

Union Township Board of Supervisors  
Special Meeting  
January 22, 2014

The Board of Supervisors Meeting was called to order by Chairperson Andrew Tullai at 7:00 p.m. The meeting was held at the Union Township Municipal Building, 3904 Finleyville-Elrama Road, Finleyville, PA. The pledge of allegiance was recited. Board Members in Attendance by roll call were Steve Parish (not present for roll call but did attend shortly thereafter), Larry Spahr, Andrew Tullai, Brenda Cushey, and Charles Trax, Jr. Also in attendance, Dennis Makel-Solicitor, Mr. Carl DeiCas-Township Engineer, Judy Taylor-Treasurer, Debra Nigon-Secretary, and Peter Grieb-Code Enforcement Officer. Harold Ivery-Building Code Official, did not attend.

Representatives from EQT who attended the meeting included Jessica Carpenter, Community Relations; Nathaniel Manchin, Manager, Community Relations; John Centefoni, Senior Environmental Engineer; and Travis Leger, Drilling Superintendent. Also attending Blaine A. Lucas, Attorney-at-Law, Babst/Calland.

Public Comment on Agenda Items:

Several residents had signed in to comment, but held their comments until after the discussion.

EQT was asked to discuss the fumes and odors experienced by Cardox Road residents. The EQT representatives said that the next rig will be a dual fuel natural gas rig running on 70-80% natural gas fitted with a catalyst unit which will further reduce emissions running most of the time on two generators with lower RPMs, also reducing noise. They said that the Pioneer rig which will be coming is a walking rig, which will require less pipe moving and cranes so that when the rig is moving from well to well there is less noise. The walking rig will arrive 20 days later than anticipated which will allow them to do another sound test and cooperate with the Township on ambient sound and noise studies. The Pioneer rig will drill horizontal shafts. The top hole rig which is currently present, drills the vertical shafts, and should be operating another 20-25 days. The walking rig will be fitted with catalytic oxidizers reducing emissions approximately 80% and will be fitted with mufflers.

The solicitor asked how many additional wells will need to be drilled.

Gary Baumgardner, Cardox Road resident, said that he has been hearing anticipation of changes and is tired of waiting. He said that he has reported the fumes to the DEP just yesterday, and now has seven documented tests, of diesel fumes. He said that he is willing to pay for vibration tests because his wife is up at night not because of noise but because of low frequency vibration that his wife particularly feels. One of the other residents said that the joists and beams of his home are vibrating and that he has seen movement.

Mr. Centefoni said the level of diesel particulates was measured at 0.021 mg . He said the level that the Mine Safety and Health Administration considers allowable exposure to employees is 0.16 mg, which is well below that number. Mr. Tullai said that in the data there is a measurement from outside the wall of Organic Carbon which is at a level that would cause

sensitive individuals trouble breathing. EQT Representatives said that the natural gas rig will greatly reduce the diesel fume odors. American Health & Safety took the levels and were looking at air quality in and around the pad.

Mr. Baumgardner said that the quality of life has been greatly impacted by having an industrial well site 500 feet away. Another resident (house number 3 in the diagram provided in the sound data studies) said that the topography of the land acts like a funnel and the houses are down wind and the diesel fumes blow across their homes; so, that even if the fumes are not measured highly at the site pad itself, it does not mean that they are not constantly being carried down wind.

EQT said that the solution would be to get the top rig off the site in the next three weeks.

Mr. DeiCas said that he believes that EQT could correct some of the sound issues and should mitigate this as quickly as possible because the longer it goes on the worse it becomes for EQT and the residents. What Mr. DeiCas said he has seen in other situations, is that the community begins feeling as if no one, the DEP nor the drilling company, is listening to them and addressing the problems, and then there is a class action suit. Mr. DeiCas said that it is the low frequency sound which is really bothering the residents and he thinks that it is the low frequency bass sound which is causing the vibration issues that were described. He said that, if that could be mitigated, then the residents may feel some responsiveness and progress and may be able to deal better with the diesel fumes and other disturbances in the environment.

The sound wall used by Chesapeake was discussed as a possible solution to mitigate the sound issue. According to EQT Drilling Superintendent, the Chesapeake rig was drilled on mud and the sound wall they used would not be effective if used with the top hole rig that EQT is currently running. EQT said that the current rig is the issue which runs on air using eight Detroit engines which run at 2500 rpm a piece. He said that once the new rig comes in with the catalyst units, there will be a lot less issues with noise. It was discussed that one of these rigs, minus the catalytic oxidizers and mufflers, is in Washington Township on the WACO pad. Although this rig is not retrofit with the catalytic oxidizers and mufflers; it was mentioned that anyone who goes to the site should hear a significant difference in terms of noise. The site is on Route 70, off Ruffcreek exit.

Mr. Tullai questioned the validity of the sound measurements on-site. EQT said that the measurements were taken by AM Health & Safety Consulting Company and that EQT questioned the consulting company on the validity of the decibel readings. Mr. Manchin explained that AM Health & Safety is a consulting company generally employed to determine health & safety of employees at the work-site, and as such they were measuring for times when conditions would be above the safety threshold. Mr. Tullai asked whether, if 80 decibels was considered the safety threshold, whether a measurement of 79 decibels and lower would show up as a zero reading on the data tables provided by their contracted consulting company and this was confirmed, that only sound spikes over 80 decibels would be registered on the charts.

Mr. Baumgardner wanted the Township to shut down EQT until after all sound testing is done as he feels that they are in clear violation of our Noise Ordinance.

EQT said that they have done a variety of things to mitigate the problems of the residents. Also, he said that the 2010 sound level studies performed by Chesapeake were not along Cardox Road; so, EQT wants to establish a new ambient noise level study, specific to Cardox Road. He also said that the data obtained so far during a forty-eight hour test showed average noise levels that were below the Township's Ordinance. Mr. Tullai made note that the levels of noise obtained by AM Health & Safety were averaged over a period of time which evened out the peaks and valleys. Mr. Tullai said that on the calibrated meter that Union Township purchased, there were measurements which exceeded accepted levels.

Another resident said that at least three times, when an extended sound study was being conducted, EQT stopped drilling during that time. John Centefoni said that during the 48 hour test there was a storm. Later the EQT Drilling Superintendent said that drilling was never shut down for 72 hours, and that the longest time drilling was shut down was 20 hours.

The solicitor asked whether drilling operations could be stopped at night, and the Drilling Superintendent said that this would mean that the company would be there drilling longer.

The drilling and fracing schedule was reviewed. It was stated that there will be three weeks of continued drilling with the vertical rig, then there will be three weeks of no drilling, and the new rig will come in and for 100 days following EQT will be drilling the laterals. After that, the "big guys come in" for fracing which would last about two months. EQT said that the estimated project end date would be in November 2014; however it was noted that these dates often change.

Another positive move that EQT said they have made to mitigate issues, is to commit to a natural gas powered frac so that there will not be as much diesel truck transport.

John Centefoni said that, EQT has also done modeling to see if a wall on the property line would improve the situation; however, it was determined that the topography shows that it would not reduce sound. Also he said that the same catalyst and muffler which is being used on the next rig was also considered for the current rig. However, it was determined that by the time the catalyst and muffler would be designed and fitted for the unit, the top drill rig would already be done drilling and off-site.

Noise cancellation was discussed as an option. Per the Township Engineer, noise cancellation may cause more problems, due to the lack of a consistent level, and also because the low frequency sound waves can start bouncing everywhere. The only thing that the Township engineer said could be considered, in his opinion, is a different type of material for the sound wall. He also mentioned the possibility of encapsulating the generators which he has seen done in a coal mine operation, though he thought it might cause overheating issues.

Mr. DeiCas said that in three weeks there is not much mitigation that can be done. He said that, at this rate, it may be best to wait the three weeks and see how things are doing with the new rig and, if the noise and fume issues are abated significantly, then it is a non-issue; however, if there are continuing complaints and problems then we can ask EQT to shut down until these issues are resolved.

Mr. Baumgardner said that EQT has improved on the noise issue; however, the problems still exist. He said that he is also concerned about the future fracking and the feeling of not knowing what is to come and not knowing if there is some potentially hazardous substance that could engulf their home. Mr. Tullai asked whether baseline measurements of silica can be taken and whether the homes can be sampled afterwards. EQT said that they want to protect their workers from silica as well. Mr. Centefoni said that he wants to provide more detailed documentation to the Township on how EQT handles silica and how they prevent it from becoming airborne, and will provide that information to the Board.

Mr. Grieb asked for updated plans to the Conditional Use applied for by Chesapeake. EQT brought the updated plans with them to the meeting and handed them over to Mr. Grieb.

**Motion** to go to Executive Session at 8:12 p.m. to discuss personnel and potential litigation.

Motion by Larry Spahr, Second by Brenda Cushey

Roll call vote: Parish-yes, Spahr-yes, Tullai-yes, Cushey-yes, Trax-yes, . Motion carried.

The Board returned from Executive Session at 8:25 p.m.

The solicitor said that matters of possible litigation were discussed.

**Motion** that EQT continue to take steps to mitigate the noise and fumes, and after the three-week period of vertical drilling elapses, EQT will work with the Township Engineer during the next three weeks to take appropriate steps to mitigate the impact of noise, vibration and diesel smell, and, if the horizontal rig comes in and begins drilling, and no acceptable improvement is made, then the Township will require a stop order on activity until the situation can be remedied to the satisfaction of the Township.

Motion by Larry Spahr, second by Brenda Cushey

Roll call vote: Parish-yes, Spahr-yes, Tullai-abstain, Cushey-yes, Trax-abstain . Motion carried.

**Motion** that the Township Engineer and John Centefoni work together and communicate to come up with a program to develop a baseline ambient noise level study that is aimed at obtaining ambient levels on the property boundaries of Cardox Road residents.

Motion by Larry Spahr, Second by Brenda Cushey

Roll call vote: Parish-yes, Spahr-yes, Tullai-yes, Cushey-yes, Trax-yes. Motion carried.

Mr. Tullai noted that as you go up Cardox hill the louder, and the Township Engineer and EQT said that there will be multiple points established for the study.

EQT was asked by the solicitor to make arrangements to take the Township Engineer and Supervisors out to Greene County to the WACO site where the horizontal rig is currently working.

Public Comment

Mr. Baumgardner was concerned about fracing, and the solicitor offered to put him in contact with Supervisors in other Townships where there is on-going fracing.

Mr. Centefoni said that on the EQT website, EQT.com, all the chemicals used in fracing are on listed along with the amount of the water that is used.

Mr. Eberland. resident, had a question in regard to frac water in terms of whether it will be recycled water. The response was that are trying to pipe in all the water instead of using the trucks to bring in recycled water in order to reduce emissions, so no recycled frac water may be used. Mr. Manchin said that many of EQT's procedures are being changed to accommodate this site.

Mr. Gniadek. resident, said that on December 4, 2014, which was a Wednesday at about seven in the evening he went out to his mailbox and was engulfed by a cloud of acidic fumes which made him gasp for air and he felt as though he almost didn't make it back into the house. He thought that something was very wrong and he contacted neighbors to make sure they were okay and then noticed that he had red spots all over the top of his forehead. He said that he later found out that the red spots across his forehead were signs of asphyxiation. He said these same fumes were also present on December 7, 2013, in the morning. EQT said that they tested for chlorine as a result of these reported events and that the device they used only found very low levels of chlorine which is shown in the data. He said there are no chlorine based products on their site. Another resident, Doug Newman, confirmed the odor described by Mr. Gniadek. Mr. Grieb, Code Enforcement Officer, said that he received multiple complaints during those events. Mr. Tullai questioned whether they could have been drilling through the mine at that point and if methane could have been released. He was informed that methane would have been detected on the instruments and those were checked and none was detected. The solicitor asked Mr. Centefoni to work with the Township Engineer to find out what may have been occurring on site when these instances of the strong odor were reported.

**Motion** to adjourn at 8:53 p.m..

Motion by Larry Spahr, Second by Brenda Cushey

Roll call vote: Parish-yes, Spahr-yes, Tullai-yes, Cushey-yes, Trax-yes, Motion carried.

  
Debra A. Nigon, Secretary