

WATER POLLUTION CONTROL ADVISORY COUNCIL

Metcalfe Building, Room 111
1520 East Sixth Avenue, Helena, MT

April 14, 2011
Meeting Minutes

Attendance

Council Members Present: Dude Tyler; Mitchell Leu; Richard Hoehne; Roger Muggli; Stevie Neuman; Karen Bucklin Sanchez; Earl Salley; and, Trevor Selch.

Council Members Present via Telephone: Corey Fisher and Mike Wendland

Meeting Recorder Present: Laurie Crutcher, Court Reporter; Stephanie Crider, DEQ; and Carrie Greeley, DEQ.

Department Personnel Present: Bob Bukantis; Jenny Chambers; Claudia Massman; Rod McNeil; Tom Reid; and, Art Compton.

Interested Persons Present: David Olson, Fidelity E&P; Neal Fehringer, Fehringer Agronomy/TRIP; Jon Metropoulos, Fidelity E&P; Jim Lloyd, Hydrometrics; Ken Small, Public; Tom Osbourne, Hydrosolutions, Inc.; Brenda Lindief Hall, Tongue River Water Users Association; and, Gary Forrester, MDU Resources.

Call to Order

The meeting was called to order by Mr. Dude Tyler (Chairman) at 10:02 am. A quorum was present.

Introductions

A brief round of introductions was made by council members.

Approval of Agenda

Chairman Tyler asked for a motion to approve the [agenda](#) as written; Mr. Mitchell Leu moved to approve, and Mr. Trevor Selch seconded. Agenda was approved.

Approval of Minutes

Chairman Tyler asked for a motion to approve the [minutes](#) from the January 5, 2011 WPCAC Meeting; Ms. Karen Bucklin Sanchez motioned, and Mr. Selch seconded. Minutes were approved.

ACTION ITEMS

Proposed New and Amended Rules, Title 17, Chapter 30, Subchapter 12 Effluent Standards, Montana Pollutant Discharge Elimination System (MPDES)

Mr. Tom Reid from the Water Protection Bureau gave a brief update regarding the [changes](#) to the Montana Pollutant Discharge Elimination System (MPDES) rules. The goal for updating MPDES rules is to bring DEQ in conformance with the 40 CFR 125.3 (federal regulations). Mr. Reid and the Water Protection Bureau are proposing to take the rules to the Board of Environmental Review in May; and are

looking for council approval today. They are clarifying and updating the rules, trying to bring Montana in line with the federal regulations, specifically regarding effluent limitations for existing sources. Cooling water infrastructures were also included in this change. Mr. Reid covered section 17.30.1206, the effluent standards for toxic pollutants, the elimination of rules 1208 and 1209, the incorporation of 1203, 1207 effluent levels for new sources. The following new rules were also discussed: 1, 2, 3, 4, and 5.

Rule 1 pertains to thermal variances, the discharges from steam generating facilities, and variance procedures. Currently there are no permits that are subject to 316(a) variances. Rule 2 establishes rules for cooling water intake structures and the requirements that would be applied to new sources. Mr. Leu asked if there was a difference between incorporating rules by reference or by writing the rules down. Mr. Reid explained that the advantage to incorporating by reference is that it gives permit writers a starting off point while still allowing for best professional judgment. New Rule 3 established the information requirements that Montana has for these facilities. New Rule 4 states the alternative requirements for cooling water intake structures for new facilities. New Rule 5 is the technology based requirements for existing facilities; if any facilities were built before 2002 the permit writer will use their best professional judgment. Finally, Subsection 9 of New Rule II provides alternatives to facilities if they cannot meet the requirements stated above.

Mr. Leu motioned for Mr. Reid and the Water Protection Bureau to move forward with the rule-making; Mr. Salley seconded the motion. The motion carried with a voice vote.

BRIEFING ITEMS

Pesticide Fee Rule Package and Permitting

Ms. Jenny Chambers presented [updated](#) information for the pesticide fee rule package and pesticide program permitting. Request for the rule package was in response to a federal court ruling that will now regulate pesticide application to water under the federal Clean Water Act, in addition to the authority already provided under the Federal Insecticide, Fungicide and Rodenticide Act. Originally fee rule package that was brought to WPCAC and presented to the BER in December were viewed as quite high, but after public feedback the costs were reduced. The Water Protection Bureau lowered the fees by almost half and made other changes in response to the public comment period. Additional information on the status of the Pesticide General Permit was also provided and briefly discussed.

Legislative Update

Claudia Massman gave a legislative update of some bills currently from this year's legislative session. The following House Bills have been passed: HB 52 (provides rulemaking authority to adopt standards for wastewater reuse), and, HB 28 (mixing zones). Mr. Richard Hoehne asked if the mixing zones are limited to subdivisions; Ms. Chambers responded that this is true, unless an easement is granted. The following Senate Bills have been passed as well: SB 267 (revise laws related to Total Maximum Daily Load development and 1996 list), SB 367 (establish nutrient standards variances), and, SB 9 (authorize use of petroleum mixing zones for petroleum release sites). Under SB367, 75-5-313 MCA variances, has been amended; and the department, not the board, will have the authority to adopt variances for nutrient standard.

Current CBM Permits and General Compliance monitoring, and inspections

Ms. Chambers gave an update on Coal-Bed Methane (CBM) permits. While production has gone down, there are currently three CBM permits issued in Montana: Fidelity E&P (reissued 11/14/10), Pinnacle

Gas/Summit Gas (drafted for permit renewal and out for public comment), and OW Ranch (issued December 2010). DEQ is exceeding the recommendation/frequency for inspections set by the Environmental Protection Agency (EPA). Pinnacle/Summit gas has had six inspections since their permit was issued, Fidelity has had five, and OW Ranch has had a pre-site visit. There are three main objectives during inspections: check to see if the facility meets permit requirements, check the accuracy of the information provided, and evaluate instream and discharge monitoring. Pinnacle/Summit gas has not discharged since 2007; Fidelity is in pretreatment as it is the only facility with a direct treated discharger. Ms. Chambers answered questions posed by council and audience members.

Break

Chairman Tyler called for a short break at 11:00am; the meeting resumed at 11:19am.

CBM Presentation

Mr. Roger Muggli prefaced his [CBM Presentation](#) with a brief family history, including the family farming history and involvement with the Tongue and Yellowstone irrigation district in Miles City. Ms. Brenda Lindief Hall assisted Mr. Muggli by reading the slides presented, with Mr. Muggli further elaborating on specific points.

Mr. Muggli continued to state that the water Fidelity marketed to Wyoming was denied, but that it was allowed in Montana. This water is now being discharged the Tongue River which is used for irrigation purposes. Mr. Muggli's farm has used Tongue River water to help irrigate his family farm, and has seen a decline in crop production he believes is directly correlated to CBM water. The soils are quite possibly the issue with the CBM discharge water; the discharge water is fine for drinking but not for crops depending on the soil type.

The soil on Mr. Muggli's land has high clay content, making it even more difficult to produce crops, especially with the CBM water. The clay can't move air or water, except on the terrace level dikes, which were created for irrigation and planting purposes. Mr. Muggli concluded the CBM water portion of his presentation by stating that more research needs to be conducted on the effects of CBM water on soil because he believes that there is a chance the discharges change the actual composition.

Finally, Mr. Muggli ended his presentation with information regarding how much the CBM water has financially affected his crop. Mr. Muggli's alfalfa yield over the years has decreased from 5.65 tons in 1995 to 4.05 tons in 2009. This equates to approximately 1,800 ton loss, which is \$226,000. Mr. Muggli addressed questions posed by council and audience members.

Break for Lunch

Lunch break 12:15; called back to order at 1:00pm.

Once called back to order Mr. Bob Bukantis made a few clarifying points in response to Mr. Muggli's presentation. The water quality standards are set for the Tongue River to protect uses and do not always trigger an enforcement action when testing shows something outside of the standards. These occurrences may happen naturally. In the Tongue River the standards sometimes are exceeded down at the lower end of the river. We believe Fidelity is in compliance with their permit. So we have no duty to perform an enforcement action there unless we can see something and then can go after it. Stated that DEQ writes TMDLs for waters that are impaired; if you look at the upper end of the Tongue, the water is in pretty good shape. The nondeg numbers are used in permits to protect high quality water.

Ms. Chambers stated that while Mr. Muggli indicated methane waste water is a pollutant, the MPDES permit is a permit that allows for discharge of a certain level of pollution. CBM waste water has always been considered a pollutant, but the amount discharged is determined on the use and treatment.

Monitoring Irrigated Soils & Crops Downstream of Coalbed Methane Operations: Tongue River in Montana

Mr. Tom Osborne, the president of HydroSolutions, Inc. introduced Mr. Neal Fehringer, a certified crop advisor and agronomist. Mr. Fehringer spoke about the Tongue River [study](#) that has been an ongoing project since 2003. From 2003 through 2005 Fidelity E&P funded the study; 2006 to present the study has been funded by the Montana Board of Oil and Gas, Department Natural Resources and Conservation. The survey consists of soil and crop samples from fields and farms both inside and outside of the Tongue River drainage taken every fall. Samples are taken, sent to an independent lab for analysis, Energy Laboratories in Helena, and then posted to the Internet via www.energylab.com. Mr. Fehringer and Mr. Muggli had a brief discussion regarding their presentations, crop irrigation, crop rotation, sodium, etc.

Tongue River Information Program Hydrology Study

Mr. Osborne prefaced his presentation by highlighting the copies of the reports that Mr. Fehringer spoke about during his presentation. There are two reports for each year that are available on the HydroSolutions, Inc. website.

Mr. Osborne spoke about the Tongue River and the associate hydrology [studies](#). There are approximately 3,000 wells in the Tongue River basin, however, all are not currently operating. Almost all impoundments in the Tongue River are in Wyoming, and are permitted by the Wyoming Department of Environmental Quality. The chemical composition of CBM waters (in total dissolved solids) median is approximately 1,200 and is dominated by sodium and bicarbonate ions. Mr. Osborne stated that the composition of CBM water is suitable for domestic and livestock use; however, it is not suitable for applications to soils without either treatment to the water or soil. And, CBM is not the only problem with the river; domestic waste water from Sheridan, feedlots, coal mining discharges, irrigation return flows, and natural factors all add pollutants to the river as well.

The hydrology study looked at both snapshots of the water information as well as long range time information regarding the flow and quality of the river. The results showed that in the 90's there was not a lot of variation, however, there was a high amount of discharge in the river in 1998 and then the driest years on record were in the early 2000's. Mr. Osborne further commented on the EPA report on the Tongue River, specifically quoting information regarding the Miles City region. Around the Miles City area that river flow is very low, suggesting that there is not much water left in the river, therefore, a high amount of discharge, groundwater, and possibly, irrigation return flows. Mr. Osborne concluded with the following statistics: the amount of CBM discharge into the Tongue River in 2009 was between 1-5%, while irrigation increased the salinity of the river from 20-21%. Mr. Osborne completed his presentation by answering questions from council and audience members.

Carcinogen/Toxin Tables used for IRIS

Mr. Rod McNeil [presented](#) a status update of the Carcinogen/Toxin Tables used for the Integrated Risk Information System (IRIS). Currently working on how the new EPA carcinogen classification system will translate to the DEQ-7 list. The changes that will be proposed are listing categories H, L, L/N as carcinogenic and categories I and N would be considered as toxins. These changes will be listed in

Footnote 2. Mr. McNeil stated that this will be an action item for WPCAC submitted in conjunction with changes to DEQ-7. Mr. McNeil addressed questions from council and audience members.

Prickly Pear/Helena Valley Irrigation Canal Use Attainability Analysis

Mr. McNeil [presented](#) an update on the process for the Prickly Pear/Helena Valley Irrigation Canal. Currently DEQ is studying the water quality in the Lake Helena ditches to determine if reclassification is appropriate. All of the Helena Irrigation Canal and four other segments of Prickly Pear hold a “B-1” classification. Two segments of Prickly Pear have “I” classification. A number of the impairments associated with the creek are because of legacy mining. DEQ is conducting a review of the last 30 years of data to see if there has been an improvement in the water quality to reclassify Prickly Pear’s “I” segments to some other classification. Mr. McNeil expects to bring the potential reclassification to WPCAC in November. Mr. McNeil addressed questions from council and audience members.

Public Comment

Mr. David Olson, Fidelity E&P, clarified a few comments that were made throughout the day’s presentations. The first being that only treated water is discharged into the outfalls. Secondly, this summer they are installing pipelines to bring untreated water to the proper facilities.

Mr. Ken Small wished to thank the entire WPCAC committee for laboring in obscurity and that they are helping make Montana a better place.

Agenda Items for Next Meeting

Chairman Tyler asked if there were any agenda items for the next WPCAC meeting. Ms. Chambers stated that it is likely she will have a rule package to present as an action item. Mr. McNeil stated that it is likely he will bring DEQ-7 forward as an action item as well.

Adjournment

Mr. Tyler stated that the next WPCAC meeting is on June 23, 2011. With no more business, the meeting was adjourned at 2:44pm.

REFERENCED LINKS FOR THE MEETING MATERIALS

(Sites last updated 5/9/11)

Agenda - <http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2011/April14/AGENDAApr14.pdf>

Agenda Links:

- Approved Minutes from January 5, 2011
http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2011/Jan5/WPCAC1_5_11Minutes.pdf

Presentations

- Proposed New and Amended Rules, Title 17, Chapter 30, Subchapter 12 Effluent Standards, Montana Pollutant Discharge Elimination System (MPDES)
<http://deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2011/April14/AgendaFormMPDES.pdf>
- Pesticide Fee Rule Package and Permitting
http://www.deq.mt.gov/wqinfo/WPCAC/agendasminutes/2011/April14/Handout_Pesticide.pdf
- Roger Muggli's CBM Presentation
<http://www.deq.mt.gov/wqinfo/WPCAC/agendasMinutes/2011/April14/WaterQualityConcernsMuggli.pdf>
- Monitoring Irrigated Soils & Crops Downstream of Coalbed Methane Operations: Tongue River in Montana
http://www.deq.mt.gov/wqinfo/WPCAC/agendasminutes/2011/April14/Osborne/AMPP_WPCA_C_4-14-11.pdf
- Tongue River Information Program Hydrology Study
http://www.deq.mt.gov/wqinfo/WPCAC/agendasminutes/2011/April14/Osborne/TRIP_Presentation_041211.pdf
- Carcinogen/Toxin Tables used for IRIS
http://www.deq.mt.gov/wqinfo/WPCAC/agendasminutes/2011/April14/carcinogen_categorization.pdf
- Prickly Pear/Helena Valley Irrigation Canal Use Attainability Analysis
http://www.deq.mt.gov/wqinfo/WPCAC/agendasminutes/2011/April14/HVICI_PricklyPearCreek.pdf