MINUTES
ENVIRONMENTAL QUALITY BOARD MEETING
May 17, 2010

VOTING MEMBERS OR ALTERNATES PRESENT

John Hanger, Chairman, Secretary, Department of Environmental Protection
Kenneth Graham, alternate for Secretary Sandi Vito, Department of Labor and Industry
Natasha Schock, alternate for Secretary Allen D. Biehler, Department of Transportation
Wayne Gardner, alternate for Chairman James H. Cawley, Public Utility Commission
Edward Yim, alternate for Representative Camille George
Joseph Deklinski, alternate for Representative Scott E. Hutchinson
Richard Fox, alternate for Senator Raphael J. Musto
Patrick Henderson, alternate for Senator Mary Jo White
Bill Capouillez, alternate for Carl Roe, Executive Director, PA Game Commission
Richard Manfredi, Citizens Advisory Council
Tim Schaeffer, alternate for John Arway, Executive Director, Pennsylvania Fish and Boat Commission
Dr. Walter Meshaka, alternate for Barbara Franco, Executive Director, PA Historical and Museum Commission
Joanne Denworth, alternate for Secretary Donna Cooper, Governor's Office of Policy and Planning
John Walliser, Citizens Advisory Council
Peter Wilshusen, Ph.D., Citizens Advisory Council
Walter Heine, Citizens Advisory Council
David Strong, Citizens Advisory Council
Secretary George Cornelius, Department of Community and Economic Development
Michael Pechart, alternate for Secretary Russell Redding, Department of Agriculture
Dr. James Logue, alternate for Secretary Everette James, Department of Health

DEPARTMENT OF ENVIRONMENTAL PROTECTION STAFF PRESENT

Doug Brennan, Director, Bureau of Regulatory Counsel
Randal (Duke) Adams, Policy Office, Acting Director
Michele Tate, Regulatory Coordinator

CALL TO ORDER AND APPROVAL OF MINUTES

Chairman Hanger called the meeting to order at 9:05 a.m. in Room 105, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA. The Board considered its first item of business - the March 16, 2010, EQB meeting minutes.

> **David Strong moved to approve the March 16, 2010, EQB meeting minutes. Peter Wilshusen seconded the motion, which was unanimously approved by the Board.**

CONSIDERATION OF PROPOSED RULEMAKING: OIL AND GAS WELL CASING AND CEMENTING (25 *Pa Code*, Chapter 78)

Scott Perry, Director, Bureau of Oil and Gas Management, presented a summary of the proposed rulemaking. Pam Bishop, Assistant Counsel, Bureau of Regulatory Counsel, and Elizabeth Nolan, Assistant Counsel, Bureau of Regulatory Counsel, assisted with the presentation.

Following the conclusion of Mr. Perry's presentation, Patrick Henderson asked for clarification if the proposed rulemaking would require well operators to report the specific quantity and mix of chemicals used to fracture gas from the Marcellus Shale. In response, Mr. Perry first explained that well operators are currently required to submit to the Department a Material Safety Data Sheet, which provides information on the hazards associated with each chemical used in the fracing process. He further elaborated that the proposed rulemaking would require a well operator to provide the Department with a complete list of the chemicals used in the fracing process in addition to the total volume of each chemical used at the well site. He further clarified that the rulemaking does not require operators to divulge the specific mix or "recipe" of chemicals used to frac the Marcellus Shale, but noted, however, that the Department has the authority to require operators to report such information during an investigation.

Mr. Henderson further inquired if the rulemaking addresses bond amounts for Marcellus Shale operations and if it does not, what the status is of such initiatives by the Department to address the inadequacy of bond amounts. Chairman Hanger replied that the Department is concerned that there may not be adequate bonds in place to protect Pennsylvania taxpayers from the potential impacts and liabilities from Marcellus Shale operations and that the Department is aware of several legislative proposals, including a bill introduced by Representative George, which addresses the inadequacy of current bond amounts. He further noted that the Department is working on several recommendations for statutory language that may be presented to the General Assembly soon and emphasized that due to a lack of statutory authority, the Department is focusing on obtaining authorization through legislation to address the inadequacy of bond amounts for Marcellus Shale operations. In response, Mr. Henderson noted Senator Mary Jo White concerns about the adequacy of current bond amounts and stated that he believes the Department has explicit statutory authority to address bond amounts for Marcellus Shale operations, without specific enabling legislation from the PA General Assembly. He further elaborated that he and Senator White would welcome the opportunity to review statutory language the Department has developed for potential introduction in the State Legislature.

In closing remarks, Mr. Henderson inquired if the Department would be amenable to scheduling public hearings on the proposed rulemaking during the public comment period. Chairman Hanger responded that given the imminent need of the regulation, including the risks to public health associated with gas migration, which the regulation addresses, the 30-day public comment period is important to maintain; however, if hearings can be scheduled within the 30-day public comment period, the Department would be happy to accommodate Mr. Henderson's request.

Bill Capouillez moved to adopt the proposed rulemaking, with a 30-day public comment period. Walter Heine seconded the motion, which was unanimously approved by the Board.

CONSIDERATION OF RULEMAKING PETITION: SILVER CREEK REDESIGNATION (Bridgewater, Franklin, Forest, Liberty and Silver Lake Townships)(Susquehanna County) (Chapter 93.9i)

John Hines, Deputy Secretary for Water Management, provided an overview of the petition to the Board, including the Department's recommendation that the Board accept the petition for further review, based upon the administrative completeness of the petition, including meeting the requirements for acceptability as defined in § 23.2 of the Board's petition policy. Dana Aunkst, Director, Bureau of Water Standards and Facility Regulation, assisted with the presentation.

Following Deputy Secretary Hines' presentation, the petitioner, Bill Fischer, with the Silver Lake Association, was invited to address the Board on the merits of the petition. Mr. Fischer provided brief remarks to the Board, where he emphasized the importance of the redesignation in protecting and preserving the water quality of Silver Creek.

Following the presentations, Richard Fox inquired what, if any affects a future redesignation may have on any current or future oil and gas well drilling activities within the petitioned area, including existing and pending permits. Mr. Aunkst replied that the potential redesignation of Silver Creek would have little to no effect on current or pending oil and gas well permits, as direct discharges from a well site are not allowed in any stream. Mr. Aunkst further noted that the Department would continue to evaluate the erosion and sedimentation controls oil and gas well operators have in place to manage and prevent run-off from these operations. Mr. Fox further noted to the Board the petitioner's request that it provide an immediate provisional ruling to reclassify the Silver Creek Watershed as an Exceptional Value water, pending a full development of such additional supporting data as may be necessary. In response, Mr. Fox wanted to clarify that an affirmative vote on the acceptance of the petition for further study should not be misrepresented as the Board taking a position on the petitioner's request for an immediate provisional rulemaking. Chairman Hanger responded that the Board's vote on the petition is strictly on whether the petition meets the requirements for acceptability for further study by the Department and does not include a vote or action on any extraneous requests that the petitioner may have included in its petition application. Mr. Fox inquired whether Mr. Fischer had contacted the municipalities most likely affected by the petition request. Mr. Fischer responded that he notified the municipalities about the petition request but has not received a formal response from those he contacted.

Mr. Henderson inquired if NPDES permits are required for oil and gas well operations, as the petitioner identified as justification for the petition that NPDES permits for gas wells are based on the classification of the watershed surrounding the proposed well site and the use designation of the receiving stream. Mr. Aunkst responded that there are different kinds of NPDES permits that can be applicable to oil and gas well operations and that the type of permit the petitioner is most likely referencing is point source discharge permits associated with treatment plants, rather than any specific effluent guidelines imposed on the oil and gas well operations, as federal effluent guidelines prohibit discharges – even permitted discharges – to any stream from the oil and gas industry. Mr. Aunkst further clarified that there could be permits issued to oil and gas operations under the Clean Streams Law but these permits would not contain discharge limits and would rather incorporate best management practices to control erosion and sedimentation from oil and gas well operations.

In concluding his remarks, Mr. Henderson noted the petitioner's reference to the clear and present danger hydraulic fracturing methods are causing to the surface waters, the air and the aquifer of the Silver Creek watershed, and stated that this reference paints an unfair picture of the efforts taken by the Department to protect the designated and existing water quality standards in Pennsylvania. He further noted that he doesn't believe a stream petition redesignation request is the appropriate recourse to ensure the protection of a designated and existing use of a waterbody, which is the responsibility of the Department.

David Strong moved to accept the rulemaking petition for further review by the Department. Mr. Heine seconded the motion, which was approved by a majority of Board members. Joe Deklinski voted in opposition to the motion.

CONSIDERATION OF FINAL RULEMAKING: EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT (25 *Pa Code*, Chapter 102)

John Hines, Deputy Secretary for Water Management, provided an overview of the final-form rulemaking. Glenn Rider, Director, Bureau of Watershed Management, and Meg Murphy, Assistant Counsel, Bureau of Regulatory Counsel, assisted with the presentation.

At the conclusion of Deputy Secretary Hines' presentation, Richard Manfredi inquired about the scope of the rulemaking and for illustrative purposes asked whether the riparian forest buffer requirements in the final-form rulemaking would be applicable to a farmer that has roughly 20 acres, but the acreage does not include the required 25% plant cover or crop residue. Mr. Rider responded that the 25% plant coverage requirement does not relate to the requirements associated with riparian forest buffers but rather correlates to the best management practices (BMPs) that would need to be implemented by the farmer to control accelerated erosion from plowing and tilling operations. Mr. Rider further clarified that under the final rulemaking the farmer in question would have to include additional BMPs in their Erosion and Sedimentation Control Plan if the farmer had a residual crop cover less than 25% and was plowing or tilling within 100 feet of a stream.

Mr. Fox inquired about the criteria that may be used by the Department to decide if an Advanced Notice of Final Rulemaking (ANFR) is warranted in finalizing a rulemaking. Chairman Hanger responded that an ANFR is an optional step the Department may take if it believes additional comment and/or outreach to the affected regulated community would be beneficial. Pertaining to the circumstances relevant to this rulemaking, Chairman Hanger noted that an ANFR was not appropriate given the tremendous outreach and opportunities for the public to comment on the rulemaking. He noted the 90-day public comment period that was provided for the rulemaking and clarified that the duration of the comment period was three-times longer than a common comment period of 30-days, which is often provided for other proposed rulemakings.

Mr. Capouillez inquired how the Department established the administrative filing fee, as included in the final-form rulemaking. Mr. Rider responded that the administrative fee is based on the costs to both the Department and the Conservation Districts over the past three years in reviewing permit applications, including the number of permits received and the amount of staff time used to review each permit. In response, Mr. Capouillez asked if the administrative filling fee includes costs associated with the Department's review of the PNDI, as part of the permit application process. Mr. Rider responded that in its calculations for setting the fee, the Department included all aspects of its permit review. Mr. Capouillez further inquired where the money generated from the fees would be deposited and if other state agencies would have access to those funds. Deputy Secretary Hines responded that the fees would be deposited in a special account within the Clean Water Fund, which is directly managed by the Department and County Conservation Districts in response to authority provided by the Clean Streams Law. Mr. Hines further elaborated that the fees would be directly used to support the Department's existing programs, including money for Conservation Districts, which are providing services to the regulated community relative to erosion and sedimentation control. Mr. Hines further noted that the regulations call for the Department to report back to the Board in three years on the adequacy of the fees to cover the program expenses of both the Department and the Conservation Districts. In response, Mr. Capouillez inquired if any of the fees assessed by the Department in the rulemaking would be spent on conservation measures. Deputy Secretary Hines responded that revenue generated from the fees would be used to support program administration only.

Mr. Henderson noted to the Board's attention page 3 of the Fee Analysis Form, where the Department provided revenue estimations based on projected permit applications received. With respect to the number of Erosion and Sedimentation and NPDES Stormwater Construction program permit applications expected from the oil and gas industry, the Department estimated it would receive approximately 3,000 permit applications per year. Mr. Henderson noted that the Department's estimation was conservative in light of industry projections and noted that if industry projections hold true, the Department may receive more revenue than anticipated, which may result in a surplus. In response, Chairman Hanger noted the importance of the provision in the rulemaking that requires the Department to provide the Board with an evaluation of the fees, noting that adjustments to the fees can be made – either an increase or decrease – at the discretion of the Board.

Mr. Henderson introduced the following amendment to the Annex of the rulemaking, which he stated reflected practices under the federal Energy Policy Act **(**see shaded language**)**:

§ 102.5. Permit requirements.

(a) Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting activities, **OIL AND GAS ACTIVITIES** or road maintenance activities, a person proposing an earth disturbance activity that involves equal to or greater than 1 acres (0.4 hectares) of earth disturbance, or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development sale that involves equal to or greater than 1 acres (0.4 hectares) of earth disturbance, shall obtain an individual NPDES Permit or coverage under a general NPDES permit for Stormwater Discharges Associated with Construction Activities prior to commencing the earth disturbance activity.

(b) A person proposing a timber harvesting or road maintenance activity involving 25 acres (10 hectares) or more of earth disturbance shall obtain an E&S Permit under this chapter prior to commencing the earth disturbance activity.

(c) A person proposed oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E&S Permit under this chapter prior to commencing the earth disturbance activity.

(d) Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting **ACTIVITIES, OIL AND GAS ACTIVITIES** or road maintenance activities, a person proposing earth disturbance activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project that do not require a permit under subsections (a), (b), and (c) shall obtain an E&S Permit under this chapter prior to commencing the earth disturbance activity.

In response, Chairman Hanger acknowledged that in adherence to federal law, the Department does not require an NPDES permit for oil and gas construction activities; however he noted that the level of uncertainty regarding the continued implementation of this exemption makes it problematic for the Department to support the amendment. Meg Murphy further elaborated to the Board that the 2005 federal Energy Policy Act amended the definition of oil and gas activities, as that term is defined in the Clean Water Act. In effect, the amendment exempted oil and gas construction activities from NPDES permit requirements; however, regulations promulgated by the EPA to implement provisions of the federal statute were overturned by the 9th Circuit. Action by the 9th Circuit has lead to uncertainty as to the status under the Clean Water Act of the Department's ability to require NPDES permits for oil and gas construction activities, when such activities could cause or contribute to a violation of water quality standards.

In response, Mr. Henderson noted that he is confident there will always be a level of uncertainty regarding the exemption for oil and gas well construction activities; however, he stated that the exemption is clear under current law and should be explicitly included in the rulemaking. He further noted that there continues to be uncertainty among the regulated public whether Department regulations specifically exempt NPDES permitting requirements for oil and gas construction activities. To address this uncertainty, Mr. Henderson noted his amendment would consistently clarify in the regulations the NPDES permitting exemption for oil and gas well construction activities that is currently provided under federal law. He further noted his concern whether the Department's regulations – if implemented as proposed – could be susceptible to legal challenge if an explicit exemption is not provided. In response, Ms. Murphy noted that it is the Department's position that a definitive and absolute exemption to the NPDES permitting requirements for oil and gas construction activities does not exist and to provide such an exemption in the regulations may be inconsistent with the mandates under the Clean Water Act. In conclusion, Chairman Hanger also noted that the intent of Mr. Henderson's amendment – namely to exempt oil and gas construction activities from NPDES permitting requirements – is already being implemented in practice by the Department and stated that he believes the regulatory language, as contained in the final rulemaking, provides a sensible solution for all parties involved.

Mr. Capouillez asked the Department to clarify the definition of "oil and gas activity". Ms. Murphy responded that the term is defined in Section 102.1 of the rulemaking and includes "earth disturbance associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities". In response, Mr. Capouillez inquired, with relation to permitting requirements associated with disturbance of five acres or more for oil and gas activities, if the Department reviews the activities associated with oil and gas well construction in a piecemeal fashion or if the activities are reviewed accumulatively. Ms. Murphy responded that the Department's assessment methodology for evaluating permit applications associated with oil and gas well activities is articulated in policy and is not included in the regulatory package.

In closing, Mr. Henderson pointed out to the Board the specific exemption language provided in the federal Energy Policy Act and reiterated his belief that the final rulemaking – without incorporation of his proposed amendment – may be in direct conflict with federal statutory law. In response, Chairman Hanger stated that the Department has been implementing the mandates of the federal Energy Policy Act in a manner that is reflected by Mr. Henderson's proposed amendment; therefore, making the passage of the amendment not necessary. In summary, Ms. Murphy stated that she believes the Department and Mr. Henderson disagree regarding the breadth of the Energy Policy Act in terms of the NPDES permitting program but that the Department and Mr. Henderson are in agreement that the Department's NPDES permitting program is currently administered in adherence to the Energy Policy Act.

> **Mr. Henderson moved to adopt the proposed amendment. Mr. Fox seconded the motion. The motion failed with 4 votes in the affirmative and 15 votes against the motion. Specifically, the motion was voted in the affirmative by the following Board members: Joe Deklinski, Bill Capouillez, Patrick Henderson, and Richard Manfredi.**

Mr. Henderson introduced a second amendment to the final-form rulemaking, which would modify Section 102.14 of the Annex, as follows (see shaded language):

> **§ 102.14 Riparian [~~forest~~] buffer requirements.**

(a) ***General requirements FOR*** ~~[~~**~~MANDATORY~~**~~]~~ ***RIPARIAN BUFFERS*****. EXCEPT** AS IN ACCORDANCE WITH PARAGRAPH (d), PERSONS PROPOSING OR CONDUCTING EARTH DISTRURBANCE ACTIVITIES **WHICH THE DEPARTMENT DETERMINES MAY POSE A THREAT TO THE ABILITY OF A WATERWAY TO ATTAIN OR MAINTAIN ITS EXISTING OR DESIGNATED USE, AND** WHERE THE ACTIVITIY REQUIRES A PERMIT UNDER THIS CHAPTER SHALL:

(1) NOT CONDUCT EARTH DISTURBANCE ACTIVITIES WITHIN 150 FEET OF A PERENNIAL OR INTERMITTENT RIVER, STREAM, OR CREEK, OR LAKE, POND OR RESERVOIR WHERE THE PROJECT SITE IS LOCATED IN AN EXCEPTIONAL VALUE OR HIGH QUAULITY WATERSHED ATTAINING ITS DESIGNATED USE AS LISTED BY THE DEPARTMENT AT THE TIME OF APPLICATION AND SHALL PROTECT ANY EXISTING RIPARIAN BUFFER IN ACCORDANCE WITH THIS SECTION; OR

(2) WHERE THE PROJECT SITE IS LOCATED IN AN EXCEPTIONAL VALUE OR HIGH QUALITY WATERSHED WHERE THERE ARE WATERS FAILING TO ATTAIN ONE OR MORE DESIGNATED USES AS LISTED IN CATEGORY 4 OR 5 ON PENNSYLVANIA'S INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT, AS AMENDED AND UPDATED, AT THE TIME OF THE APPLICATION, AND THE PROJECT SITE CONTAINS, IS ALONG OR WITHIN 150 FEET OF A PERENNIAL OR INTERMITTENT RIVER, STREAM, OR CREEK, LAKE, POND, OR RESERVOIR SHALL, IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION:

(i) PROTECT AN EXISTING RIPARIAN FOREST BUFFER; OR
(ii) CONVERT AN EXISTING RIPARIAN BUFFER TO A RIPARIAN FOREST BUFFER; OR
(iii) ESTABLISH A NEW RIPARIAN FOREST BUFFER.

In response to the motion, Ms. Murphy replied that the amendment is broad in nature and would in effect reintroduce the reason why the Department initiated the regulatory amendments in the final-form rulemaking. She further elaborated that through this rulemaking, the Department has already concluded that earth disturbance activities – as identified in the regulations – have the potential to threaten the ability of a waterway to attain or maintain an existing or designated use, and it is for this reason that the rulemaking is being pursued so that the Department can prevent degradation to the Commonwealth's waterways. Ms. Murphy further elaborated that the amendment would create problematic consequences both for the Department and the regulated community, including tremendous unpredictability, additional costs, and additional permit review times. She also mentioned the waivers and exemptions that are provided in the rulemaking and explained that the intent of the waivers and exemptions are to codify the Department's experience relative to the activities that are lower-risk and can be managed without the necessity of a riparian forest buffer. Ms. Murphy also noted that the inclusion of exemptions and waivers in the rulemaking effectuates the intention of the Department in connecting mandatory riparian buffers with those higher-risk activities that are known to cause water degradation.

In response, Mr. Henderson replied that he believes the current permitting process utilized by the Department includes a level of evaluation and discretion on a case by case basis because there are a number of BMPs that are being utilized, depending upon the specific situation, to ensure the most water quality protection. He further noted that he doesn't believe his amendment introduces a new hurdle in the permit review process employed by the Department. He also noted that he understands the Department

has concluded that buffers are necessary to protect the existing and designated use of waterway, but he also believes his amendment provides further discretion to the Department to make individualized decisions based upon case-specific factors. For example, he elaborated that through his amendment, the Department would have the flexibility to require other effective BMPs – beyond buffers – that may be as effective or more so in protecting water quality.

Mr. Henderson moved to adopt the proposed amendment. Mr. Fox seconded the motion. The motion failed with 2 votes in the affirmative and 17 votes against the motion. Specifically, the motion was voted in the affirmative by the following Board members: Patrick Henderson and Joe Deklinski.

Following the vote on the amendment, Mr. Henderson inquired why the rulemaking only mandates the use of buffers in special protection waters, including Exceptional Value and High Quality waters. In asking this question, he noted that under federal law the Department is required to protect and maintain all existing uses and he is concerned that the Department is perpetuating a rulemaking that does not provide equal protection to all waterways in the Commonwealth. In response, Ms. Murphy noted that the differentiation in protection, as contained in the mandatory buffer requirements for special protection waters in the rulemaking, is authorized by and implements the antidegradation requirements of 25 *Pa Code,* Chapter 93. In response, Mr. Henderson contended that while he understands the benefits of buffers, he respectfully disagrees with the Department and believes it has a legal obligation across the board to protect all waterways.

Joanne Denworth moved to adopt the final rulemaking. Edward Yim seconded the motion, which was approved by a majority of Board members. Patrick Henderson and Joe Deklinski voted in opposition to the motion.

CONSIDERATION OF FINAL RULEMAKING: WASTEWATER TREATMENT REQUIREMENTS (25 *Pa Code*, Chapter 95)

John Hines, Deputy Secretary for Water Management, provided an overview of the final-form rulemaking. Dana Aunkst, Director, Bureau of Water Standards and Facility Regulation, Ron Furlan, Program Manager, Division of Planning and Permits, and Richard Morrison, Assistant Counsel, Bureau of Regulatory Counsel, assisted with the presentation.

Following the presentation, Mr. Fox inquired what the Department's current standards are for TDS effluent, given the 500 mg/l effluent standard for gas well activities, as included in the final-form rulemaking. Mr. Aunkst responded that in April 2009, the Department announced a permitting strategy to deal with industrial wastewater that is high in total dissolved solids (TDS). He explained that since the announcement of the strategy, several NPDES permits for new discharges of high-TDS wastewater have been issued with an end-of-pipe effluent limitation of 500 mg/l of TDS, although existing facilities and POTWs that had prior authorization to accept wastewater have been given standards based upon the assimilative capacity in their watershed.

Mr. Fox inquired why a later compliance date of December 31, 2018, was included in the rulemaking for coal-fired electric steam generating units. Mr. Aunkst responded that because an Effluent Limitation Guideline setting TDS effluent limits for this industrial sector is currently being developed by EPA and is expected to be completed in 2014, and EPA will shortly issue regulations under the Clean Air Interstate Act (CAIR) and the Clean Air Mercury Rule (CAMR) which would require these facilities to install scrubbers or other air pollution control equipment that will ultimately generate wastewater with high TDS

loadings, the Department extended the compliance deadline to address the legitimate concerns of this industrial sector over the timing of the Commonwealth's regulations and the pending federal regulations. Mr. Deklinski asked the Department to elaborate on the differences between a new and existing discharge, as included in the final-form rulemaking. Mr. Aunkst responded that the rulemaking was drafted to include as an existing discharge any load that was authorized by the Department on or prior to the effective date of the rulemaking. Mr. Aunkst further elaborated that new or expanding discharges of TDS which are authorized after the effective date of the rulemaking will be considered a new or expanded discharge. Chairman Hanger also clarified to the Board that a renewal of an existing permit at existing levels is not considered to be a new discharge under the final-form rulemaking.

Secretary Cornelius inquired about existing operations that are capable of treating high-TDS wastewaters to the 500 mg/l limit included in the rulemaking. Mr. Aunkst responded that the Department has spoken with numerous manufacturers in other states that have been successful in treating high-TDS wastewaters to the 500 mg/l limit in the rulemaking. He specifically cited AOP Clearwater in West Virginia, which started operations in the summer of 2009, and 212 Resources from Utah, which runs two full-scale operations in Colorado. Mr. Aunkst also mentioned Reserve Environmental, which recently opened a wastewater recycling facility in the former SONY plant in Westmoreland County, Pennsylvania and Integrated Water, which has implemented a full-scale pilot study in Fayette County on the Monongahela River in Southwestern Pennsylvania.

As an alternative regulatory strategy, Mr. Manfredi asked whether the Department had considered other options – including focusing on existing permitted industries with high TDS-discharge limits – rather than establishing the new standards in the rulemaking. Chairman Hanger responded that from the inception of the rulemaking, the Department had two goals, namely to protect existing users of Pennsylvania's rivers and streams and to prevent the Commonwealth's waterways from exceeding a limit of 500 mg/l of TDS, because once that limit is exceeded, the waterway will be listed as impaired, in accordance with federal law, which will trigger additional treatment costs to be borne by existing users. Chairman Hanger further clarified that once a waterway is classified as impaired, existing businesses using the waterway will be subject to a Total Maximum Daily Load (TMDL). Due to the important feedback received during the public comment period on the proposal, Chairman Hanger noted the Department modified the proposed rulemaking by developing a watershed approach for industires other than the gas industry, which should protect existing investments and uses in the watershed. He further elaborated that to protect existing users, the final rulemaking focuses on new and expanded loadings of TDS and treats the oil and gas well industry differently because it is this industry that is discharging very large and highly concentrated loads of TDS into Pennsylvania's waterways. Chairman Hanger also noted the problems of exceeding TDS assimilative capacity levels in the Monongahela River in southwestern Pennsylvania and the associated problems that resulted not only to drinking water suppliers but to other industries on the river that use the water for their operations. He also noted that to further delay the rulemaking will put drinking water and aquatic life at risk, and will put the cost structure of existing users at risk.

In response to Chairman Hanger's comments, Mr. Henderson inquired how the rulemaking can guarantee that watersheds will maintain a 500 mg/l threshold when the regulations grandfather and exempt existing permit holders and seem therefore to promote the status quo. Mr. Aunkst replied that the final-form rulemaking takes a proactive approach to ensure TDS assimilative capacity in Pennsylvania's watersheds. He emphasized that most watersheds in Pennsylvania have assimilative capacity to manage TDS mass loadings and that this rulemaking will help to preserve that assimilative capacity and existing business interests on these watersheds. He further noted that the rulemaking will help facilitate the Department's efforts to focus on projected problems in those watersheds where assimilative capacity could be used up rather quickly by new mass loadings of TDS. Chairman Hanger noted that the rulemaking will help stop

TDS assimilative capacity problems that happened in the Monongahela River from happening in other watersheds in Pennsylvania and will preserve current business interests on Pennsylvania's watersheds, as well as protect the Commonwealth's water resources.

In response, Mr. Henderson inquired how the Department would issue a permit now for a new facility, since the final-form rulemaking is not effective. Mr. Aunkst replied that the Department would issue a permit to a new facility using remaining assimilative capacity on the watershed, until such a time as a final-form rulemaking would be effective, whereupon an effluent standard would be specifically set for the facility. In reply, Mr. Henderson asked if the Department is currently applying the standards in the rulemaking to pending permit applications. Mr. Aunkst replied that until such time as the final-form rulemaking is in place, the Department is making individual determinations on pending permit applications based on site-specific conditions in the receiving water body. In response, Mr. Henderson noted that it was critical for the Department to paint an accurate picture to the regulated community of what the permitting program consists of today, versus what the program will be after the final-form regulations are in place. In response, Chairman Hanger noted that what the Department has done to date is evaluate each permit application on a case-by-case basis, which results in some certainty in comparison to a statewide rulemaking. He further noted that regulatory certainty, as provided in the rulemaking, will not only provide predictability to current and potential users of the Commonwealth's watersheds, but will also attract businesses to the Commonwealth that are capable of implementing technology that can treat TDS wastewater to the standards included in the rulemaking.

Mr. Manfredi reiterated his concerns that the rulemaking may be casting a wider net than anticipated which would affect other industries beyond the oil and gas industry, which are known to be discharging mass loadings of highly-concentrated TDS. In response, Chairman Hanger noted that with respect to the situation in the Monongahela River, the lack of assimilative capacity of the watershed to handle additional TDS affected not only the oil and gas industry, but all users of that watershed. Because the river is near or at assimilative capacity, the Department has had to make very difficult permitting decisions on the Monongahela River, which has affected numerous users of the watershed. He further noted that it is imperative to ensure Pennsylvania watersheds in the Commonwealth do not exceed a limit of 500 mg/l of TDS, because to do so will increase costs for all businesses utilizing that watershed. However, he noted, business "will continue as usual" for those that utilize watersheds that are below the limit of 500 mg/l of TDS, as costs will be minimal.

Mr. Deklinski asked the Department how it will evaluate and determine requests for a variance, as provided in the rulemaking. Mr. Aunkst replied that variances will be evaluated on a watershed basis, where the watershed will be considered the area that drains to the next downstream potable water supply intake.

Edward Yim noted that when the rulemaking was introduced at the proposed stage, Representative George noted to the Department that it should proceed with caution as to not create a rulemaking that would cast a wide net, which would obligate numerous industries to comply with the effluent standards in the rulemaking. He noted that the Department has been successful in the final-form rulemaking by narrowing and tailoring the focus of the rulemaking and its impacts to various industries.

Mr. Henderson asked, beyond the limits proposed in the rulemaking, if the Department uses any other secondary drinking water standard for an "end of pipe" discharge. Mr. Aunkst responded no and clarified that Pennsylvania is different than other states because it has its own Safe Drinking Water Act, and clarified that the 500 mg/l TDS standard, as included in the rulemaking, is a federal secondary drinking

water standard but in Pennsylvania the Commonwealth must treat the standard as a health-based or primary standard.

Mr. Henderson inquired, with respect to existing NPDES permits that don't include a TDS limitation, how the Department will determine a baseline and how much the permit holder will be able to discharge, as there doesn't appear to be specific guidance in the regulation that speaks to these points. Mr. Aunkst responded that the Department will use previous data submitted with an NPDES permit application to determine a baseline. Mr. Aunkst further explained that permit holders will also be able to collect data on their own to document their TDS load. Mr. Aunkst explained that the Department reviews data that is submitted with an NPDES permit application and makes a determination if a reasonable potential exists for that parameter to cause a violation of water quality standards in the stream. He noted that even though the Department has not placed a specific effluent limit for a parameter in the NPDES permit, the Department may nevertheless have authorized the discharge of that parameter at a certain loading or concentration.

Mr. Fox inquired when the Department expects that the final-form rulemaking will be effective, given that the rulemaking is approved at today's meeting. Chairman Hanger responded that the Department anticipates the rulemaking will be published as final by December 2010.

Mr. Henderson noted to the Board that he believes the rulemaking would benefit from additional comment through the issuance of an Advanced Notice of Final Rulemaking, given the substantial changes made to the rulemaking from its proposed to final form. In response to Mr. Henderson's remarks, Mr. Manfredi asked about the net effect on the rulemaking if an Advanced Notice of Final Rulemaking was utilized. Chairman Hanger noted that the effect would be indeterminate and emphasized that the rulemaking is needed now to ensure protection for the Commonwealth's drinking water systems, aquatic life and businesses users.

Mr. Capouillez asked for clarification on the number of comments the Board received on the rulemaking. Mr. Aunkst responded that comments were received from 4,223 commentators. In response, Mr. Capouillez stated that, given the number of commentators on the rulemaking, it may be beneficial for the Board to seek additional comment on the final rulemaking through an Advance Notice of Final Rulemaking. Chairman Hanger responded that a majority of the comments received were nearly identical and were thoughtfully and carefully addressed by the Department. He further noted that a majority of the comments received urged the Department for immediate action to protect and preserve the Commonwealth's water resources from mass loadings of TDS.

Mr. Fox noted that Senator Musto, in addition to Senator White and Representative Hutchinson, had written to the Department expressing their request that the Department utilize an Advance Notice of Final Rulemaking to solicit additional comment on the rulemaking. As a result of a meeting between Senator Musto and Chairman Hanger where they discussed the rulemaking in more detail, Mr. Fox noted to the Board that he would be voting against the motion to utilize an Advance Notice of Final Rulemaking on behalf of Senator Musto.

> **Mr. Henderson moved to utilize an Advance Notice of Final Rulemaking with a 30-day public comment to allow for additional comment on the final-form rulemaking. Mr. Deklinski seconded the motion, which failed with 4 votes in the affirmative for the motion, and 15 votes against the motion. Specifically, the motion was voted in the affirmative by the following Board members: Bill Capouillez, Patrick Henderson, Richard Manfredi and Joe Deklinski.**

In response to the vote on his amendment, Mr. Henderson noted to the Board that he, on behalf of Senator White, would vote to approve the final rulemaking, but would do so with the understanding that he and Senator White would address their remaining concerns with the rulemaking through the remaining steps of the regulatory review process.

Secretary Cornelius moved to adopt the final rulemaking. Mr. Strong seconded the motion, which was approved by a majority of Board members. Mr. Deklinski voted in opposition to the motion, and Mr. Gardner abstained from voting on the motion.

OTHER BUSINESS:

The next regularly scheduled meeting of the Board will occur on Tuesday, June 15, 2010, at 9:00 a.m.

ADJOURN:

With no further business before the Board, Mr. Strong moved to adjourn the meeting. Michael Pechart seconded the motion, which was unanimously approved by the Board. The May 17, 2010, meeting of the Board was adjourned at 11:52 a.m.