

**WEST DEER TOWNSHIP PLANNING COMMISSION
FEBRUARY 27, 2020**

Mark Schmidt called the Meeting to order with the following members in attendance:
Patrick Stark, Suzanne Garlena , John Butala, and Alan Banks.
Absent Members: Kathy Rojik, Robert Bechtold.

Other Attendees: William Payne (Code Enforcement Officer)
Scott Shoup (Township Engineer/ Shoup Engineering)
Gavin Robb (Solicitor, Tucker/ Arensburg Attorneys)
Dorothy Moyta (Zoning & Planning Administrator)

January 23, 2020 minutes were submitted and stand approved.

Items on Agenda: Proposed Dionysus and Leto Well Pads.

Outline and Order of Meeting:

1. Developer's Presentation
2. Township Engineer's Comments
3. Public Comments
4. Planning Commission Comments
5. Actions by Planning Commission

**DIONYSUS GAS WELL PAD (1501 Middle Rd. Ext.)
LETO GAS WELL PAD (301 Oak Rd.)**

Olympus Energy and Michael Baker Corporation combined to give an overall presentation to include speakers from several facets of the Gas Well Industry to answer questions and expound on their expertise. Easels were set up with drawings mounted on boards that were part of the application pack. Questions were asked of the speakers below by Kate Gafner representing KL Gates. The following speakers were posed *questions* by Kate and answered highlighting with their experience and industry knowledge. The last presentation from Olympus Energy was made on November 26, 2019. Olympus received 2 letters from Scott Shoup and they replied to his letters.

Note: All questions, answers, and explanations throughout these notes are paraphrased for intent and are not intended to be direct quotes; original recording is available upon request. Questions/ comments by KL Gates are in italics.

Joe Buckenderfer, Michael Baker Corporation, Project Manager for Civil Land Development and Environmental Permits:

Regarding setbacks, the Township requires setbacks 1.5 times the drilling rig height. Will both of these wells comply ?

They will. The total setback including the rig height will be about 260' which falls well within the requirement.

Also regarding setbacks, the Township requires a 650' setback from all pre-existing buildings. Are there any pre-existing buildings within 650' of either well ?

There are. (Refers to drawings on easels.) Within 650' of Leto there is a Clean Streams Water Treatment building that is not operational. Within 650' of Dionysus there Spedd Inc. to the southeast and Safety Properties to the southwest. Both are commercial properties.

Olympus has asked for an exemption for these 2 buildings as it is not feasible to place the well anywhere else on the site. Is that correct ?

Yes. No, it is not.

Has Olympus gotten waivers from all the impacted owner' buildings ?

Yes, they have.

The next topic I'd like to discuss is landscaping and screening. West Deer wants to plant pine trees at the well head itself. Is that possible ?

No, it's not practical to plant pine trees at the well head itself. It would impact safety, security, and emergency response.

Ok, so planting at the well head would impact emergency response and safety. West Deer has questions/ comments regarding landscaping and screening. Can you explain if these Well pads are visible as they stand today ?

No, they are not. As you see from the photos in our application, we took photos from various public location such as roadways and residences and the existing growth will block any view of the Well Pad from the public.

I know that there's been talk about view the Well Head from residences at higher elevations. Is there anything that you can do to screen from higher elevations ?

No, there's no way that you could screen the Well Pad from the higher elevations. Operationally, it becomes difficult.

OK, so once this pad is built there should be sufficient existing screening to shield this pad from the public view.

Yes, that is correct.

Anthony Miller, Drilling Manager, Drilling Operations, Olympus Energy

One thing that the Community is concerned about is site safety. Can you please explain what Olympus does to insure that the site is secure ?

During the operations we have a 24 hr. security and trained hazard personal. License and ID are checked at the gate. Once it's in production there will be a locked gate at the pad that will keep anyone from driving onto the pad. Right on the location at the pad, we install a 6'

chain link fence. There is a double locked gate and there is an exit only gate on each side of the gates for emergency egress. Also we have security cameras, alarms, and a one call number where anyone can call into to report an issue. Regarding the camera, the site manager can pan around and look at the whole site.

Olympus typically places barbed wire at the top of the fence but West Deer ordinances do not allow barbed wire. We are asking the Township to reconsider the barbed wire.

Yes. We typically have 3 strands of barbed wire at the top of the fence.

Could you describe any flaring that will occur on the site, if any ?

There are only a few instances when you want to flare a well. The first one that comes to mind is well testing where it flares 50' to 100' in the air; that was done in the early days for testing. Companies don't do that anymore. (Refers to drawings on easels.) They do flare during production but it's typically a smaller flare – 5'-10' flame that will burn for a few seconds. Our policy – if we anticipate a larger flare, we'll call township or emergency 911 for flare ups. During completion, there may be a small flare.

Hours of Operations – could you explain the different hours of Operation for different stages ?

Construction is daylight only depending on the time of the year and weather – those factors. Drilling and Completion is ongoing – production is 24 hours. In the early stages, a truck or 2 hauling off the water but that falls off quickly.

Regarding school hours, has Olympus talked to the school district regarding that? Could you talk a little bit about that?

We have reached out to them and touched base. We're so far out that we have not gotten into that yet. My operation is one where we will go out and meet with some representatives and find out about routes and times. We self impose regulations and hours on how we can operate trucks during bus hours. We put up signage regarding signage for truckers.

So school bus hours can change, so if your operations are prolonged, do you periodically check back in with the school district?

Yes the last job we were on we had somebody go out there and get stats on when the various buses came and went. Say if they're coming in every 15 min., we'll give 15 min. on both sides of that just to be safe. We'll get set up on the local district site for 2 hr. delays and time changes.

What kind of lighting is used on the well pad ?

All temporary lighting. Spotlighting on the rig for production; We use light plants. 4-6 spotlights will be installed on the rig during production for safety for the work people. We adjust the height and direction. The frack trucks will have their own lighting. The intention is not to light up the whole pad. We're very responsive. I've had a landowner call me and

say a light is shining into their house and we adjust that. We walk around and figure which one it is and we adjust that. Lights are pointed down as much as possible to avoid that.

So you do take the neighboring landowners into consideration ?

Yes. The highest lighting is on the rig itself so that we can see the guys go up and down for safety.

So what about dust; what do you do to control dust ?

We don't typically have dust on the pad; everything is gravel. Sometimes the lease road gets dusty; we typically do wet the lease road usually with water or Penn DOT approved material but to date we've only used water.

So do you use certain materials on the access road to control dust with trucks coming in and going out ?

We do have that built into the drawings. We have larger gravel 100' to 150' at the pad to cut down on dust and to get mud off of the trucks. It's not a good visual; we don't want get mud on the road. We have a tractor with brooms on it.

Signage. We've asked the Municipality to let us move ahead with the typical signage as it does not comply with the signage in the local ordinances. Can you please explain what signage you do have and what it would look like?

Yes. There is a very specific signage required by the state and the DEP. There is a specific height, width, and size of letters. Specific information and no more information; that is required to be at the entrance to the lease road along with the permit and emergency response plans.

*In our conditional use in **Tab 3** of the binder, there are pictures of those signs and what all those dimensions are so you can see what those signs will look like as required by DEP.*

(Aside: I brought along this caisson if anyone wants to see this.)

Taiga Rosendal, Accoustical Control. Regional Account Manager:

Could you please explain what your role is ?

We did the sound impact models for the Dionysus and Leto well pads.

We handed in the sound impact analysis with our initial application. Could you please explain the reason for that analysis ?

It's basically to find out what the sound impact is going to be on the surrounding area.

Even though we explained that at the last presentation, can you please explain generally how you conduct that assessment ?

We take spatial information that has elevation data and we take data from the noise producing equipment on site and using 3 D mapping software, we input the frequency data and we combine with the spatial data and it provides maps reflecting sound impact.

Based on your analysis, the West deer ordinance allows 70 decibels; does your data exceed that?

No.

For completion, the ordinance allow 75 decibels. Does your data exceed that?

No, it does not.

I just handed the Planning Commission a revised sounding analysis for the Leto well pad. Why did you revise the sound impact for the Leto well pad ? (See Sound Impact Assessment attached. 9 pages.)

There are a lot of nearby houses that are going to be impacted by the Leto Well Pad and we wanted to run another analysis so in the interests of being a good neighbor we wanted to do some additional modeling.

So what did your additional modeling results show ?

The further that you go away from the sound source, the less the noise of nearby houses that are going to be impacted by the Leto Well Pad and we wanted to run another analysis so in the interests of being a good neighbor we wanted to do some additional modeling.

So you ran the additional modeling on Leto because it's closer to the residences, correct ?

Correct.

What did your results show ?

The closer that you are to the sound sources, the more impact that you're going to have. Utilizing a 24' high STC 34 sound barrier, we can reduce the noise by 7 decibels. 10 decibels drop is perceived half as loud by the human ear, so a 7 decibel reduction is significant.

So what measures did you take to mitigate the noise level. ?

We utilized a 24' high STC 34 barrier on 3 sides.

And those are the sides closest to those impacted residences ?

Yes.

To your knowledge, Olympus is going to go forward with your mitigation recommendations ?

Yes

So this impact study is new to you tonight; if you have any questions, I'll be happy to answer them later on. That's all I have for you.

OK.

Gary Steidl, Senior Project Manager, Saul Shaeffer Engineering

Could you please tell us what your role is with the gas Well pads ?

Yes we work on the Haul route evaluations for these well pads.

Could you please describe the haul routes for each of the well pads ?

As shown in **Tab 6** of the Leto well pad application, (pointing to the larger drawings on the easels) the route begins on state route 910 and continues in 1022 which is Oak Rd. The access for Leto well pad is off Oak Rd., Dionysus similar haul route beginning on 910.and continuing to Middle Road Extension. Dionysus will have an access rd. off of middle Road extension.

Were these haul routes designed to minimize the impact to the community ?

Yes, they avoid all township roads..

So you said these haul routes will not be utilizing township roads ?

Correct.

Who does have jurisdiction over these roads ?

910 and Oak Road are under Penn DOT, and Middle Road Extension is under the jurisdiction of Allegheny County.

Will Olympus plan to get the required permits to use these roads ?

For Leto, the state permits for 910 and Oak Rd. have been obtained. **Tab 11.** The required permits for Middle Road will be obtained from the County.

What safeguards are in place to maintain these public roads ?

For the state roads, a maintenance agreement has been signed with Penn DOT. For the County, they don't require bonding, but Olympus has tried to reach the county in a sign of good faith to execute an agreement for those roads as well.

Anthony Miller, Drilling Manager, Drilling Operations, Olympus.

We brought Anthony back to talk about how you are able to make your trucking contractors abide by the speed limits, routes, and things of that nature ?

We have a big emphasis on contractor management. We have a lot of training that anyone coming onto the site has to do. They have to be approved. They have to have a passing grade. We police ourselves. If the public sees something, they can call in and let us know. We can check out the security cameras. We can check the sign in and out sheets. We can call our representative on the rig. We take it very seriously; they represent us. We've had multiple vendors that we have not invited back. Everyone who works there will have correct routes with blackout routes – school pick-up times. We have our own speed limit signage as well. There are additional steps we can take.

I understand that there have been some discussions about jake braking. Do you take that into consideration with your truck contractors ?

Yes, we do. It depends upon how close that we are to residence and farms. For most of our sites, the instructions are no jake brakes. I haven't had a problem after conveying that to our contractor. Also, it's common to put up signage for no jake braking. For the steeper hills, we've asked people to be patient with us if we are having a big rig.

Can you talk a little bit about the general truck traffic that you anticipate with each stage of the gas wells execution ?

Yes, we do. Starting with construction, you have dozers, excavators, and those types of equipment. Depends upon how close that we are to residence and farms. For most of our sites, the instructions are no jake brakes. One of the heaviest times is when you get everything to grade, you have quite a lot of rock trucks coming on. That's the busiest time and that can go on for 4 or 5 days. On the drilling side, the busiest times are when they're moving on or moving off. All said it could be 45-55 or 100 trucks. There is traffic controls and flaggers. Traffic control at intersections as you get closer to the pad. Signage too. That's both putting up and taking down the rig. At the end of each well traffic increase to bring in caisson materials. Production of the caisson foundations 6 or 7 trucks. They all convoy in together, stay for 12 or 14 hours and then convoy out. For completion, similar number of trucks coming on site – about 100 mostly tractor trailer trucks. (pump trucks mounted on tractor trailer) Once they start completing the wells the biggest truck loads are sand; that could be 50 to 80 sand trucks in a 24-hour period. To help reduce that, sometimes a week or 2 prior to cut down on that, they will stockpile sand on the site. The sand mostly comes in big boxes, and they are moved by a forklift on site. The question that will come up

on water. Olympus has every intention of water coming from the Allegheny or a high rate source. Our other sites we supplement or do job with municipal water – we put a tap in as close as we can. If you can get that high rate water, water trucks almost down to nothing, but if you can't, obviously a lot of water truck traffic. That number varies greatly depending on the season, stage of job, and size of the job that you need to do.

High rate means a pipeline, correct ?

Yes, it's typically a hard line, laid flat - temporary . It can be either/ or - it depends what you get.

Brian Domith, Regulatory Advisor, Olympus Energy:

What is your role in this project ?

I handle overall permitting for the well pad, wells, and water sourcing.

One of the questions that we received before this meeting is how does Olympus handle complaints.

There are multiple ways that we handle complaints. On the signage on the access road we do have our 24-hour hotline and that has the number to which we respond. Also, on olympusenergy.com – there's a form to fill out there. That is checked every day. Concerns that come into that are usually handled within 1 or 2 days.

Can you please explain Olympus's plan for water ?

Whenever we go into an area, we determine what water supplies are available. In this area we have just started this process. We've talked to some operators that have draws on the Allegheny River and we've talked with some water purveyors to see what kind of infrastructure that they have in place and what plans they have. It's economics too – it's how much those sources cost. How many wells that we're going to do - whether we pipe or truck water in.

One of the reasons that you can't do that analysis now is that you don't have approval, correct ?

Correct.

As part of your drilling permit process, you need to do water quality testing, correct ? Can you explain the water testing and the obligations that you need to meet?

We're required to do a water survey 2500' out from the well head itself. DEP requires notifications out to 3000'. We self-impose go out to 3100'. We hire a 3rd party contractor that is not affiliated with Olympus. They will contact everyone within that 3100' radius and conduct a survey of their domestic water supplies whether it's to water your cows or what not. We'll get out there and sample all those sources. Once they are analyzed, we're required to get those back to the landowner in 10 days, and we're required to get provide those to the DEP 10 days prior to any drilling.

And do you disclose those results to anyone besides the landowner ?

No, we do not.

We've had those discussions with the township and why would someone not want their results to be disclosed. Well, if you're selling the house. If you find out that your water is not great, that makes it more difficult to sell your house. What are some practical reasons that people don't want to disclose that information?

It's private information and the DEP is not allowed to release that either. Some people have never had their water tested so the first time they see that is when we provide those analyses.

In other words, we don't have to disclose anything that the DEP doesn't require us to disclose unless we're pre-empted by the Township or the solicitor.

Could you please describe how you get rid of waste?

Obviously there's different types of waste. We have a waste management plan. Solid waste will go to landfills allowed for that type of particular waste. Water is usually entered into water share agreements with other operators; we recycle a lot of the water into our operations. If that's not an option, we take it to a water recycler like RES, and if that's not an option we take it to Ohio for deep well injection.

*And Olympus has provided its entire waste management plan with its conditional use application. It's **Tab 10** of the Leto Conditional Use Application and **Tab 9** of the Dionysus Conditional Use Application if you're looking for more detail on that. This concludes our presentation and we're happy to open it up to the rest of the meeting.*

Comments from Scott Shoup (Township Engineer):

Scott Shoup is asked to provide a review of any information. In regard to time savings, he provided his comments of the Leto and Dionysus at the same time as these 2 do overlap. Scott's comments are attached to these meeting notes (**4 pages attached**) and *additional commentary (with respective numbered comment form the attachment) from the meeting is provided below.*

- 1. The applicant has acknowledged that and the Township will need to hold a conditional use meeting and take testimony with regard to both sites. With the extension granted that hearing will need to be held sometime in May.*
- 2. From tonight's testimony there won't be any decision on water till there is permit approval. Any information that Olympus could provide to the Planning Commission or Board of Supervisors would be helpful.*
- 3. Statement of fact – Highway Occupancy needed from the County for Dionysus.*
- 4. Olympus is requiring a waiver from to the 650' distance in the Zoning Code.*
- 5. Plan does need to be reviewed with emergency responders.*
- 6. 3100' distance surpasses zoning code. Zoning code also requires testing for bacterium, chloraform, salt, brine, sulfur, hydrocarbons, including hydrogenated hydrocarbons, and heavy metals. Applicant needs to identify which of those parameters they are not going to test for. Does that 3100' also extend to surface waters and springs? Yes, they ask landowners what is available and they test it. Olympus) Is there a need for an pre-*

emption from this Zoning Ordinance? Yes, the ordinance requires us to give you the results – that’s what the exemption is for. (Olympus) The conflict is providing sample results to Township? That is governed by state law. What authority does the Township have to demand testing or disclosure? (Olympus) What authority does the Township have ? (Gavin) I don’t think this is pre-empted. I don’t think that there is anything that would preclude testing – The disclosure, I’m not so sure - this needs to have further discussion.

- 7. Perimeter fencing; applicant is not embedding of the posts in concrete conflicts with the Township ordinance. Also, the barbed wire. Ordinance requires pine trees to be planted as screening around the fence area. Olympus is taking that to mean the well head itself. The actual intent is to plant trees around the fenced area. That is the intent (Bill Payne. Zoning Officer) Whether or not the pine trees are warranted is another issue and another discussion.*
- 8. Noise – new assessment indicates an STC 34 barrier. What is the wall made of ? High density plastic – 2.5 lbs per square foot. (Taige Rosendal, Accoustical Control) Olympus should provide description in assessment in of what the barrier is and translate to civil drawings in terms of location. There is a methodology to deal with complaints about noise in the ordinance; it’s very specific.*
- 9. You discuss in your documents a developer’s agreement which you will need to discuss further in the process.*
- 10. There are other outside permits needed such as a grading permit.*
- 11. Middle Road Extension – need to evaluate horizontal and vertical geometry of the road in bringing drill rigs in. Oak and Gibsonia are less challenged?*
- 12. Which direction on Gibsonia Rd. does the direction come from? It depends on which way the vendors are coming from - either way as the documents stand - that will be further laid out and explained in future documents. (Olympus) As it stands today, they could come from either direction.*
- 13. Township has a grading ordinance you will need to get a Grading Permit prior to doing work.*

Comments from the Public:

Jo Resciniti, 1006 York Way, Gibsonia, PA 15044

We live about 1.25 miles from proposed Leto Well Pad site. There are a couple of concerns that Jo wants to bring to people’s attention.

- 1. There are a lot of comments about noise and traffic, but I also want the planning commission to be aware of air and water pollution as well as contamination from radiation and wonders if the township could impose conditioning approval of limits on the amount of radioactive materials stored at the site. Page 3 of the application that was provided to her indicated that there would be water pollution, air pollution, noise, and radioactive emissions during drilling. Does the Commission have more information on this that could be provided to me as a community member ? West Deer Township provided tabs of information requested as well as an invitation to come in and peruse all materials at the Township. Also, Olympus says all information can be reproduced.*
- 2. There is a frack pond on one of the sites. Olympus replied - no, it is a stormwater pond.*

David Harrison, 1339 Middle Road Extension, Gibsonia, PA 15044

1. I have some questions about the rumors to improvements to Middle Road Extension. I don't know of people know how bad it is to travel up and down Middle Road Extension. As far as truck hauling is concerned, has there been any discussion on straightening it out *It was answered that the project hasn't gotten that far yet. (West Deer)* David reiterated that it would be extremely difficult to bring a large truck and rig down that road.
2. Do you know who would be doing your site development ? Do you do that yourself or contract that out ? *It was answered that that is bid out to approved contractors.*
3. When you get into production, are there pipelines that are accessible to the well ? *Yes, there are pipelines but they are not there yet.*
4. As far as the horizontal drilling, do you know how many legs you would have coming out from the main well ? *Dionysus 10, and Leto 5. (Olympus)*
5. Have all the property owner's been notified of that, or would that be when you get approval ? *As part of the public approval process, the Township is required by MPC to mail out notices to all affected parcels. That has not happened yet because we don't have a date set for the Public Hearing. When the date is set, you will get notice if you are in that designated area. (Bill Payne, Zoning Officer)*
6. What would be the estimated depth to the Marcellus shale at Dionysus? *Don't have exact info but it would be in the range of 7000-7500 TVF.(true vertical feet)*
7. What would be the estimated horizontal length to the Marcellus shale at Dionysus ? *Depending on leases signed but it would be 7000' to 14,000' range.*
8. The sound study – the 70 decibels. Do you know what location that was recorded at ? It was a study modeled based on the Township ordinance levels. Where was that modeled from then ? *There were 31 receivers that the decibel levels were calculated at. We pinned houses or property lines depending on the ordinance. Equipment such as compressor and shakers being used on the rig was provide to the engineer to be able to do the modeling. All was dependent on Ordinance. Taige was provided with equipment used to do modeling.(Olympus)*
9. One of my biggest concerns was the traffic moving up and down Middle Road Extension for operations.

COMMENTS AND QUESTIONS FROM THE PLANNING COMMISSION:

Note: Answers from Olympus, Michael Baker and the presentation team are in italics.

1. Has the Developer provided documentation of their right to drill on this property? *If we haven't provided leases, we can. (Olympus) Housekeeping.*
2. Regarding traffic, we have several intersections where we are concerned. We've done traffic studies on them. All are on your route: they are Oak Road and Route 910, Oak Road and Bairdford Road, Route 910 and Middle Road Extension, and Middle Road and Route 910. Middle Road and Route 910 may have already crossed a line and require a traffic signal. Our concern is that we are creating a situation here that will impact this. Regarding Scott's comment on which direction traffic is coming from, I'd note that there is a hazardous material prohibition from Saxonburg Blvd. to the Well, probably because of the curves there down to the turnpike at that point.

3. What would happen in a prolonged operation and what would make it prolonged ? *If machinery goes down, on the construction side depending on the weather like a really wet summer – no activity happens for a period of time. On the completion side usually no delays – a few days here or there. On the drilling side, if there is something encountered in the formation or if a drill bit gets stuck. That could extend out a couple weeks. That’s rare and costly. If you have gaps between drilling and construction that could go out a few months. (Olympus)*
4. Regarding spotlights on the towers, if a neighbor objects – can the lights be shielded? *The lighting on the tower is small and all pointed inward – no way to cover-but as we have to have good visuals for safety. If we do have complaints, it’s usually one light turned the wrong way or outward a little bit. Sometimes that causes a glare – we’ll turn them in and turn them down. (Olympus)*
5. What kinds of lights will they be ? *Typical kind of lights towers that you would see on a construction site. If you lower them down and point them in you typically don’t have an issue. (Olympus)*
6. Do you have any kind of timing for drilling operations ? Any schedule estimated or otherwise ? *We do have lease obligations; originally this was going in 2021 but with falling commodity prices, a lot of drillers are slowing down till prices are more favorable. (Olympus)*
7. Would you be able to provide MSDS sheets for emergency responders ? *I can look into that. We keep all that information on site and in the trailers. (Olympus)*
8. Would it be possible to view each site where the proposed wells are to be placed ? *Yes, this was done Thursday morning 5th at 9:00 AM. Bill will follow up with memo.*

Regarding traffic, Olympus wanted to note that this traffic is temporary, and no traffic after that..

9. It was noted on the Russellton Mine reclamation that residents are very conscious of road mud. When Concordia built on Cedar Ridge Road they were open to paving the first 150’. Is that something that you guys would be open to ? (Bill Payne) *Penn DOT has a provision that requires driveways be paved the first 100’. That is included (Olympus)* Other communities have used cattle guards – something to knock off that excess mud before it gets on the road; is that something that you’d be open to ? (Bill Payne) *No, these plans have been ok’d by the DEP; in lieu of that we use the bigger aggregate. (Olympus)*
10. What is your assurance if there is road mud that it can be removed in a quick and effective manner ? (Bill Payne) *DEP thoroughly regulates us – that’s probably why these other developments weren’t in a hurry to clean up their road mud. We’ll get fines so it’s in our best interests to make sure that’s clean. (Olympus)*
11. I’m aware of that but also that Allegheny County is a regulating authority but they were also a regulating authority to Russellton mine and they got a lot road mud. I do understand that it’s a different atmosphere when it’s completed. Please consider that. There will be a lot of concerned residents with mud on roads and buildings. (Bill Payne)
12. Also, on the school curfew side, especially at the Leto Well, you need to be aware of the buses coming and going. Also, during Community days, it’s a 2-day event that you need to be aware of. They are the first weekend is August. I would encourage you to reach out to the Township and police. (Bill Payne)
13. There’s a pad over in Fawn Township on Route 908, and he had an issue with mud on the road. Once it’s on the road it’s bad at that point; there’s nothing that you can do. When

the street sweepers go by, they just smear the mud. They get the big chunks but they don't get the dust. *We're always aware of that. And we're after that.* (Olympus)(Fawn site is not an Olympus site.)

14. Is there a plan to deal with emergencies such as fire, if a well breaks, excessive traffic or accidents? Is there a plan to coordinate with local authorities? *Everything is site specific with first responders and that is detailed – it has all been detailed. Every year we do an incident drill internally; we don't know when that will occur – it's thrown on us. We just did one in Penn Township - it is a 2 day deal. Tab 7 has all that information.* (Olympus)
15. The other concern is Middle Road extension – are you aware of that road? *We're going to talk to the County and we're continuing to look at that.* (Olympus) With a line of trucks, I can't imagine someone going out to the grocery store. Is that something that you can update us for in the future. *We'll need to get back on that. We'll call tomorrow and get a meeting on the books.* (Olympus)
16. Another problem we've had in the past is traffic and back up alarms – do you try to arrange your sites so that back-ups are minimal? *A lot of times we try to arrange things so that they come in and out and minimize use of back-up alarms.* (Olympus)
17. Do you have any idea of off-site support or staging areas for tanks, etc. Could that possibly could involve township roads? *We haven't had to do that much in the past.* (Olympus)
18. Some of the problems here are that we're not that close yet and we're being asked to approve things that we don't know the answer to. We don't know what you're doing with water and with routing. *Traffic needs to be worked out. with County. As far as water, that's sort of normal. I can talk with the local water purveyors and see what they have available. We like to plan for the worst case scenario. Say I find a source, I can't just throw that out there as we don't know yet and if it becomes public knowledge that could be an issue for us.* (Olympus) You're getting further and further from the river – that's my concern. *We need to get out ahead of that as it costs a lot of money to do these water assessments as we go so it's a balancing act and not easy on either side.* (Olympus)
19. With the interest in staging it would be could to get that all laid out ahead of time as truck drivers don't always pay attention to curfew and speed limits in the interest of safety and all that. That would help safety.
20. With regard to road routes, is it your intention to do site specific traffic studies for safety and adequacy and provide us with that information and also provide us with a list of road improvements that you will do? I saw by accident from the University of Wisconsin : “a legally loaded semi-truck can produce 5000 - 10,000 times the road damage of one car.” When we look at the roads that we have here particularly Middle Road Extension, I want to know upfront and in detail how you're going to turn that pathway into a transport route and how that can handle all the things that you drive over it with. Can you provide us with that information? *We have to deal with a lot of other bodies that have jurisdiction over those roads and I'm not sure when we can get that information to you.* (Olympus) That's crucial to my decision making.
21. When you did your sound modeling, was that for activity at a single well head or all well heads together? *We basically used the sound signature for all the equipment being used at a particular well head. We plug that in at different locations for the sound modeling.* (Olympus)
22. Are these reflective of the totality of the sounds of all this? *It doesn't reflect the sounds off of the site.*(Olympus) Ok you include all the sounds that your equipment makes and that becomes your suite of noise.

23. Where does most of the noise come from – is it the equipment or the fracking process ? *It's the equipment that's making the noise. During fracking, it's the pump trucks, equipment, etc. (Olympus) A single well or all activity ? Mostly a single well at one time*
24. What are you going to do for people at higher elevations ? How will you protect them ? *We've done the sound impact at higher elevations. (Olympus)*
25. Will your 24' barrier protect people at the higher elevations ? *There are many variables. (Olympus). We have people that have higher elevations than your well heads. Have you taken these elevations into account? Yes, We can do additional calculations if needed. (Olympus) I may take you up on that.*
26. Whether your modeling is wrong or right, what if there is still a complaint ? *If we receive a complaint, we'll do a 72-hour sound monitor and investigate the situation. (Olympus) So if a resident calls your hotline you'll do an individual monitor of that situation. .*
27. In regard to exemption request, as you don't want to put the pine trees in and you want an exemption. Will you still be looking for an exemption ? *Yes, we are looking for an exemption in terms for security, safety, erosion controls, DEP requirements need to have adequate vegetation. We need to have that perimeter with 70% vegetative cover. The pine trees are not good for that kind of vegetative pad. It hurts the stability of the pad itself. We do have to deal with geotechnical reports on that deal with the stability of that pad. (Olympus)*
28. John and I took a tour of your site about a year ago.. If you're still going to ask for an exemption on the bulk of your fence, could at least that equipment in the corner be screened from outside the pad ? *It's still a safety concern as we have cameras up and that a safety concern. That's not something I've seen done anywhere. (Olympus) As this exemption is a zoning code revision, that would need to go through those channels.*
29. At certain times of the year, there may be a screening issue as many of the existing trees that were pointed out in your survey are deciduous and would not provide screening in the winter when the leaves go down. (This will be determined when the sites are toured on Thursday.) This also would be a zoning code revision.
30. Were the photos reviewed referencing screening of the well pads? People keep referencing the "well head." The issue is that we're more interested in screening of the well pad. Where were those photos taken from ? *These were taken from various areas on the road that the public would view as well as various points that would provide a view. These areas are called out on the photographs. (Olympus) The concern for the general public is the pad. There's been some confusion between the well head and the well pad. The intent of the ordinance was so that the public couldn't see the operations. (Olympus)*
31. We do have buffer requirements between industrial and residential districts. We do have parking requirements; I'm hearing 2-3 trucks on the site a day after construction.
32. I understand that you can't plant at the well pads but we are talking about very large graded sites and I do believe that you can establish screening that complies with our ordinance within DEP requirements.
33. Bill will coordinate the viewing of the Dionysus and Leto site so that these screening questions can be answered for the next meeting. (This was done.)
34. Regarding noise impact assessment, is that assuming that all the noise is on the pad ? *Yes, we did provide equipment and sound signatures from the well pad. (Olympus) So if we truck in water, and need 50 trucks a day, those 50 trucks are not included in this sound modeling? That is correct vehicle noise is not included in this survey. (Olympus) So if we have 50 trucks idling on Oak Road, that model will expand. They're not going to be idling. They're going to shut off. Yes, we would have them shut off . There may be 10*

trucks on the road going back and forth – they will never be stacked up out there like that. (Olympus) But 10 going back and forth, that would change the modeling. Taige may have something to say about this but all the Township ordinances I've seen always exempt truck traffic. That's the loudest thing that can happen. But there are rules regarding trucks during school time frames. 4 or 5 trucks maybe. (Olympus)

35. Does our ordinance specifically say how to model that sound ? Does it specifically say to exempt truck traffic ? *It does not mention truck traffic as far as noise modelling is concerned. (Olympus)*
36. What about when trucks offload ? *We could add trucks, but sand trucks are the loudest. That noise is mostly swallowed up as it's not the most impactful. (Olympus)* Usually water is louder than the sand.
37. Based on the information that we've received tonight we need some time to assimilate this and you need to supplement with some additional information. I would suggest that we consider tabling this till next month, till we get to view the site, get an idea of what all the exemptions are and who they are to whether the exemptions are to us (Planning Board) or to the Zoning Hearing Board. I would suggest that you get together with our solicitor and come up with a developer's agreement. *Are you suggesting that we come up with some conditions of approval – something along those lines ? (Olympus)* We've talked about a lot of things tonight and we'll be looking for some answers on some of those things.
38. Any other questions from the audience ? None

First motion by Mr. Butala and second motion by Mr. Banks to **TABLE THIS UNTIL OUR NEXT MEETING.**, voting was unanimous to table this until the next meeting. There are no further items for the planning commission.

Meeting Sign in Sheet attached.