

**Minutes of the Oil and Gas Technical Advisory Board Meeting**  
**Rachel Carson State Office Building**  
**Harrisburg, PA**  
**March 26, 2009**  
**10:00 A.M.**

A meeting of the Oil and Gas Technical Advisory Board (TAB) was held on March 26, 2009 in the 6<sup>th</sup> Floor Conference Room of the Rachel Carson State Office Building, Harrisburg. TAB members present were Chairman Robert Watson, Burt Waite and Art Yingling. Ron Gilius, Dave English, Joseph Umholtz, Eugene Pine, Susan Ghoweri, Carol Daniels, Patti Davenport, Sarah Mollett, Chris Laughrey, Scott Perry and Dan Lapato attended from DEP. Also attending were Amy Randolph, Nathan Bennett and Ted Borawski (DCNR Forestry), Charity Fleenor (Penn Virginia Oil & Gas), Chris Underwood (ERM), Teresa Copenhaver (Triad Strategies), Carla Suszkowski (Range Resources), Christine Shepard and Mary Anna Babich (EXCO-North Coast Energy).

**Agenda Item 1 – Introduction and Opening Remarks**

The meeting was called to order by Chairman Watson at 10:00 a.m. and was followed by introductions.

**Agenda Item 2 – Approval of Draft Minutes from January 26, 2009**

The motion to approve the minutes from the last TAB meeting was made by Burt Waite, second by Art Yingling. Minutes were approved.

**Agenda Item 3 – Update on Regulations for New Applications Fees**

David English informed the members that the Final Omit Package proposed for the Marcellus Shale increase was approved by the Independent Regulation Review Commission (IRRC). The House Senate Committee had requested an extension for their time to review and we should get that approved by next week. The proof then goes to the Legislative Reference Bureau for publication in the PA Bulletin at which time the fee increase becomes final. We expect publication by mid to the end of April.

The Proposed Rulemaking Package public comment period ended last Monday (March 16<sup>th</sup>). Combined comments were received from the Pennsylvania Oil and Gas Association (POGAM) and the Independent Oil and Gas Association of PA (IOGA) along with two other commentators. We will be considering those comments and preparing the comment/response document to share with TAB at the next meeting. The package will then go to the Environmental Quality Board (EQB) with the comments on the proposed and any changes to begin the Final Rulemaking process. It is expected to go the EQB for their August 28<sup>th</sup> meeting.

#### **Agenda Item 4 – Discussion of Projections for Marcellus Well and other Shale Well Development**

David English indicated what we are currently seeing from the incoming permit applications is that there has been some downturn in conventional well permit applications. However, the downturn is not enough to have a substantial impact on the fee projections. Chairman Watson asked if this included shallow well drilling to which David confirmed it did. David added that we are not seeing a significant downturn in Marcellus activity which appears to be fairly level at this time.

Art Yingling reported he is hearing that one of the top ten operators is taking 70% of their wells outside the state. Their shallow well drillings are down significantly. David reported we are not seeing this happening based on permit applications. Art said perhaps in light of prices, people may be permitting but not drilling.

Chris Laughrey, of DCNR Geological and Topographical Survey, reported that at a recent Shale meeting in Pittsburgh 800 Marcellus Shale wells were projected to be drilled in the Appalachian River Basin in 2009. This includes West Virginia and New York as well as Pennsylvania.

Chris informed everyone that the Pittsburgh Association of Petroleum Geologist (P.A.P.G.) website, [www.Papgrocks.org](http://www.Papgrocks.org), has Power Point presentations and maps available for download and includes well location, permitting and drilling. The site was updated in February 2009.

#### **Agenda Item 5 – Update on Regional Offices Reorganization and Staffing**

A map of the new Oil and Gas Regions alignment was provided for review. The map shows the state being split into three different regions, the Northwest Region in Meadville, the Southwest Region in Pittsburgh and the new East Region in Williamsport.

David English stated that progress was moving along and we are in the process of hiring new staff. He confirmed that we are having trouble filling some of the positions.

The Northwest Regional Office and the Southwest Regional Office will maintain the alignment as shown on the map. The new Eastern office in Williamsport will include the Northcentral, Southcentral, Eastern and Southeastern part of Pennsylvania. Primarily the new Eastern office is going to initially pick up the water aspects of the Oil and Gas Program - Water Management and Erosion and Sediment (E & S) Plans. The field staff will be overseeing the E & S portions.

Permitting for Oil and Gas Wells will still be coming out of the Meadville and Pittsburgh offices until the Williamsport Office gets properly staffed, which could be a year away at this point.

Dave said 37 new positions will be filled this year.

## **Agenda Item 6 – Update on Marcellus Permitting Procedures**

- **Centralized Impoundments**

Joe Umholtz told the committee that all the forms have pretty much been worked through and are posted on the web with minor edits to punctuation and grammar. There is a worksheet that has been developed so that the industry can review to see if they actually need to get a permit or not. Joe mentioned to the committee there were two consultants in the industry that used the worksheet and were very pleased. They found it to be a tremendous help for them when determining if they needed a permit.

Scott Perry stated that if you stay beneath 15 feet in depth and 50 ac.ft in volume for freshwater impoundments, no permit is necessary. For all impoundments exceeding the 15/50 size criteria, a permit will need to be obtained from the Dam Safety Division of Water Management.

Joe said that Oil and Gas Management Regional Offices will do the permitting for all impoundments accepting frac fluid that are below the 15/50 rule and are not on a stream, wetland or floodway. Those permits would be processed by Dam Safety.

- **Water Withdrawals**

Joe informed the committee the biggest change in the Addendum was taking it apart and incorporating the different sections elsewhere.

Burt Waite said he went through the proposed new format carefully as well as the Water Management and the Water Management Plan, and from a hydrologist's standpoint he feels it works better. It can be more closely equated to preparing a Preparedness, Prevention and Contingency (PPC) plan for operators, which covers a multiple of operations. The Water management plan is a plan that can cover geographic areas of operations there are multiple sources of water straining the groundwater. This puts all the water management aspects of operation of a geographic area into a single plan making it flow a lot smoother than the initial addendum.

- **Erosion and Sediment Control and Stormwater Management**

Joe continued by saying there are three options that the industry has to apply before applying for a permit. Option 1 would require that 14 days prior to earth disturbance you must submit an erosion and sediment and stormwater plan. We are working on the module plan right now determining what we would like to see on that plan. This option would be used for one well site or if you are doing exploratory drilling. This would be completed in lieu of the full blown ESCGP-1 process.

Option 2 is you can submit an expedited ESCGP-1. The application is the same except you need to check the box for expedited review and have a licensed professional seal on the Notice of Intent (NOI). DEP will respond in 14 days.

Option 3 is at least 60 days prior to your earth disturbance, submit your ESCGP-1 application. It will then go through the full blown administrative/technical review process. This option will take more time.

The first two options takes the emphasis off of the review end of things and puts it onto the field staff of the industry to make sure the Best Management Practices (BMPs) are installed correctly and maintained properly.

Joe continued by stating that the reviewing process of the permits are being pulled away from the Conservation Districts and back to the Bureau of Oil and Gas Regional offices. Effective on March 18, any ESCGP-1 applications should be submitted to the Oil and Gas Regional Offices. April 1 is the last date to use any of the old forms. After this date the new ESCGP-1 forms should be used. The final missing piece of the puzzle would be to have the model put in place as soon as possible.

Burt Waite asked about the rationale of pulling the review process away from the Conservation Districts. Joe said he believed the decision was made based on the fact that the Bureau of Oil and Gas was better equipped to handle this process since now more of the emphasis is on the enforcement end of things as opposed to the reviewing portion.

- **Waste Tracking Systems**

Ron Gilius told the attendees that what we had been working toward is a manifest system where essentially the manifest would start off with the operator and be transferred to the transporter and ultimately be received by the waste water treatment facility.

Ron stated that since there are some problems with the use of the term manifest and the implications of hazardous waste management systems, he said we will go on with a slight modification of the system. It is a waste tracking system which is pretty much identical to what we had in place for many years.

It starts off with the operator who has to keep records of the amount of waste, what the chemical characteristics are and where it is being disposed. The transporter, under the residual transportation rules, must keep a daily record of the wastes they are transporting, where it is being picked up, where it is being transported to, as well as be familiar with any emergency plans in case there is an accident.

On the treatment facility end (the receiving end), whether it is a treatment plant, sewage treatment plant or a disposal well, they must keep records of all the waste they are receiving on a daily basis. Ron stated that rather than completely altering this manifest, we are going to stay with the existing system only firming it up to making sure everything is in place between the operator, transporter and the receiving facilities.

Some of the facilities that currently treat brine dedicated to oil and gas waste water, such as municipalities and sewage treatment plants, have firm requirements while others are new facilities just getting involved in receiving wastewater. Ron stated as they go through their

approval process for their National Pollutant Discharge Eliminations System (NPDES) permit, we will make sure they have all their requirements in place for the wastewater they receive.

- **Upcoming Training**

Joe Umholtz said there will be three training sessions in April regarding the updates/changes on the Marcellus Permitting procedures. This will include Centralized Impoundments, Water Withdrawals, Erosion and Sediment Control and Stormwater Management and Waste Tracking Systems.

The three sessions will be held on April 16 at the Genetti Hotel, Williamsport, for the Northcentral and Northeast Regions, April 20 at the Southpoint Hilton, Canonsburg, for the Southwest Region and on April 21 at the Clarion Holiday Inn, Clarion, for the Northwest Region.

Due to all the rapid changes Joe told everyone he has not yet scheduled his annual Oil and Gas Management Industry Workshop Training. Joe stated that once we get through the changes and have the most recent information available, we plan to proceed with setting up some training sessions as we have in past years.

#### **Agenda Item 7 – Discussion of Well Plugging Procedures for Wells with Horizontal Laterals**

Handouts were provided to the attendees providing information on various U.S. states' methods of Plugging Horizontally Drilled Wells and Coalbed Methane Wells. Susan Ghoweri performed the research and provided the Agency, Contact person, Applicable Regulations/Policy, an Internet link, as well as a Summary for each state she researched.

The states contacted by Susan for Horizontally Drilled Wells were Alabama, Texas, Wyoming, New York, West Virginia, North Dakota, Colorado and Arkansas. States contacted for the coalbed Methane Wells were Texas, Wyoming, West Virginia, Ohio, Colorado and Arkansas.

Discussion ensued about the research results.

#### **Agenda Item 8 – Discussion of Allowable Pressures at the Well Casing Seats**

Gene Pine discussed the hydrostatic pressure calculation at the surface casing seat that is incorporated into Section 78.73(b) of the DEP regulations. This had been generally discussed at the May 2008 TAB meeting.

The Department is evaluating this method and subsequent alternative considerations in terms of protecting groundwater resources. The intent is to create an internal workgroup to evaluate the regulations, and subsequently solicit input from TAB and/or industry representatives.

Some wells in the Northwest Region are not complying with the hydrostatic pressure requirement at the surface casing seat. These are predominantly shallow wells that utilize surface casing as production casing.

In other areas, notably in Susquehanna County, there are intermediate casing strings where pressure exerted at the casing seat exceeds the calculated hydrostatic pressure at that point. This does not violate DEP regulations since the regulations only prescribe a maximum pressure at either the surface casing seat or the coal protective casing seat. However, an analysis/evaluation should be conducted as to what alternative methods, tests or procedures might be employed in instances where the hydrostatic pressure determination may not be the best way to evaluate certain cases. The general goal is to adequately contain pressure and ensure the protection of groundwater.

It was also mentioned that the hydrostatic pressure calculation for the surrounding fresh groundwater system in the regulations may not always be accurate as it currently appears. The regulation refers to the length of the surface casing in the calculation. However, this assumes that the entire length of surface casing is surrounded by saturated unconsolidated or consolidated media. In many areas saturated conditions do not appear at the surface (or the top of the surface casing); rather, saturated conditions may not be found until some depth below the surface. This may lead to an erroneously high calculated hydrostatic pressure at the surface casing seat.

The general goal is to review and evaluate what methods and procedures best apply in terms of adequately containing pressure and protecting groundwater. The Department will be working on a draft document that discusses these issues, and anticipates input from TAB and other resources at a later date.

### **Additional Agenda Item**

Ron introduced Mary Anna Babich from Exco – North Coast Energy who is part of the Marcellus Shale Water Committee in leading up the waste characteristics characterization study on frac water. Although she was not able to provide the committee with analytical data, Mary Anna provided the committee with an informative update on where the committee stands at this point.

### **Agenda Item 9 – Comments From the Public**

Comments from the public were addressed during the discussion of the various agenda items.

The next scheduled TAB meeting will be May 28 in the Rachel Carson State Office Building in Harrisburg.

Burt Waite motioned the meeting be adjourned. Art Yingling second the motion. Meeting adjourned at 12:30 pm.