 1000. At an SAR of 5, no resulting decrease in infiltration would occur. Above an SAR of 5, a rainfall-induced reduction in EC to 1000 would result in a decrease in infiltration.

Therefore, a rainfall effect-adjusted SAR of 3 was chosen for the Tongue and Rosebud, to correspond to the EC standard of 1000 μS/cm. For the Powder, a rainfall effect-adjusted SAR of 5 was chosen to correspond to the EC standard of 2000 μS/cm. The rainfall effect adjustment for the Powder is greater than that for the Tongue, reflecting the lower availability of irrigation water, and the resulting greater ratio of precipitation to irrigation water applied.

Suarez, Wood, and Lesch, 2008, reported that salinity and SAR criteria in earlier literature had been developed for conditions where irrigation was the only water source. The investigators found that these criteria may not be applicable where there is a combination of rain AND irrigation during the growing season[32].

Bauder, Hershberger and Browning, 2008, found that decreases in EC upon leaching with distilled water were of greater magnitude than corresponding decreases in SAR, reinforcing supposition of sodium-induced dispersion of fine-textured soils as a consequence of rainfall following irrigation with water having salinity and sodicity levels equal to previously published irrigation guidelines[39].

For irrigation systems on tributary streams, infiltration of rainfall and snowmelt is crucial to maintaining soil salinity levels that have little or no impact on crops, particularly alfalfa. The EC of rainfall is near zero. Thus during a wet spring, the salinity of the soil surface can be low due to leaching by rain during times when there is no water of acceptable quality available for irrigation. The SAR of the captured runoff water should not result in adsorbed levels of sodium in the soil that will impede the infiltration of rain.

Schaefer, et al[38] cites Ayers and Westcot, 1985[1], and Hanson et al 1999[13] in stating that for irrigation water with low salinity (EC between 200 and 700 dS/CM) the lowest SAR required to protect soil permeability is 3.0

For these reasons, an SAR of three during the irrigation season was adopted for tributary streams, to correspond with the EC standard of 500 μS/cm.

Standards Exceeded by Ambient Water Quality

One public comment received by the department noted that the standards establish EC values that are lower than some recorded values in the streams. This means that some of the time the ambient quality will exceed the proposed standards due to natural fluctuations of EC in the water throughout the year. When the natural EC values exceed the proposed EC standards, the provisions of 75-5-306, MCA would apply. This section of the Montana Water Quality Act allows for natural exceedances of standards by providing that: "It is not necessary that wastes be treated to a purer condition than the natural condition of the receiving stream as long as the minimum treatment requirements established under this chapter are met". Thus, if the standard is 1000 μS/cm and

the natural condition of the receiving water is 1500 μS/cm, a discharge could occur as long as the discharge did not raise the instream concentration above 1500 μS/cm. The Department will determine the natural condition of the stream at any given point in time through monitoring and interpretation of historic data to ensure that water quality is not diminished under the guise of ambient conditions

Decline in produced water quality between discharge and ultimate use

One complicating factor is that CBM produced water may decline in quality between the point and time it is discharged, and where it ultimately winds up and may affect beneficial use. A number of studies since 2003 investigate this decline in quality. The decline makes protective standards even more important.

Jackson and Reddy, 2007, reported that outfalls are chemically different from corresponding discharge ponds. They found that sodium, alkalinity, and pH all tend to increase, possibly due to environmental factors such as evaporation, while Ca decreased due to calcite precipitation. Most discharge ponds within individual watersheds tended to increase in Na and SAR from 2003 to 2005[40].

Brink, Drever and Frost, 2008, report that the interaction of CBNG-produced waters with semiarid Powder River Basin soils can mobilize accumulated salts, which, through infiltration, can then reach the water table, potentially affecting the quality of the groundwater. They found that the mobilization of the soil-based salts may render the composition of the water recharging the near-surface groundwater very different from the initial chemical composition of the CBNG-produced water. The researchers went on to say that prolonged exposure to CBNG-produced water can cause the salinization and sodification of soils surrounding CBNG-produced water ponds and streams. They concluded that the high SAR of CBNG-produced water requires careful management to prevent sodification of irrigated soils when it is used as an irrigation source[41].

Patz, Reddy, and Skinner, 2004, found that the dissolved calcium concentration of produced water decreased significantly in the downstream channel water, and SAR increased from 32.93 to 45.5 in downstream channels after the confluence of Sue Draw with Burger Draw[42].

They concluded that significant increase in SAR values of CBM discharge water in Burger Draw and Sue Draw tributaries suggest a careful monitoring of salinity and sodicity is needed if CBM discharge water is used for irrigation in semi-arid environments.

McBeth, Reddy, and Skinner, 2003, found that mean EC of CBM produced water increased from 1.93 to 2.09 dS/m, between discharge point and pond waters in the Little Powder watershed. They concluded that release of CBM product water onto the rangelands of the Little Powder may precipitate calcium carbonate

($CaCO_3$) in soils, which in turn may decrease infiltration and increase runoff and erosion[43].

Nondegradation

Two commenters questioned why EC & SAR were found to be harmful parameters. The previous nondegradation criteria was based upon a narrative standard that provided that changes in existing surface and groundwater quality were nonsignificant if the changes would not have measureable effect on any existing or anticipated use, or cause changes in aquatic life or ecological integrity. All other DEQ-7 parameters for which there are numeric standards have numeric antidegradation criteria. Applying this policy to the numeric EC & SAR standards is necessary to protect the existing water quality of the Tongue River from degradation from CBM discharges. Designation of EC & SAR as harmful parameters merely applies the numeric nondegradtion policy, and makes the handling of the parameters consistent with all other constituents in DEQ-7.

The Montana Supreme Court has deferred to the Department's decision to treat harmful parameters with numeric standards in a consistent fashion, and rejected industry's proposal that the 2006 treatment of EC and SAR was novel. See Pennaco et al. v. Board of Environmental Review et al., 2008 MT 425, ¶ 37-39.

Since salinity and sodium as measured by EC & SAR are harmful to plants, soils and aquatic life, the appropriate nondegradation criteria for them is harmful. For harmful parameters changes in existing water quality are considered nonsignificant if the change is less than ten percent of the numeric standards and the ambient water quality of the receiving stream is less than 40% of the standard.

The department does not consider the Powder and Little Powder Rivers to be High Quality Waters for salinity and subject to antidegradation policy. These rivers exceed some of the numeric standards as much as 40% of the time. The department also found that these waterbodies are impaired for salinity in the 2010 Water Quality Integrated Report[22].

Flow based permitting

One commenter suggested using flow-based permitting in implementing the numeric standards. In 2006, the Board adopted the section of the proposed rule that deleted the requirement to use flow based dilution when calculating MPDES permit discharge limits. The Board also rejected the proposal to require the DEQ to use the 7Q10 low flow value to calculate permits. These decisions give the DEQ the discretion to use either method or combination of the two and will make

the analysis of CBM produced water permit applications consistent with other types of discharge permits.

Severability

The nonseverability requirement was originally recommended by DEQ and adopted by the Board at the CBM industry's request. The intent was to prevent a situation in which narrative nondegradation criteria were struck down in court, leaving only the numeric standards in effect. Since the Board approved the replacement of the narrative nondegradation criteria with a conventional numeric approach, the nonseverability provision was no longer necessary.

Recommendation

The department finds that the great majority of the literature published since 2003 supports the need for protective numeric standards, the manner in which they were developed, and the ultimate values that the Board adopted. The Department has considered all of the studies identified in its public notice dated April 10, 2010, as well as all public comments received, and determines that the rules adopted in 2003 and 2006 are adequate to protect beneficial uses and do not require any amendment. The department has not identified any basis through these recent studies, nor through the public comments received, that argue revisitation of the general approach, the numbers themselves, or the manner in which they are implemented.

The department therefore recommends that the Board not initiate further rulemaking on the EC & SAR standards at this time. The department intends to submit this Rationale to EPA, and request approval of the numeric standards submitted in 2003 and 2006.

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Appendix 1 - Calculation Of Water Quality Standards For Long-term Irrigation On The Tongue/Powder/Rosebud Tributaries

In southeastern Montana, the consumptive use of water on the tributaries is very different than the mainstem rivers. Irrigation consists largely of gates and canals on the mainstems, and spreader dike systems on the tributaries[i]. Water is in short supply on the tributaries, application is very opportunistic, and limited to snow-melt and rain driven events. The Department of Environmental Quality (DEQ) calculated water quality standards for tributaries to protect the long-term irrigation use in these systems. The criterion will protect agricultural production while preventing significant crop loss.

DEQ took a three-step approach to calculate a protective electrical conductivity (EC) limit on the tributaries:

- Estimate the frequency of conditions resulting in leaching of the soil-profile
- Calculate the amount of salt accumulated between leaching events
- Determine the amount of salt accumulation possible without any significant crop loss.

Leaching of the majority of salts will occur only under wet conditions when the total infiltrated water from rain, snowmelt, and operation of the spreader dike system exceeds evapotranspiration (ET) by about 14 inches[ii].

To determine the target crop to determine ET, information from the 2001 grower surveys was used. DEQ received more than 200 responses to several surveys asking the agricultural community what type of plants they cultivate each year. One of the surveys was targeted at tributary water use, and 15 of 16 respondents grew alfalfa[iii]. Actual evapotranspiration for alfalfa is calculated at 5.17 inches[iv] from the start of the growing season (April 1) through May 15th.

Total precipitation was estimated from data from National Oceanic and Atmospheric Administration (NOAA) National Climatological Data Center[v]. Data from the Broadus, MT station was used from 1920-2010. A conservative assumption was made that when mean monthly temperatures were at or below freezing, snow build-up occurred: from November through March. The water content from this snow was added to rain through May to estimate the total available water for infiltration in the spring.

Water contribution from the spreader dike systems was estimated to be 6 inches per year. This assumption was based on an infiltration rate study in the Powder River drainage presented in deMooy and Franklin[vi]. The average infiltration rate

across 6 sites was 1.6 inches per hour. Assuming the duration of 4 hours of flooding for one event per year, approximately 6 inches of water would infiltrate into the soil profile.

Leaching event are promoted when 14" of water is available in excess of the 5" to meet ET: that is 19" of total water. This is achieved with the combined water contributions from the following sources: 6 inches from spreader dike irrigation systems, 6 inches held in the 3 foot soil profile (2 inches/foot)[vii], and 7 inches precipitation in the form of snow melt and rain. A recurrence frequency was calculated for the total available water from precipitation at Broadus (**Figure 1**).

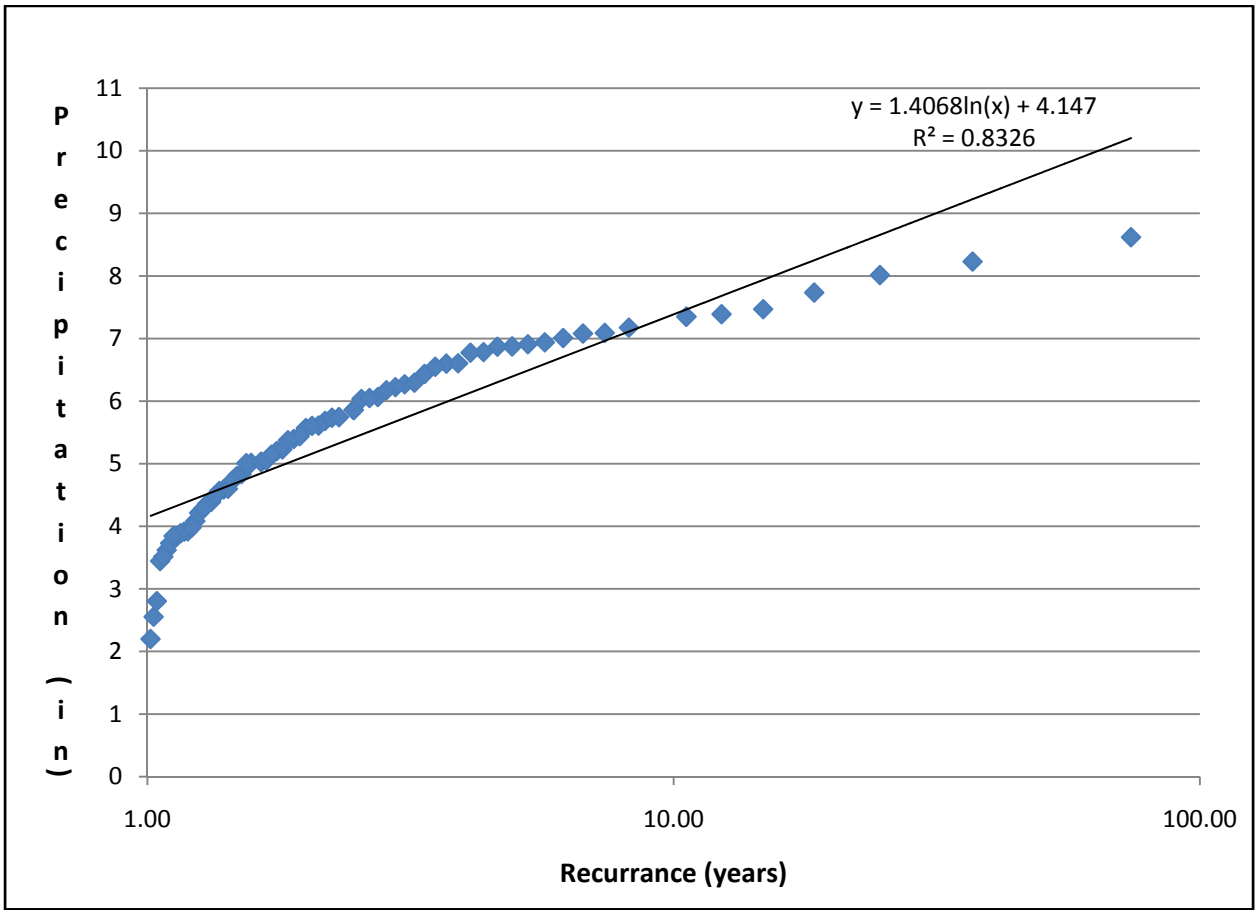

Figure 1 – Precipitation Recurrence Frequency at Broadus, MT

Sufficient water to drive the leaching events occurs once every 8 to 10 years. In the intervening years, when leaching does not occur, salts in the water applied with the spreader dike system accumulate in the upper 3 feet of soil.

A water-salt mass balance calculation ***(eq. 1)*** was used to determine the total salt accumulating from applied irrigation water between leaching events. This

approach accounts for the initial salt present in the soil, plus salt added with irrigation water.

$$\left[\frac{S_{SW} + (I_S * D)}{W_{SP}}\right] = S_{AC} \qquad \textbf{\textit{(eq. 1)}}$$

where:

S_{SW} = Initial salt present in soil water, [dS*inches]/m
I_S = Salt water added annually through irrigation, [dS*inches]/m
D = Duration between leaching events
W_{SP} = Depth of total water in soil profile, inches
S_{AC} = Final soil electrical conductivity, dS/m

The mathematical steps to apply the equation are as follows:

Salt accumulates in the upper 3 feet of soil
Water holding capacity is 2" water/foot soil
Therefore, total water in the soil is:
3' soil * 2"/foot = 6" total water

The average initial soil salinity was assumed to be 0.25 dS/m (250 µS/cm) as measured on extracts from saturated soil pastes that have a water content two times higher than that of the soil. To correct the dilution factor, the initial soil quality was multiplied by 2.

Therefore:
0.25 dS/m * 2 = 0.5 dS/m

The initial soil salinity was multiplied by the total depth of soil water to quantify the total initial salt present in the 3 foot soil profile:
S_{SW} = 0.5 dS/m * 6" total soil water = 3 [dS*inches]/m

500 µS/cm (or 0.5 dS/m) was used as a surrogate water quality. The following calculation derives the amount of water and salt added annually through the application of irrigation water:
I_S = 0.5 dS/m * 6" = 3 [dS*inches]/m added annually

Leaching occurs at a frequency of once every 8 to 10 years (D).
Therefore ($I_S * D$):
3 [dS*inches]/m * 8 years = 24 [dS*inches]/m increase over 8 years
3 [dS*inches]/m * 10 years = 30 [dS*inches]/m increase over 10 years

The EC increase over 8 and 10 years of irrigation plus the initial soil EC ([($I_S * D$)+ S_{SW}]):
8 years: 24 [dS*inches]/m + 3 [dS*inches]/m = 27 [dS*inches]/m
10 years: 30 [dS*inches]/m + 3 [dS*inches]/m = 33 [dS*inches]/m

The calculated EC increase is contained in the 6 inches of water that is distributed throughout the 3 foot soil profile so we divided by 6 to determine the average condition of the soil profile.

S_{AC} = 8 years: 27 [[dS*inches]/m]/ 6" water = 4.5 dS/m

S_{AC} = 10 years: 33 [[dS*inches]/m]/ 6" water = 5.5 dS/m

The EC of the soil was converted back to EC of soil water extract by dividing by a dilution factor of 2:

8 years: (4.5 dS/m) / 2 = 2.3 dS/m

10 years: (5.5 dS/m) / 2 = 2.8 dS/m

After 8 to 10 years of irrigation with 500 µS/cm water, EC of soil water extract would range from 2.3 -2.8 dS/m.

The approach (***eq. 2***) used by Ayers[viii] and Ayers and Westcott[ix] was used to relate soil water extract quality to potential crop yield loss.

$$Y = 100 - (\mathrm{ECe} - a) \qquad (\textbf{\textit{eq. 2}})$$

where:

Y = relative crop yield in %

EC_e = salinity of the soil saturation extract (mmhos/cm)

a = threshold value for the crop representing the maximum EC_e at which 100% yield can be obtained (mmhos/cm)

b = yield decrement per unit of salinity, or percent yield loss per unit of salinity (EC_e) between the threshold value (a) and the EC_e value representing the 100% yield decrement

The following yield threshold values for alfalfa taken from Ayers and Westcott were used:

100% yield for alfalfa: 2.0 dS/m EC_e

0% yield for alfalfa: 15.5 dS/m EC_e

The following method to calculate b ws used:

0% yield – 100% yield = range of EC_es

Range of EC_es / 100 = EC_e per 1% loss

b * EC_e per 1% loss = 1dS/m

15.5 dS/m – 2.0 dS/m = 13.5 dS/m

13.5 / 100 = 0.135 dS/m per 1% loss

b * 0.135 dS/m = 1dS/m (solve for unknown)

7.4% loss per dS/m = b

The calculated relative crop loss (Y) range from 2.2% to 5.9% when applying 500 µS/cm water for 8 to 10 years. If 600 uS/cm was used as a surrogate quality of the irrigation, the range of crop loss would increase to 4.8% to 9.3%.

To protect the agricultural water supply designated use, a tributary electrical conductivity standard of 500 uS/cm is warranted.

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Appendix 2: Public comment categories received, and department responses

Scientific & technical basis

1. The standards cannot be met, because historic water quality sometimes exceeds them.

When the natural EC values exceed the proposed EC standards, the provisions of 75-5-306, MCA would apply. This section of the Montana Water Quality Act allows for natural exceedances of standards by providing that: "It is not necessary that wastes be treated to a purer condition than the natural condition of the receiving stream as long as the minimum treatment requirements established under this chapter are met". Thus, if the standard is 1000 μS/cm and the natural condition of the receiving water is 1500 μS/cm, a discharge could occur as long as the discharge did not raise the instream concentration above 1500 μS/cm.

2. Montana has only established standards for the waters of CBM country. It seems they would be needed for all waterbodies in the state that support irrigation.

Narrative standards are in effect for salinity and sodium in all state waters. Numeric standards were adopted for the Powder River basin because there is a risk to beneficial uses from a significant volume of discharge of water with elevated salinity and sodium.

The use of the standards by the department may result in their application on other waterbodies that have narrative standards. The department would likely use the same approach used here in permit-specific narrative standard translation.

3. What crop, soil, and irrigation methods were used to justify the standards? We do not believe MT has provided adequate scientific justification for the selected standards.

The original 2003 SORN included an in-depth analysis of crop tolerances, irrigation methods, leaching fractions, and rainfall effects. The updated rationale revisits this analysis with additional findings from recent literature and scientific studies, and response to public comment. The analysis provides a sound basis for the identification of appropriate numeric standards, and the manner in which they are implemented.

4. We see no scientific justification for the determination that EC & SAR are harmful parameters and thus subject to non-degradation criteria.

The existing literature and recent studies affirm that elevated salinity adversely affects plants' ability to draw water soil. Elevated SAR causes dispersal and reduction in infiltration in sensitive soils. All water quality parameters that have numeric standards are also subject to numeric non-degradation criteria, and EC & SAR should be no exception.

5. We question the need for non-irrigation season limits on the Powder & Little Powder. With no impoundments, this water will not be used for irrigation.

Non-irrigation season limits are adopted to protect riparian vegetation. Montana's narrative water quality standards prohibit concentrations of materials that are harmful to plant life (ARM 17.30.637 (1)(d)).

The updated Rationale includes recent studies that identify typical riparian species in each of the Tongue and Powder River basins, and the salinity levels that adversely affect their propagation and growth.

7. Montana should return to the narrative standards that serve almost all other states for beneficial use protection.

All states use a combination of narrative and numeric standards to protect beneficial uses; Montana is no exception. With respect to the EC & SAR standards, numeric standards provide more consistency and greater predictability in agency permitting.

8. If MT persists in using numeric values, it should adopt "sliding" or flow based values, which recognize that lower flows naturally result in higher EC and SAR.

The department can and does use flow-based permit limits in some situations. For instances when the natural water quality exceeds the standards, see the response to Comment No. 1.

9. If MT persists in using numeric values, it should adopt the Hanson formula to determine the SAR limit based on the existing EC.

The Board used a range of alternative methods, and relied on established literature, to identify the appropriate SAR for given ranges of ECs, including the Hanson formula for mid-range EC's. As identified in both the original 2003 SORN and the updated Rationale, the Hanson formula is not effective in identifying meaningful SAR levels at very low EC's, when the existing authoritative literature identifies an SAR of 3 as the appropriate level. The formula is also ineffective at high EC's, when the indicated SAR level would leave soils vulnerable to the rainfall effect. In these cases, a maximum SAR level of 5 insures that a rainfall-induced reduction in EC won't result in dispersal of sensitive soils.

10. Dawson Powder study concludes no change in WQ between ’69 & ’04; no studies on Tongue or Little Powder yet.

The Dawson Powder study found small changes in the quality of river flow when pre-1990 data were not included. 1990 is about the time that the Salt Creek oil fields in Wyoming ceased discharging poor quality produced water. Montana maintains that it is not appropriate to include this data, which was affected by human-caused discharges which have ceased and will not occur again. Dr. Dawson conducted a Tongue River analysis; see Comment No. 12.

11. Department has failed to explain why it changed it’s 2003 decision on numeric nondeg.

The comment responses in the 2006 MAR rule adoption notice include an explanation of the decision to adopt numeric nondegradation criteria by designation EC & SAR as harmful parameters. The reasons for this decision include the Board’s 2003 direction to the department to come up with an alternative to the narrative nondegradation approach approved at that time. The narrative nondegradation approach also left EC and SAR as the only two parameters, out of over a hundred parameters in DEQ-7, that had numeric standards and narrative nondegradation criteria. Finally, the Department concluded that the high quality water of the Tongue River required protection through the numeric nondegradation approach. This protection was lacking under the narrative nondegradation approach

12. The Dawson Tongue report concludes that there is no statistically significant difference in pre- and post-CBM EC at Stateline. The report notes a post-CBM increase in SAR, but states that there is insufficient monitoring information to determine whether the post-CBM development increase in SAR in the Tongue River at Stateline station is due to:

- direct discharges to the river from CBM development in Montana,
- discharge from Prairie Dog Creek (which has had CBM development in Wyoming and is characterized by higher SAR than the main stem)
- or a characteristic of the lower flows observed during the post-CBM development time period

The Department agrees with this interpretation of the Dawson Tongue report.

13. Irrigation water from the Tongue has damaged clay soils in the TY irrigation district.

The Department agrees with the conclusions of the study, Rainfall induced dispersion and hydraulic conductivity reduction under low SAR x EC combinations in smectite-dominated soils of eastern Montana by Dr. James W.

Bauder. Among his conclusions are that the observed adverse effects were not necessarily linked to CBM discharges. He found, however, that application of even low SAR water can cause dispersion on very sensitive soils in combination with other events, such as significant precipitation.

14. Numeric standards that protect the broad range of soils in the Tongue and Yellowstone valleys are critical.

The Department agrees. The updated Rationale includes information on specific soil types found in the Powder River basin.

15. The science to date supports Montana's numeric standards and the designation of EC & SAR as harmful parameters.

The department agrees.

16. Produced water accumulates in the Tongue River Reservoir; if there is insufficient spring runoff, it contributes to standards exceedences at gauging stations downstream.

The Board adopted year-round standards for the reservoir so that higher non-irrigation season standards could not contribute to downstream exceedences when the stored water is released.

17. Three-fourths of the TY irrigation district is on the Yellowstone River drainage, which contains a high proportion of clay soils. These soils do not have adequate ability to disperse the level of sodium in CBM produced water.

The department agrees, although the study referenced in the response to Comment No. 13 concludes that soils effects can occur even with low EC's under certain circumstances.

18. USGS grab sample SAR levels have increased by 27% pre- and post development.

The USGS has two trend analysis studies ongoing, one in each state. No results have been published yet. When they are, these study efforts will aid the identification of any water quality trends. State agencies, including the department, also track water quality. If significant trends are identified, actions can be taken to mitigate them.

19. DEQ's hired expert during standards development concluded there is insufficient diluting flow in the tributaries; hence the EC standard of 500 dS/cm.

The 500 dS/cm standard for the tributaries was the product of a fairly detailed calculation including rate of water application, initial soil salinity, water holding

capacity of the soil, and an accumulation period of eight to ten years. This approach comes from deMooy and Franklin, 1977, an authoritative source for calculation of salinity and drainage parameters. It was necessary because the zero leaching fraction on tributaries renders the comparatively straight forward approach used for other waterbodies with leaching fractions unworkable.

The department has restated the analysis in the updated Rationale, with greater detail, documentation, and cites to the authoritative literature.

20. More acreage is being converted from flood to sprinkler irrigation; this fact supports the use of the 30% leaching fraction in arriving at the standards. In some cases, the 30% leaching fraction may be insufficient to flush salts from soils.

The department agrees that the Tongue River drainage has experienced this conversion; it is described in the updated Rationale. However, a 15% leaching fraction was used for sprinkler irrigation, which is more efficient than flood irrigation. The numeric standards represent water quality levels for which sufficient leaching is available to flush salts from the root zone. That is, application of irrigation water meeting the numeric standards will result in sustainable agricultural practices.

21. The tribs are a source of high quality irrigation water. Maintaining the current standards will help prevent perennialization and preserve their value for supporting this beneficial use.

The updated Rationale includes cites from Hendrickx and Buchanan, 2009, which describe the adverse effects of perrenialization of ephemeral drainages. The department recognizes that changes in flow regimes can alter ecosystems and water quality.

Legal issues

Because these issues were raised in litigation, the department does not feel it is appropriate to respond.

1. EPA conditioning of permits based on downstream state WQS applies only to federal permits, not state-issued permits. Section 1342(b) of the CWA does not require Wyoming to comply with Montana's water quality standards at the border.

2. Section 510 of the CWA explicitly preserves a state's jurisdiction over its own waters. This fact prevents Montana from directing Wyoming producers to meet limits more restrictive than those provided in the CWA.

3. As written, the rules impermissibly discriminate against Wyoming, contrary to the Commerce Clause.

4. Construing the CWA to allow Montana's water quality standards would intrude upon Wyoming's sovereignty.

5. The federal district court ruling does not void Montana's EC & SAR standards; they remain in effect.

6. The court did not rule on Wyoming & industry's argument that the standards violate Wyoming's sovereignty.

7. Wyoming & industry misconstrue the purpose of the Triennial Review when they reargue the points raised in their Pennaco briefs. EPA has not determined that Montana's standards are inconsistent with the CWA.

10. No changes should be made to the EC & SAR standards. EPA cannot approve the standards until it has reviewed the entire admin record, and even then approval is dependent upon Montana's review and upon the state's preparation of the requisite admin record.

Administrative & implementation issues

1. EPA approval is also inappropriate at this time because the agency is conducting its own review of CBM produced water through its Effluent Guidelines Program.

Federal promulgation of ELG's, if it occurs, is likely a number of years away. Water quality based standards are necessary and appropriate at the present time. Ultimately, when both technology-based and water quality-based standards exist, the more stringent of the two will be used in permitting decisions.

2. Will MT use average historic data or instantaneous data to determine background water quality in compliance determinations?

Both. The numeric standards include both a monthly average and an instantaneous value

3. The fact that CBM discharges in Montana actually control water quality at Stateline suggests that setting Montana standards for use in Wyoming's discharge permits is unwarranted.

MT DEQ's 2010 mass balance analysis on the Tongue River indicates that MT authorized discharges comprise about two or three percent of the salinity load at Stateline station. Prairie Dog Creek in Wyoming, where there is extensive CBM

development, contributes between 10 and 15 % of the load in it's surface flow, and probably more than that in subsurface flows through alluvial soils.

4. Discharges in Wyoming are degrading Montana waters. Montana needs to uphold their standards and promote federal compliance support.

The department intends to resubmit the water quality standards for EPA review after this review is complete and any necessary changes have been made.

5. The recent Montana Supreme Court decision appears to impose treatment requirements on produced water. Standards changes should not occur until agencies can determine the best method to comply with the Court's decision.

Montana's standards are still in effect in-state, and permits are being rewritten to accommodate the Supreme Court's decision on treatment.

6. The numeric standards in place for EC & SAR are protective of existing uses and in many cases overly protective given that the ambient water quality in tributaries exceeds these standards.

Please see the response to Scientific Basis comment No. 1.

7. The SAR standards should apply in the receiving waters, not at the end of the pipe. Addition of calcium salts to meet end of pipe criteria unnecessarily raises the EC of the receiving water.

The department considers various issues, including the quality of the receiving water, to determine whether the approval of a mixing zone is appropriate. If it is, then the standards apply at the end of the mixing zone, not at the end of the pipe, and the calcium and magnesium content of the receiving water is availably to buffer the SAR.

8. In the absence of a proposed revision to an existing rule, it is not possible to offer specific comments.

Any changes proposed to the standards will include a separate rulemaking process including public comment on the proposed revision.

9. DEQ should provide an explanation of the relevance of each of the CBM studies listed on the agency's site, and how it supports the standards so that the public can comment on the department's rationale.

In the updated Rationale, the department has included references to and interpretations of the studies that relate directly to the technical issues addressed. The department has also summarized the findings of each study

which was reviewed for relevance to this effort, and posted online to support the public involvement process.

10. Existing discharge permits must apply nondegradation provisions when renewed.

The department will apply numeric nondegradation criteria to permits incorporating any new or increased source, and have the potential to cause a change in existing water quality. In this case, the nondegradation criteria that are in effect at the time of renewal would be applied.

11. The recent Supreme Court decision requires all produced water to be treated before discharge. If nondegradation and treatment are required, the produced water will no longer fail WET testing.

The department agrees that treatment will likely reduce toxicity to levels that will routinely pass whole effluent toxicity tests. Once treatment is in place for CBM discharges, the WET testing protocols will serve the function of assuring that no acute or chronic toxicity remains after treatment.

12. Access points are necessary for the monitoring of water quality in the Tongue. Enforcement of the standards is impossible otherwise.

75-5-603, MCA authorizes the department to enter upon any public or private property to investigate conditions relating to pollution of state waters, inspect any monitoring equipment, and sample any effluents.

13. Nondegradation requires that discharges that add more than 15% of the flow be deemed significant.

The department agrees. However, ARM 17.30.715(3) allows the Department to find these increases are nonsignificant based on the criteria of 75-5-301(5)(c). These include the discharge's potential for harm, its quality and strength, its duration, and the character of the pollutant.

14. The standards should not be flow-based. At low flows, discharges are not curtailed, resulting in the majority of the flow in the river being produced water.

ARM 17.30.623(2)(j) and 635(1)(e) require that permit be issued based on the design flow or 7-day, 10-year low flow. Water quality based effluent limits must be based on this design condition to ensure compliance with water quality standards. When in-stream flow is below this level, the discharge is to be governed by the permit conditions developed and implemented in the permit.

15. When TMDL's are completed, it may be necessary to revisit the standards.

TMDL's represent the highest level of pollutants that a waterbody can experience and still meet stadards and support its beneficial uses. The TMDL does not generally affect the standards, rather it is driven by them.

16. Montana permits have not taken into consideration the standards proposed by the Northern Cheyenne tribe; these standards need to be considered in drafting permits.

The NC Tribe is presently revising it's proposed standards; they have not yet been approved. When they are, the department will insure that state-issued permits comply with them.

17. The existing standards cannot be protective until MT DEQ and EPA enforce them.

Water quality standards serve as a basis for permit limits and are enforceable as permit limitations. Other provisions of state and federal statutes prohibit the discharge of pollutants without a permit. Water discharges and instream water quality are monitored for compliance by a number of methods, including field sampling, real time reporting, and industry self monitoring and reporting of discharge quality and volume.

18. MT should formally reopen the numeric standards.

The department advertised the current review as open to any and all technical and public input. If changes to the standards are proposed, a separate rulemaking will be undertaken, which will include another call for public comment.

19. The inquiry of the Triennial Review is whether there is additional scientific or technical data that requires revision of the existing rules.

The department agrees. Studies conducted between 2003 and 2010 were reviewed and analyzed in the Rationale.

20. The EC & SAR standards should not be part of the Triennial Review constituents proposed for EPA approval. A comprehensive rulemaking should be conducted, taking into account public comment and all scientifically sound data.

As elements of the State's water quality standards, the EC & SAR criteria are part of the Triennial Review. A rulemaking will be conducted if the Board determines that new information and data requires it. The department's recommendation is that no rulemaking is necessary at this time.

Appendix 3 - Studies not cited in the Rationale

The following studies posted to support public review were not cited in the Rationale, for the reasons provided:

Comments by James Bauder regarding Potential Impacts of Coal Bed Methane Development to the Buffalo Rapids Project: Draft Agreement Between Montana and Wyoming 2007

Dr Bauder provides observations on other studies cited in the Rationale. These studies themselves are cited.

A Comparison of Coalbed Methane Product Water Quality Versus Surface Water Quality in the Powder River Basin of Wyoming, and An Assessment of the Use of Standard Aquatic Toxicity Testing Organisms for Evaluating the Potential Effects of Coalbed Methane Product Waters Susan Clearwater, Brady Morris & Joseph Meyer 2002

Dr Clearwater's conclusions on the variability in quality of CBM produced water and the manner in which discharge might impact surface waters are valid and informative, but are not necessary to expand the Rationale's discussion of the numeric standards required to protect beneficial uses.

Measured and Estimated Sodium-Adsorption Ratios for Tongue River and it's Tributaries, Montana and Wyoming 2004 - 2006 USGS Scientific Investigations Report 2007-5072 M.R. Cannon, David A. Nimick, Thomas E. Cleasby, Stacy M. Kinsey, and John H. Lambing. 2007

This USGS study describes the regression method used to estimate SAR levels from the real-time EC readings. It is an important tool in the reporting of real-time data, but does not reflect on the development of numeric standards required to protect beneficial uses.

Pre- and Post-Coal Bed Natural Gas Development Surface Water Quality Characteristics of Agricultural Concern in the Upper Tongue River Watershed Helen E. Dawson, U.S. EPA, Region 8, Denver, CO

Powder River Watershed Stream Water Quality Pre- and Post-CBM Development. Helen Dawson, US EPA Region 8. March 2007

Dr Dawson's conclusions about whether or not CBM development to date has had any measurable effect on the quality of surface waters in the Powder River basin do not bear on the development of numeric standards required to protect beneficial uses.

Infiltration from an impoundment for coal-bed natural gas, Powder River Basin, Wyoming: Evolution of water and sediment chemistry. Richard W. Healy, Cynthia A. Rice, Timothy T. Bartos, and Michael P. McKinley. WATER RESOURCES RESEARCH, VOL. 44, 2008

Dr Healy's conclusions on the impacts of water inflitrating from CBM ponds are certainly cause for concern, but do not directly bear on on the development of numeric standards required to protect beneficial uses in surface waters.

Environmental Tracers Applied to Quantifying Causes in Water Quality Along the Powder River, Wyoming. Carol Frost, Elizabeth Brink, Jason Mailloux, Shaun Carter, and Shikka Sharma. 2009

Tracing Coalbed Natural Gas-Coproduced Water Using Stable Isotopes of Carbon. S. Sharma and C.D. Frost. GROUND WATER, Vol 46, No. 2, March-April 2008

Strontium isotopes as indicators of aquifer communication in an area of coal-bed natural gas production, Powder River basin, Wyoming and Montana. Catherine E. Campbell, Benjamin N. Pearon and Carol D. Frost. ROCKY MOUNTAIN GEOLOGY Vol. 43, no. 2 2008

Dr Frost's isotope tracer studies are innovative and informative, but the amount of CBM produced water in the Powder River does not directly bear on the development of numeric standards required to protect beneficial uses in the Powder. Dr Frost's study on the geochemical evolution of produced water in the environment was cited in the Rationale.

Modelling potential impacts of coalbed methane development on stream water quality in an American watershed Xixi Wang and Wanhong Yang. HYDROLOGICAL PROCESSES Vol. 22, No. 1, 2008

Dr Wang's predictive modeling work does not directly bear on the development of numeric standards required to protect beneficial uses in surface waters. Dr. Wang's JAWRA study was cited in the Rationale.

Monitoring Geochemistry of CBNG Produced Water Outfalls, Disposal Ponds, and Sediments in the Powder river Basin, Wyoming. C. Milligan, K.J. Reddy, K.J. and D. Legg. Chapter 8. In K.J. Reddy (ed.) COALBED METHANE: ENERGY AND ENVIRONMENT. Nova Science Publishers, New York. 2010

Recommendations for the monitoring of produced water do not directly bear on the development of numeric standards required to protect beneficial uses. Two other studies conducted by Dr. Reddy were cited in the Rationale.

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR RULEMAKING

AGENDA ITEM # III.B.1.

AGENDA ITEM SUMMARY - The Department is requesting the Board to initiate rulemaking to amend rules establishing treatment requirements for the Montana Pollutant Discharge Elimination System Permit (MPDES) program in ARM Title 17, Chapter 30, subchapter 12. The Department is requesting these amendments in order to maintain compliance with federal regulations governing states with delegated authority to implement the federal Clean Water Act's permitting program.

LIST OF AFFECTED RULES - ARM Title 17, Chapter 30, subchapter 12

AFFECTED PARTIES SUMMARY - Persons or facilities holding permits issued pursuant to the Montana Water Quality Act, Title 75, chapter 5, MCA, and persons or facilities who wish to obtain a permit under the Act.

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

BACKGROUND - This rulemaking action is intended to update rules establishing effluent limitations, standards of performance, and treatment requirements in order to maintain compliance with federal regulations governing states with delegated authority to implement the federal Clean Water Act's permitting program, according to 40 CFR 123.25. That regulation requires delegated states to adopt the technology-based effluent limitations and standards found in subparts A, B, D, H, I, and N of 40 CFR Part 125, 40 CFR Part 133, 40 CFR Part 129, and 40 CFR Chapter I, subchapter N. The Board's existing rules, set forth in ARM Title 17, chapter 30, subchapter 12, incorporate by reference the technology-based effluent limitations and standards of performance that were promulgated by the U.S. Environmental Protection Agency (EPA) prior to 1989. The proposed revisions are necessary, in part, to adopt effluent limitations and standards promulgated by EPA after 1989. The proposed revisions are also necessary to eliminate some federal requirements that are not applicable to the Montana Pollutant Discharge Elimination System (MPDES) permit program (e.g., federal requirements for ocean discharges and pretreatment requirements), clarify existing language, and provide ease of access to federal requirements that are applicable to permits issued by a delegated state.

The proposed revisions fall into the following categories: (1) eliminating existing incorporations by reference adopted prior to 1989 and adopting the text of some of those federal regulations into state rules; (2) adopting the text of relatively recent federal regulations that impose treatment requirements on cooling water intake structures; (3) updating incorporations by reference of federal rules that are too cumbersome to publish into state rules; (4) repealing existing incorporations by reference that are either duplicative or inapplicable to state permit programs; and (5) clarifying existing language.

HEARING INFORMATION - The department recommends that the Board appoint a hearing officer and conduct a public hearing to take comment on the proposed amendments.

BOARD OPTIONS - The Board may:

1. Initiate rulemaking and issue the attached Notice of Public Hearing on Proposed Amendment;
2. Modify the Notice and initiate rulemaking; or
3. Determine that amendment of the rules is not appropriate and deny the department's request to initiate rulemaking.

DEQ RECOMMENDATION - The Department recommends that the Board initiate rulemaking and appoint a hearing officer to conduct a public hearing.

ENCLOSURES -

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

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.30.1201, 17.30.1202, 17.30.1203, 17.30.1206, and 17.30.1207; the adoption of new rules I through V; and the repeal of ARM 17.30.1208 and 17.30.1209 pertaining to Montana pollutant discharge elimination system effluent limitations and standards, standards of performance, and treatment requirements	NOTICE OF PUBLIC HEARING ON PROPOSED AMENDMENT, ADOPTION, AND REPEAL (WATER QUALITY)

TO: All Concerned Persons

1. On _____, 2011, at ____ __.m., the Board of Environmental Review will hold a public hearing [in/at address], Montana, to consider the proposed amendment, adoption, and repeal 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., _____, 2011, 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:

17.30.1201 PURPOSE AND SCOPE (1) The purpose of this subchapter is to establish effluent limitations and standards, treatment ~~standards~~ requirements, standards of performance, and other requirements for point sources discharging wastes into state surface waters. These requirements, together with the rules in subchapter~~s~~ 13 ~~and 14~~, are adopted to discharge the responsibilities of the board ~~and department~~ under Title 75, chapter 5, parts 3 and 4, Montana Code Annotated, the Montana Water Quality Act, to adopt effluent limitations and standards, standards of performance, and treatment requirements ~~and to require compliance with such standards in~~ for permits issued to point sources discharging into state surface waters. These requirements are adopted in a manner that implements the national pollutant discharge elimination system (NPDES) established ~~and administered for the EPA~~ under Sections 301, 302, 304, 306, 307, 316, 318, and 402 of the federal Clean Water Act.

AUTH: 75-5-304, MCA
IMP: 75-5-304, 75-5-401, MCA

17.30.1202 DEFINITIONS ~~For the purposes of this subchapter, t~~The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:

(1) "Alternative effluent limitations" means all effluent limitations or standards of performance for the control of the thermal component of any discharge which are established under section 316(a) of the federal Clean Water Act and this subchapter.

(2) "Annual mean flow" means the average of daily flows over a calendar year. ~~H~~Historical data, up to ten years, must be used where available.

(3) "Applicable standards and limitations" is defined in ARM 17.30.1304.

(4) "Balanced, indigenous community" means a biotic community typically characterized by diversity, the capacity to sustain itself through cyclic changes, presence of necessary food chain species, and a lack of domination by pollution tolerate species. Such a community may include historically non-native species introduced in connection with a program of wildlife management and species whose presence or abundance results from substantial, irreversible environmental modifications. Normally, however, such a community will not include species whose presence or abundance is attributable to the introduction of pollutants that will be eliminated by compliance by all sources with section 301(b)(2) of the federal Clean Water Act, and may not include species whose presence or abundance is attributable to alternative effluent limitations imposed pursuant to section 316(a) of the federal Clean Water Act.

(1) remains the same, but is renumbered (5).

(6) "Closed-cycle recirculating system" means a system designed, using minimized makeup and blowdown flows, to withdraw water from a natural or other water source to support contact and/or noncontact cooling uses within a facility. The water is usually sent to a cooling canal or channel, lake, pond, or tower to allow waste heat to be dissipated to the atmosphere and then is returned to the system. Some facilities divert the waste heat to other process operations. New source water (make-up water) is added to the system to replenish losses that have occurred due to blowdown, drift, and evaporation.

(7) "Conventional pollutant" means the following list of pollutants:

(a) biochemical oxygen demand (BOD);

(b) total suspended solids (nonfilterable) (TSS);

(c) pH;

(d) fecal coliform; and

(e) oil and grease.

(8) "Cooling water" means water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises. Cooling water that is used in a manufacturing process, either before or after it is used for cooling, is considered process water for the purposes of calculating the percentage of a new facility's intake flow that is used for cooling purposes in [New Rule II(6)].

(9) "Cooling water intake structure" means the total physical structure and any associated constructed waterways used to withdraw cooling water from state surface water. The cooling water intake structure extends from the point at which

water is withdrawn from the surface water source up to, and including, the intake pumps.

(2) remains the same, but is renumbered (10).

(11) "Design intake flow" means the value assigned, during the facility's design, to the total volume of water withdrawn from a source water body over a specific time period.

(12) "Design intake velocity" means the value assigned, during the design of a cooling water intake structure, to the average speed at which intake water passes through the open area of the intake screen, or other device, against which organisms might be impinged or through which they might be entrained.

(13) "Effluent limitation" means any restriction or prohibition imposed by the department on quantities, discharge rates, and concentrations of chemical, physical, biological, and other constituents that are discharged from point sources, other than new sources, into state surface waters, including schedules of compliance.

(14) "Effluent limitations guidelines" means a regulation published by EPA in 40 CFR Chapter I, Subchapter N, pursuant to the requirements in section 304(b) of the federal Clean Water Act to adopt or revise effluent limitations.

(15) "Effluent standard" is defined in 75-5-103, MCA, and is synonymous with the term "effluent limitation," as defined in this subchapter, with the exception that it does not include a schedule of compliance.

(16) "Entrainment" means the incorporation of all life stages of fish and shellfish with intake water flow entering and passing through a cooling water intake structure and into a cooling water system.

(3) remains the same, but is renumbered (17).

(18) "Existing facility" means any facility that is not a new facility.

(19) "Existing Source" is defined in ARM 17.30.1304.

(4) remains the same, but is renumbered (20).

(21) "Freshwater river or stream" means a lotic (free-flowing) system that does not receive significant inflows of water from oceans or bays due to tidal action. For the purposes of this subchapter, a flow-through reservoir with a retention time of seven days or less will be considered a freshwater river or stream.

(22) "Hazardous substance" means any element or compound designated by EPA pursuant to section 311(b)(2)(A) of the federal Clean Water Act and listed in 40 CFR 116.4.

(23) "Hydraulic zone of influence" means that portion of the source waterbody hydraulically affected by the cooling water intake structure withdrawal of water.

(24) "Impingement" means the entrapment of all life stages of fish and shellfish on the outer part of an intake structure or against a screening device during periods of intake water withdrawal.

(25) "Lake or reservoir" means any inland body of open water with some minimum surface area free of rooted vegetation and with an average hydraulic retention time of more than seven days. Lakes or reservoirs might be natural water bodies or impounded streams, usually fresh, surrounded by land or by land and a man-made retainer (e.g., a dam). Lakes or reservoirs might be fed by rivers, streams, springs, and/or local precipitation. Flow-through reservoirs with an average hydraulic retention time of seven days or less should be considered a freshwater

river or stream.

(26) "Maximize" means to increase to the greatest amount, extent, or degree reasonably possible.

(27) "Minimize" means to reduce to the smallest amount, extent, or degree reasonably possible.

(5) remains the same, but is renumbered (28).

(29) "Natural thermal stratification" means the naturally-occurring division of a waterbody into horizontal layers of differing densities as a result of variations in temperature at different depths.

(30) "New facility" means any building, structure, facility, or installation that meets the definition of a "new source" in ARM 17.30.1304(37)(a) and (b) or "new discharger" in ARM 17.30.1304(36) and that is a greenfield or stand-alone facility, commences construction after January 17, 2002, and uses either a newly constructed cooling water intake structure, or an existing cooling water intake structure whose design capacity is increased to accommodate the intake of additional cooling water. New facilities include only "greenfield" and "stand-alone" facilities. A greenfield facility is a facility that is constructed at a site at which no other source is located, or that totally replaces the process or production equipment at an existing facility. A stand-alone facility is a new, separate facility that is constructed on property where an existing facility is located and whose processes are substantially independent of the existing facility at the same site. New facility does not include new units that are added to a facility for purposes of the same general industrial operation (for example, a new peaking unit at an electrical generating station).

(a) Examples of "new facilities" include, but are not limited to, the following scenarios:

(i) A new facility is constructed on a site that has never been used for industrial or commercial activity. It has a new cooling water intake structure for its own use;

(ii) A facility is demolished and another facility is constructed in its place. The newly-constructed facility uses the original facility's cooling water intake structure, but modifies it to increase the design capacity to accommodate the intake of additional cooling water;

(iii) A facility is constructed on the same property as an existing facility, but is a separate and independent industrial operation. The cooling water intake structure used by the original facility is modified by constructing a new intake bay for the use of the newly constructed facility or is otherwise modified to increase the intake capacity for the new facility.

(b) Examples of facilities that would not be considered a "new facility" include, but are not limited to, the following scenarios:

(i) A facility in commercial or industrial operation is modified and either continues to use its original cooling water intake structure or uses a new or modified cooling water intake structure.

(ii) A facility has an existing intake structure. Another facility (a separate and independent industrial operation), is constructed on the same property and connects to the facility's cooling water intake structure behind the intake pumps, and the design capacity of the cooling water intake structure has not been increased. This

facility would not be considered a "new facility" even if routine maintenance or repairs that do not increase the design capacity were performed on the intake structure.

(31) "New source" is defined in ARM 17.30.1304.

(32) "Publicly owned treatment works" (POTW) is defined in ARM 17.30.1304.

(33) "Representative important species" means species that are representative, in terms of biological needs, of a balanced, indigenous community of shellfish, fish, and wildlife in the body of water into which a discharge of heat is made.

(34) "Source water" means the state water body (state surface waters) from which the cooling water is withdrawn.

(35) "Standard of performance" is defined in 75-5-103, MCA.

(36) "Toxic pollutant" means any pollutant designated by EPA under section 307(a)(1) of the federal Clean Water Act and listed in 40 CFR 401.15.

(37) "Variance" means any mechanism or provision under sections 301 or 316 of the federal Clean Water Act, or in the applicable "effluent limitations guidelines," which allows modification to, or waiver of, the generally applicable effluent limitation requirements or time deadlines. This includes provisions that allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), or 316(a) of the federal Clean Water Act.

(38) The board adopts and incorporates by reference the following federal regulations as part of the Montana pollutant discharge elimination system:

(a) 40 CFR 401.15 (July 1, 2010), which identifies the list of toxic pollutants designated pursuant to section 307(a)(1) of the federal Clean Water Act.

(b) 40 CFR 116.4 (July 1, 2010), which identifies elements and compounds designated as hazardous substances pursuant to section 311(b)(2)(A) of the federal Clean Water Act.

(c) Copies of these federal regulations may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-304, MCA
IMP: 75-5-304, 75-5-401, MCA

17.30.1203 CRITERIA AND STANDARDS FOR IMPOSING TECHNOLOGY-BASED TREATMENT REQUIREMENTS IN MPDES PERMITS - VARIANCE PROCEDURES (1) ~~The board hereby adopts and incorporates herein by reference 40 CFR Part 125, which is a series of federal agency rules setting forth criteria and standards for the imposition of technology-based treatment requirements in MPDES permits. Copies of 40 CFR Part 125 may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.~~ Technology-based treatment requirements under Section 301(b) of the federal Clean Water Act represent the minimum level of control that must be imposed in MPDES permits. Unless a more stringent effluent limitation applies under ARM 17.30.1344, permits issued by the department must contain the applicable technology-based treatment requirements provided in (2) and (3), according to the applicable deadlines.

(2) ~~The criteria and standards incorporated and adopted herein may be incorporated in any MPDES permit, modification, or renewal thereof issued in accordance with ARM Title 17, chapter 30, subchapters 13 or 14.~~ For POTW's, effluent limitations must be based upon:

(a) Secondary treatment as defined in 40 CFR Part 133, from date of permit issuance; and

(b) The best practicable waste treatment technology, not later than July 1, 1983.

(3) For dischargers other than POTWs except as provided in ARM 17.30.1340(5), effluent limitations must require:

(a) The best practicable control technology currently available (BPT) in accordance with the following schedules:

(i) for effluent limitations promulgated under section 304(b) of the federal Clean Water Act after January 1, 1982, and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989;

(ii) for effluent limitations established on a case-by-case basis based on best professional judgment (BPJ) under (5) in a permit issued after February 4, 1987, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989;

(iii) for all other BPT effluent limitations compliance is required from the date of permit issuance.

(b) For conventional pollutants, the best conventional pollutant control technology (BCT) in accordance with the following schedule:

(i) for effluent limitations promulgated under section 304(b) of the federal Clean Water Act, compliance is required as expeditiously as practicable, but in no case later than such limitations are promulgated, and in no case later than March 31, 1989.

(ii) for effluent limitations established on a case-by-case basis based on (BPJ) under (5) in a permit issued after February 4, 1987, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989;

(c) For all toxic pollutants identified in 40 CFR 401.15, the best available technology economically achievable (BAT) in accordance with the following schedule:

(i) for effluent limitations promulgated under section 304(b) of the federal Clean Water Act, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989.

(ii) for permits issued on a case-by-case basis based on (BPJ) under (5) after February 4, 1987, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989.

(d) For all pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT in accordance with the following schedule:

(i) for effluent limitations promulgated under section 304(b) of the federal Clean Water Act, compliance is required as expeditiously as practicable, but in no case later than March 31, 1989.

(ii) for permits issued on a case-by-case basis based on (BPJ) under (5) after

February 4, 1987 establishing BAT effluent imitations, compliance is required as expeditiously as practicable but in no case later than March 31, 1989.

(4) The following variances from technology-based treatment requirements may be applied for and incorporated into MPDES permits:

(a) for dischargers other than POTW's, a variance from effluent limitations promulgated under sections 301 and 304 of the federal Clean Water Act based on fundamentally different factors in accordance with 40 CFR Part 125, Subpart D;

(b) for dischargers other than POTW's, a water quality related variance from BAT for certain nonconventional pollutants under section 301(g) of the federal Clean Water Act; and

(c) a thermal variance from BPT, BCT and BAT under section 316(a) of the federal Clean Water Act in accordance with [New Rule I].

(5) Technology-based treatment requirements may be imposed through one of the following methods provided in (a) through (c):

(a) application of EPA promulgated effluent limitations guidelines for dischargers by category or subcategory. These effluent limitations are not applicable to the extent that they have been remanded or withdrawn. However, in the case of a court remand, determinations underlying effluent limitations must be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations pursuant to 40 CFR, Part 125, Subpart D;

(b) on a case-by-case basis using best professional judgment (BPJ) to the extent that EPA-promulgated effluent limitations are inapplicable. The permit writer shall apply the appropriate factors listed in (6) and shall consider:

(i) the appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and

(ii) any unique factors relating to the applicant;

(c) through a combination of the methods described in (a) and (b). Where promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the federal Clean Water Act;

(d) limitations developed under (6)(b) may be expressed, where appropriate, in terms of toxicity (e.g., "the LC50 for fat head minnow of the effluent from outfall 001 shall be greater than 25%"), provided that the limits reflect the appropriate requirements (for example, technology-based or water-quality-based standards) of the federal Clean Water Act.

(6) In setting case-by-case limitations pursuant to (5), the permit writer shall consider the following factors:

(a) For BPT requirements:

(i) the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;

(ii) the age of equipment and facilities involved;

(iii) the process employed;

(iv) the engineering aspects of the application of various types of control techniques;

(v) process changes; and

(vi) non-water quality environmental impact (including energy requirements).

(b) For BCT requirements:

(i) the reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived;

(ii) the comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources;

(iii) the age of equipment and facilities involved;

(iv) the process employed;

(v) the engineering aspects of the application of various types of control techniques;

(vi) process changes; and

(vii) non-water quality environmental impact (including energy requirements).

(c) For BAT requirements:

(i) the age of equipment and facilities involved;

(ii) the process employed;

(iii) the engineering aspects of the application of various types of control techniques;

(iv) process changes;

(v) the cost of achieving such effluent reduction; and

(vi) non-water quality environmental impact (including energy requirements).

(7) Technology-based treatment requirements are applied prior to or at the point of discharge.

(8) Technology-based treatment requirements cannot be satisfied through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:

(a) the technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;

(b) the discharger agrees to waive any opportunity to request a variance under section 301(c), (g), or (h) of the federal Clean Water Act; and

(c) the discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.

(9) Technology-based effluent limitations must be established under this rule for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.

(10) The department may set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a nonconventional pollutant which must not be subject to modification under section 301(c) or (g) of the federal Clean Water Act where:

(a) effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant; or

(b) the limitation reflects BAT-level control of discharges of one or more toxic pollutants that are present in the waste stream, and a specific BAT limitation upon

the toxic pollutant(s) is not feasible for economic or technical reasons;

(c) the permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and

(d) the fact sheet required by ARM 17.30.1371 sets forth the basis for the limitation, including a finding that compliance with the limitation will result in BAT-level control of the toxic pollutant discharges identified in (c), and a finding that it would be economically or technically infeasible to directly limit the toxic pollutant(s).

(11) The department may set a permit limit for a conventional pollutant at a level more stringent than BCT when:

(a) effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance; or

(b) the limitation reflects BAT-level control of discharges, or an appropriate level determined under section 301(c) or (g) of the federal Clean Water Act, of one or more hazardous substance(s) that are present in the waste stream, and a specific BAT or other appropriate limitation upon the hazardous substance(s) is not feasible for economic or technical reasons;

(c) the permit identifies which hazardous substances are intended to be controlled by use of the limitation; and

(d) the fact sheet required by ARM 17.30.1371 sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT-level (or other appropriate level) control of the hazardous substances discharges identified in (c), and a finding that it would be economically or technically infeasible to directly limit the hazardous substance(s).

(e) Hazardous substances that are also toxic pollutants are subject to (10).

(12) The department may not set a more stringent limit under the preceding sections if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutant(s) or hazardous substance(s) controlled by the limit were limited directly.

(13) Toxic pollutants identified under (10) remain subject to the requirements of ARM 17.30.1343(1)(a) (notification of increased discharges of toxic pollutants above levels reported in the application form).

(14) The board adopts and incorporates by reference the following federal regulations as part of the Montana Pollutant Discharge Elimination System:

(a) 40 CFR Part 133 (July 1, 2010), which sets forth the level of effluent quality attainable through the application of secondary treatment or equivalent treatment for POTWs;

(b) 40 CFR Part 125, Subpart D (July 1, 2010), which sets forth criteria and standards for determining fundamentally different factors under section 301 of the federal Clean Water Act;

(c) 40 CFR 401.15 (July 1, 2010), which is a list of toxic pollutants identified by EPA under section 307(a)(1) of the federal Clean Water Act.

(d) Copies of these federal regulations may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-304, MCA
IMP: 75-5-304, 75-5-401, MCA

17.30.1206 TOXIC POLLUTANT EFFLUENT STANDARDS (1) ~~The board hereby adopts and incorporates herein by reference 40 CFR Part 129 which is a series of federal agency rules setting forth standards and prohibitions applicable to owners and operators of specified point source dischargers discharging into state waters. Copies of 40 CFR Part 129 may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.~~ This rule is applicable to owners or operators of facilities specified in 40 CFR Part 129 that discharge into state surface waters.

(2) ~~The toxic pollutant effluent standards and prohibitions incorporated and adopted herein may be incorporated in any MPDES permit, modification, or renewal thereof issued in accordance with ARM Title 17, chapter 30, subchapters 13 or 14.~~ The effluent standards or prohibitions for toxic pollutants established in 40 CFR Part 129 shall be applicable to the sources and pollutants set forth in 40 CFR Part 129, and may be incorporated into any MPDES permit, renewed MPDES permit, or permit modification, in accordance with the provisions of 40 CFR Part 129.

(3) The effluent standards and prohibitions established in 40 CFR Part 129 apply to the following toxic pollutants:

(a) Aldrin, which means the compound aldrin as identified by the chemical name, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4 -endo-5,8-exo-dimethanonaphthalene and Dieldrin, which means the compound dieldrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-exo-dimethanonaphthalene;

(b) DDT, which means the compounds DDT, DDD, and DDE as identified by the chemical names: (DDT)-1,1,1-trichloro-2,2-bis(p-chlorophenyl) ethane and someo,p'-isomers; (DDD) or (TDE)-1,1-dichloro-2,2-bis(p-chlorophenyl) ethane and some o,p'-isomers; and (DDE)-1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene;

(c) Endrin, which means the compound as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-endodimethanonaphthalene;

(d) Toxaphene, which means a material consisting of technical grade chlorinated camphene having the approximate formula of C10 H10 Cl8 and normally containing 67-69 percent chlorine by weight;

(e) Benzidine, which means the compound benzidine and its salts as identified by the chemical name 4,4'-diaminobiphenyl;

(f) Polychlorinated biphenyls (PCBs), which means a mixture of compounds composed of the biphenyl molecule which has been chlorinated to varying degrees.

(4) The board adopts and incorporates by reference 40 CFR Part 129 (July 1, 2010), which establishes toxic effluent standards pursuant to section 307of the federal Clean Water Act, as part of the Montana pollutant discharge elimination system. A copy of the incorporated federal regulation may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-304, MCA
IMP: 75-5-304, 75-5-401, MCA

17.30.1207 EFFLUENT LIMITATIONS AND STANDARDS OF

PERFORMANCE (1) ~~The board hereby adopts and incorporates herein by reference 40 CFR Subpart N (except 40 CFR Part 403), which is a series of federal agency rules setting forth effluent limitations for existing point source dischargers and standards of performance for new point source dischargers discharging into state waters. Copies of 40 CFR Subpart N (except 40 CFR Part 403) may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.~~ Permits issued to point source dischargers, other than POTWs, must include effluent limitations or standards of performance applicable to the point source that are set forth in 40 CFR Chapter I, Subchapter N, as provided below:

(a) for existing sources, effluent limitations representing the degree of effluent reduction attainable by the application of:

(i) the best practicable control technology currently achievable (BPT) for all pollutants;

(ii) the best available technology economically achievable (BAT) for toxic and non-conventional pollutants; and

(iii) the best conventional pollutant control technology (BCT) for conventional pollutants;

(b) for new sources, new source performance standards (NSPS) reflecting the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge.

(2) ~~The effluent limitations and standards of performance adopted and incorporated herein may be incorporated in any MPDES permit, modification, or renewal thereof issued in accordance with ARM Title 17, chapter 30, subchapters 13 or 14.~~ The department shall ensure that the applicable effluent limitations or standards of performance set forth in 40 CFR Chapter I, Subchapter N, are included in any new MPDES permit, renewed MPDES permit, or permit modification issued in accordance with ARM Title 17, chapter 30, subchapter 13.

(3) ~~40 CFR Part 403, which is excluded from this incorporation by reference, sets forth general pretreatment requirements for new and existing sources of pollution. Montana pretreatment requirements appear in ARM Title 17, chapter 30, subchapter 14.~~ The board adopts and incorporates by reference 40 CFR Chapter I, Subchapter N (except 40 CFR Part 403) (July 1, 2010), which sets forth federal effluent limitations and standards for existing sources and standards of performance for new sources, which are promulgated by EPA under sections 301, 304(b), 306(b), and 316(b) of the federal Clean Water Act. 40 CFR Part 403, which is excluded from this incorporation by reference, sets forth general pretreatment requirements for new and existing sources. A copy of the incorporated federal regulations may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-304, MCA
IMP: 75-5-304, 75-5-401, MCA

4. The proposed new rules provide as follows:

NEW RULE I CRITERIA AND STANDARDS FOR DETERMINING

ALTERNATIVE EFFLUENT LIMITATIONS FOR THERMAL DISCHARGES

(1) Thermal discharge effluent limitations or standards established in permits may be less stringent than those required by applicable standards and limitations, if the discharger demonstrates to the satisfaction of the department that such effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made. This demonstration must show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, will assure the protection and propagation of a balanced indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made.

(2) In determining whether or not the protection and propagation of the affected species will be assured, the department may consider any information contained or referenced in any applicable thermal water quality criteria and thermal water quality information published by the EPA under section 304(a) of the federal Clean Water Act, or any other information the department deems relevant.

(3) Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies. Any such demonstrations must show:

(a) that no appreciable harm has resulted from the normal component of the discharge, taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge has been made; or

(b) that, despite the occurrence of such previous harm, the desired alternative effluent limitations, or appropriate modifications thereof, will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made.

(4) In determining whether or not prior appreciable harm has occurred under (3)(a), the department shall consider the length of time that the applicant has been discharging and the nature of the discharge.

(5) Any initial application for a variance from thermal effluent limitations pursuant to section 316(a) of the federal Clean Water Act must include the following early screening information:

(a) description of the alternative effluent limitation requested;

(b) a general description of the method by which the discharger proposes to demonstrate that the otherwise applicable thermal discharge effluent limitations are more stringent than necessary;

(c) a general description of the type of data, studies, experiments, and other information which the discharger intends to submit for the demonstration; and

(d) such data and information as may be available to assist the department in selecting the appropriate representative important species.

(6) After submitting the early screening information under (5), the discharger shall consult with the department at the earliest practicable time, but not later than 30 days after the application is filed, to discuss the discharger's early screening

information. Within 60 days after the application is filed, the discharger shall submit for department approval a detailed plan of study that the discharger will undertake to support its demonstration for a variance under Section 316(a). The discharger shall specify the nature and extent of the following type of information to be included in the plan of study: biological, hydrographical, and meteorological data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration must be given to species mentioned in applicable water quality standards. After the discharger submits its detailed plan of study, the department shall either approve the plan or specify any necessary revisions to the plan. The discharger shall provide any additional information or studies that the department subsequently determines are necessary to support the demonstration, including such studies or inspections as may be necessary to select representative important species. The discharger may provide any additional information or studies that the discharger feels are appropriate to support the demonstration.

(7) Any discharger that intends to apply for a renewal of a section 316(a) thermal variance must notify the department of its intent in writing. Within 60 days after receipt of the notification, the department shall request that the discharger include in its renewal application only such information described in (5) and (6) that the department determines is necessary to evaluate the request.

(8) In making the demonstration, the discharger shall consider any information or guidance published by EPA to assist in making such demonstrations.

(9) If an applicant desires a ruling on a Section 316(a) variance before the ruling on any other necessary permit terms and conditions, it shall make such request upon filing its application under (5). This request must be granted or denied at the discretion of the department.

(10) At the expiration of the permit, any discharger holding a thermal variance must support the continuation of the variance with studies based on the discharger's actual operation experience.

AUTH: 75-5-305, 75-5-401, MCA
IMP: 75-5-305, 75-5-401, MCA

NEW RULE II TECHNOLOGY-BASED REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURES FOR NEW FACILITIES (1) The purpose of this rule is to establish technology-based requirements that apply to the location, design, construction, and capacity of the cooling water intake structures at new facilities. This rule implements Section 316(b) of the federal Clean Water Act for new facilities. These requirements are implemented through MPDES permits.

(2) Section 316(b) of the federal Clean Water Act provides that any standards established pursuant to Sections 301 or 306 of the federal Clean Water Act and applicable to a point source must require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.

(3) New facilities that do not meet the threshold requirements regarding amount of water withdrawn or percentage of water withdrawn for cooling water

purposes in (4) must meet requirements determined on a case-by-case, best professional judgment (BPJ) basis. The owner or operator of a new facility that does not meet the threshold requirements in (4) must submit the application information required in 40 CFR 122.21(r).

(4) This rule applies to a new facility if it:

(a) is a point source that uses or proposes to use a cooling water intake structure;

(b) has at least one cooling water intake structure that uses at least 25 percent of the water it withdraws for cooling purposes as specified in (6); and

(c) has a design intake flow greater than two million gallons per day (MGD).

(5) Use of a cooling water intake structure includes obtaining cooling water by any sort of contract or arrangement with an independent supplier, or multiple suppliers, of cooling water if the supplier or suppliers withdraw(s) water from state surface waters. Use of cooling water does not include obtaining cooling water from a public water system or the use of treated effluent that otherwise would be discharged to a state surface water. This provision is intended to prevent circumvention of these requirements by creating arrangements to receive cooling water from an entity that is not itself a point source.

(6) The threshold requirement that at least 25 percent of water withdrawn be used for cooling purposes must be measured on an average monthly basis. A new facility meets the 25 percent cooling water threshold if, based on the new facility's design, any monthly average over a year for the percentage of cooling water withdrawn is expected to equal or exceed 25 percent of the total water withdrawn.

(7) The owner or operator of a new facility that will withdraw equal to or greater than 10 MGD shall comply with either the requirements of (9) or the following:

(a) reduce the facility’s intake flow, at a minimum, to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system;

(b) design and construct each cooling water intake structure at the facility to a maximum through-screen design intake velocity of 0.5 feet per second;

(c) design and construct the cooling water intake structure at the facility such that the total design intake flow from all cooling water intake structures at the facility meets the following requirements:

(i) for cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five percent of the source water annual mean flow;

(ii) for cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern, where present, of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency;

(d) select and implement design and construction technologies or operational measures for minimizing the impingement mortality of fish and shellfish if:

(i) there are threatened, endangered, or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure;

(ii) based on information submitted by any fishery management agency or

other relevant information, there are migratory and/or sport or commercial species of impingement concern to the department that pass through the hydraulic zone of influence of the cooling water intake structure; or

(iii) it is determined by the department, based on information submitted by any fishery management agency or other relevant information, that the proposed facility, after meeting the technology-based performance requirements in (7)(a), (b), and (c), would still contribute unacceptable stress to the protected species, critical habitat of those species, or species of concern; and

(e) select and implement design and construction technologies or operational measures for minimizing entrainment of entrainable life stages of fish and shellfish if:

(i) there are threatened, endangered, or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure; or

(ii) based on information submitted by any fishery management agency or other relevant information, there are or would be undesirable cumulative stressors affecting entrainable life stages of species of concern to the department and the department determines that the proposed facility, after meeting the technology-based performance requirements in (7)(a), (b), and (c), would still contribute unacceptable stress to the protected species, critical habitat of those species, or these species of concern.

(f) submit the application information required in 40 CFR 122.21(r) and [New Rule III(2)];

(g) implement the monitoring requirements specified in 40 CFR 125.87; and

(h) implement the record-keeping requirements in 40 CFR 125.88.

(8) The owner or operator of a new facility that will withdraw equal to or greater than 2 MGD and less than 10 MGD, and that chooses not to comply with (7), shall comply with either the requirements of (9) or the following:

(a) design and construct each cooling water intake structure at the facility to a maximum through-screen design intake velocity of 0.5 feet per second;

(b) design and construct the cooling water intake structure at the facility such that the total design intake flow from all cooling water intake structures at the facility meets the following requirements:

(i) for cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five percent of the source water annual mean flow;

(ii) for cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern, where present, of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency;

(c) select and implement design and construction technologies or operational measures for minimizing the impingement mortality of fish and shellfish if:

(i) there are threatened, endangered, or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure;

(ii) based on information submitted by any fishery management agency or other relevant information, there are migratory and/or sport or commercial species of

impingement concern to the department that pass through the hydraulic zone of influence of the cooling water intake structure; or

(iii) it is determined by the department, based on information submitted by any fishery management agency or other relevant information, that the proposed facility, after meeting the technology-based performance requirements in (8)(a) and (b), would still contribute unacceptable stress to the protected species, critical habitat of those species, or species of concern;

(d) select and implement design and construction technologies or operational measures that minimize entrainment of entrainable life stages of fish and shellfish;

(e) submit the application information required in 40 CFR 122.21(r) and new rule III(2)(b),(c),(d);

(f) implement the monitoring requirements specified in 40 CFR 125.87; and

(g) implement the recordkeeping requirements specified in 40 CFR 125.88.

(9) The owner or operator of a new facility that will withdraw equal to or greater than 2 MGD, and that chooses not to comply with (7) or (8), shall comply with the following:

(a) demonstrate to the department that the technologies employed will reduce the level of adverse environmental impact from the cooling water intake structure located at the facility to a level comparable to that which would be achieved if the facility implemented the requirements of (7)(a) and (b). This demonstration must include a showing that the impacts to fish and shellfish, including important forage and predator species, within the watershed will be comparable to those that would result if the facility implemented the requirements of (7)(a) and (b). This showing may include consideration of impacts other than impingement mortality and entrainment, including measures that will result in increases in fish and shellfish, but it must demonstrate comparable performance for species that the department identifies as species of concern. In identifying such species, the department may consider information provided by any fishery management agency along with data and information from other sources;

(b) design and construct the cooling water intake structure such that the total design intake flow from all cooling water intake structures at the facility meet the following requirements:

(i) for cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five percent of the source water annual mean flow; and

(ii) for cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern, where present, of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency;

(c) submit the application information required in 40 CFR 122.21(r) and [New Rule III(3)];

(d) implement the monitoring requirements specified in 40 CFR 125.87; and

(e) implement the recordkeeping requirements specified in 40 CFR 125.88.

(10) In addition to the technology based requirements of (7), (8), and (9), the owner or operator of a new facility must comply with any more stringent requirements relating to the location, design, construction, and capacity of a cooling

water intake structure or monitoring requirements that the department determines are reasonably necessary to comply with applicable water quality standards adopted by the board pursuant to 75-5-301 and 75-5-303, MCA.

(11) The board adopts and incorporates by reference the following federal regulations as part of the Montana Pollutant Discharge Elimination System:

(a) 40 CFR 125.87 (July 1, 2010), which sets forth monitoring requirements for new facilities with cooling water intake structures;

(b) 40 CFR 125.88 (July 1, 2010), which sets forth record and reporting requirements for new facilities with cooling water intake structures; and

(c) 40 CFR 122.21(r) (July 1**,** 2010), which sets forth application requirements for new facilities with cooling water intake structures.

(d) Copies of these federal regulations may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-305, 75-5-401, MCA
IMP: 75-5-305, 75-5-401, MCA

NEW RULE III INFORMATION REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURES FOR NEW FACILITIES (1) The owner or operator of a new facility with cooling water intake structures shall submit to the department a statement specifying its intent to comply with the technology-based requirements in either (7), (8), or (9) of [New Rule II].

(2) The owner or operator of a new facility that chooses to comply with the requirements of either (7) or (8) of [New Rule II] shall, in addition to meeting the application requirements of 40 CFR 122.21(r)**,** collect and submit to the department the following information, when applying for a new or reissued permit, to demonstrate compliance with (7) or (8) of New Rule II]. (The information required under (a) applies only to an owner or operator that chooses to comply with (7) of [New Rule II]):

(a) flow reduction information demonstrating a reduction in flow to a level that is commensurate with that which can be attained by a closed-cycle recirculating cooling water system, including:

(i) a narrative description of the facility's system that has been designed to reduce the facility's intake flow to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system and any engineering calculations, including documentation demonstrating that make-up and blowdown flows have been minimized; and

(ii) if the flow reduction requirement is met entirely, or in part, by reusing or recycling water withdrawn for cooling purposes in subsequent industrial processes, documentation that the amount of cooling water that is not reused or recycled has been minimized;

(b) velocity information demonstrating that the facility complies with the requirement to meet a maximum through-screen design intake velocity of no more than 0.5 feet per second at each cooling water intake structure as required in (7)(b) and (8)(a) of [New Rule II], including:

(i) a narrative description of the design, structure, equipment, and operation used to meet the velocity requirement; and

(ii) design calculations showing that the velocity requirement will be met at minimum ambient source water surface elevations, based on best professional judgment using available hydrological data, and maximum head loss across the screens or other device;

(c) source waterbody flow information demonstrating that the facility's cooling water intake structure meets the flow requirements in (7) (c) and (8)(b) of [New Rule II], including:

(i) for cooling water intake structures located in a freshwater river or stream, the annual mean flow and any supporting documentation and engineering calculations to show that the facility's cooling water intake structure meets the flow requirements; and

(ii) for cooling water intake structures located in a lake or reservoir, a narrative description of the water body thermal stratification and any supporting documentation and engineering calculations to show that the natural thermal stratification and turnover pattern will not be disrupted by the total design intake flow. In cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish, supporting documentation and a written concurrence from any fisheries management agency with responsibility for fisheries potentially affected by the facility's cooling water intake structure(s); and

(d) a design and construction technology plan demonstrating compliance with (7)(d) and (e) or (8)(c) and (d) of [New Rule II], including:

(i) information to demonstrate whether or not the facility meets the criteria of (7)(d) and (e) or (8)(c) and (d) of [New Rule II];

(ii) delineation of the hydraulic zone of influence for the facility's cooling water intake structure; and

(iii) new facilities required to install design and construction technologies and/or operational measures must develop a plan explaining the technologies and measures that have been selected based on information collected for the source water biological baseline characterization required by 40 CFR 122.21(r)(3). (Examples of appropriate technologies include, but are not limited to, wedgewire screens, fine mesh screens, fish handling and return systems, barrier nets, aquatic filter barrier systems, and similar technologies. Examples of appropriate operational measures include, but are not limited to, seasonal shutdowns or reductions in flow, continuous operations of screens, and similar measures.) The plan must contain the following information:

(A) a narrative description of the design and operation of the design and construction technologies, including fish-handling and return systems, that will be used to maximize the survival of those species expected to be most susceptible to impingement, including species-specific information that demonstrates the efficacy of the technology;

(B) a narrative description of the design and operation of the design and construction technologies that will be used to minimize entrainment of those species expected to be the most susceptible to entrainment, including species-specific information that demonstrates the efficacy of the technology; and

(C) design calculations, drawings, and estimates to support the descriptions provided in (2)(d)(iii)(A) and (B).

(3) The owner or operator of a new facility that chooses to comply with (9) of [New Rule II] shall, in addition to meeting the application requirements of 40 CFR 122.21(r)**,** collect and submit to the department the following information, when applying for a new or reissued permit, to demonstrate compliance with (9) of [New Rule II]:

(a) source waterbody flow information to demonstrate that the facility's cooling water intake structure meets the source waterbody requirements in (9)(b) of [New Rule II]:

(i) for cooling water intake structures located in a freshwater river or stream, the annual mean flow and any supporting documentation and engineering calculations to show that the facility's cooling water intake structure meets the flow requirements; and

(ii) for cooling water intake structures located in a lake or reservoir, a narrative description of the waterbody thermal stratification, and any supporting documentation and engineering calculations to show that the natural thermal stratification and turnover pattern will not be disrupted by the total design intake flow. In cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish, supporting documentation and a written concurrence from any fisheries management agency with responsibility for fisheries potentially affected by the facility's cooling water intake structure(s);

(b) a comprehensive demonstration study to characterize the source water baseline in the vicinity of the cooling water intake structure(s), to characterize operation of the cooling water intake(s), and to confirm that the technology(ies) proposed and/or implemented for the facility's cooling water intake structure reduce the impacts to fish and shellfish to levels comparable to those achieved by implementing the requirements of (7)(a) and (b) in [New Rule II]. To meet the "comparable level" requirement, the owner or operator shall demonstrate that:

(i) there is a reduction in both impingement mortality and entrainment of all life stages of fish and shellfish to 90 percent or greater of the reduction that would be achieved through (7)(a) and (b) of [New Rule II]; or

(ii) if the demonstration includes consideration of impacts other than impingement mortality and entrainment, that the measures taken will maintain the fish and shellfish in the waterbody at a level substantially similar to that which would be achieved through (7)(a) and (b) of [New Rule II];

(c) a plan containing a proposal for how information will be collected to support the comprehensive demonstration study required in (3)(b). The plan must include:

(i) a description of the proposed and/or implemented technology(ies) to be evaluated in the study;

(ii) a list and description of any historical studies characterizing the physical and biological conditions in the vicinity of the proposed or actual intakes and their relevancy to the proposed study. If an owner or operator proposes to rely on existing source waterbody data, it must be no more than five years old, and the owner or operator must demonstrate that the existing data are sufficient to develop a scientifically valid estimate of potential impingement and entrainment impacts and

provide documentation showing that the data were collected using appropriate quality assurance and quality control procedures;

(iii) any public participation or consultation with federal or state agencies undertaken in developing the plan; and

(iv) a sampling plan for data that will be collected using actual field studies in the source waterbody. The sampling plan must document all methods and quality assurance procedures for sampling and data analysis. The proposed sampling and data analysis methods must be appropriate for a quantitative survey and must be based on consideration of methods used in other studies performed in the source water body. The sampling plan must include:

(A) a description of the study area, including the area of influence of the cooling water intake structure and at least 100 meters beyond;

(B) taxonomic identification of the sampled or evaluated biological assemblages, including all life stages of fish and shellfish; and

(C) a description of all sampling and data analysis methods; and

(d) documentation of the results of the comprehensive demonstration study required in (3)(b), including:

(i) a source water biological study, which must include:

(A) a taxonomic identification and characterization of aquatic biological resources including:

(I) a summary of historical and contemporary aquatic biological resources;

(II) determination and description of the target populations of concern (those species of fish and shellfish and all life stages that are most susceptible to impingement and entrainment); and

(III) a description of the abundance and temporal/spatial characterization of the target populations based on the collection of multiple years of data to capture the seasonal and daily activities (such as, spawning, feeding, and water column migration) of all life stages of fish and shellfish found in the vicinity of the cooling water intake structure;

(B) an identification of all threatened or endangered species that might be susceptible to impingement and entrainment by the proposed cooling water intake structure(s); and

(C) a description of additional chemical, water quality, and other anthropogenic stresses on the source waterbody;

(ii) an evaluation of potential cooling water intake structure effects, which must include:

(A) calculations of the reduction in impingement mortality and entrainment of all life stages of fish and shellfish that would need to be achieved by the technologies that have been selected to implement and to meet requirements under (9) of [New Rule II]. In order to do the calculation, the owner or operator shall determine the reduction in impingement mortality and entrainment that would be achieved by implementing the requirements of (7)(a) and (b) of [New Rule II] at the facility; and

(B) an engineering estimate of efficacy for the proposed or implemented technologies used to minimize impingement mortality and entrainment of all life stages of fish and shellfish and maximize survival of impinged life stages of fish and shellfish. The estimate of efficacy must include a demonstration that the proposed

or implemented technologies reduce impingement mortality and entrainment of all life stages of fish and shellfish to a comparable level to that which would be achieved if the requirements in (7)(a) and (b) of [New Rule II] were implemented. The efficacy projection must also include a site-specific evaluation of the technology's suitability for reducing impingement mortality and entrainment based on the results of the source water biological study described in (3)(d)(i). The efficacy estimates may be determined based on case studies that have been conducted in the vicinity of the cooling water intake structure or site-specific technology prototype studies;

(iii) an evaluation of proposed restoration measures, if the owner or operator proposes to use restoration measures to maintain the fish and shellfish as allowed in (9)(a) of [New Rule II]. The evaluation must include the following:

(A) information and data to show coordination with the appropriate fishery management agency(ies); and

(B) a plan that provides a list of the measures proposed to be implemented and an explanation of how the owner or operator will demonstrate and continue to ensure that the proposed restoration measures will maintain the fish and shellfish in the waterbody to a substantially similar level to that which would be achieved through (7)(a) and (b) of [New Rule II]; and

(iv) a verification monitoring plan that must include:

(A) a plan to conduct, at a minimum, two years of monitoring to verify the full-scale performance of the proposed or implemented technologies and operational measures. The verification plan must begin at the start of operations of the cooling water intake structure and continue for a sufficient period of time to demonstrate that the facility is reducing the level of impingement and entrainment to the level documented in (3)(d)(ii). The plan must describe the frequency of monitoring and the parameters to be monitored. The department will use the verification monitoring to confirm that the facility is meeting the level of impingement mortality and entrainment reduction required in (9) of [New Rule II]; and

(B) a plan to conduct monitoring to verify that the restoration measures will maintain the fish and shellfish in the waterbody to a substantially similar level as that which would be achieved through (7)(a) and (b) of [New Rule II].

(4) The department shall review the materials submitted by an owner or operator of a new facility with cooling water intake structures and impose appropriate requirements and conditions in permits to ensure compliance with [New Rule II], in accordance with 40 CFR 125.89.

(5) The board adopts and incorporates by reference the following federal regulations as part of the Montana Pollutant Discharge Elimination System:

(a) 40 CFR 125.89 (July 1, 2010), which sets forth procedures and requirements for imposing permit conditions for new facilities with cooling water intake structures; and

(b) 40 CFR 122.21(r) (July 1**,** 2010), which sets forth application requirements for new facilities with cooling water intake structures.

(c) Copies of these federal regulations may be obtained from the Department of Environmental Quality, Water Protection Bureau, P.O. Box 200901, Helena, MT 59620.

AUTH: 75-5-305, MCA, 75-5-401, MCA
IMP: 75-5-305, MCA, 75-5-401, MCA

NEW RULE IV ALTERNATIVE REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURES FOR NEW FACILITIES (1) Any interested person may request that alternative requirements less stringent than those required in [New Rule II(7) through (10)] be imposed in a permit. The department may establish alternative requirements less stringent than the requirements of [New Rule II(7) through (10)] only if:

(a) there is an applicable requirement under [New Rule II(7) through (10)];

(b) the department determines that data specific to the facility indicate that compliance with the requirement at issue would result in compliance costs wholly out of proportion to the costs EPA considered in establishing the requirement at issue or would result in significant adverse impacts on local air quality, significant adverse impacts on local water resources other than impingement or entrainment, or significant adverse impacts on local energy markets;

(c) the alternative requirement requested is no less stringent than justified by the wholly out of proportion costs or the significant adverse impacts on local air quality, significant adverse impacts on local water resources other than impingement or entrainment, or significant adverse impacts on local energy markets; and

(d) the alternative requirement will ensure compliance with other applicable provisions of the Montana Water Quality Act, Title 75, chapter 5, MCA, and the federal Clean Water Act.

(2) The burden is on the person requesting the alternative requirement to demonstrate that alternative requirements should be authorized.

AUTH: 75-5-305, 75-5-401, MCA
IMP: 75-5-305, 75-5-401, MCA

NEW RULE V TECHNOLOGY-BASED REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURES FOR EXISTING FACILITIES (1) The purpose of this rule is to establish technology-based requirements that apply to the location, design, construction, and capacity of the cooling water intake structures at existing facilities. This rule implements Section 316(b) of the federal Clean Water Act for existing facilities. These requirements are implemented through MPDES permits.

(2) Section 316(b) of the federal Clean Water Act provides that any standards established pursuant to section 301 and 306 of the federal Clean Water Act and applicable to point sources shall require that the location, design, construction, and capacity of the cooling water intake structure reflect the best technology available for minimizing adverse environmental impact.

(3) Existing facilities with cooling water intake structures that are not subject to technology-based requirements under [New Rule II] must meet the requirements of section 316(b) of the federal Clean Water Act, as determined by the department on a case-by-case, best professional judgment (BPJ) basis.

AUTH: 75-5-305, 75-5-401, MCA
IMP: 75-5-305, 75-5-401, MCA

5. The rules proposed to be repealed are as follows:

17.30.1208 HAZARDOUS SUBSTANCES (AUTH: 75-5-304, MCA; IMP, 75-5-304, 75-5-401, MCA), located at page 17-2892, Administrative Rules of Montana.

17.30.1209 SECONDARY TREATMENT (AUTH: 75-5-304, MCA; IMP, 75-5-304, 75-5-401, MCA), located at page 17-2892, Administrative Rules of Montana.

REASON: The board is proposing amendments to rules establishing effluent limitations, standards of performance, and treatment requirements in order to maintain compliance with federal regulations governing states with delegated authority to implement the federal Clean Water Act's permitting program, as set forth in 40 CFR 123.25. That regulation requires delegated states to adopt the technology-based effluent limitations and standards found in subparts A, B, D, H, I, and N of 40 CFR Part 125, 40 CFR Part 133, 40 CFR Part 129, and 40 CFR Chapter I, subchapter N. The board's existing rules, set forth in ARM Title 17, chapter 30, subchapter 12, incorporate by reference the technology-based effluent limitations and standards of performance that were promulgated by the U.S. Environmental Protection Agency (EPA) prior to 1989. The proposed amendments are necessary, in part, to adopt effluent limitations and standards promulgated by EPA after 1989. The proposed amendments are also necessary to eliminate some federal requirements that are not applicable to Montana's MPDES program (e.g., federal requirements for ocean discharges and pretreatment requirements), clarify existing language, and provide ease of access to federal requirements that are applicable to permits issued by a delegated state.

The proposed amendments fall into the following categories: (1) eliminating existing incorporations by reference adopted prior to 1989 and adopting the text of some of those federal regulations into state rules; (2) adopting the text of relatively recent federal regulations that impose treatment requirements on cooling water intake structures; (3) updating incorporations by reference of federal rules that are too cumbersome to publish into state rules; (4) repealing existing incorporations by reference that are either duplicative or inapplicable to state permit programs; and (5) clarifying existing language.

ARM 17.30.1201 - Purpose

The board is proposing to amend the text of ARM 17.30.1201 to clarify that the standards adopted in ARM Title 17, chapter 30, subchapter 12 are technology-based treatment requirements promulgated by EPA, and different from the standards relating to water quality adopted by the board in ARM Title 17, chapter 30, subchapter 6. This amendment is necessary because the existing language simply refers to "standards" for MPDES permits, which would include both technology-based and water quality-based standards. Other minor amendments are proposed to clarify that the rules apply only to surface water discharges and to eliminate reference to pre-treatment rules in ARM Title 17, chapter 30, subchapter 14, because the department has not been delegated the authority to administer the federal Clean Water Act's pretreatment program.

ARM 17.30.1202 - Definitions

The board is proposing to amend the definitions in ARM 17.30.1202 to include the statutory definitions in Montana's Water Quality Act, Title 75, Chapter 5, MCA, and add new definitions that explain the terms of the technology-based requirements that are proposed for adoption in this rulemaking. This amendment is necessary in order to clarify the meaning of technical terms used in New Rules I through V and in the amended text of ARM 17.30.1203, 17.30.1206, and 17.30.1207.

ARM 17.30.1203 - Criteria and Standards for MPDES

The board is proposing to amend ARM 17.30.1203 to eliminate the incorporation by reference of 40 CFR Part 125 and replace it with the text of 40 CFR 125.3 (July 1, 2010 edition). Other federal regulations, which will be eliminated by removing the incorporation by reference of 40 CFR Part 125, are addressed in other amendments proposed by the board, including incorporating some of those regulations by reference into the revised text of ARM 17.30.1203 and 17.30.1207 and adopting the text of some of those federal regulations in New Rules I through V.

The board is proposing this revision because 40 CFR 125.3 establishes the framework for imposing minimum technology-based treatment requirements mandated by Section 301 of the federal Clean Water Act. Adoption of the text will assist the regulated community in understanding which technology-based requirements will apply to any new, revised, or modified MPDES permit for an existing point source discharge. The proposed amendment is necessary in order to provide transparency to the criteria used when imposing technology-based standards in the permitting process and also to maintain the required elements of a state-delegated permit program, as set forth in 40 CFR 123.25.

The proposed revision will not result in a change in existing permit requirements, because 40 CFR 125.3 is one of the federal rules that were incorporated by reference in 1989. Since 40 CFR 125.3 has not been revised by EPA since it was incorporated into state rules, this amendment will not result in new permit requirements.

The board is also proposing to amend ARM 17.30.1203 in order to incorporate by reference the following federal regulations: 40 CFR Part 133 (July 1, 2010 edition), which establishes secondary treatment requirements for publicly owned treatment works (POTWs); 40 CFR Part 125, subpart D (July 1, 2010 edition), which allows variances from certain technology-based limits based upon fundamentally different factors; and 40 CFR 401.15 (July 1, 2010 edition), which is a list of toxic pollutants identified by EPA under Section 307(a)(1) of the federal Clean Water Act. These updates to the incorporations by reference of federal regulations do not result in new permit requirements, because these federal regulations have not been revised since they were originally incorporated into ARM Title 17, chapter 30, subchapter 12. Updating these incorporations by reference is necessary because these regulations are referenced as applicable federal requirements in the amendments to ARM 17.30.1203. Incorporating these federal regulations is also necessary to maintain compliance with federal rules governing delegated states'

permit programs. See, 40 CFR 123.25(a)(36), (37).

ARM 17.30.1206 - Toxic Effluent Standards

The board is proposing to amend ARM 17.30.1206 in order to clarify that the technology-based requirements in 40 CFR Part 129 apply only to specific facilities that discharge specific toxic pollutants. The proposed amendment does not result in new permit requirements, because the provisions of 40 CFR Part 129 have not been revised by EPA since those provisions were originally incorporated by reference into state rules in 1989. The board is also proposing to update the incorporation by reference of 40 CFR Part 129 in order to maintain compliance with rules governing a state's delegated program. See, 123.25(a)(37).

ARM 17.30.1207 - Effluent Limitations and Standards of Performance

The board is proposing to amend ARM 17.30.1207 in order to clarify how the effluent limitations and standards of performance promulgated by EPA and published in 40 CFR Chapter I, subchapter N will be applied to new and existing point sources. The board is also proposing to update the incorporation by reference of 40 CFR Chapter I, subchapter N, so that any effluent limitations and standards of performance that have been promulgated by EPA since 1989 will be adopted into state rule. Updating the incorporation by reference of these federal regulations is necessary, because they are a required element of a delegated state's permit program. See, 40 CFR 123.25(a)(37).

New Rule I - Criteria and Standards for Determining Alternative Effluent Limitations for Thermal Discharges

The board is proposing to adopt the text of 40 CFR 125.72 and 40 CFR 125.73 into New Rule I in order to make the requirements for obtaining alternative effluent limitations for thermal discharges readily available to the regulated community. Adoption of New Rule I will not result in new requirements for Montana permittees because the text of the federal regulations has not changed since 1989, when they were first incorporated into state rule. See, 40 CFR Part 125, subpart H.

Since the board is proposing to adopt the text of federal requirements for thermal discharges, the board is also proposing to amend ARM 17.30.1202 in order to include the special definitions that apply to alternative requirements for thermal discharges. The proposed adoption of New Rule I and the inclusion of special definitions in ARM 17.30.1202 are necessary because the federal criteria and standards for allowing alternative effluent limitations for thermal discharges are required elements of a delegated state's permit program. See, 40 CFR 123.25(a)(36).

New Rules II through IV

The Board is proposing to adopt portions of the text of 40 CFR Part 125, subpart I, into New Rules II through IV. The board is also proposing to incorporate

by reference the remaining portions of 40 CFR Part 125, subpart I, which will not be adopted as text within the new rules. The federal regulations proposed for adoption into New Rules II through IV were promulgated by EPA in 2001 for the purpose of establishing technology-based treatment requirements for cooling water intake structures at new facilities. The board is proposing to adopt New Rules II through IV, because the federal regulations in 40 CFR Part 125, subpart I, are required elements of a delegated state's permit program. See, 40 CFR 123.25(a)(36). A more detailed explanation of the content of new rules II through IV is provided below.

New Rule II - Technology-Based Requirements for Cooling Water Intake Structures for New Facilities

The board is proposing to adopt New Rule II, which contains the text of 40 CFR 125.80, 40 CFR 125.81, and 40 CFR 125.84. The text proposed for adoption explains the purpose of adopting federal requirements for cooling water intake structures, provides thresholds for determining which new facilities are subject to those requirements, and provides three options among which an owner or operator may choose in order to comply with the technology-based requirements in Section 316(b) of the federal Clean Water Act. In addition, the board proposes to incorporate by reference into New Rule II the following federal regulations: 40 CFR 125.87 (July 1**,** 2010), which sets forth monitoring requirements for cooling water intake structures at new facilities; 40 CFR 125.88 (July 1, 2010), which sets forth record and reporting requirements for new facilities; and 40 CFR 122.21(r) (July 1, 2010), which sets forth application requirements for new facilities with cooling water intakes. These proposed incorporations by reference are necessary because the text of New Rule II requires owners or operators of cooling water intake structures at new facilities to comply with these federal regulations.

New Rule III - Information Requirements for Cooling Water Intake Structures for New Facilities

The board is proposing to adopt New Rule III, which contains the text of 40 CFR 125.86. The text of that federal regulation describes the information that must be submitted by an owner or operator of a new facility with a cooling water intake structure when applying for a new or renewed MPDES permit.

In addition, the board is proposing to incorporate by reference the following federal regulations: 40 CFR 125.89, which establishes the procedures and requirements the department must follow when imposing permit requirements for new facilities with cooling water intake structures; and 40 CFR 122.21(r), which sets forth application requirements for new facilities with cooling water intake structures. The proposed incorporations by reference are necessary because the text of New Rule III requires compliance with those regulations.

New Rule IV - Alternative Requirements for Cooling Water Intake Structures for New Facilities

The board is proposing to adopt New Rule IV, which contains the text of 40

CFR 125.85. The text of that regulation authorizes the department to establish alternative requirements less stringent than the requirements of New Rule II, provided that the person requesting the alternative requirements demonstrates that they should be allowed.

New Rule V - Technology-Based Requirements for Cooling Water Intake Structures for Existing Facilities

The board is proposing to adopt new rule V, which establishes technology-based treatment requirements for existing facilities with cooling water intake structures. Adoption of New Rule V is necessary to comply with federal requirements governing a delegated state's permit program. See, 40 CFR 123.25(a)(36).

Repeal of ARM 17.30.1208 – Hazardous Substances

The board is proposing to repeal ARM 17.30.1208, which incorporates by reference a list of hazardous substances identified by EPA under Section 311(b) of the federal Clean Water Act. Section 311(b) prohibits the discharge of oil and hazardous substances into the navigable waters of the United States and its adjoining shorelines and is administered by EPA and the U.S. Coast Guard. Since states have no delegated authority to administer and enforce Section 311(b), the board is repealing the rule implementing that provision of the federal Clean Water Act.

Repeal of ARM 17.30.1209 – Secondary Treatment

The board is proposing to repeal ARM 17.30.1209, which currently incorporates by reference federal regulations establishing secondary treatment for POTWs. Since the proposed amendments to ARM 17.30.1203 clarify the application of minimum treatment requirements, including the application of secondary treatment requirements to POTWs, the existing incorporation by reference in ARM 17.30.1209 is no longer necessary.

6. 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., _____, 2011. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

7. 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.

8. 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.

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

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

_____ BY: _____

JAMES M. MADDEN
Rule Reviewer

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

Certified to the Secretary of State, _____, 2011.

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM

EXECUTIVE SUMMARY FOR ACTION ON RULE INITIATION

Agenda # III.B.2.

Agenda Item Summary: The Department requests that the Board initiate rulemaking to amend air quality rule provisions in Title 17, Chapter 8, subchapters 8, 9, and 10 to update requirements for PM-2.5 from sources subject to major source permit rules.

List of Affected Rules: This rulemaking would amend ARM 17.8.801, 17.8.804, 17.8.818, 17.8.820, 17.8.822, 17.8.825, 17.8.901, 17.8.904, and 17.8.1007.

Affected Parties Summary: The proposed rule amendments would affect owners and operators of major sources.

Scope of Proposed Proceeding: The Department requests that the Board initiate rulemaking and conduct a public hearing to consider the proposed amendments.

Background: This rulemaking action is intended to update Montana's rules to incorporate requirements for major source permitting regarding airborne emissions of particulate matter having an aerodynamic diameter of less than or equal to 2.5 µg in diameter (PM-2.5).

On May 16, 2008, EPA promulgated nonattainment area and Prevention of Significant Deterioration of Air Quality (PSD) Major New Source Review (NSR) regulations establishing: PM-2.5 significant emission rates (SERs) that trigger NSR; requirements for consideration of precursors to PM-2.5 in determining the significance of PM-2.5 emissions; and nonattainment area offset ratios for PM-2.5 emissions. 73 Fed. Reg. 28321. On October 20, 2010, EPA promulgated additional PM-2.5 PSD regulations, including: maximum allowable increases in ambient concentrations ("increments") applicable to PSD Class I, II, and III areas; requirements for determining baseline areas and baseline dates for applicability of PSD increments; PSD significant impact levels (SILs), used to determine whether the ambient impacts of a proposed new major stationary source or major modification would be significant enough to require modeling of cumulative emissions from the source and existing sources; and PSD significant monitoring concentrations (SMCs), used to determine whether it is necessary for the applicant to conduct pre-application monitoring of background ambient concentrations. 75 Fed. Reg. 64864.

The Department is proposing that the Board adopt these federal preconstruction review requirements. In order for Montana to retain its primacy to regulate construction of major air pollutant emission sources in the state, the state is required to adopt at least the minimum federal standards applicable to preconstruction review applicable to emissions of a NAAQS pollutant. Also, adding nonattainment area and PSD preconstruction review requirements for PM-2.5 is necessary in order for the Department to ensure that PM-2.5 offsets are properly obtained for emissions from

major stationary sources and major modifications that would be located in PM-2.5 nonattainment areas and that PM-2.5 emissions from any proposed new major stationary source or major modification would not cause or contribute to air pollution in excess of applicable requirements. These rule amendments would make Montana's rules consistent with the minimum federal requirements.

Hearing Information: The Department recommends that the Board appoint a presiding officer and conduct a public hearing to take comment on the proposed amendments.

Board Options: The Board may:

1. Initiate rulemaking and issue the attached Notice of Public Hearing on Proposed Amendment;
2. Modify the Notice and initiate rulemaking; or
3. Determine that amendment of the rules is not appropriate and deny the request to initiate rulemaking.

DEQ Recommendation: The Department recommends that the Board initiate rulemaking and appoint a presiding officer to conduct a public hearing, as described in the enclosed draft Notice of Public Hearing on Proposed Amendment.

Enclosures:

1. Draft Notice of Public Hearing on Proposed Amendment

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.8.801, 17.8.804, 17.8.818, 17.8.820, 17.8.822, 17.8.825, 17.8.901, 17.8.904, and 17.8.1007 pertaining to definitions, ambient air increments, major stationary sources, source impact analysis, source information, sources impacting federal class I areas, definitions, when air quality permit required, baseline for determining credit for emissions and air quality offsets	NOTICE OF PUBLIC HEARING ON PROPOSED AMENDMENT (AIR QUALITY)

TO: All Concerned Persons

1. On _____, 2011, at ____ __.m., the Board of Environmental Review will hold a public hearing [in/at address], 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., _____, 2011, 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 (1) through (2)(c) remain the same.

(3) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable in 40 CFR 81.327 in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established, except baseline areas for PM-2.5 are designated when a major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 0.3 $\mu g/m^3$ as an annual average for PM-2.5.

(a) through (20)(b)(vii) remain the same.

(21) The following apply to the definitions of the terms "major source baseline date" and "minor source baseline date":

(a) "major source baseline date" means:

(i) in the case of ~~particulate matter~~ PM-10 and ~~sulfur dioxide~~ SO_2, January 6,

1975; ~~and~~

(ii) in the case of ~~nitrogen dioxide~~ NO_2, February 8, 1988; and

(iii) in the case of PM-2.5, October 20, 2010.

(b) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulation. The trigger date is:

(i) in the case of ~~particulate matter~~ PM-10 and ~~sulfur dioxide~~ SO_2, August 7, 1977; ~~and~~

(ii) in the case of ~~nitrogen dioxide~~ NO_2, February 8, 1988; and

(iii) in the case of PM-2.5, October 20, 2011.

(c) through (26) remain the same.

(27) 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: 40 tpy
Sulfur dioxide: 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 SO_2 emissions, or 40 tpy of NO_2 emissions unless demonstrated not to be a PM-2.5 precursor
Ozone: 40 tpy of volatile organic compounds
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 and hydrogen chloride): 36 megagrams per year (40 tpy)

(b) through (29) remain the same.

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.804 AMBIENT AIR INCREMENTS (1) In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
CLASS I	
Particulate matter:	
PM-2.5, annual arithmetic mean	1
PM-2.5, 24-hr maximum	2
PM-10, annual arithmetic mean	4
PM-10, 24-hr maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
CLASS II	
Particulate matter:	
PM-2.5, annual arithmetic mean	4
PM-2.5, 24-hr maximum	9
PM-10, annual arithmetic mean	17
PM-10, 24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
CLASS III	
Particulate matter:	
PM-2.5, annual arithmetic mean	8
PM-2.5, 24-hr maximum	18
PM-10, annual arithmetic mean	34
PM-10, 24-hr maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum.	700
Nitrogen dioxide:	
Annual arithmetic mean	50

(2) remains the same.

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) carbon monoxide~~--~~: 575 µg/m^3, eight-hour average;

(ii) nitrogen dioxide~~--~~: 14 µg/m^3, annual average;

(iii) PM-2.5: 4 µg/m^3, 24-hour average;

~~(iii)~~ (iv) ~~particulate matter--~~PM-10: 10 µg/m^3 ~~PM-10~~, 24-hour average;

~~(iv)~~ (v) sulfur dioxide~~--~~: 13 µg/m^3, 24-hour average;

~~(v)~~ (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 subject to this subchapter ~~would be required to perform~~ requires an ambient impact analysis, including the gathering of ambient air quality data;

~~(vi)~~ (vii) lead~~--~~: 0.1 µg/m^3, three-month average;

~~(vii)~~ (viii) fluorides~~--~~: 0.25 µg/m^3, 24-hour average;

~~(viii)~~ (ix) total reduced sulfur~~--~~: 10 µg/m^3, one-hour average;

~~(ix)~~ (x) hydrogen sulfide~~--~~: 0.2 µg/m^3, one-hour average;

~~(x)~~ (xi) reduced sulfur compounds~~--~~: 10 µg/m^3, one-hour average; or

(b) and (c) remain the same.

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.820 SOURCE IMPACT ANALYSIS (1) remains the same.

(2) For purposes of PM-2.5, the demonstration required in (1) is made if the emissions increase from the new stationary source alone or from the modification alone would cause in all areas, air quality impacts less than the following amounts:

Pollutant	Averaging time	Class I area	Class II area	Class III area
PM-2.5	Annual	0.06 µg/m^3	0.3 µg/m^3	0.3 µg/m^3
	24-hour	0.07 µg/m^3	1.2 µg/m^3	1.2 µg/m^3

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.822 AIR QUALITY ANALYSIS (1) through (7) remain the same.

(8) The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the department determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(9) Nitrogen oxides are presumed to be precursors to PM-2.5 in an area,

unless the applicant demonstrates that emissions of nitrogen oxides from sources in the area are not a significant contributor to that area's ambient PM-2.5 concentrations.

(10) Volatile organic compounds and ammonia are presumed not to be precursors to PM-2.5 unless emissions of volatile organic compounds or ammonia from sources in the area are a significant contributor to that area's ambient PM-2.5 concentrations.

(11) PM-2.5 emissions and PM-10 emissions include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(12) Applicability determinations for PM-2.5 made prior to January 1, 2011, without accounting for condensable particulate matter, are not subject to (11).

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.825 SOURCES IMPACTING FEDERAL CLASS I AREAS--ADDITIONAL REQUIREMENTS (1) through (3) remain the same.

(4) The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from such source would have no adverse impact on the air quality-related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with such demonstration and so certifies to the department, the department may, provided that applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over the minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM-2.5	
annual arithmetic mean	4
24-hr maximum	9
Particulate matter:	
PM-10, annual arithmetic mean	17
PM-10, 24-hr maximum	30
Sulfur dioxide:	
annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide:	
annual arithmetic mean	25

(5) through (6) remain the same.

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.901 DEFINITIONS (1) through (14)(f) remain the same.

(15) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(16) "Precursor" means:

(a) volatile organic compounds and nitrogen oxides in ozone nonattainment areas; and

(b) sulfur dioxide in PM-2.5 nonattainment areas.

(16) and (17) remain the same, but are renumbered (17) and (18).

~~(18)~~ (19) "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~~ Emission Rate
Carbon monoxide:	100 tons per year (tpy)
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter:	25 tpy of particulate matter emissions or
~~or~~	15 tpy of PM-10 emissions
PM-2.5	10 tpy of direct PM-2.5 emissions, 40 tpy of sulfur dioxide emissions, or 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM-2.5 precursor
Lead:	0.6 tpy

(19) and (20) remain the same, but are renumbered (20) and (21).

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.904 WHEN MONTANA AIR QUALITY PERMIT REQUIRED (1) Any new major stationary source or major modification which would locate anywhere in an area designated as nonattainment for a national ambient air quality standard under 40 CFR 81.327 and which is major for the pollutant for which the area is designated nonattainment, shall, prior to construction, obtain from the department a Montana air quality permit in accordance with subchapter 7 and all requirements contained in this subchapter if applicable. A major stationary source or major modification exempted from the requirements of subchapter 7 under ARM 17.8.744 and 17.8.745 which would locate anywhere in an area designated as nonattainment

for a national ambient air quality standard under 40 CFR 81.327 and which is major for the pollutant for which the area is designated nonattainment, shall, prior to construction, still be required to obtain a Montana air quality permit and comply with the requirements of ARM 17.8.748, 17.8.749, 17.8.756, 17.8.759, and 17.8.760 and with all applicable requirements of this subchapter.

(2) remains the same.

(3) Sulfur dioxide is a precursor to PM-2.5 in a PM-2.5 nonattainment area.

(4) Nitrogen oxides are presumed to be precursors to PM-2.5 in a PM-2.5 nonattainment area, unless the applicant demonstrates that emissions of nitrogen oxides from sources in the PM-2.5 nonattainment area are not a significant contributor to that area's ambient PM-2.5 concentrations.

(5) Volatile organic compounds and ammonia are presumed not to be precursors to PM-2.5 in a PM-2.5 nonattainment area unless emissions of volatile organic compounds or ammonia from sources in the area are a significant contributor to that area's ambient PM-2.5 concentrations.

(6) PM-2.5 emissions and PM-10 emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures.

(7) Applicability determinations made prior to January 1, 2011, without accounting for condensable particulate matter, are not subject to (5).

AUTH: 75-2-111, 75-2-203, MCA
IMP: 75-2-202, 75-2-203, 75-2-204, MCA

17.8.1007 BASELINE FOR DETERMINING CREDIT FOR EMISSIONS AND AIR QUALITY OFFSETS (1) For the purposes of this subchapter, the following requirements ~~shall~~ apply:

(a) ~~t~~The requirements of ARM 17.8.906, except that 17.8.906(7) through (9) ~~are not applicable~~ do not apply to offsets required under this subchapter;

(b) ~~e~~Emission offsets must be reductions in actual emissions for the same pollutant obtained from the same source or other sources which are located in the same general area of the proposed major stationary source or modification, and that contribute to or would contribute to the violation of the national ambient air quality standard;

(c) In meeting the emissions offset requirements in this subchapter, emissions offsets for direct PM-2.5 emissions or emissions of precursors of PM-2.5 may be satisfied by offsetting reductions in direct PM-2.5 emissions or emissions of any precursor.

~~(c)~~ (d) ~~i~~In the case of emission offsets involving volatile organic compounds and oxides of nitrogen, offsets will generally be acceptable if they are obtained from within the areas specified in (1)(b). If the proposed offsets would be from sources located at considerable distances from the new source, the department shall increase the ratio of the required offsets and require a showing by the applicant that nearby offsets were investigated and reasonable alternatives were not available;

~~(d)~~ (e) ~~i~~In the case of emission offsets involving sulfur dioxide, particulates, and carbon monoxide, areawide mass emission offsets are not acceptable, and the applicant shall perform atmospheric simulation modeling to ensure that emission

offsets provide a positive net air quality benefit. The department may exempt the applicant from the atmospheric simulation modeling requirement if the emission offsets provide a positive net air quality benefit, are obtained from an existing source on the same premises or in the immediate vicinity of the new source, and the pollutants disperse from substantially the same effective stack height; and

~~(e)~~ (f) ~~n~~No emissions credit shall be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977).

AUTH: 75-2-111, 75-2-203, MCA
IMP, 75-2-202, 75-2-203, 75-2-204, MCA

REASON: Pursuant to the federal Clean Air Act, areas within a state are designated as nonattainment, attainment, or unclassifiable for compliance with the National Ambient Air Quality Standards (NAAQS). Major stationary sources and major modifications that would be located in nonattainment areas are subject to nonattainment area major new source review (NSR) requirements, and major sources and major modifications that would be located in attainment or unclassifiable areas are subject to Prevention of Significant Deterioration (PSD) NSR requirements.

In 1997, the U.S. Environmental Protection Agency (EPA) promulgated NAAQS for fine particulate matter, known as PM-2.5, which includes particles with an aerodynamic diameter less than or equal to 2.5 micrometers. EPA revised the NAAQs in 2006.

On May 16, 2008, EPA promulgated nonattainment area and PSD NSR regulations establishing: PM-2.5 significant emission rates (SERs) that trigger NSR; requirements for consideration of precursors to PM-2.5 in determining the significance of PM-2.5 emissions; and nonattainment area offset ratios for PM-2.5 emissions. 73 Fed. Reg. 28321. On October 20, 2010, EPA promulgated additional PM-2.5 PSD regulations, including: maximum allowable increases in ambient concentrations (“increments”) applicable to PSD Class I, II, and III areas; requirements for determining baseline areas and baseline dates for applicability of PSD increments; PSD significant impact levels (SILs), used to determine whether the ambient impacts of a proposed new source or modification would be significant enough to require modeling of cumulative emissions from the source and existing sources; and PSD significant monitoring concentrations (SMCs), used to determine whether it is necessary for the applicant to conduct pre-application monitoring of background ambient concentrations. 75 Fed. Reg. 64864. The federal requirements for state nonattainment area NSR provisions related to PM-2.5 are codified at 40 CFR § 51.165(a)(1)(x)(A), (C) and (D) and 40 CFR § 51.165(a)(11), and the federal requirements for state PSD provisions are found at 40 CFR § 51.166(b)(14), (15) and (23), (k), and (p).

The board is proposing in this rulemaking to adopt these federal preconstruction review requirements. In order for Montana to retain its primacy to regulate construction of major air pollutant emission sources in the state, the state is required to adopt at least the minimum federal standards applicable to

preconstruction review applicable to emissions of a NAAQS pollutant. Also, adding nonattainment area and PSD preconstruction review requirements for PM-2.5 is necessary in order for the department to ensure that PM-2.5 offsets are properly obtained for emissions from major stationary sources and major modifications that would be located in PM-2.5 nonattainment areas and that PM-2.5 emissions from any proposed new major stationary source or major modification would not cause or contribute to air pollution in excess of applicable requirements.

The board also is proposing minor editorial revisions that are not intended to have any substantive effect.

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., _____, 2011. 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

_____ BY: _____

DAVID RUSOFF
Rule Reviewer

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

Certified to the Secretary of State, _____, 2011.

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM
EXECUTIVE SUMMARY FOR
WATER QUALITY STANDARDS AMENDMENTS

AGENDA ITEM # III.B.3.

AGENDA ITEM SUMMARY: The proposed rulemaking would amend rules to designate a portion of the Gallatin River as an Outstanding Resource Water (ORW).

LIST OF AFFECTED RULES: ARM 17.30.617 and 17.30.638.

AFFECTED PARTIES SUMMARY: The proposed designation of the Gallatin River from the Yellowstone National Park boundary to Spanish Creek as an ORW would prohibit new or increased point source discharges that would cause a permanent change of water quality. This includes individual and community waste water treatment systems or industrial sources that desire to discharge to the proposed ORW section of the Gallatin River or are determined to have a direct hydrologic connection to the Gallatin River.

SCOPE OF PROPOSED PROCEEDING: Issuance of a notice of supplemental rulemaking extending the comment period.

BACKGROUND: The Board received a petition from American Wildlands in December 2001 requesting the Board to initiate rulemaking to designate the mainstem Gallatin River from the Yellowstone National Park boundary to the confluence of Spanish Creek as an Outstanding Resource Water (ORW).

At the March, 2002, meeting the Board received comment on the petition and directed the Department to prepare an environmental impact statement (EIS) addressing the petition. The draft EIS was released for public comment in September, 2006. The comment period on the draft EIS closed on October 27, 2006. The final EIS was issued on January 9, 2007.

Notice of proposed rulemaking appeared in the October 5, 2006, Montana Administrative Register. The comment period on the proposed rulemaking closed on November 2, 2006. The Board received a number of comments objecting to the ORW designation on grounds that it would render a number of properties in the Big Sky area undevelopable. In response, the petitioners and several members of the development community commenced discussions regarding local and other actions that could eliminate the potential that an ORW designation would render properties undevelopable. They requested the Board to delay action on the rulemaking while they explored the feasibility of these options. The Board granted this request and has extended the comment period at approximately six-month intervals since then to allow those efforts to continue. The last extension expired on April 29, 2011. During the comment period, the Board received comments from the Department and American Rivers indicating that a pilot project to determining the feasibility of disposal of wastewater from the Big Sky wastewater treatment plant using snowmaking will be conducted this fall. Those commentors and one other requested that the comment period be further extended while this testing occurs. One commenter recommended that the Board adopt the ORW designation.

HEARING INFORMATION: The Board held a hearing on October 25, 2006.

BOARD OPTIONS:

The Board may:

1. Publish a supplemental notice extending the comment period;
2. Adopt the rule amendments as proposed or with modifications; or
3. Determine that it will not adopt the rule amendments, either affirmatively or by inaction.

DEQ RECOMMENDATION: Since the original publication of the notice, various interested parties have formed a collaborative called the "Wastewater Solutions Forum." The Forum hired an engineering firm and that firm completed a feasibility study for engineering option that would protect the Gallatin River without the need for an ORW. Comments received indicated that extension of the Big Sky Water and Sewer District service area along the Gallatin would provide more effective water quality protection than the ORW designation. The Forum was exploring funding options when the economic downturn began. That downturn resulted in an interruption of those efforts. However, those efforts have now resumed. The Forum has funding for and will conduct a pilot test to determine the feasibility of disposing of waste water from the Big Sky and Yellowstone Mountain Club wastewater treatment facilities using snow making at a confined site at the Yellowstone Mountain Club. If successful, this will provide a method for disposal of wastewater without affecting the Gallatin River. This may allow for expansion of the sewer system and protection of the Gallatin. The Department therefore recommends that, rather than making a decision to adopt or not adopt the rule, the Board extend the comment period until November 8, 2011.

ENCLOSURES:

The following information is attached to this summary:

1. Public Comment
2. Notice of Extension of Comment Period on Proposed Amendment

Gable, Misty

From: Scott Bosse [SBosse@americanrivers.org]
Sent: Friday, April 29, 2011 1:49 PM
To: DEQ BER; Bukantis, Bob
Subject: American Rivers letter re Gallatin River ORW rulemaking
Attachments: American Rivers letter - Apr '11.pdf

Dear Members of the Board of Environmental Review:

Please find attached our letter seeking an extension in the public comment period on the rulemaking for the Gallatin River ORW designation.

Sincerely,

Scott

Scott Bosse
Northern Rockies Director
American Rivers
P.O. Box 1330
Bozeman, MT 59771
Cell Ph: (406) 570-0455

Vote for Clean Water! Help American Rivers win a large donation from Garnier at http://bit.ly/feJ77s.

Please consider the environment before printing this e-mail.

Scott Bosse, Northern Rockies Director
American Rivers
P.O. Box 1330
Bozeman, MT 59771

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

April 29, 2011

Dear Members of the Board of Environmental Review:

On behalf of American Rivers, I am writing to request that the Board of Environmental Review grant an extension of the comment period in ARM 17.30.617 and 17.30.630 pertaining to the Outstanding Resource Water (ORW) designation for the Gallatin River.

American Rivers is the leading conservation organization dedicated to protecting and restoring America's rivers for the benefit of communities, wildlife and nature. Founded in 1973, American Rivers has more than 65,000 members and supporters, with offices in Washington, DC and nationwide. We opened our Northern Rockies office in Bozeman in 2009 with the goal of protecting Montana's last, best headwaters. The Gallatin River is high on our list of conservation priorities.

Although American Rivers was not involved in writing the original ORW petition, nor has it endorsed ORW designation for the Gallatin River, we continue to believe it is important that it remain on the table as we explore other options for protecting water quality in the Gallatin River. We are active participants in the Wastewater Solutions Forum – a collaboration of conservation groups, Big Sky area developers, the three local ski areas, and the Big Sky Water & Sewer District – whom have joined together to study ways to maintain high water quality in the Gallatin River while enhancing the local economy. We are excited to report that the Forum recently began collaborating with the Montana Department of Environmental Quality (DEQ) on a pilot project to determine whether snowmaking can be used to dispose of highly treated wastewater. Until we know for sure whether this is feasible, and until we fully explore other alternatives to ORW designation, we would like to keep the comment period on the rulemaking open.

In conclusion, while American Rivers prefers to address wastewater issues in the Gallatin River via a collaborative process, keeping ORW designation on the table ensures that all the aforementioned parties will remain committed to finding effective solutions in a timely manner.

Sincerely,

Scott Bosse
Northern Rockies Director

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

April 29, 2011

FILED this 29th day of April AD 2011
at ____ o'Clock ____ m.
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
by: Misty Cott

Elios Johnson, Paralegal
Department of Environmental Quality
1520 E. Sixth Avenue
Helena, MT 59602

RE: ORW Rulemaking, MAR Notice No. 17-276

The Big Sky Wastewater Solutions Forum is working on an engineering solution that will protect the Gallatin River without the need for an ORW designation. A component of the solution is devising a method for disposal of treated water from the Big Sky wastewater treatment plant without discharge to the Gallatin River. The Big Sky Wastewater Solutions Forum is planning a pilot project to test disposal of this wastewater using snowmaking. The project is planned and funded to occur this upcoming fall and winter at the Yellowstone Mountain Club. An updated plan was submitted to the Department in March from the Big Sky Water and Sewer District on behalf of the Wastewater Solutions Forum. The proposed site should be ideal for the pilot project, and the Department, after review of the plan, has determined that no permit will be necessary.

Given this progress, the Department recommends that the comment period on the ORW rulemaking be extended.

Sincerely,

Bob Bukantis
Section Supervisor, Water Quality Standards

Johnson, Elois

From: James Wm Johnson [jas.wm.johnson@gmail.com]
Sent: Sunday, February 06, 2011 11:47 AM
To: Johnson, Elois
Subject: ARM 17.30.617 and 17.30.636

Elois Johnson
DEQ

Reference is made to the Extension of Comment Period for ARM 17.30.617 and 17.30.636

As you are well aware, this notice was originally published October 5, 2006! The comment period has been extended now for almost FIVE years.

I would like to make a comparison for the board with regard to their position regarding the preservation of the Gallatin. This comparison is apt because it demonstrates how "organized government" can use its devices to produce the result (in the instant case, apparently) desired.

In 1513, the Spanish employed a device *Requerimiento* http://en.wikipedia.org/wiki/Requerimiento presented to the American natives for the Spanish nation's "just war."

Prior to an invasion, often in the middle of the night, a monk, *in Spanish,* would, outside the Pueblo walls, read the *Requerimiento* telling the Indians to lay down their arms and accept Christianity; and then, in the words of a historian, with "chilling legalism" employing a notary that the edict had been pronounced, proceed.

The developers of five hundred years ago got their wish: land for colonization.

Today, the Big Sky developers, by continuing to have the board delay, get their wish: land for development.

With "chilling legalism" the board continues to allow the Gallatin to be unprotected.

--
Jim Johnson
POB 160996
Big Sky, MT 59716

406.995.3262 Big Sky

Johnson, Elois

From: Gretchen Grayum [woodsongdesigns@bresnan.net]
Sent: Wednesday, February 02, 2011 5:11 PM
To: Johnson, Elois
Subject: Comment Re: Extension of Time for Gallatin River Funding

February 2, 2011

Dear Ms. Johnson,

Upon receiving my notification In The Matter of the amendments pertaining to Outstanding Resource Water Designation for the Gallatin River:

I would like to include these comments ~~~ that I fervently hope that the comment period will be extended to allow resumption of efforts to obtain funding to complete and ensure final designation of the Gallatin River as an Outstanding Water Resource.

My family has owned property on this river for many, many years ~~~ and we have no doubt whatsoever as to this river deserving this designation.

Thank you for recording my comment.

Sincerely, Gretchen Grayum

906 N Benton Ave.
Helena, MT 59601

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.30.617 and 17.30.638 pertaining to outstanding resource water designation for the Gallatin River	)))))	NOTICE OF EXTENSION OF COMMENT PERIOD ON PROPOSED AMENDMENT (WATER QUALITY)

TO: All Concerned Persons

1. On October 5, 2006, the Board of Environmental Review published MAR Notice No. 17-254 regarding a notice of public hearing on the proposed amendment of the above-stated rules at page 2294, 2006 Montana Administrative Register, issue number 19. On March 22, 2007, the board published MAR Notice No. 17-257 regarding a notice of extension of comment period on the proposed amendment of the above-stated rules at page 328, 2007 Montana Administrative Register, issue number 6. On September 20, 2007, the board published MAR Notice No. 17-263 regarding a notice of extension of comment period on the proposed amendment of the above-stated rules at page 1398, 2007 Montana Administrative Register, issue number 18. On March 13, 2008, the board published MAR Notice No. 17-268 extending the comment period on the proposed amendment of the above-stated rules at page 438, 2008 Montana Administrative Register, issue number 5. On September 11, 2008, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 1953, 2008 Montana Administrative Register, issue number 17. On February 26, 2009, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 162, 2009 Montana Administrative Register, issue number 4. On August 13, 2009, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 1324, 2009 Montana Administrative Register, issue number 15. On February 11, 2010, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 264, 2010 Montana Administrative Register, issue number 3. On July 29, 2010, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 1648, 2010 Montana Administrative Register, issue number 14. On January 27, 2011, the board published MAR Notice No. 17-276 extending the comment period on the proposed amendment of the above-stated rules at page 1648, 2010 Montana Administrative Register, issue number 14.

2. During the initial comment period and extensions of the original comment period, the board was advised that members of the Big Sky community, which would be affected by this rulemaking, had formed a collaborative, called the “Wastewater Solutions Forum,” and had hired an engineering firm, which completed a feasibility study on extending the coverage of the Big Sky Water and Sewer district service area. The board received comments indicating that this would protect water quality in the Gallatin River as well as or better than adoption of the proposed rule. The

Forum was exploring funding options when the economic downturn began. That downturn resulted in an interruption of those efforts. However, those efforts have now resumed. During the comment period, the board received comments indicating that the Forum has funding for and will conduct a pilot test to determine the feasibility of disposing of wastewater from the Big Sky and Yellowstone Mountain Club wastewater treatment facilities using snow making at a confined site at the Yellowstone Mountain Club. If successful, this will provide a method for disposal of wastewater without affecting the Gallatin River, which may allow for expansion of the sewer system and protection of the Gallatin. During the most recent comment period, the board received three comments requesting that the board further extend the comment period and one comment recommending that the board adopt the rule without further comment. The board has determined that it will further extend the comment period in order to allow submission of comments and information on the feasibility of this option.

3. Written data, views, or arguments 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 [DATE]. To be guaranteed consideration, mailed comments must be postmarked on or before that date.

4. The board will make reasonable accommodations for persons with disabilities who wish to participate in this rulemaking action or need an alternative accessible format of this notice. If you require an accommodation, contact the board no later than 5:00 p.m., [DATE], to advise us of the nature of the accommodation that you need. Please contact the board secretary at P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2544; fax (406) 444-4386; or e-mail ber@mt.gov.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

_____ BY: _____

JOHN F. NORTH
Rule Reviewer

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

Certified to the Secretary of State, July 5, 2011.

BOARD OF ENVIRONMENTAL REVIEW
AGENDA ITEM

EXECUTIVE SUMMARY FOR ACTION ON RULE ADOPTION

Agenda # III.C.1.

Agenda Item Summary: On December 23, 2010, the Board published MAR Notice No. 17-309 regarding proposed amendments to ARM 17.30.201 and ARM 17.30.1341. The proposed amendments would add a general permit category for pesticide application, set permit fees, provide definitions of relevant terms, correct a clerical error in the suction dredge fees, and make a minor clarification to the fee rule.

List of Affected Rules: ARM 17.30.201 and ARM 17.30.1341

Affected Parties Summary: The proposed rule amendments would affect parties intending to obtain pesticide permit coverage and potentially all MPDES permit holders.

Scope of Proposed Proceeding: The Board is considering final action on adoption of the amendments to the above-referenced rules.

Background: In response to a federal court decision, the proposed amendments provide an administrative framework to allow the Department to proceed with development of a Montana Pollutant Discharge Elimination System pesticide general permit, and to provide the fee schedule information as required in the Montana Water Quality Act. The amendments were released for public comment from December 23, 2010 until January 24, 2011.

Thirty-five (35) comments were received during the public comment period. Based on these comments, the Department requests that the Board consider the following changes:

- Modify the definitions for multi-county and single-county to remove any reference to agriculture districts and instead clarify that up to 20 contiguous counties may be included in one multi-county permit.
- Introduce a “less than threshold” category with bare minimum new permit fees of $50/single-county and $100/multi-county (application + first year) and $25/single and $50/multi-county annual fees.
- Reduce the “greater than threshold” category fees by approximately 50% from the rates proposed in December.

The Pesticide General Permit was finalized and effective by the court-ordered date of April 9, 2011. The permit allows a 6-month delay for application and fee submittal requirements. Congress is currently considering legislation to eliminate pesticide application from Clean Water Act permitting. If that legislation is

enacted, the Department will not implement the Montana pesticide general permit or the fees.

Hearing Information: Katherine Orr conducted a public hearing on January 12, 2011.

Board Options: The Board may:

1. Adopt the proposed amendments as set forth in the attached draft Notice of 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 proposed amendments.

DEQ Recommendation: The Department recommends that the Board adopt the amendments to the rules with changes made in response to comments, as set out in the attached draft Notice of Amendment.

Enclosures:

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

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.30.201 and 17.30.1341 pertaining to permit application, degradation authorization, and annual permit fees and general permits	NOTICE OF PUBLIC HEARING ON PROPOSED AMENDMENT (WATER QUALITY)

TO: All Concerned Persons

1. On January 12, 2011, at 1:30 p.m., the Board of Environmental Review 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 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., January 3, 2011, 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:

17.30.201 PERMIT APPLICATION, DEGRADATION AUTHORIZATION, AND ANNUAL PERMIT FEES (1) through (1)(h) remain the same.

(2) For purposes of this rule, the definitions contained in ARM Title 17, chapter 30, subchapter 10 and subchapter 13 are incorporated by reference. The following definitions also apply in this rule:

(a) through (e) remain the same.

(f) "multi-county," for pesticide permit fee purposes, means the general permit authorizing pesticide application within multiple counties that are within the same Montana Department of Agriculture field office district;

(f) through (i) remain the same, but are renumbered (g) through (j).

~~(j)~~ (k) "outfall" means a disposal system through which effluent or waste leaves the facility or site; ~~and~~

(l) "pesticide" means:

(i) a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest;

(ii) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; and

(iii) any nitrogen stabilizer, except that the term "pesticide" shall not include any article that is a "new animal drug" within the meaning of section 201(w) of the federal Food, Drug, and Cosmetic Act, 21 U.S.C. 321(w), that has been determined by the United States Secretary of Health and Human Services not to be a new

animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201(x) of 21 U.S.C. 321(x) bearing or containing a new animal drug. The term "pesticide" does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 321. For purposes of the preceding sentence, the term "critical device" includes any device that is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, and the term "semi-critical device" includes any device that contacts intact mucous membranes but that does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body.

~~(k)~~ (m) "renewal permit" means a permit for an existing facility that has an effective discharge permit~~.~~; and

(n) "single county," for pesticide permit fee purposes, means the general permit authorizing pesticide application within one county or within multiple counties that are not within the same Montana Department of Agriculture field office district.

(3) through (5) remain the same.

(6) The fee schedules for new or renewal applications for, or modifications of, a Montana pollutant discharge elimination system permit under ARM Title 17, chapter 30, subchapter 11 or 13, a Montana ground water pollution control system permit under ARM Title 17, chapter 30, subchapter 10, or any other authorization under 75-5-201, 75-5-301, or 75-5-401, MCA, or rules promulgated under these authorities, are set forth below as Schedules I.A, I.B, I.C, and I.D. Fees must be paid in full at the time of submission of the application. For new applications under Schedule I.A, the annual fee from Schedule III.A for the first year must also be paid at the time of application. For new applications under Schedule I.B and I.C, the annual fee is included in the new permit amount and covers the annual fee for the calendar year in which the permit coverage becomes effective.

(a) and (b) remain the same.

(c) The department may assess an administrative processing fee under Schedule I.D when a permittee makes substantial alterations or additions, requiring significant additional review, to a sediment control plan, waste management plan, nutrient management plan, pesticide discharge management plan, or storm water pollution prevention plan.

(d) Application fees are nonrefundable except, as required by 75-5-516(1)(d), MCA, if the permit or authorization is not issued the department shall return a portion of the application fee based on avoided enforcement costs. The department shall return 25% of the application fee if the application is withdrawn or if the department waives Federal Clean Water Act section 401 certification within 30 days after submittal.

(e) through (h) remain the same.

Schedule I.A remains the same.

Schedule I.B Application Fee for Non-Storm Water General Permits

Category	Renewal Fee	New Permit Fee (includes initial annual fee)
Concentrated animal feeding operation	$ 600	$ 1,200
Construction dewatering	400	900
Fish farms	600	1,200
Produced water	900	1,200
Suction dredge		
resident of Montana	25	~~25~~ 50
nonresident of Montana	100	~~100~~ 200
Sand and gravel	900	1,200
Domestic sewage treatment lagoon	800	1,200
Disinfected water	800	1,200
Petroleum cleanup	800	1,200
Pesticides		
Single county	450	900
Multi-county	1,400	2,700
Ground water remediation or dewatering	800	1,400
Ground water potable water treatment facilities	800	1,400
Other general permit, not listed above	600	1,200

(i) through (n) remain the same.
Schedule I.C remains the same.
(o) remains the same.

Schedule I.D Application Fee for Other Activities

Category	Amount
Short-term water quality standard, turbidity "318 authorization"	$ 250
Short-term water quality standard, remedial activities and pesticide application "308 authorization"	~~400~~ 250
Federal Clean Water Act section 401 certification	See ARM 17.30.201(6)(o)
Review plans and specifications to determine if permit is necessary, pursuant to 75-5-402(2), MCA	2,000
Major modification	Renewal fee from Schedule I.A
Minor modification, includes transfer of ownership	500

Resubmitted application fee	500
Administrative processing fee	500

(7) remains the same.
Schedule II remains the same.
(8) and (8)(a) remain the same.
Schedule III.A remains the same.

Schedule III.B Annual Fee for Non-Storm Water General Permits

Category	Amount
Concentrated animal feeding operation	$600
Construction dewatering	450
Fish farms	450
Produced water	750
Portable suction dredges	
resident of Montana	25
nonresident of Montana	100
Sand and gravel production	750
Domestic sewage treatment lagoon	850
Disinfected water	750
Petroleum cleanup	750
Pesticides	
Single county	450
Multi-county	1,400
Ground water remediation or dewatering	800
Potable water treatment facilities	800
Other general permit, not listed above	800

(b) through (d) remain the same.
Schedule III.C remains the same.

(e) A facility that maintains compliance with permit requirements, including effluent limitations and reporting requirements, as determined by the previous year's discharge and compliance monitoring data, is entitled to a 25% reduction in its annual permit fee. A new permittee is not eligible for fee reduction in its first year of operation. A permittee that is under a formal enforcement order providing a compliance schedule for correction of permit violations is not eligible for a fee reduction until the violations are corrected. A permittee with a violation of any permit requirement during the previous year is not eligible for fee reduction.

(f) through (9)(b) remain the same.

(10) The department shall give written notice to each person assessed a fee under this rule of the amount of the fee that is assessed and the basis for the department's calculation of the fee. The fee is due 30 days after the date of the written notice. The fee must be paid by a check, money order, or electronic transfer payable to the state of Montana, Department of Environmental Quality. The fee also

may be paid on line at the e-bill payment service site.

(11) through (11)(b) remain the same.

AUTH: 75-5-516, MCA
IMP: 75-5-516, MCA

REASON: Pursuant to 75-5-516, MCA, the board must prescribe fees to be assessed by the department for water quality permit applications, annual permit renewals, review of petitions for degradation, and for other water quality authorizations required under the Montana Water Quality Act, Title 75, chapter 5, MCA. Subject to specific statutory fee caps, the Act requires the board to adopt permit fees that are sufficient to cover the board and department costs of administering the permits and other authorizations required under the Act.

In 2007, the United States Environmental Protection Agency (EPA) issued a rule exempting pesticide application from discharge permitting requirements under the federal Clean Water Act (CWA). The rule concluded that pesticides, applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), were exempt from CWA permitting. In January of 2009, the EPA rule was vacated by a federal court of appeals. The primary purpose of this proposed rulemaking is to provide an administrative framework to allow the department to develop a general permit for pesticide application and to publish the draft permit for public comment. This proposed rulemaking also sets the fees for pesticide permits and makes minor changes to other sections of the fee rule as described below.

The proposed new definitions in ARM 17.30.201(2)(f), (l), and (m) are necessary to implement the pesticide general permit authority. The definition of "pesticide" in proposed ARM 17.30.201(2)(l) is taken from the statutory definition in FIFRA. The definitions of "multi-county" and "single county" in ARM 17.30.201(2)(f) and (n) identify two types of general permit that the department intends to develop. The single county permit will authorize pesticide application in one county or in multiple counties that are not in the same field office district for the Montana Department of Agriculture (MDA). The multi-county permit will authorize pesticide application in multiple counties that are within the same MDA field office district.

The proposed amendment to ARM 17.30.201(6)(c) would add an administrative processing fee for substantial alterations or additions to a pesticide discharge management plan. This fee is necessary to recover the additional review costs associated with changes to pesticide management plans.

The proposed amendment to ARM 17.30.201(6)(d) is necessary to clarify that the allowance for a 25% refund of an application fee also applies when the department waives federal Clean Water Act section 401 certification as provided in ARM 17.30.105.

The proposed amendments to Schedule I.B set the application fees for the single county and multi-county pesticide general permits. The fees are necessary to recover the costs to the department of issuing and administering permits under the pesticide general permit program. The amendments to Schedule I.B also make a correction to the suction dredge new permit fees. Because the new permit fees shown in Schedule I.B include both the application fee and the initial annual fee from Schedule III.B, the fee shown for suction dredges in Schedule I.B should be

doubled. This is necessary to remain consistent with the statutory fee provisions for suction dredges set out in 75-5-516(12), MCA.

The proposed amendments to Schedule I.D would reduce the fee for short-term water quality standard 308 authorizations. This group currently includes pesticide 308 authorizations. Because the new general pesticide permit will address pesticide applications that have a potentially higher risk, the fees in the 308 category in Schedule I.D can be reduced.

The proposed amendments to Schedule III.B set the annual fees for the single county and multi-county pesticide general permits. The fees are necessary to recover the costs to the department of administering permits and authorizations under the pesticide general permit program.

The proposed amendment to ARM 17.30.201(8)(e) clarifies that a permittee whose violations are subject to a corrective action schedule in a formal enforcement order is not eligible for the fee reduction until the violations are corrected. This is necessary to comply with the requirement in 75-5-516(2), MCA, that the fee reduction is not available to permittees who are not in compliance with permit requirements.

The proposed amendment to ARM 17.30.201(10) clarifies that fees may be paid on line at the e-bill payment service site. This is necessary to afford permittees the convenience of using the e-bill system.

It is estimated that the pesticide permit would affect approximately 100 permittees. Total pesticide fee revenue generated in the first year would be approximately $175,000. Of this amount, applications are projected to generate approximately $87,500, and annual fees are projected to generate approximately $90,000. Revenue in the following four years would be less because the application fees are due only every five years. The total first year fee revenue of $175,000 includes a decrease in revenue from pesticide 308 authorizations (Schedule I.D) of approximately $3,600. This decrease will occur in subsequent years as well, because 308 fees are due every year. The $3,600 decrease in the 308 fees would affect an average of 24 permittees a year.

17.30.1341 GENERAL PERMITS (1) The department may issue general permits for the following categories of point sources which the board has determined are appropriate for general permitting under the criteria listed in 40 CFR 122.28 as stated in ARM 17.30.1105:

(a) through (q) remain the same.

(r) swimming pool discharge; ~~and~~

(s) septic tank pumper disposal sites; and

(t) pesticide application.

(2) through (3)(d) remain the same.

(4) A person owning or proposing to operate a point source who wishes to operate under a MPDES general permit shall complete a standard MPDES application or notice of intent form available from the department for the particular general permit. Except for notices of intent ~~submitted for storm water discharges associated with construction activity as stated in ARM 17.30.1115~~, the department shall, within 30 days of receiving a completed application, either issue to the applicant an authorization to operate under the MPDES general permit, or shall

notify the applicant that the source does not qualify for authorization under a MPDES general permit, citing one or more of the following reasons as the basis for the denial:

(a) through (12)(e) remain the same.

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

REASON: The proposed amendment to ARM 17.30.1341 would add pesticide application to the list of general permits that the department is authorized to issue. This amendment is necessary to comply with the federal requirement to issue discharge permits for pesticide application. See reason for amendments to ARM 17.30.201. The proposed amendment would also clarify that authorizations are not needed when the notice of intent (NOI) form is used. The amendment is necessary to allow the department to initiate coverage under the pesticide general permit upon receipt of a properly completed NOI and fees.

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., January 24, 2011. 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/ James M. Madden
JAMES M. MADDEN
Rule Reviewer

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

Certified to the Secretary of State, December 13, 2010.

PRESIDING OFFICER REPORT BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.30.201 and 17.30.1341 pertaining to permit application, degradation authorization and annual permit fees and general permits	))))))	**PRESIDING OFFICER REPORT**

INTRODUCTION

1. On January 12, 2011, at 1:30 p.m., the undersigned presided over and conducted the public hearing held in Room 111 of the Metcalf Building, Helena, Montana, to take public comment on the above-captioned proposed amendments of existing rules. The amendments would add a general permit category for pesticide application, set permit fees, provide definitions of relevant terms, correct a clerical error in the suction dredge fees and make a minor clarification to the fee rule. The amendments, prepared in response to a federal court decision, provide an administrative framework to allow the Department of Environmental Quality (DEQ) to proceed with development of a general permit and to provide a fee schedule for the permitting.

The Notice of Public Hearing on Proposed Amendment was contained in the 2010 Montana Administrative Register (MAR) No.24, MAR Notice No. 17-309 and was published on December 23, 2010. A copy of the notice is attached to this report. (Attachments are provided in the same order as they are referenced in this report.)

2. The hearing was recorded by the Water Quality Protection Bureau.

3. The undersigned announced that persons at the hearing would be given an opportunity to submit their data, views, or arguments concerning the proposed action, either orally or in writing. At the hearing, the undersigned also identified and summarized the MAR notice, stated that copies of the MAR notice were available in the hearing room, 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

4. Ms. Jenny Chambers, Chief of the Water Protection Bureau of the Montana Department of Environmental Quality presented written and oral testimony providing an overview, an explanation of the need and basis for the rules. (Ms. Chamber's testimony is attached.)

5. There were nine persons who presented oral testimony, Mr. Mike Volesky from the Governor's office, Mr. John Youngberg of Farm Bureau, Mr. Mike Murphy of the Montana Water Resources Association, Ms. Krista Lee Evans of the Montana Agricultural Business Association, Mr. John Semple representing himself, Mr. Gordon Stodder of the Montana Grain Growers Association, Mr. Jim Cancroft of Northwest Management Inc., Mr. Kelly Gephardt of the Gephardt Post Plant and Sawmill, Mr. Patrick Heffernan of the Montana Wood Products Association. All persons who testified opposed the amendments. These comments address the sufficiency of the FIFRA (Federal Insecticide Fungicide

and Rodenticide Act) in permitting of pesticides, the triggers for the permits, the excessive cost of the permitting and questions concerning the entities that have to get permits, coverage of the permit to entities and geographically and the application of the permit to multi-county districts.

SUMMARY OF WRITTEN MATERIALS

6. After the hearing, written comments were timely received from various entities with comments. Their comments are attached. Most comments concerned the clarity of the definitions and the cost of the permit. The DEQ addresses these comments in its proposed changes to the amendments.

7. The Department also submitted a memorandum from DEQ staff attorney, Mr. Jim Madden, with HB 521 and HB 311 reviews of the proposed amendments together with a Private Property Assessment Act Checklist. Mr. Madden's memorandum is attached to this report.

8. Mr. Madden concluded that under HB 521 there are no comparable federal fee rules and no special findings are required under HB 521 for the Board to adopt the proposed amendments to the permit fee rule in ARM 17.30.201. Mr. Madden also concluded that special findings are also not required for the proposed amendments to the general permit rule in ARM 17.30.1341. The proposed amendments to the Board rules adopt a definition of "pesticide" that is the same as the FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) definition and this rulemaking is not more stringent than comparable federal regulations or guidelines.

9. With respect to HB 311 (the Private Property Assessment Act, Mont. Code Ann. §§ 2-10-101 through 105), the State is required to assess the taking or damaging implications of a proposed 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 in violation of the United States or Montana Constitution. Therefore, no further assessment is required.

10. The period to submit comments ended at 5 p.m. on January 24, 2011.

PRESIDING OFFICER COMMENTS

11. The Board and the DEQ have jurisdiction to adopt and amend, the amendments and rules referenced in this rulemaking pursuant to Mont. Code Ann §§ 75-5-516, 75-5-201 and 75-5-401.

12. House Bill 521 (1995), codified in Mont. Code Ann. 75-5-203 generally provides that the Board may not adopt a rule that is more stringent than comparable federal regulations or guidelines, unless the Board makes written findings after public hearing and comment. The proposed amendments are not more stringent than the comparable to federal regulation or guidelines. Therefore written findings are not necessary.

13. House Bill 311 (1995), the Private Property Assessment Act, codified as Mont. Code Ann. § 2-10-101 through -105, provides that a state

agency must complete a review and impact assessment prior to taking an action with taking or damaging implications. The proposed amendments affect real property. A Private Property Assessment Act Checklist was prepared in this matter. The proposed amendments do not have direct taking or damaging implications for property. Therefore, no further HB 311 assessment is necessary.

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

15. The Board may adopt the proposed rule amendments or reject them, or adopt the rule amendments with revisions as proposed by the DEQ not exceeding the scope of the public notice.

16. 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 June 23, 2011.

Dated this _____ day of May, 2011.

_____
KATHERINE J. ORR
Presiding Officer

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

MEMORANDUM

To: Board of Environmental Review

From: Jim Madden
DEQ Legal Counsel

Re: **In the matter of the amendment of ARM 17.30.201 and 17.30.1341 pertaining to permit application, degradation authorization, and annual permit fees and general permits. MAR Notice No. 17-309.**

HB 521 Analysis and Takings Checklist

Date: January 12, 2011

Background

In this rulemaking, the Board is proposing to amend the fee rules pertaining to water quality discharge permits, and to amend the general permit rule to include a permit for pesticide application. The purpose of the proposed rulemaking is to provide an administrative framework to allow the Department to develop a general permit for pesticide application and to set fees for pesticide permits. The rulemaking also makes other minor changes to the permit fee rules for clarification.

HB 521 Analysis

The Board's authority to adopt the proposed amendments to the permit fee rule is found at § 75-5-516, MCA. The Board's authority to adopt the proposed amendments to the general permit rule is found at §§ 75-5-201 and 75-5-401, MCA. Pursuant to § 75-5-203, MCA, the Board may not adopt a rule to implement Title 75, Chapter 5, that is more stringent than comparable federal regulations or guidelines that address the same circumstances, unless the Board makes certain written findings establishing the need for the rule. Section 75-5-309, MCA, requires similar written findings before the Board may adopt rules to implement Title 75, Chapter 5, MCA, that are more stringent than corresponding draft or final federal regulations, guidelines, or criteria.

The United States Environmental Protection Agency does not charge fees for issuance of discharge permits under the federal Clean Water Act, and there are no comparable federal fee

rules. Consequently, no special findings are required under HB 521 for the Board to adopt the proposed amendments to the permit fee rule in ARM 17.30.201.

Special findings are also not required for the proposed amendments to the general permit rule in ARM 17.30.1341. The amendments authorize the Department to issue a general water discharge permit for pesticide application. This is consistent with federal law. A recent federal court decision held that discharges to water of pesticide pollutants are subject to the NPDES permitting program under the federal Clean Water Act. National Cotton Council of America v. United States EPA, 553 F.3d 927 (6th Cir. 2009), cert. denied 130 S. Ct. 1505 (2010). The federal NPDES permit for pesticide application applies to "pesticides" as defined in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) at 7 U.S.C. § 136(u). The proposed amendments to the Board rules adopt a definition of "pesticide" that is the same as the FIFRA definition. Accordingly, this rulemaking is not more stringent than comparable federal regulations or guidelines.

Private Property Assessment Act

Section 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.

Section 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. A completed Attorney General checklist for the proposed rules is attached. Based on the guidelines provided by the Attorney General, the proposed rule amendments do not constitute an "action with taking or damaging implications" in violation of the United States or Montana Constitutions.

Attachment: Attorney General HB 311 Checklist

Board of Environmental Review
MAR Notice No. 17-309

In the matter of the amendment of ARM 17.30.201 and 17.30.1341 pertaining to permit application, degradation authorization, and annual permit fees and general permits.

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS OR DAMAGINGS 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?
	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)

If taking or damaging implications exist, the agency must comply with §5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, preparation of an impact assessment will require consultation with agency legal staff.

Jim Madden
Signature of Reviewer

January 13, 2011
Date

Public Hearing

Thank you. For the record my name is Jenny Chambers, I am the Chief of the Water Protection Bureau.

I wanted to provide an overview of the need and basis for this proposed rule making. The rule making (MAR Notice 17-309) establishes the administrative and legal framework to allow the Department to develop a pesticide general permit in response to a recent court ruling and provides the fee schedule in accordance with our statutory requirements.

The initiation of the current pesticide permitting activity and therefore subsequent need for the general permit authority and fee structure is based on a January 2009 federal court decision (Sixth Circuit Court of Appeals) that held discharges of pesticide pollutants are subject to water discharge permitting under the federal Clean Water Act.

Since Montana is a delegated state with regulatory authority over issuance of discharge permits to state waters and compliance with the Clean Water Act, we needed to address the court ruling and provide a permitting mechanism for protection of discharges associated with this activity for Montana pesticide applications.

The Montana Water Quality Act requires the Board to adopt rules that are sufficient to recover the costs of issuing permits, licenses and other authorization issued by the Department, as well as the administrative costs of operating the program.

At the December 3, 2010 meeting, the Board of Environmental Review concurred with the Department request to initiate this rulemaking in order to amend ARM 17.30.201 and 17.30.1341. General amendments, as they relate to the fee rules and not necessarily program implementation and/or permitting requirements, include:

1.) Adding definition for pesticide which is consistent with the federal definition;
2.) Adding definitions for multi-county vs. single county coverage area;
3.) Correcting suction dredge fee amounts to align with the statutory amount in Title 75, chapter 5 MCA;
4.) Reducing the fee amount for short-term water quality standard 308 authorizations; and
5.) Providing some clarification language.

A draft of the rule revision was presented to the governor-appointed Water Pollution Control Advisory Council (WPCAC) for review and discussion at the November 4, 2010 meeting. WPCAC agreed with the recommendation from the Department to proceed with initiation.

In addition, our legal unit has completed the required HB521 Analysis and the HB311,Private Property Assessment Act review. I would like to submit Jim Madden's, a member of the Departments legal staff, memo detailing his conclusions.

United States Senate

WASHINGTON, DC 20510

December 15, 2010

The Honorable Jacob Lew
Director
Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

Dear Director Lew:

We are very concerned about Environmental Protection Agency's (EPA) pesticide general permit (PGP), which is now under review at the Office of Management and Budget (OMB). We would like to focus your attention on three significant issues: 1) the degree to which the latest draft goes beyond the measure released for public comment in June 2010; 2) the short timeline for states to implement and regulated entities to comply with the new regulatory scheme; and 3) the extraordinary cost the new regulation will impose on affected stakeholders for minimal environmental benefit.

Before moving into substance, we believe it is important to provide some background on how the EPA got to the point of drafting a PGP. For more than 30 years, EPA has interpreted the federal Clean Water Act not to require a permit for pesticide applications so long as the product was applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act, the federal law governing pesticide use. When this position was challenged and later struck down by the Sixth Circuit Court of Appeals in January 2009 (*See National Cotton Council v. EPA, 553 F.3d 927*), EPA decided to develop a PGP under the Clean Water Act instead of challenging the court's mistaken ruling.

When EPA's first draft of the PGP was released, we appreciated the agency's efforts to limit the scope of the permit to issues specifically raised by the court. However, we are now alarmed that the second draft PGP goes beyond the first draft to capture additional entities in the permitting scheme. For example, while the second draft would enlarge the action thresholds under the Notice of Intent provisions and thereby lessen the financial burden on some smaller entities, the PGP would now require all government agencies with pest control functions, including mosquito control and irrigation districts, to obtain a permit *regardless* of the size of area they treat each year. In effect, this means that some entities that would not need to apply for a permit under the draft that was put out for public comment would now be captured under the new regulatory scheme.

Beyond who would need a permit, the second draft PGP also now includes placeholders for other issues that will be incorporated before the permit is finalized. While we do not know precisely

what those additional measures will be, we are concerned by the likelihood of substantial changes in several areas. For example, it is likely EPA will address endangered species issues, changes to technology and water-quality based limitations, Notice of Intent filing requirements, and co-permitting between subcontractors and federal, state and local agencies.

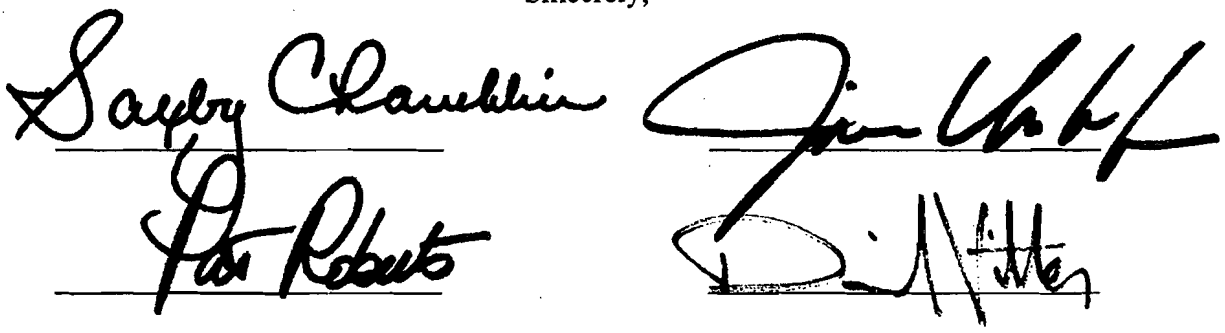
As to timing, the court granted EPA two years to develop the PGP. This deadline expires in April 2011 – just five short months away. While EPA is writing a permit for six states in which it has oversight of Clean Water Act programs, the remaining 44 states and Virgin Islands must have their permits in place before the April deadline. This is in spite of the fact that the agency has yet to finalize the parameters for its permit.

Given the economic climate in many states as well as the severe budget shortfalls that many states face, we are most concerned about the hardship this will place on state regulators as well as the pesticide users and applicators they regulate. These users may face legal jeopardy because they do not have enough time to understand and resources to comply with all of the new requirements. Thus, we strongly believe the Administration should either seek a delay from the court or use its authority to suspend enforcement of the new permit. It is only fair to give states and permittees a reasonable period of time in which to comply with the new regulatory scheme.

Finally, we are alarmed by EPA's continued claims that the economic impact of the PGP on covered entities, including small businesses, will be minimal. In its most recent draft, the agency has declared the PGP to be a "significant regulatory action" under Executive Order 12866 thereby mandating a review by OMB. Further, absent such declaration, the sheer impact of this action is self-evident. In EPA's Federal Register notice dated November 3, 2010, (Vol. 75, Page 67713), the agency indicates that the action will impact 365,000 entities covering 5.6 million pesticide applications each year. The PGP will touch 45 permitting authorities and require one million hours to implement. Beyond time, compliance with the new requirements will also cost regulated entities more than $50 million each year. Whether viewed individually or cumulatively, these impacts are not minimal.

We believe there are many serious issues of policy, timing, and economic impact relating to the PGP that need substantial scrutiny, particularly since the PGP will provide no new protection for the environment, pesticide users and applicators, or farm workers. Accordingly, we strongly urge you to carefully review both the draft PGP and the final permit and appreciate your attention to this critical matter.

Sincerely,



Dick Lugar

Chuck Grassley

Lamar Alexander

John Barrasso

Mike Crapo

Johnson, Elois

From: larrynbev [larrynbev@in-tch.com]
Sent: Friday, January 21, 2011 6:42 PM
To: Johnson, Elois
Cc: John Semple; Patrick Dougherty
Subject: NOI Comments

Dear Elois Johnson:

The fees for the Notice of Intent (NOI) Pesticide Application will render our mosquito abatement program ineffective. For 2010 our budget was $2000 and the Department of Environmental Quality wants us to submit $900 for a permit that does not kill a single mosquito. With $1100 left we can not hire our Contractor to do an effective job of mosquito control. The Public Health will suffer as a result of the taxpayers money being wasted on this non-productive fee.

Not only are the fees outrageous, but the entire program outlined by the National Pesticide Discharge Elimination System (NPDES) is nothing more than a waste of taxpayers hard earned money. There has been a system (FIFRA) in place for years that satisfies our needs.

The entire NPDES program must be eliminated before more damage is done to Montanan's Public Health and the ability of ranchers and farmers to help create the food supply for America.

Thank you for passing these comments to the appropriate officials,

Larry Phillis
Chairman - Three Forks Mosquito District
Broadwater County
406-285-6536

Johnson, Elois

From: GROVERMRKT@aol.com
Sent: Saturday, January 22, 2011 1:36 PM
To: Johnson, Elois
Subject: NPDES fees

Elois Johnson:
The proposed fees for Mosquito Contol entities under NPDES are far too high for small business, contractors. Our budgets are very tight and this added expense adds even more pressure. Current government is supposed to encourage small business not discourage it. Counterpars in other states that I contacted state that their proposed fees are less than half of Montana proposed fees.
Thank you for your attention,
George Grover

Johnson, Elois

From: townoffp [townoffp@nemont.net]
Sent: Monday, January 24, 2011 4:56 PM
To: Johnson, Elois
Subject: Mosquito control fee

To Whom It May Concern:
The proposed fees for mosquito control included in the new NPDES rules will place a great hardship on our little town. Our entire mosquito control budget is $4715 for this fiscal year. Without mosquito control, the quality of life in our town will decline.

Bobette Kirkland
Town Clerk/Treasurer
Town of Fort Peck
PO Box 310
Fort Peck, MT 59223
(406)526-3220

Johnson, Elois

From: Bruce Peterson [bpeterson@valleycountymt.net]
Sent: Monday, January 24, 2011 11:32 AM
To: Johnson, Elois
Subject: mosquito fees

Elois,

As per email of 20 January 2011 concerning the new EPA regulations and fees for mosquito control.

Valley County Commissioners oppose any change in regulations or fees because:
Our mosquito control department feels that present system is working well and there is no need for change; so we agree with many sentiments expressed at your MMVCA conference.
The proposed fees are not a great amount but our county watches all expenditures and if we can continue without any increase in costs that is our preference. We are serious about the budget and to wit I will tell you that we cut our budgets by 5% this year and did not give employees a raise.

Thanks for your time

Bruce Peterson for
Valley County Commissioners.

Johnson, Elois

From: Kevin Dukart [cibaker@midrivers.com]
Sent: Thursday, January 20, 2011 3:02 PM
To: Johnson, Elois
Subject: Fee Schedule for mosquito control permit.

To whom it may concern:

I believe the fees fior this permit should be absorbed either EPA or DEQ. It is an unfunded mandate and will be add to the increase in costs to enjoyment of the health and well being of citizens and visitors to our communities.

Thank You for your consideration.

Kevin Dukart
City Clerk/Treasurer
City of Baker

Johnson, Elois

From: Steve Tyrrel [tyrrel@midrivers.com]
Sent: Tuesday, January 11, 2011 6:36 AM
To: Chambers, Jenny
Cc: Weaver, Christine; Johnson, Elois
Subject: Re: DRAFT REPONSE - Annual Pesticide permit fees

Jenny,
Thank you for the prompt and informative response.
Steve

----- Original Message -----
From: Chambers, Jenny
To: tyrrel@midrivers.com
Cc: Weaver, Christine ; Johnson, Elois
Sent: Monday, January 10, 2011 5:12 PM
Subject: FW: DRAFT REPONSE - Annual Pesticide permit fees

Mr. Tyrrel,

The rule making just establishes the administrative framework to allow the Department to develop a general permit in response to the court ruling and legal challenges and/or provides the fee structure that we are obligated to obtain per statutory requirements. If the rule did not move forward and get adopted, then permits would still be needed and potential permittees would need to obtain an individual Montana Discharge Pollutant Elimination System (MPDES) permit and the fee would be charged for the individual permit types. If for some reason, Congress or the courts change the recent ruling, then DEQ would not proceed with permit issuance. Additional information is provided below that should hopefully help.

First, the initiation of the current pesticide permitting activity is based on a January 2009 federal court decision (Sixth Circuit Court of Appeals) whereby the court decided that CWA permits are required for all biological pesticide applications and chemical pesticide applications that leave a residue in water *when such applications are made in or over, including near, waters of the U.S.* See EPA's website for more information: http://cfpub.epa.gov/npdes/pesticides/aquaticpesticides.cfm.

Montana is a delegated state with regulatory authority over issuance of discharge permits to state waters. We worked with the regional EPA office, Montana Department of Agriculture and other interested parties during the Fall of 2010 in an effort to develop a Montana-specific MPDES general permit for pesticides. This will be available for public comment from January 10 – March 2, 2011 http://deq.mt.gov/wqinfo/mpdes/pesticides.mcpx.

We made every effort to make this MPDES GP no more (or less) stringent than the federal requirements. Two of the key exceptions remain: the MPDES GP does not apply to irrigation waters that do not returned to waters of the state; and the MPDES GP does not apply to storm water runoff. In addition, we clarified that the pesticides must be unavoidably discharged to the surface water (not due to unintentional spray drift) and the pesticide must be authorized by FIFRA for use in or around water. The permit and requirement for application of a discharge permit will be based on volume and extent of environmental impact and discharge and not all applicators will be required to submit a Notice of Intent for permit coverage.

If you review the DEQ's webpage and associated draft permit and fact sheet, you can note that the vast majority of individual landowners should not be affected by the proposed MPDES GP. If you have comments on the proposed pesticide use patterns and their thresholds, we would welcome your comments within the specific public comment requirements.

To answer your specific questions, please see the following responses:

1. Yes, the pesticide general permit is only applicable to pesticide applications "to or over water, including near such water" as included in the general permit's definitions:

   "To or over surface water, including near such waters," refers to the application of pesticides where a portion of the pesticides will unavoidably be deposited into waters of the state. The intention of the application is to target pests in, over, or near the water. It is up to the owner/operator (and applicator, if separate) to determine whether their pesticide application will be close enough to any surface water that pesticide will be considered unavoidably discharged to the water. The PGP does not include "spray drift" – the airborne movement of pesticide sprays away from the target application site into a water of the state – or application of pesticides to terrestrial agriculture crops where storm water may pick up residual. As non-point sources, spray drift and stormwater runoff are not covered by the PGP.

   In order to be considered an application 'to or over surface water including near such waters' that is subject to the PGP, the applicator must be allowed per the FIFRA label to spray into the water. If the FIFRA label prohibits application into water, the pesticide cannot be covered under the PGP. (Any pesticide that is prohibited from use in water is excluded from the PGP since its use in this manner is illegal.)

2. If you have suggestions for clarifications to the above definition, please submit them as part of the General Permit's public comment process. For your information, the Department does not intend to specify a linear distance since determining such a distance would be extremely arbitrary and enforcement of a distance would be impractical.

3. The permit does not exclude private applicators (or anyone else) – it regulates anyone who applies pesticide to the waters of the state over the specified threshold. Please note that application of pesticides under the threshold will remain regulated by the existing 308 Authorization process.

If you have comments we would welcome your comments within the specific public comment requirements. If you have further questions, feel free to me at 444-4969 or jchambers@mt.gov or Christine Weaver at 406-444-3927 or cweaver@mt.gov.

I hope this information is helpful-
Jenny

Jenny Chambers
Chief, Water Protection Bureau
MT Dept. of Environmental Quality
1520 East 6th Avenue
Helena MT 59620
406-444-4969 phone
406-444-1374 fax
jchambers@mt.gov

From: Chambers, Jenny
Sent: Monday, January 10, 2011 11:55 AM
To: Weaver, Christine
Subject: FW: Annual Pesticide permit fees

Can you please address? - Thanks, Jenny

From: Steve Tyrrel [mailto:tyrrel@midrivers.com]
Sent: Monday, January 10, 2011 11:11 AM
To: Johnson, Elois
Cc: Chambers, Jenny
Subject: Re: Annual Pesticide permit fees

Ms. Johnson,

Thank you for your prompt response. We do have some questions regarding the proposed rulemaking and would like a contact person to address them to. Below are some questions:

1. Is it correct that this new permit is required only if an applicator is applying pesticide in or over a body of water?
2. The "near water" language is unclear, can this be further clarified?
3. Does this permit requirement include Private Applicators or only Commercial Applicators?

Thanks for your assistance,

Steve Tyrrel

----- Original Message -----
From: Johnson, Elois
To: Steve Tyrrel
Cc: Chambers, Jenny
Sent: Monday, January 10, 2011 10:00 AM
Subject: RE: Annual Pesticide permit fees

Mr. Tyrrel:

Thank you for your interest in this rulemaking. Jenny Chambers is the Bureau Chief for the Water Protection Bureau. I am copying her on this reply so that she may respond to your request to be placed on the program's interested persons mailing list and also direct you to the proper individual for any questions you may have. If I can provide further information, please don't hesitate to contact me.

Elois Johnson
Paralegal
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-9001
Telephone: 406.444.2630
Email: ejohnson@mt.gov

From: Steve Tyrrel [mailto:tyrrel@midrivers.com]
Sent: Monday, January 10, 2011 8:57 AM
To: Johnson, Elois
Subject: Annual Pesticide permit fees

Ms Johnson,

We would like to be notified of all hearings and pertinent updated information concerning the administrative process for ARM 17.30.201 and 17.30.1341.

Also, can you provide a contact who can address specific questions?

Regards,
Steve Tyrrel
Vice President
IAS Inc.
406-855-7600
tyrrel@midrivers.com

Johnson, Elois

From: Ansley, John [John.Ansley@gallatin.mt.gov]
Sent: Tuesday, January 04, 2011 10:30 AM
To: Johnson, Elois
Subject: MPDES Permits
Attachments: GCWD MPDES Questions.doc

Hi Elois,
Here are some questions/comments that the Gallatin County Weed District would like to see addressed regarding the MPDES Permitting Process. Let me know if you have any questions
Thanks,
John

John Ansley
Gallatin County Weed Coordinator
901 N. Black
Bozeman, MT 59715
Office: (406) 582-3265
Cell: (406) 539-1143
Fax: (406) 582-3273

Gallatin County Weed District Questions

1. **Fee schedule needs clarification – For example, if an application is submitted for suction dredge, do you also have to pay the administrative processing fee? (suction dredge = $50, Administrative Fee = $500)**

2. **What is the turn around time from when we file an application for a permit to receipt of the permit? Our spray season begins in late April. If the permit would not be available until May or June, can we get an exemption?**

ARM 17.30.201 and 17.30.1341

Background:

The Sixth Circuit Court of Appeals' National Cotton Council decision overturned an EPA rule that exempted pesticide applications made in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) from the need to obtain NPDES permits. The Sixth Circuit stayed its ruling until April 9, 2011, after which time EPA and states with NPDES authority must permit point source discharges to waters of the United States from pesticide applications that leave a residue.

States have maintained following with regard to this decision:

1. FIFRA has long protected water quality from pesticides by requiring registration, mandating detailed label and application instructions, limiting the number of pesticides available to the general public, restricting application of hazardous pesticides to certified applicators, and monitoring the distribution of restricted pesticides.
2. The EPA has historically not required NPDES permits for pesticide applications made in compliance with FIFRA.
3. The Sixth Circuit did not analyze FIFRA's water quality protections, nor its relationship with the Clean Water Act, but based its ruling on a technical finding that the statutory text of the CWA foreclosed EPA's rule.
4. EPA estimates that the ruling will affect approximately 365,000 pesticide applicators nationwide, who perform 5.6 million applications annually. The ruling creates an unnecessary and duplicative level of regulation without providing clear environmental benefits.
5. The burden of implementing NPDES programs to regulate pesticides will fall almost entirely on state water quality agencies, since most states have delegated NPDES authority.
6. Implementing and operating programs to regulate pesticide applications under the NPDES program will require substantial site monitoring, record keeping, reporting, and other efforts that will impose significant costs upon states at a time when many are facing budget shortfalls and are struggling to provide other more important and necessary environmental services.
7. Unfortunately, it is EPA's position that states with delegated NPDES authority are obligated to regulate applicable pesticide applications under the NPDES program even though no additional federal funding accompanies the mandate.
8. There is a way to solve this problem: Rather than the creation of a new permitting program, Congress needs to enact legislation that amends FIFRA and/or the CWA to clarify that pesticide applications performed in compliance with FIFRA are not subject to NPDES permitting.

Comments specific to this rulemaking:

1. The fee for this permit seems rather high, and we need to look into fees a bit further to make sure they are set at only what is necessary to cover administrative costs. It is hard to judge the scope of this administrative work, since the permitting process is not yet fully defined.
2. The definitions of multi-county and single-county permits are not clear enough, and may be confusing to applicators conducting business in more than one county. We also need to be sure that these distinctions are necessary, and that we've fully explored the possibility of a statewide permit.
3. We need to explore an exemption for local government, since fees will obviously cut into the limited dollars available to control mosquitoes and aquatic noxious weeds at the local level.
4. The need for this permit may indeed be temporary or become moot, because federal action may correct it, but we need to make sure this permit is not overly burdensome to applicators.

Mike Volesky
Office of Governor Schweitzer
January 12, 2001

NORTHWEST
MANAGEMENT, INC.

"Providing a Balanced Approach to Natural Resource Management"

January 12, 2011

Board of Environmental Review

Thank you for the opportunity to comment on the new Pesticide General Permit (PGP) being proposed to authorize the application of pesticides to or near state surface waters. As a consulting forester with Northwest Management, Inc. I have assisted numerous private forest landowners in Montana managing their forested properties.

The use of Bt (bacillus thuringiensis) a microbial insecticide for the control of western spruce budworm within private forests in Montana is a common management strategy. Bt is a bacterium that is found naturally in the soil and is known to affect only lepidopteron larvae that consume it. It has no known toxic effects on humans or other mammals, plants, birds, fish, frogs, honeybees or other beneficial insects. It is registered for use in organic food farming.

Bt is typically applied aerially by a fixed wing aircraft or helicopter. Timing of treatment must coincide with optimal larval feeding and foliage development. Application dates in the past three years have varied from mid-June to late July.

Our client's immediate concerns about the new rules are the potential increased costs, and the development of a Pesticide Discharge Management Plan. The annual threshold for forest canopy pesticide applications is 640 acres. A permit is required if the owner/operator exceeds this threshold (applies Bt to over 640 acres of state waters). The permit fees for a single county are $900 and multi-county fees are $2,700. In order to comply with the permit a Pesticide Discharge Management Plan needs to prepared by the owner/operator.

Questions/Concerns

- How is the 640 acres determined? Is it determined by just the distance and width of the surface water? If the owner/operator chooses not to spray Bt over state water bodies, what is the appropriate buffer distance?

- Has the state considered a state wide permit? Forest ownerships often cross county and district boundaries and it seems punitive to potentially pay these increased costs.

- The requirements for a Pesticide Discharge Management Plan appear rigid and burdensome. Are there examples of these plans for Bt applications?

- What is the time frame for the permit application and approval? Monitoring for budworm populations starts in late May or early June. Initial monitoring may determine that certain properties do not need to spray, while other properties will be recommended based on budworm activity.

- Fees are required to be paid in full at the time of application. Are they refundable if monitoring work determines that spraying is unnecessary?

- The Water Protection Bureau of MT DEQ may assess an administrative processing fee when a permittee makes substantial alterations or additions, requiring significant additional review to a Pesticide Discharge Management Plan. What are the parameters that may warrant these "additional administrative processing fees"?

- Do these plans provide the flexibility to add new landowners on short notice (commonly occurs when neighbors learn that a forest treatment is planned)?

Summary

Private forest landowners need to be able to utilize the most current cost effective management strategies to mitigate the effects of forest insects and diseases. Expensive, burdensome rules and regulations will only inhibit forest landowners from actively managing their forested properties. Since this will be the first year of the new regulations (effective April 9, 2011) Montana has the opportunity to develop regulations, protocols and fees that are cost effective and user friendly to businesses and forested landowners. Consulting foresters and their clients support the appropriate use of Bt to help mitigate the effects of western spruce budworm.

Respectfully,

Jim Cancroft
Senior Forester/Wildlife Biologist

NWMGP DEQ letter 2011.txt

EQ
x 406 444 1374
ater Protection Bureau
tn: Christine Weaver

Jan. 10, 2011

DEQ,
gulations and associated costs continue to increase while our economy continues to stagnate, slip and slide. Our ncern is for the opportunity of our Montana citizens to mine, prospect and enjoy our Montana outdoors, nething more than smelling flowers, spandex and hiking shoes. We encourage others to prospect, dredge and reate following all the rules and laws accordingly. Everything costs more, gas, deisel, groceries etc. We voted as Montana group, the Northwest Montana Gold Prospectors to oppose the increase of fees for new application for dging. Dredging , like fishing and hunting may not pay for the gas but it is an opportunity we share and enjoy our great Treasure state of Montana.
ank you for your consideration.
rence Taber, President Northwest Montana Gold Prospectors

Lawrence L Taber

RECEIVED
JAN 10 2011
DEQ/WPB
PERMITTING & COMPLIANCE DIV.

Haab, Freddi

From: Sharpe, Barb
Sent: Tuesday, January 25, 2011 8:06 AM
To: Haab, Freddi
Subject: FW: Comments on the Fee Rule Notice (MAR Notice 17-309)

Another comment

From: Broadwater County Weed
Sent: Monday, January 24, 2011 5:18 PM
To: WPB Public Notices
Subject: Comments on the Fee Rule Notice (MAR Notice 17-309)

TO: Noelle Uncles or Barb Sharpe

Greetings from the Broadwater County Weed District.

After reviewing the proposed fees for Montana's Pollutant Discharge Elimination System permit program we are quite worried about how high they are. Broadwater County is a class 5 county so is very low in tax dollars. Last fall Eurasian Watermilfoil, a noxious weed, was found throughout our waterways from the Jefferson River to Canyon Ferry Reservoir. Many of the areas can be treated without the use of herbicides but for some herbicide treatment is the only feasible way to eradicate the plants. Also, the Jefferson and Missouri River form the boundary between Gallatin and Broadwater or Jefferson County, depending on the location. Since the weed is located on several different rivers and in several different counties the fees would add up quite quickly making a cooperative effort very difficult. If you have any questions please call (406) 266-9243 or respond to this email.
Thank you for your time.

Pam Converse
Broadwater County Weed Coordinator

Pamela L. Converse
Broadwater County Weed District
515 Broadway
Townsend, MT 59644
(406) 266-9243
FAX (406) 266-3674

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.30.201 and 17.30.1341 pertaining to permit application, degradation authorization, and annual permit fees and general permits	NOTICE OF AMENDMENT (WATER QUALITY)

TO: All Concerned Persons

1. On December 23, 2010, the Board of Environmental Review published MAR Notice No. 17-309 regarding a notice of public hearing on the proposed amendment of the above-stated rules at page 2870, 2010 Montana Administrative Register, issue number 24.

2. The board has amended ARM 17.30.1341 exactly as proposed and has amended ARM 17.30.201 as proposed, but with the following changes, stricken matter interlined, new matter underlined:

17.30.201 PERMIT APPLICATION, DEGRADATION AUTHORIZATION, AND ANNUAL PERMIT FEES (1) through (1)(h) remain as proposed.

(2) For purposes of this rule, the definitions contained in ARM Title 17, chapter 30, subchapter 10 and subchapter 13 are incorporated by reference. The following definitions also apply in this rule:

(a) through (e) remain as proposed.

(f) "multi-county," for pesticide permit fee purposes, means the general permit authorizing pesticide application within multiple contiguous counties, not to exceed 20, ~~that are within the same Montana Department of Agriculture field office district~~ as identified by the applicant;

(g) through (l) remain as proposed.

(m) "renewal permit" means a permit for an existing facility that has an effective discharge permit; ~~and~~

(n) "single county," for pesticide permit fee purposes, means the general permit authorizing pesticide application within one county ~~or within multiple counties that are not within the same Montana Department of Agriculture field office district.~~; and

(o) "threshold," for pesticide permit fee purposes, means the area of surface water that is impacted annually by pesticide treatment, as designated in the Pesticide General Permit for specific pattern uses.

(3) through (5) remain as proposed.

(6) The fee schedules for new or renewal applications for, or modifications of, a Montana pollutant discharge elimination system permit under ARM Title 17, chapter 30, subchapter 11 or 13, a Montana ground water pollution control system permit under ARM Title 17, chapter 30, subchapter 10, or any other authorization under 75-5-201, 75-5-301, or 75-5-401, MCA, or rules promulgated under these authorities, are set forth below as Schedules I.A, I.B, I.C, and I.D. Fees must be

paid in full at the time of submission of the application. For new applications under Schedule I.A, the annual fee from Schedule III.A for the first year must also be paid at the time of application. For new applications under Schedule I.B and I.C, the annual fee is included in the new permit amount and covers the annual fee for the calendar year in which the permit coverage becomes effective.

(a) and (b) remain as proposed.

(c) The department may assess an administrative processing fee under Schedule I.D when a permittee makes substantial alterations or additions, requiring significant additional review, to a sediment control plan, waste management plan, nutrient management plan, pesticide ~~discharge~~ management plan, or storm water pollution prevention plan.

(d) through (h) remain as proposed. Application fees are nonrefundable except, as required by 75-5-516(1)(d), MCA, if the permit or authorization is not issued the department shall return a portion of the application fee based on avoided enforcement costs. The department shall return 25% of the application fee if the application is withdrawn or if the department waives Federal Clean Water Act section 401 certification within 30 days after submittal.

(e) through (h) remain as proposed.

Schedule I.A remains as proposed.

Schedule I.B Application Fee for Non-Storm Water General Permits

Category	Renewal Fee	New Permit Fee (includes initial annual fee)
Concentrated animal feeding operation	$ 600	$ 1,200
Construction dewatering	400	900
Fish farms	600	1,200
Produced water	900	1,200
Suction dredge		
resident of Montana	25	50
nonresident of Montana	100	200
Sand and gravel	900	1,200
Domestic sewage treatment lagoon	800	1,200
Disinfected water	800	1,200
Petroleum cleanup	800	1,200
Pesticides		
Single county - less than threshold	25	50
Multi-county - less than threshold	50	100
Single county - greater than threshold	~~450~~ 250	~~900~~ 500
Multi-county - greater than threshold	~~1,400~~ 50	~~2,700~~ 100

Ground water remediation or dewatering	800	1,400
Ground water potable water treatment facilities	800	1,400
Other general permit, not listed above	600	1,200

(i) through (n) remain as proposed.
Schedule I.C remains as proposed.
(o) remains as proposed.
Schedule I.D remains as proposed.
(7) remains as proposed.
Schedule II remains as proposed.
(8) and (8)(a) remain as proposed.
Schedule III.A remains as proposed.

Schedule III.B Annual Fee for Non-Storm Water General Permits

Category	Amount
Concentrated animal feeding operation	$600
Construction dewatering	450
Fish farms	450
Produced water	750
Portable suction dredges	
resident of Montana	25
nonresident of Montana	100
Sand and gravel production	750
Domestic sewage treatment lagoon	850
Disinfected water	750
Petroleum cleanup	750
Pesticides	
Single county - less than threshold	25
Multi-county - less than threshold	50
Single county - greater than threshold	~~450~~ 250
Multi-county - greater than threshold	~~1,400~~ 600
Ground water remediation or dewatering	800
Potable water treatment facilities	800
Other general permit, not listed above	800

(b) through (d) remain as proposed.
Schedule III.C remains as proposed.
(e) through (11)(b) remain as proposed.

3. The following comments were received and appear with the board's responses:

COMMENT NO. 1: The fees for coverage under the pesticide general permit are too high. Fees should be set at only what is necessary to cover administrative

costs. It is hard to judge the scope of this administrative work, since the permitting process is not yet fully defined.

RESPONSE: The Department of Environmental Quality Water Protection Bureau (department) operates under a fee-based program. The Montana Water Quality Act requires the Board to adopt fee rules that are sufficient to recover the costs of issuing permits, licenses, and other authorizations, as well as the administrative costs of operating the program. Section 75-5-516, MCA. It is hard to exactly predict program costs at this time, since the permitting process and the regulated community have not been fully defined. However, it will require department time and resources to ensure that applicants submit a complete Notice of Intent (NOI) and comply with the pesticide general permit requirements.

The department estimated the proposed fees for the pesticide general permit based on consideration of the following factors: (a) comparison to general permits for construction dewatering and construction storm water; (b) comparison to other general permit fees, which are approximately 25% higher than the fee originally proposed for single-county pesticide applicators; (c) comparison to existing 308 authorization fees, which have historically been $400 annually; (d) the types of chemicals that could potentially be discharged to state waters and the potential impacts of these chemicals on the environment, with a higher fee needed for higher potential impacts; (e) an assumption that the program will require 1.5 full time equivalent (FTE) staff to administer the program; and (f) an assumption that there will be approximately 100 permittees.

Based upon comments received, the proposed fees have been significantly reduced. In addition to reducing the multi-county and single-county fees, the revised rules will create a new category for smaller sources that discharge less than the pesticide permitting threshold designated in the general permit. The new category will have nominal application and annual fees. If it becomes apparent in the future that the program is not self-sufficient, the department may request a fee increase based on the shortfall at that time.

COMMENT NO. 2: The definitions of multi-county and single-county permits are not clear enough, and may be confusing to applicators conducting business in more than one county.

RESPONSE: Based upon comments received, the definition of "multi-county" has been changed. Rather than restricting operations to one of the five agriculture field office districts, the "multi-county" definition is changed to include up to 20 contiguous counties. The limit of 20 out of the 56 counties will allow each applicant to cover up to about one third of the state in any one authorization. This will ensure that the department has a manageable administrative burden, while allowing flexibility for owner/operators whose work crosses county boundaries. The definition of "single county" also has been changed, to eliminate the reference to multiple counties that are not in the same agriculture field office district.

Each owner/operator must determine the best permitting strategy for its own business. If pesticide application activities statewide could impact state waters, the owner/operator will need to determine if the activities will be located within one county or multiple counties. Based on that determination, the owner/operator would indicate the type of permit requested and submit the appropriate fee.

COMMENT NO. 3: There should be an exemption for local government, since fees will cut into the limited dollars available to control mosquitoes and aquatic noxious weeds at the local level.

RESPONSE: There is no difference in the cost to the department for permitting and compliance efforts, or in the environmental impacts of pesticide activity, between local government pesticide application and that of state, federal, or private activity. Based on the statutory requirement that fees be sufficient to cover the costs of administering the program, it is not appropriate to create an exemption for local government.

A majority of local governments already have a budget set for mosquito and weed control, which should include permitting under the current 308 authorization process. See 75-5-308, MCA. 308 authorizations have been required since 1993, and the current annual fee is $400, although that fee is reduced in this rulemaking to $250. The new rules also introduce a streamlined NOI process, with nominal fees, for pesticide applications that are below the annual threshold, as defined under the pesticide general permit. Most local governments affected by the pesticide general permit should see a reduction in permitting costs because they will be able to take advantage of the new below-threshold permit coverage with substantially lower fees.

COMMENT NO. 4: The need for this permit may be temporary or become moot, because federal action may correct it, but we need to make sure this permit is not overly burdensome to applicators.

RESPONSE: The requirement to create a pesticide discharge permitting program originated in January of 2009 with a decision by the federal Court of Appeals for the Sixth Circuit. The court held that application of pesticides to water required a permit under the federal Clean Water Act. As a consequence of the federal court decision, the department was required to develop a Montana pesticide general permit. The Montana general permit was issued by the original court deadline, which was April 9, 2011. The court subsequently extended the deadline for permit coverage to October 31, 2011.

Congress is considering legislation to exempt pesticide application from Clean Water Act permitting. If that legislation is enacted, the department will not implement the Montana pesticide general permit. No fees will be collected under the new fee rule, and the permit will effectively sit idle until the board can take action to repeal the related rules. Pesticide applicators who would have been subject to the pesticide general permit would revert to the existing 308 authorization program, which allows temporary exemptions from water quality standards for the use of pesticides.

If there is no action by Congress to overturn the federal court decision, the department will implement the Montana pesticide general permit, and will require the submittal of an NOI and payment of fees by October 31, 2011. Until that date, pesticide applications to waters of the state will be required to have authorization under the 308 program. In an effort to reduce the burden to applicators, the department intends to provide education and outreach in conjunction with existing pesticide training courses, and will provide information and updates on the department webpage at http://deq.mt.gov/Permits.mcpx.

COMMENT NO. 5: The fees for this permit should be absorbed by either EPA or the department. The pesticide discharge permit requirement is an unfunded mandate, and it will add to costs and will impact the well-being of citizens and visitors to our communities.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1 and 4.

COMMENT NO. 6: The board needs to determine if this is the correct permit fee. It may be too high; it may be too low.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Response to Comment No. 1.

COMMENT NO. 7: The proposed fees for the pesticide general permit will render our mosquito abatement program ineffective. For 2010 our budget was $2,000 and the proposed permit fee of $900 does not kill a single mosquito. With $1,100 left we cannot hire our contractor to do an effective job of mosquito control. The public health will suffer as a result of the taxpayers' money being wasted on this non-productive fee. There has been a system (FIFRA) in place for years that satisfies our needs. The entire NPDES program must be eliminated before more damage is done to Montana's public health and the ability of ranchers and farmers to help create the food supply for America.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1, 2, and 3.

COMMENT NO. 8: Valley County Commissioners oppose any change in regulations or fees. Our mosquito control department feels that the present system is working well and that there is no need for change.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1, 2, and 3.

COMMENT NO. 9: The proposed fees are not a great amount, but our county watches all expenditures, and, if we can continue without any increase in costs, that is our preference. We are serious about the budget.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1, 2, and 3.

COMMENT NO. 10: The proposed fees for mosquito control included in the new rules will place a great hardship on our little town. Our entire mosquito control budget is $4,715 for this fiscal year. Without mosquito control, the quality of life in our town will decline.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1, 2, and 3.

COMMENT NO. 11: Our county is concerned that the fees for the pesticide general permit program are too high. Broadwater County is a class 5 county and is very low in tax dollars. Last fall Eurasian Watermilfoil, a noxious weed, was found throughout our waterways from the Jefferson River to Canyon Ferry Reservoir.

Many of the areas can be treated without the use of herbicides but, for some areas, herbicide treatment is the only feasible way to eradicate the plants. Also, the Jefferson and Missouri River form the boundary between Broadwater and Gallatin and Jefferson Counties, depending on the location. Since the weed is located on several different rivers and in several different counties, the fees would add up quite quickly making a cooperative effort very difficult.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1, 2, and 3.

COMMENT NO. 12: These rules may act as a disincentive to commercial applicators, who are educated, trained, and experienced professionals. Commercial applicators are in the best position to avoid environmental impacts from spraying, and they should be encouraged to stay in business.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1 and 2.

COMMENT NO. 13: The proposed permit fees for mosquito control entities are far too high for small business contractors. Our budgets are very tight and this added expense adds even more pressure. Government is supposed to encourage small business, not discourage it. Counterparts in other states say that their states' proposed fees are less than half of Montana's proposed fees.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos.1 and 2.

COMMENT NO. 14: A county weed control district is concerned about the cost of the permit and modifications. As aquatic weed awareness rises, they will continue to find new infestations of existing and new weeds that may require the use of an herbicide not listed on the original permit. There also will be new labeling for existing herbicides, as well as new herbicides. With an authorization fee of $900, and about 30 modifications over the last five years, it would have cost the district an additional $15,900 as well as the $90,000 it has cost to treat aquatic weeds over the last five years.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos.1, 2, and 3. The need for a modification would depend on how the NOI was originally submitted. The NOI does not require the applicant to identify the specific type of pesticide used, so changing the type of pesticide will not necessarily trigger a modification. The NOI also allows a general statement of treatment location within a single county, e.g., "all water bodies"; so changing water bodies would not necessarily trigger a modification.

COMMENT NO. 15: I operate a small business that does mosquito control for 12 mosquito districts. Some of my districts have $4,500 or less in their budget for this, and I was told to share with you that I would not have their business if this particular fee structure was passed.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Response to Comment No. 1. An applicator may decide that it is a good investment to obtain pesticide general permit coverage for all counties where

the applicator might conduct pesticide applications. In that case, any district that hires the applicator would be covered under the applicator's authorization, and the district would not be required to submit a separate NOI. See Response to Comment No. 20.

COMMENT NO 16: The members of a grain growers association view this proposed fee structure as a tax and as an excessive paperwork burden.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Response to Comment No. 1.

COMMENT NO. 17: It is not fair that a farmer that farms in Hill County and Blaine County would only need a single-county permit, but a farmer that farms in Blaine and Phillips counties would be subject to a multi-county fee because the two counties were not in the same agriculture field office district.

RESPONSE: Based upon comments received, the proposed fees have been reduced, and the multi-county permit has been restructured. See Responses to Comment Nos. 1 and 2.

COMMENT NO. 18: If there is a way to streamline this process and reduce costs, it would go a long way towards addressing the concerns of a wood products association.

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Responses to Comment Nos. 1 and 2.

COMMENT NO. 19: Would a separate permit authorization be required for each pesticide that an applicator uses or would a single authorization cover all pesticides used?

RESPONSE: The owner/operator applying for coverage under the permit is required to submit one NOI and fee for all pesticide applications to state waters for which they are responsible. As long as the NOI specifies all of the relevant pesticide use patterns that would be undertaken, the authorization would cover those within the county or counties indicated in the NOI. For example, if an owner/operator were responsible for both mosquito control and weed and algae control within one county, and the NOI indicated those applications, both could be permitted under a single authorization.

COMMENT NO. 20: How will the fee be applied to aerial applicators: individually on each farm, on each field, or can there be one single application fee just for business for a year?

RESPONSE: All pesticide applications to state water need to have coverage under the pesticide general permit. It will be up to the aerial applicators and their clients as to what the best permitting option may be. One of the parties needs to be responsible for submitting a complete NOI package and fee prior to any pesticide application that may affect state waters. The NOI can be as general or specific as the applicant determines. For instance, a county may obtain permit coverage for all applications to all state waters in the county. In that case, aerial applicators hired by the county could operate under the county's authorization. Conversely, an aerial

applicator may obtain permit coverage for all contiguous counties where the applicator conducts pesticide applications. In that case, anyone hiring the applicator would be covered under the applicator's authorization and would not be required to submit a separate NOI.

The pesticide general permit authorization is on a five-year renewal cycle. The initial fee submitted with the NOI includes both the application fee and the first year's annual fee. Fees for each of the following four years are annual fees only. An applicant can choose to terminate the authorization at any time if they no longer intend to spray to state waters, but they will be responsible for the annual fee for the year in which they terminate.

COMMENT NO. 21: Has the state considered permit-by-rule or a state-wide NOI process? Forest ownerships often cross county and district boundaries and it seems punitive to have to pay these increased costs.

RESPONSE: A state-wide general pesticide application permit would be too difficult to administer and would not be consistent with the way other MPDES permits are administered. To effectively track permit coverage and compliance, the department needs more specific information about pesticide application areas. However, based on comments the proposed fees have been reduced and the definition of multi-county has been changed. See Responses to Comment Nos. 1 and 2.

COMMENT NO. 22: What is the time frame for the permit application and approval? Monitoring for budworm populations starts in late May or early June. Initial monitoring may determine that certain properties do not need to be sprayed, while other properties will be recommended for spraying based on budworm activity.

RESPONSE: The rules authorizing the pesticide general permit and fees will be considered for final adoption by the board at their meeting on May 13, 2011. If adopted, the rules will be effective by the end of May 2011. The pesticide general permit itself was finalized by the April 9, 2011, deadline imposed by the federal court, although that deadline was subsequently extended to October 31, 2011. Accordingly, the pesticide general permit allows until October 31, 2011, for submittal of NOI and fee packages. This will allow the department time to provide outreach and education. In the meantime, the existing 308 authorization process will continue.

The department will process NOI submittals within a very short time frame. Coverage under the pesticide general permit is effective upon filing a complete NOI and fees, and the department will send out a letter confirrning coverage within a week or ten days.

COMMENT NO. 23: What is the turn-around time from filing an application to receipt of the permit authorization? Our spray season begins in late April. If the permit would not be available until May or June, can we get an exemption?

RESPONSE: See Response to Comment No. 22.

COMMENT NO. 24: Fees are required to be paid in full at the time of application. Are they refundable if monitoring work determines that spraying is unnecessary?

RESPONSE: If a particular spray project is deemed unnecessary, but the applicant may do additional spraying throughout the year, it would be in the applicant's best interest to maintain permit coverage. However, if the applicant terminates permit coverage under this permit, there is no provision in the fee rules to allow a fee refund.

COMMENT NO. 25: The department may assess an administrative processing fee when the permittee makes substantial alterations or additions, requiring significant review, to a pesticide discharge management plan. What circumstances would warrant additional administrative processing fees?

RESPONSE: In response to comments, the term "pesticide discharge management plan" was changed to "pesticide management plan," because an important purpose of the plan is to prevent discharges if possible.

According to ARM 17.30.201(6)(c), as amended, the department may assess an administrative processing fee under Schedule I.D when a permittee makes substantial alterations or additions, requiring significant additional review, to a pesticide management plan. This will not routinely occur, since pesticide management plans must be maintained on-site but are not required to be submitted to the department except under special circumstances. The administrative fee might apply if submittal of the pesticide management plan were required as part of a complaint investigation or during a compliance inspection, and the submitted plan was found to be deficient. The department could assess the administrative fee if significant plan review were required in that situation.

COMMENT NO. 26: Do pesticide management plans allow the flexibility to add new landowners on short notice? This commonly occurs when neighbors learn that a forest treatment is planned.

RESPONSE: Pesticide management plans can and should be continually updated by applicants to reflect changed conditions such as new application areas. Since the department is not requiring submittal of the plans except as part of a compliance inspection, complaint investigation, or other similar circumstance, no fees are required for revisions, other than as described above in the Response to Comment No. 25.

COMMENT NO. 27: Could this permit be combined with another permit, such as a storm water runoff permit?

RESPONSE: Combining this permit with the storm water general permit would not be appropriate. Based on federal requirements, discharge of pesticides to surface water through storm water runoff is considered a nonpoint source and is exempt from the discharge permit requirements.

COMMENT NO. 28: Could the application form be reduced to a page or two, to reduce the workload for the department so that the fee structure could be reduced?

RESPONSE: Based upon comments received, the proposed fees have been reduced. See Response to Comment No. 1. The NOI set out in the general permit will be as streamlined as possible. The current draft is three pages plus a signature page.

COMMENT NO. 29: If an application is submitted for an authorization under the suction dredge general permit, is the applicant required to pay a $500 administrative fee in addition to the $50 application fee?

RESPONSE: The administrative processing fee in ARM 17.30.201(6)(c) does not apply to suction dredge permit applications. An applicant for coverage under the suction dredge general permit would need to pay an initial fee, which is $50 for residents of Montana or $200 for non-residents. These fees include both the application fee and the first year's annual fee. After the first year, the annual fee is $25 for residents or $100 for non-residents. These fees are set in statute at 75-5-516(12), MCA, and are not being changed in this rulemaking.

COMMENT NO. 30: A Montana group of gold prospectors opposes the increase of fees for new applications for suction dredge permits.

RESPONSE: The fees for suction dredge permits have not been changed in this rulemaking. See Response to Comment No. 29.

COMMENT NO. 31: Who would be required to get the pesticide discharge permit?

RESPONSE: A detailed response to this question is outside the scope of this rulemaking, and will be addressed through the general permit process. In order to ensure that the regulated community is aware of the pesticide general permit and associated fees, the department intends to provide education and outreach in conjunction with existing pesticide training courses, and will provide information and updates on the department webpage at http://deq.mt.gov/Permits.mcpx.

COMMENT NO. 32: How is the 640-acre pesticide use pattern threshold in the pesticide general permit determined? Is it determined by the distance and width of the surface water? If the owner/operator chooses not to spray Bacillus thuringiensis over state water bodies, what is the appropriate buffer distance?

RESPONSE: This question is outside the scope of this rulemaking and will be addressed through the general permit process. See Response to Comment No. 31.

COMMENT NO. 33: The requirements for a pesticide management plan appear rigid and burdensome. Are there some examples of the plans for Bacillus thuringiensis applications?

RESPONSE: This question is outside the scope of this rulemaking and will be addressed through the general permit process. See Response to Comment No. 31.

Reviewed by: BOARD OF ENVIRONMENTAL REVIEW

_____ By: _____

JAMES M. MADDEN
Rule Reviewer

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

Certified to the Secretary of State, _____, 2011.

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

Charlie Johnston
M.K. Weeden Construction Inc.
HWY 87 west
P.O. Box 1164
Lewistown, MT 59457
Representative of Petitioner

FILED this 26th day of April AD 2011
at ____ o'Clock ____ M.
MONTANA BOARD OF ENVIRONMENTAL REVIEW
by Misty Gratt

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY M.K. WEEDEN CONSTRUCTION, INC. AT THE STAHL PIT, FERGUS COUNTY, MONTANA [FID #2037, DOCKET NO. OC-11-04]	Case No. 2011-03 OC **STIPULATION TO DISMISS**

Petitioner, M.K. Weeden Construction, Inc., and the Department of Environmental Quality, by counsel, hereby inform the Board of Environmental Review that they have resolved their differences through an Administrative Order on Consent, a copy of which is attached hereto as Exhibit A.

WHEREFORE, the parties stipulate that this contested case should be dismissed with prejudice pursuant to Rule 41(a) of the Montana Rules of Civil Procedure, each party to bear its own costs.

Dated this 26th day of April, 2011.

RECEIVED
APR 19 2011
DEQ/EMB

DEPARTMENT OF ENVIRONMENTAL QUALITY

BY: Jane B. Amdahl
Jane B. Amdahl
Attorney for the Department

M.K. WEEDEN CONSTRUCTION, INC.

BY: CS
CHARLIE JOHNSTON

Certificate of Service

I hereby certify that on the 26th day of April, 2011, I sent a true and correct copy of the foregoing Stipulation to Dismiss by the State of Montana's Interdepartmental Delivery System to the following:

Katherine Orr
Hearing Examiner
Department of Justice
Agency Legal Services

Jane B. Amdahl

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY M.K. WEEDEN CONSTRUCTION, INC. AT THE STAHL PIT, FERGUS COUNTY, MONTANA (FID NO. 2037)	ADMINISTRATIVE ORDER ON CONSENT Docket No. OC-11-04

This Administrative Order on Consent (Consent Order) is issued to resolve the enforcement action (FID 2037) that the Department of Environmental Quality (Department) initiated against M.K. Weeden Construction, Inc. (Weeden) with respect to violations of the Opencut Mining Act (the Act), Title 82, chapter 4, part 4, MCA, and the Administrative Rules of Montana (ARM) adopted thereunder, Title 17, chapter 24, sub-chapter 2. Concurrent with the issuance of this Administrative Order on Consent (Consent Order), the Department is terminating its March 11, 2011 Notice of Violation and Administrative Penalty Order that was issued in this matter, and is replacing it with this Consent Order.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Department makes the following 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. Pursuant to Section 82-4-441, MCA, the Department specifically is authorized to institute and maintain administrative enforcement proceedings under the Act. The Act also authorizes the Department to seek administrative penalties from persons who violate requirements of the Act. *See* Section 82-4-441(1) and (2), MCA.

EXHIBIT A

4. Weeden is a corporation and, therefore, is a "person" within the meaning of Section 82-4-403(10), MCA.

5. Weeden engaged in or controlled an opencut operation at the Stahl Pit (Site) and has engaged in or controlled several other permitted sites, exceeding the removal or disturbance of 10,000 cubic yards of materials and overburden, therefore, is an "operator" within the meaning of Section 82-4-403(8), MCA. Accordingly, Weeden is subject to the requirements of the Act and the rules adopted thereunder.

6. On March 11, 2011, the Department issued Weeden a Notice of Violation and Administrative Compliance and Penalty Order (Order). The Order alleged that Weeden had conducted an opencut operation at the Stahl Pit in Fergus County, Montana, without a valid permit issued by the Department. The Order required corrective action, which Weeden has completed. However, to resolve the violation, the Order assessed an administrative penalty in the amount of $5,000.

7. On March 15, 2011, Weeden requested a hearing before the Board of Environmental Review (Board)..

8. The matter is pending before the Board.

9. Weeden has submitted payment of the administrative penalty to the Department in the amount of $5,000 without protest.

10. The Department and Weeden have reached an agreement, as set forth in the *Administrative Order on Consent* below, to resolve the violation alleged in the Department's Order.

ADMINISTRATIVE ORDER ON CONSENT

Now, THEREFORE, the Department hereby ORDERS and Weeden AGREES as to the following:

11. Weeden and the Department mutually agree to execute a Stipulation to Dismiss Board of Environmental Review Case No. BER 2011-03 OC, the Department's Order above having been fully and finally settled.

12. Weeden is hereby assessed an administrative penalty in the amount of $5,000. As indicated above, Weeden has previously submitted the penalty amount in full to the Department.

CONSENT TO ADMINISTRATIVE ORDER

13. Weeden waives its right to administrative appeal or judicial review of the Findings of Fact and Conclusions of Law and Administrative Order on Consent set forth herein and agrees that this Consent Order is the final and binding resolution of the issues raised.

14. None of the requirements in this Consent Order are intended to relieve Weeden from complying with all applicable state, federal, and local statutes, rules, ordinances, orders, and permit conditions.

15. The terms of this Consent Order constitute the entire agreement between the Department and Weeden with respect to the issues addressed herein notwithstanding any other oral or written agreements and understandings made and entered into between the Department and Weeden prior to the effective date of this Consent Order.

16. 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.

17. Weeden agrees that it has been notified that it has a right to be represented by an attorney in connection with this matter, and that it has knowingly waived that right.

18. Each party shall bear its own costs incurred in this action, including attorney fees.

19. 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.

20. 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

4/26/11
Date

IT IS SO AGREED:

M.K. WEEDEN
CONSTRUCTION, INC.

Signature

CHARLIE JOHNSTON
Printed Name

ENGINEER
Title

04/18/2011
Date

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY M.K. WEEDEN CONSTRUCTION, INC. AT THE STAHL PIT, FERGUS COUNTY, MONTANA [FID #2037, DOCKET NO. OC-11-04]	Case No. 2011-03 OC **DISMISSAL ORDER**

The parties have filed a Stipulation to Dismiss pursuant to Rule 41(a), M.R.Civ.P., and finding that the parties have settled their differences by means of an Administrative Order on Consent and that they have agreed that this matter should be dismissed with prejudice, as provided in the parties' Stipulation and for good cause appearing:

IT IS HEREBY ORDERED THAT this appeal is dismissed with prejudice. Each party shall bear its own costs.

DATED this _____ day of _____, 2011.

BOARD OF ENVIRONMENTAL REVIEW

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

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: April 12, 2011

SUBJECT: Board of Environmental Review case, Case No. BER 2011-04 OC

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY CONCRETE MATERIALS OF MONTANA, L.L.C. AT THE MAURITZSON SITE, YELLOWSTONE COUNTY, MONTANA. [FID #1980, DOCKET NO. OC-11-01]	Case No. BER 2011-04 OC

TITLE

BER has received the attached request for hearing. Also attached is DEQ's administrative document relating to this request (Enforcement Case FID #1980, Docket No. OC-11-01).

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

John Arrigo, Administrator
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Attachments

BER 2011-04 OC

RAMLER LAW OFFICE, P.C.

a Professional Corporation
202 West Madison Avenue
Belgrade, Montana 59714

Richard A. Ramler
richardramler@aol.com

406-388-0150
406-388-6842 fax

April 8, 2011

FILED this 11th day of April AD 2011
at _____ o'Clock ____ M.
MONTANA BOARD OF
ENVIRONMENTAL REVIEW
by: Misty Cobb

Board Secretary
Board of Environmental Review
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

Re: Request for Hearing - Amended Notice of Violation and Administrative Compliance and Penalty Order, Docket No. OC-11-01 (Amended Order)

Dear Board Secretary:

I represent Concrete Materials of Montana, LLC. (CMM). On behalf of CMM, I hereby request a hearing before the Montana Board of Environmental Review of the above referenced Amended Order, pursuant to § 82-4-441, M.C.A.

Thank you.

Sincerely,

Richard A. Ramler

cc. Greg Lucht
Franklin H. Gessaman
Jane Amdahl

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY CONCRETE MATERIALS OF MONTANA, L.L.C. AT THE MAURITZSON SITE, YELLOWSTONE COUNTY, MONTANA. (FID #1980)	AMENDED NOTICE OF VIOLATION AND ADMINISTRATIVE COMPLIANCE AND PENALTY ORDER Docket No. OC-11-01

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 Concrete Materials of Montana, L.L.C. (CMM) of the following Findings of Fact and Conclusions of Law with respect to violations of the Opencut Mining Act (the Act), Title 82, chapter 4, part 4, MCA, and the Administrative Rules of Montana (ARM) adopted thereunder, Title 17, chapter 24, sub-chapter 2. Concurrent with the issuance of this Amended Notice of Violation and Administrative Compliance and Penalty Order (Amended Order), the Department is terminating the March 8, 2011 Notice of Violation and Administrative Compliance and Penalty Order that was issued in this matter and is replacing it with this Amended Order.

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Department makes the following 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, Title 82, chapter 4, part 4, MCA.

3. The Department is authorized under Section 82-4-441, MCA, to issue this Amended Order to CMM to address the alleged violations of the Act, the administrative rules

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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 violations.

4. CMM is a corporation and, therefore, is a "person" within the meaning of Section 82-4-403(10), MCA.

5. ARM 17.24.225 provides that "[a]n operator shall comply with the provisions of its permit, this subchapter, and the Act."

6. The Department issued Mined Land Reclamation Permit No. 1128 (Permit) to CMM to authorize the disturbance of 6.5 acres for an opencut mine in Section 18, Township 1 North, Range 27 East, Yellowstone County, Montana, the Mauritzson Site (Site). CMM operates or has operated the opencut mine at the Site and therefore is an "operator" within the meaning of Section 82-4-403(8), MCA. Accordingly, CMM is subject to the requirements of the Act and the rules adopted thereunder.

7. An approved Plan of Operation (Plan) is appended to and incorporated into the Permit.

8. Sections 82-4-432(5) (2007) and 82-4-432(11) (2009), MCA, state that an operator desiring to have a permit amended to cover additional contiguous or nearby land is to submit an amendment application to the Department.

9. On April 29, 2010, J.J. Conner (Conner) of the Department's Opencut program conducted an inspection of the Site. During the inspection, Conner observed that CMM had increased the size of the Site from the permitted 6.5 acres to 12 acres without first submitting a permit amendment application and obtaining written approval from the Department.

10. During the April 29, 2010 inspection, Conner documented that the permit boundaries were not marked, soil and waste piles were unstable and eroding, asphalt was illegally being stored on the site, concrete and asphalt were buried on the site, the operator had failed to follow the Plan by not reclaiming by the date on the Plan, the Site was not ripped and topsoil not spread or seeded as required by the Plan, and asphalt was buried on the Site.

11. On May 20, 2010, Conner sent a Violation Letter to notify CMM that it was in violation of the Act for conducting mining activities on land not covered by a valid permit and for not following the approved Plan.

Violation #1 -- Conducting opencut operations in a non-permitted area

12. Section 82-4-431(1), MCA, requires that an operator may not conduct opencut mining operations until the Department has issued a permit to the operator for the reclamation of the land affected.

13. Section 82-4-403(1), MCA, defines "affected land," in part, to mean "...the area of land... that is disturbed by opencut operations, including the area from which overburden or materials are to be or have been removed..."

14. Sections 82-4-432(5) (2007) and 82-4-432(11) (2009), MCA, provide that the Department may issue a permit amendment to an original permit to cover additional contiguous or nearby land if the operator submits an application for an amendment, which must include any additional bond that may be required.

15. CMM conducted opencut mining operations on contiguous unpermitted land prior to obtaining a permit amendment approval from the Department.

16. CMM violated Section 82-4-431(1), MCA, by conducting an opencut operation in an unpermitted area at the Site.

Violation #2 -- Failure to follow the approved Plan of Operation

17. ARM 17.24.225(1) requires an operator to comply with its Permit, which includes the approved Plan.

18. ARM 17.24.218 requires that the Plan must include certain site preparation, mining and processing plan commitments and information, including the placement and maintenance of permit boundary markers, waste disposal requirements, and how soil piles will be stored.

19. Section II, Paragraph 2, Soil Materials Handling, Paragraph c. of the approved Plan states that the operator will handle soil and overburden separately and haul these materials to areas prepared for resoiling or separately stockpile them where they will not be disturbed, contaminated, or lost to erosion.

20. Section II, Paragraph 8, Waste Disposal, Paragraph (a), of the approved Plan states that the operator will provide separate on-site storage or disposal areas for the following groups of wastes as specified below and at the locations shown on the site map: 1) excess overburden, fines, and oversize, (2) clean fill, and (3) on-site-generated asphaltic pavement, metal, plastic, and tires (clean fill is limited to soil, dirt, sand, gravel, scoria, rock, brick, and exposed metal-free concrete; commit to establishing a minimum 25' vertical separation between asphaltic pavement, metal, plastic, and tire waste and the seasonally high water table, unless it is demonstrated that a smaller separation is acceptable). Paragraph (b) states the operator will prohibit on-site disposal of wastes not listed under (a), unless an appropriate solid waste management system license is obtained from the Department.

21. Section II, Paragraph 16, Road and Boundary Markers, of the approved Plan states that the operator ... has clearly marked the main contract area with durable markers.

22. Section II, Paragraph 14, Concurrent and Final Reclamation, of the approved Plan states that the operator ...will have the final reclamation completed by November 2005.

23. CMM violated ARM 17.24.225(1) and its Permit by failing to install and maintain permit boundary markers, having soil piles that are unstable and eroding, inappropriately storing concrete and asphalt on Site, and failing to reclaim by November 2005 as required by the Plan.

Administrative penalty

24. Section 82-4-441, MCA, provides that the Department may assess an administrative penalty of not less than $100 or more than $1,000 for a violation and an additional administrative

penalty of not less than $100 or more than $1,000 for each day during which a violation of a rule or permit continues.

25. Using the factors set forth in Section 82-4-1001, MCA, and ARM 17.4.301 through 17.4.308, the Department has calculated an administrative penalty in the amount of $11,640.00 resolve the violations cited herein. (*See* enclosed Penalty Calculation Worksheet.)

III. ADMINISTRATIVE ORDER

This Amended Order is issued to CMM 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 hereby ORDERS CMM to do the following:

26. Upon receipt of this Amended Order, CMM shall cease any further opencut operations outside of the Permit boundaries at the Site until the Department has reviewed and approved an amendment to the Permit that includes the non-permitted area.

27. Within 45 days of receipt of this Amended Order, complete an application to amend the Permit to include in the permit all areas disturbed by the mining operation and correct all violations described above.

28. Within 30 days of service of this Amended Order, CMM shall pay to the Department an administrative penalty in the amount of $11,640.00 to resolve the violations cited above. The penalty must be paid by check or money order, made payable to the "Montana Department of Environmental Quality," and shall be sent to:

John L. Arrigo, Administrator
Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

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IV. NOTICE OF APPEAL RIGHTS

29. CMM may appeal this Amended Order under Section 82-4-441, MCA, by filing a written request for a hearing before the Montana Board of Environmental Review no later than 30 days after service of this Amended Order. Service of this Amended Order is complete three business days after mailing. Any request for a hearing must be in writing and sent to:

Board Secretary
Board of Environmental Review
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

30. 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 CMM is not an individual, CMM must be represented by an attorney in any contested case hearing. *See* ARM 1.3.231(2) and Section 37-61-201, MCA.

31. If a hearing is not requested within 30 days after service of this Amended Order, the opportunity for a contested case appeal is waived.

32. This Amended Order becomes effective on the date of service. Service by mail is complete three business days after mailing.

IT IS SO ORDERED:

DATED this 21st day of March, 2011.

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

JOHN L. ARRIGO, Administrator
Enforcement Division

Department of Environmental Quality - Enforcement Division
Penalty Calculation Worksheet

Responsible Party Name:	Concrete Materials of Montana, L.L.C. (CMM)
FID:	1980
Statute:	Opencut Mining Act
Date:	1/4/2011
Name of Employee Calculating Penalty:	Robert D. Smith
Maximum Penalty Authority:	$1,000.00

Violation #1
Description of Violation:
CMM violated Section 82-4-431, MCA, by conducting opencut operations on approximately 5.5 acres outside of the approved permitted area.

I. BASE PENALTY

Nature

Explanation:
Conducting an opencut operation prior to obtaining a permit or an approved permit amendment creates the potential to harm human health or the environment. Unless the Department has reviewed and approved an application for permit or an amendment to an existing permit, the public has no assurance that an opencut operation will be conducted in compliance with state law or that the operator will mitigate impacts to the environment and/or human health. Commencing or expanding an opencut operation prior to completing the permitting process also circumvents the public's opportunity to provide input into the permitting process and to have any concerns addressed. Finally, if adequate bond has not been posted, resources may not be available to reclaim the disturbance and the environment may be adversely impacted by the activities that have occurred at the site. Therefore, the nature of the violation is one that has the potential to harm human health or the environment.

Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
ARM 17.4.303(5)(a) provides that the "operation without a required permit or approval" is a violation of major gravity.
Extent Explanation:
The regulatory expectation is that an opencut operator will not mine outside of its permitted area without having obtaining an amendment to its permit. The fact that CMM conducted an opencut operation on 5.5 unpermitted acres, which is nearly equal to the permitted area, prior to obtaining a permit amendment consitutes a major deviaton from the regulatory requirement. Therefore, the extent is major.

Harm to Human Health or the Environment

Extent \ Gravity	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:	0.00

BASE PENALTY (Maximum Penalty Authority x Gravity and Extent Factor): **$850.00**

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:
CMM had control over the circumstances surrounding the violation and should have forseen that conducting opencut operations outside of the permit boundary would result in a violation. As a permitted entity, CMM should be knowledgeable about the requirements of the Act. Therefore, the Department is adding 20% to the base penalty to reflect a moderate degree of culpability for circumstances.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	$170.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:
CMM was notified of the violation on May 20, 2010 and did not submit a permit amendment to include the additional disturbance in the permit boundary. Therefore, the Department is not deducting any amount of the penalty for good faith and cooporation.

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 CMM to mitigate the violation or the impacts of the violation above and beyond what is expected. Therefore, no decrease to 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	$850.00
Circumstances	$170.00
Good Faith & Cooperation	$0.00
Amt. Voluntarily Expended	$0.00
ADJUSTED BASE PENALTY	**$1,020.00**
Statutory Maximum	**$1,000.00**

III. DAYS OF VIOLATION

Explanation:
Section 82-4-441(2), MCA, provides, in part, that the Department may assessed an administrative penalty for the violation and an additional administrative penalty for each day the violation continues. The Department does not have information to determine how many days CMM conducted opencut mining operation to disturb 5.5 acres outside of its permitted area. Using its discretion, the Department is choosing to use five (5) days of violation to calculate the administrative penalty assessed for the first acre of unpermitted disturbance and an additional day of violation for each remaining acre that was mined outside the permitted area. The rationale for choosing to use 5 days of violation for the first acre of unpermitted disturbance is that the definition of "opencut operation" includes the following five activities: site preparation, mining, processing, transportation and stockpiling. *See* Section 82-4-403(7)(a)-(e), MCA. The Department is assigning one day of violation for each of the activities. Using this rationale, the Department has calculated a penalty for nine (9) days of violation for CMM's conducting opencut operations on 5.5 acres outside its permitted boundary.

Number of Days:	9
ADJUSTED BASE PENALTY x NUMBER OF DAYS:	$9,000.00

OTHER MATTERS AS JUSTICE MAY REQUIRE

Explanation:
Not applicable.

OTHER MATTERS:	$0.00

IV. ECONOMIC BENEFIT

Explanation:
In this case, the Department determined that the economic benefit would be minimal as there is a bond in place for the original pit.

ECONOMIC BENEFIT REALIZED:	$0.00

Responsible Party Name:	Concrete Materials of Montana, L.L.C. (CMM)
FID:	1980
Statute:	Opencut Mining Act
Date:	3/7/2011
Maximum Penalty Authority:	$1,000.00

Violation #2
Description of Violation:
CMM violated ARM 17.24.225(1) and the Permit by failing to install and maintain permit area boundary markers, having unstable and eroding soil and waste piles, improperly burying concrete and asphalt on site, and not reclaiming the site by the date on the approved Plan of Operation (Plan).

I. BASE PENALTY

Nature

Explanation:	
The failure to comply with the Plan has the potential to harm human health or the environment.	
Potential to Harm Human Health or the Environment	x
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:
Failure to operate in accordance with an approved permit condition is considered moderate gravity in accordance with ARM 17.4.303(5)(b).
Extent Explanation:
The extent of deviation for this violation is moderate. The expectation is that the operator will install and maintain permit area boundary markers, have stable soil and waste piles, properly handle concrete and asphalt on site, and reclaim the site by the date on the approved Plan.

Harm to Human Health or the Environment

Extent \ Gravity	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): **$550.00**

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:	
As a regulated entity that regularly mines gravel in Montana, CMM should be aware of the requirement not to violate the approved Plan. Therefore, the increase to the Base Penalty for Circumstances is 20%.	
Circumstances Percent:	0.20

Circumstances Adjustment (Base Penalty x Circumstances Percent) $110.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:
CMM was notified of the violation on May 20, 2010 and did not submit a permit amendment. Therefore, the Department is not granting any reduction for good faith and cooporation.

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 beyond that necessary to bring the mining operation into compliance. Therefore, no decrease to the Base Penalty is calculated for amounts voluntarily expended.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	$0.00

ADUSTED BASE PENALTY SUMMARY

Base Penalty	$550.00
Circumstances	$110.00
Good Faith & Cooperation	$0.00
Amt. Voluntarily Expended	$0.00
ADJUSTED BASE PENALTY	**$660.00**

III. DAYS OF VIOLATION

Explanation:
In a violation letter dated May 20, 2010, the Department documented the failure to install and maintain permit area boundary markers, having unstable and eroding soil and waste piles, concrete and ashpalt being buried, and not having the site reclaimed by the date on the accepted Plan. Based on the one-day documentation for each of the above violations of the Plan, the Department is calculating four days of violation.

Number of Days:	4
ADJUSTED BASE PENALTY x NUMBER OF DAYS:	$2,640.00

OTHER MATTERS AS JUSTICE MAY REQUIRE

Explanation:
Not applicable.

OTHER MATTERS:	$0.00

IV. ECONOMIC BENEFIT

Explanation:
CMM gained a delayed economic benefit by failing to install and maintain boundary markers and burying asphalt and concrete on the property. The Department, however, considers the amount of savings that CMM gained by not installing and maintaining boundary markers to be minimal for the following reasons. Operators generally drive steel fence posts at locations on the perimeter of the permitted area to mark the boundary. Periodic maintenance is accomplished by spray painting the posts. The Department estimates these costs to be less than a couple of hundred dollars. Additionally, CMM will need to bear these costs in any event as well as remove the buried asphalt and concrete and potentially have to replace the eroded soil. The Department considers the economic benefit that CMM gained by delaying the installation of boundary markers and delaying removal of the asphalt and concrete to be minimal and is not adding an amount for economic benefit.

Economic Benefit Realized:	$0.00

Department of Environmental Quality - Enforcement Division
Penalty Calculation Summary

Responsible Party Name:	Concrete Materials of Montana, L.L.C. (CMM)
FID:	1980
Statute:	Opencut Mining Act
Date:	3/7/2011
Signature of Employee Calculating Penalty:	Robert Smith

I. Base Penalty (Maximum Penalty Authority x Matrix Factor)

	Violation #1	*Violation #2*
Maximum Penalty Authority:	$1,000.00	$1,000.00
Percent Harm - Gravity and Extent:	0.85	0.55
Percent Impact - Gravity:	0.00	0.00
Base Penalty:	$850.00	$550.00

II. Adjusted Base Penalty

			Totals
Base Penalty:	$850.00	$550.00	$1,400.00
Circumstances:	$170.00	$110.00	$280.00
Good Faith and Cooperation:	$0.00	$0.00	$0.00
Amount Voluntarily Expended:	$0.00	$0.00	$0.00
Adjusted Base Penalty:	$1,020.00	$660.00	$1,680.00
Statutory Maximum:	**$1,000.00**		

III. Days of Violation or Number of Occurrences	9	4	
Adjusted Base Penalty Total	$9,000.00	$2,640.00	$11,640.00
Other Matters as Justice May Require Total	$0.00	$0.00	$0.00
IV. Economic Benefit	$0.00	$0.00	$0.00
V. History*			$0.00
		TOTAL PENALTY	$11,640.00

*CMM does not have a prior history of violations of the Opencut Mining Act documented in either an administrative order, judicial order, or judgment within the last three years.

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE OPENCUT MINING ACT BY CONCRETE MATERIALS OF MONTANA, L.L.C. AT THE MAURITZSON SITE, YELLOWSTONE COUNTY, MONTANA. [FID #1980; DOCKET NO. OC-11-01]	**CASE NO. BER 2011-04 OC**

FIRST PREHEARING ORDER

Mr. Richard A. Ramler, Counsel for Concrete Materials of Montana, LLC, has requested a hearing to appeal the Amended Notice of Violation and Administrative Compliance and Penalty Order, Docket No. OC-11-01, dated March 21, 2011, pertaining to violation of legal requirements and imposition of penalties under the Metal Mine Reclamation Act, Montana Code Ann. Title 82, Chapter 4, Part 3 and administrative rules adopted under the Act in Title 17, Chapter 24, Administrative Rules of Montana (ARM). The following guidelines and rules are provided to assist the parties in an orderly resolution of this contested case.

1. REFERENCES: This matter is governed by the Montana Administrative Procedure Act, Mont. Code Ann. Tit. 2, ch. 4, 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. 3.

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:

JOYCE WITTENBERG
Secretary, Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

One copy of each document that is filed should be sent to the Hearing Examiner addressed as follows:

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

Although discovery documents are not normally filed, when a motion or brief is filed making reference to discovery documents, the party filing the motion or brief should also attach the relevant discovery documents.

3. SERVICE: Copies of all documents filed with the Board and provided to the undersigned, including correspondence, must be served upon the opposing party. A certificate of service should be provided.

4. EX PARTE COMMUNICATIONS: The Montana Administrative Procedure Act in Mont. Code Ann. § 2-4-613, and the Attorney General's Model Rule 18 in Mont. Admin. R. 1.3.222, prohibit ex parte communications with a hearing examiner concerning any issue of fact or law in a contested case. In addition to observing this rule, please contact the opposing party before you communicate with the Hearing Examiner even on purely procedural matters such as the need for a continuance.

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 **May 6, 2011**. The schedule should include the following dates:

(a) for joinder/intervention of additional parties;

(b) for disclosure by each party to the other parties of: (1) the name and address of each individual likely to have discoverable information that the disclosing party may use to support its claims or defenses; and (2) a copy of, or a description by

category and location of, all documents and tangible things that are in the possession, custody, or control of the disclosing party and that the disclosing party may use to support its claims or defenses;

(c) for completion of discovery (if any party wishes to conduct discovery);

(d) for exchange of lists of witnesses and copies of documents that each party intends to offer at the hearing;

(e) for submitting any motions and briefs in support;

(f) for a prehearing conference to hear argument on any motions and resolve other prehearing matters; and

(g) for the contested case hearing, as well as the place of hearing.

DATED this 27th day of April, 2011.

For James W. Scheier

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

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and accurate copy of the foregoing First Prehearing Order to be mailed to:

Ms. Joyce Wittenberg
Secretary, Board of Environmental Review
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
(original)

Ms. Jane Amdahl
Legal Counsel
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Mr. John Arrigo
Administrator, Enforcement Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Mr. Richard A. Ramler
202 West Madison Avenue
Belgrade, MT 59714

DATED: April 27, 2011 James M. Scheier

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: April 25, 2011

SUBJECT: Board of Environmental Review case, Case No. BER 2011-05 PWS

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE PUBLIC WATER SUPPLY LAWS BY JORE CORPORATION AT JORE CORPORATION, PWSID #MT0004060, RONAN, LAKE COUNTY, MONTANA. [FID #1993, DOCKET NO. PWS-10-34]	Case No. BER 2011-05 PWS

TITLE

BER has received the attached request for hearing. Also attached is DEQ's administrative document relating to this request (Enforcement Case FID #1993, Docket No. PWS-10-34).

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Carol Schmidt
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

BER 2011-05 PWS

Dear Mr. Russell, Mr. Mires, and Board Secretary, April 20, 2011

I am sending this letter to both the chairman and public member of the environmental review board and the address I have for the Board Secretary, as written notice of Jore Corporation's desire to appeal the amendment we received regarding docket number PWS-10-34 sent to us on March 24th ,2011. Section IV of the amendment informed us that we could appeal the amendment per section 75-6-109(3) MCA.

We had hoped we would have gained resolution on this issue by now but I have not heard back from Mr. Gessaman in regards to my last correspondence and the time frame for asking for an appeal is short. In lieu of having any instruction as to proper methods for written notification I hope this suffices.

We at Jore Corporation have a non-transient, non-community public water system. In essence we have a well and employees have access to drink water from that well. We failed the MCL for arsenic levels with test results ranging from .011 - .015 mg/L. We sent samples in for speciation and based on those results as well as having taken "ND", no detect, samples at the point of use where we had filters on prefabricated drinking bars we are confident we can provide safe drinking water for our employees. We have asked to be allowed to install filters designed to remove arsenic from water at all locations where it can logically be assumed that an employee could consume water from the well. The reason we are asking for an appeal is that the MDEQ is insistent that we hire an outside engineering firm adding what we consider to be undo expense to our efforts to correct the levels of arsenic in our water.

Thank you for your time and consideration.

Sincerely,
Kevin Torgenrud
Engineering/Quality/Facilities manager
Jore Corporation

FILED this 22nd day of
Apr. AD 2011
at _____ o'Clock
MONTANA BOARD OF
ENVIRONMENTAL
By

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE PUBLIC WATER SUPPLY LAWS BY JORE CORPORATION AT JORE CORPORATION, PWSID #MT0004060, RONAN, LAKE COUNTY, MONTANA. (FID #1993)	AMENDMENT TO NOTICE OF VIOLATION AND ADMINISTRATIVE COMPLIANCE ORDER Docket No. PWS-10-34

AMENDMENT

An Amendment (Amendment) is made to the December 8, 2010 Notice of Violation and Administrative Compliance and Penalty Order (Order), Docket No. PWS-10-34, as shown below. In the following replacement paragraphs, language that is being deleted is "interlined" and language that is being added is "underlined." All other parts of the Order remain unchanged and continue in effect.

17. ~~Within 60 days of the date of mailing of this Order~~ On or before June 30, 2011, Respondent shall submit a corrective action plan and schedule to the Department for review and approval that addresses each of the following:

a) Identification of a preferred corrective action to enable the System to meet the arsenic MCL, which may include treatment for arsenic removal or connection to a new water source.

b) Respondent shall retain a licensed professional to design and submit plans and specifications to the Department. The plans and specifications must be submitted in conformance with the requirements of ARM 17.38.101, *et seq.*

c) A funding plan to implement the selected corrective action. The funding plan shall identify potential funding sources and procedures, including a schedule that Respondent will pursue to secure funding to implement the proposed project.

d) A proposed project schedule for completion of the corrective action. The schedule must include timeframes for construction of the preferred corrective action.

17a. On or before May 30, 2011, Respondent shall notify the Department in writing of the name and address of the licensed professional engineer who Respondent has retained to prepare and submit the required Plan.

17b. Respondent shall continue to instruct employees to obtain drinking water from the Culligan water bars that have been installed in the break rooms and cafeteria and post all other locations where water is available as non-potable.

IV. NOTICE OF APPEAL RIGHTS

27. Respondent may appeal this Amendment ~~Order~~ under Section 75-6-109(3), MCA, by filing a written request for a hearing before the Montana Board of Environmental Review no later than 30 days after service of this Amendment ~~Order~~. Any request for a hearing must be in writing and sent to:

Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

28. 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 Respondent is not an individual, Respondent must be represented by an attorney in any contested case hearing. *See* ARM 1.3.231(2) and Section 37-61-201, MCA.

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29. If a hearing is not requested within 30 days after service of this Amendment ~~Order~~, the opportunity for a contested case appeal is waived.

30. This Amendment ~~Order~~ becomes effective on the date of service.

31. Service by mail is complete on the date of mailing.

IT IS SO ORDERED:

DATED this 24th day of March, 2011.

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

JOHN L. ARRIGO, Administrator
Enforcement Division

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: April 25, 2011

SUBJECT: Board of Environmental Review case, Case No. BER 2011-06 SDL

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE MONTANA SEPTAGE DISPOSAL AND LICENSURE LAWS BY JAMES VAUGHAN, D/B/A ANY TIME SEPTIC & PORTA-POTTY, CHARLO, LAKE COUNTY, MONTANA [FID #2002, DOCKET NO. SDL-11-01]	Case No. BER 2011-06 SDL

TITLE

BER has received the attached request for hearing. Also attached is DEQ's administrative document relating to this request (Enforcement Case FID #2002, Docket No. SDL-11-01).

Please serve copies of pleadings and correspondence on me and on the following DEQ representatives in this case.

Norm Mullen
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

BER 2011-06 SDL

Robert J. Long
Long Law Office P.C.
311 2nd St. E.
Polson, MT
(406) 883-1363

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE MONTANA SEPTAGE DISPOSAL AND LICENSURE LAWS BY JAMES VAUGHAN, D/B/A/ ANYTIME SEPTIC &PORTA-POTTY, CHARLO, LAKE COUNTY, MONTANA (FID 2002)	**Cause No. SDL-11-01** **REQUEST FOR HEARING**

COMES NOW undersigned counsel for James Vaughan and requests a hearing on Notice of Violation and Administrative Compliance and Penalty Order herein dated April 11, 2011.

DATED this 22nd day of April, 2011.

Long Law Office, P.C.

Robert J. Long

CERTIFICATE OF SERVICE

The undersigned does hereby certify that on the above date a true and correct copy of the foregoing document was served at the below address, either by mailing, hand delivery, or otherwise, as indicated.

John L. Arrigo, Administrator
Enforcement Division
Department of Environmental Quality
1520 East Sixth Ave.
Box 200901
Helena, MT 59620-0901

[X] U.S. Mail (first class postage)
[ ] Hand Delivery
[ ] Other

Robert J. Long

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF MONTANA

IN THE MATTER OF: VIOLATIONS OF THE MONTANA SEPTAGE DISPOSAL AND LICENSURE LAWS BY JAMES VAUGHAN, D/B/A ANY TIME SEPTIC & PORTA-POTTY, CHARLO, LAKE COUNTY, MONTANA (FID 2002)	NOTICE OF VIOLATION AND ADMINISTRATIVE COMPLIANCE AND PENALTY ORDER Docket No. SDL-11-01

I. NOTICE OF VIOLATION

Pursuant to the authority of Section 75-10-1222, Montana Code Annotated (MCA), the Department of Environmental Quality (Department) hereby gives notice to James Vaughan (Vaughan), d/b/a Any Time Septic & Porta-Potty, of the following Findings of Fact and Conclusions of Law with respect to violations of the Montana Septage Disposal and Licensure Laws (SDLL), Title 75, chapter 10, part 12, MCA, and the administrative rules adopted thereunder (Administrative Rules of Montana (ARM) Title 17, chapter 50, subchapter 8).

II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The Department hereby makes the following 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 is charged with the administration and enforcement of the SDLL and is specifically authorized to institute and maintain administrative enforcement proceedings under the SDLL, including the assessment of administrative penalties not to exceed $500 for each day of violation. *See* Section 75-10-1222, MCA.

3. Vaughan is an individual and is, therefore, a "person" as defined in Section 75-10-1201(6), MCA.

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Disposing of Septage on a Site Not Approved by the Department

4. A person proposing to apply septage to a land-disposal site must obtain the written approval of the Department. Department approval can be obtained only by listing the site on the form submitted to the Department as part of the license application required in Sections 75-10-1210 and 1211, MCA, and ARM 17.50.803(1)(d), or as part of a request made under ARM 17.50.803(6) to add a land-application site during the term of a license.

5. On January 26, 2009, the Department issued a renewal of Cesspool Septic Tank and Privy Cleaners License No. S-983 (License) to Vaughan. The License expired on December 31, 2009.

6. The only disposal site that had been approved for disposal of septage under Vaughan's license was property owned by Joseph Brooks located in the South half of Section 5, Township 20 North, Range 20 West, Lake County, Montana.

7. On September 2, 2009, after a Department employee learned that Mr. Brooks had revoked permission for disposal by Vaughan at that property, the Department sent a letter to Vaughan informing him that he had operated a septage disposal business without an approved disposal site. The letter also informed Vaughan that he needed to cease operations until the Department had approved a disposal site. The letter requested that Vaughan submit a disposal site application to the Department to establish an approved septage disposal site.

8. After he had been notified by the September 2, 2009 letter that he should not operate a septage disposal business until he had an approved disposal site, Vaughan land-applied 10 loads of septage onto his own property located at 61596 Highway 212, Charlo, Lake County, Montana, on 10 separate occasions from September 4 through December 23, 2009.

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9. Vaughan submitted disposal logs to the Department on January 12, 2010, showing the facts in Paragraph 8.

10. Vaughan has never listed his own property as a septage land-application site in either a septage cleaning and disposal license application or in a request to add a disposal site during a license term. He therefore did not meet the requirements of ARM 17.50.803(1)(d) or 803(6) for his own property.

11. Vaughan did not submit a disposal site application to the Department in response to the September 2, 2009 letter.

12. Vaughan's own property was not approved by the Department for disposal of septage on the dates that the violations occurred.

13. A person may not dispose of septage without a license from the Department. Section 75-10-1210(1), MCA.

14. By disposing of septage onto his own property during 10 days from September 4 through December 23, 2009, when his own property had not been submitted or approved as a disposal site, Vaughan disposed of septage without a license on 10 different days, violating Section 75-10-1210(1), MCA, 10 times.

15. A person who violates a provision of Title 75, chapter 10, part 12, MCA, a rule adopted under that part, or a condition of approval of a septage cleaning and disposal license application is liable for a penalty not to exceed $500 for each day of violation under Section 75-10-1222(1) and (5), MCA.

16. Vaughan is therefore liable for a penalty of up to $500 for each of the 10 days that he applied septage to his own property without a license from the Department.

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Administrative penalty

17. Pursuant to Section 75-10-1222(1) and (5), MCA, the Department may assess an administrative penalty not to exceed $500 for each day a person has violated a section of the SDLL, an administrative rule in ARM Title 17, chapter 50, subchapter 8, or a condition of approval of a license issued under the SDLL.

18. The Department has calculated an administrative penalty of $5,000 for the violations in Paragraph 14. The authority for this penalty calculation is found in Sections 75-10-1222(5) and 75-1-1001, MCA, and ARM 17.4.301 through 17.4.308. The enclosed Penalty Calculation Worksheet is incorporated by reference herein.

III. ADMINISTRATIVE ORDER

This Notice of Violation and Administrative Compliance and Penalty Order (Order) is issued to Vaughan pursuant to the authority vested in the State of Montana, acting by and through the Department under Section 75-10-1222, MCA, of the SDLL and administrative rules adopted under the SDLL found at ARM Title 17, chapter 10, subchapter 8. Based on the foregoing Findings of Fact and Conclusions of Law and the authority cited above, the Department hereby ORDERS Vaughan to take the following actions to comply with the SDLL within the time frames specified in this Order:

19. Upon receipt of this Order, Vaughan shall cease all septage cleaning and disposal practices until licensed by the Department.

20. Vaughan is hereby assessed an administrative penalty of $5,000 for the violations identified in Paragraph 14.

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21. Within 60 days after service of this Order, Vaughan shall pay to the Department the $5,000 administrative penalty to resolve the violations cited herein. The penalty must be paid by check or money order, made payable to the "Montana Department of Environmental Quality," and shall be sent to:

John L. Arrigo, Administrator
Enforcement Division
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

22. Failure to take the required corrective actions and pay the assessed penalty by the specified deadlines, as ordered herein, constitutes a violation of Title 75, chapter 10, part 12, MCA, and may result in the Department seeking a court order assessing civil penalties of up to $500 per day of violation pursuant to Section 75-10-1223, MCA.

23. None of the requirements in this Order are intended to relieve Vaughan from complying with all applicable state, federal, and local statutes, rules, ordinances, orders, and permit conditions.

24. The Department may take an additional enforcement action against Vaughan, including the filing of a court action seeking injunctive relief, civil penalties, and other available relief for any violation of, or failure or refusal to comply with, this Order.

IV. NOTICE OF APPEAL RIGHTS

25. Vaughan may appeal this Order under Section 75-10-1222(3) and (6), MCA, by filing a written request for a hearing before the Montana Board of Environmental Review no later than 30 days after service of this Order. Any request for a hearing must be in writing and sent to:

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Board Secretary
Board of Environmental Review
P.O. Box 200901
Helena, MT 59620-0901

26. 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. Vaughan has the right to be represented by an attorney in any contested case hearing.

27. If a hearing is not requested within 30 days after service of this Order, the opportunity for a contested case appeal is waived.

28. This Order becomes effective upon the date of service. Service by mail is complete on the date of mailing.

IT IS SO ORDERED:

DATED this 11th day of April, 2011.

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

JOHN L. ARRIGO, Administrator
Enforcement Division

Department of Environmental Quality - Enforcement Division
Penalty Calculation Worksheet

Responsible Party Name:	James Vaughan (Vaughan), d/b/a Any Time Septic & Porta Potty
FID:	2002
Statute:	Septage Disposal and Licensure Laws (SDLL)
Date:	4/11/2011
Maximum Penalty Authority:	Darrick Turner
	$500.00

Penalty Calculation #1

Description of Violation:

Vaughan violated Section 75-10-1210 and 1211, MCA, and ARM 17.50.803(1)(d) by disposing of septage at a site not approved by the Department. A person may not apply any pumpings to land unless that person obtains the written approval of the Department.

I. BASE PENALTY

Nature

Explanation:

Engaging in the septage pumping business and disposing of septage by means of land application at a site not approved by the Department has the potential to harm human health or the environment.

Potential to Harm Human Health or the Environment	X
Potential to Impact Administration	

Gravity and Extent

Gravity Explanation:

ARM 17.4.303(5)(a) states that a violation has major gravity if it causes harm to human health or the environment, or poses a serious potential to harm human health or the environment. Vaughan's violation of ARM 17.50.803(5) and 17.50.803(6) by engaging in the business of cleaning cesspools and septic tanks and disposing of septage by means of land application without the Department's written approval of the land application site poses a serious potential to harm human health or the envionment. The process of septage land application introduces pathogens and chemicals to the environment that have the potential to harm human health.

Extent Explanation:

The Department considers Vaughan's failure to comply with the regulatory requirements to be a major deviation from the regulatory requirement. The extent for this violation 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): **$425.00**

II. ADJUSTED BASE PENALTY

A. Circumstances (up to 30% added to Base Penalty)

Explanation:
As the owner and licensed operator of a septage pumping business, Vaughan should have known of the licensing requirements. The Department notified Vaughan in writing on September 2, 2009 identifying the unapproved septage disposal site. Vaughan was in control of the circumstances involved in the violation. The Department is adding 20% to the base penalty to reflect a moderate degree of culpability.

Circumstances Percent:	0.20
Circumstances Adjustment (Base Penalty x Circumstances Percent)	$85.00

B. Good Faith and Cooperation (up to 10% subtracted from Base Penalty)

Explanation:
Vaughan did not cease land application practices after being notified of the violation on September 2, 2009. 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 Vaughan to mitigate the violation and/or its impact. Therefore, no reduction is being allowed.

AVE Percent:	0.00
Amounts Voluntarily Expended Adjustment (Base Penalty x AVE Percent)	$0.00

ADJUSTED BASE PENALTY SUMMARY

Base Penalty	$425.00
Circumstances	$85.00
Good Faith & Cooperation	$0.00
Amt. Voluntarily Expended	$0.00
ADJUSTED BASE PENALTY	$510.00
STATUATORY MAXIMUM	**$500.00**

III. DAYS OF VIOLATION

Explanation:
The Department notified Vaughan on September 2, 2009 that the disposal site was not approved by the Department and requested that Vaughan cease operations. Vaughan continued to land apply septage after notification from the Department on 10 separate occasions from September 4 to December 23, 2009. Therefore the Department is calculating a penalty for 10 days of violation.

Number of Days:	10

ADJUSTED BASE PENALTY x NUMBER OF DAYS: **$5,000.00**

Other Matters as Justice May Require Explanation:
Not applicable.

OTHER MATTERS AS JUSTICE MAY REQUIRE TOTAL:	$0.00

IV. ECONOMIC BENEFIT

Explanation:
The Department has determined that Vaughan realized a minimal economic benefit for land applying septage at a site not approved by the Department. The time and resources needed to gain Department approval for land application is minimal. Therefore, no economic benefit is included in this penalty calculation.

ECONOMIC BENEFIT REALIZED:	$0.00

Department of Environmental Quality - Enforcement Division
Penalty Calculation Summary

Responsible Party Name:	James Vaughan (Vaughan), d/b/a Any Time Septic & Porta Potty
FID:	2002
Statute:	Septage Disposal and Licensure Laws (SDLL)
Date:	4/11/2011
Signature of Employee Calculating Penalty:	Darrick Turner

I. Base Penalty (Maximum Penalty Authority x Matrix Factor)

	Penalty #1
Maximum Penalty Authority:	$500.00
Percent Harm - Gravity and Extent:	0.85
Percent Impact - Gravity:	0.00
Base Penalty:	$425.00

II. Adjusted Base Penalty		***Totals***
Base Penalty:	$425.00	$425.00
Circumstances:	$85.00	$85.00
Good Faith and Cooperation:	$0.00	$0.00
Amount Voluntarily Expended:	$0.00	$0.00
Adjusted Base Penalty:	$510.00	$510.00
Statuatory Maximum:	$500.00	$500.00

III. Days of Violation or Number of Occurrences	10	
Adjusted Base Penalty Total	$5,000.00	$5,000.00
Other Matters as Justice May Require Total	$0.00	$0.00
IV. Economic Benefit	$0.00	$0.00
V. History*		$0.00
	TOTAL PENALTY	$5,000.00

*Vaughan does not have a prior history of violations of the SDLL documented in either an administrative order, judicial order, or judgment within the last three years.