

**Buckingham County  
Planning Commission  
Monthly Meeting  
Packet**



**November 21, 2016**

**Buckingham County Planning Commission**  
**Agenda**  
**Monday, November 21, 2016**  
**County Administration Building**  
**6:00 P.M.**

1. Reconvene by Planning Commission Chairman
  - Invocation
  - Pledge of Allegiance
  - Establishment of Quorum
  
2. Adoption of Agenda
  
3. Approval of Minutes
  - A. October 17, 2016 meeting\*
  - B. October 24, 2016 regular meeting\*
  
4. Public Comment
  
5. Old Business
  - A. Public Hearing – 16ZMA240 Jeffery Sheffer, Wise Ridge Store\*
  - B. Continued Discussion - 16SUP236 ACP Compressor Station\*
  
6. Reports / Correspondence
  - A. November Building Permits\*
  
7. Commission Matters / Concerns
  
8. Adjournment

**Buckingham County  
Planning Commission  
Reconvened Meeting  
October 17, 2016**

At the reconvened meeting of the Buckingham County Planning Commission held on Monday, October 17, 2016 at 6:00 p.m. in the Peter Francisco meeting room, located within the Buckingham County Administration Complex, the following members were present: John E. Bickford, Chairman; Alice T. Gormus, Vice-Chair; Patrick Bowe; James D. Crews; Sammy Smith; Chet Maxey and Danny R. Allen, Board of Supervisors' representative. Also present were Rebecca S. Carter, County Administrator, Rebecca S. Cobb, Zoning Administrator, and E.M. Wright, Jr., County Attorney. Royce Charlton III arrived late.

**Bickford:** We're going to now reconvene our September 26<sup>th</sup> commission meeting. We are going to skip to establishment of a quorum to save some time because it's a continuation of the previous meeting.

**Re: Quorum Present**

Chairman Bickford certified there was a quorum - seven of eight members were present. The meeting could continue.

**Re: Adoption of Agenda**

**Bickford:** Ms. Cobb any changes to the agenda...adoption of the agenda?

**Cobb:** No sir.

**Bickford:** Seeing none do I have a motion to approve?

**Allen:** So moved.

**Gormus:** And seconded.

**Supervisor Allen moved, Vice-Chair Gormus seconded and was unanimously carried by the Commission to approve the agenda as presented.**

**Re: Old Business-Continued Public Hearing-16SUP236 ACP Compressor Station**

**Bickford:** That will bring us to our old business which is the continuation of the Public Hearing. Several announcements. Same thing as last time. If you're representing a group you have 5

minutes. If you're speaking on your own behalf you have 3 minutes. Because of the number of people we have I have to keep you cut off at the time. So when the light goes off, and I say stop, that means stop. It doesn't mean keep running on. That means stop. Ok. Thank you. Another thing please cut off all your cell phones or vibrate, cut off whatever, silence. Also if there is when someone is speaking please keep courtesy. Let them talk. Don't over talk, speak over them, make noise, whatever. If we have too much these fine gentlemen with the badges are going to escort you out of the room. Ok now. That's all I have to say right now. We'll go to Ms. Cobb and Ms. Gormus they will start the continuation of the public hearing.

**Gormus:** Alright. Come to the podium when I call your name. I'll call two names, one will be the speaker and the other person will be the on deck speaker. Fill Hevener. Joseph Anthony.

**Fillmer Hevener:** Good evening. I am Fillmer Hevener from District #3. Thank you for conducting this hearing. Eminent domain is a time-honored practice allowing for the public good. The Fifth Amendment to the Constitutions says "nor shall private property be taken for public use without just compensation." Virginia Constitution provides the same requirement. What is public use? Is taking for a gas... What is public use? Is taking for a gas pipeline a public use? Article I section 11 of the Virginia Constitution states "A public service company, public service corporation or railroad exercises the power of eminent domain for public use when such exercise is for the authorized provision of utility, common carrier or railroad services." Well what is a public service corporation? A legal definition: a privately or publicly held firm organized to provide a particular service such as communications, electricity, gas, transportation or water. Therefore, the ACP does qualify as a public service. The entire Hampton Roads delegation to the Virginia General Assembly, 20 Republicans and 13 Democrats, has strongly endorsed this project. They are joined by Gov. Terry McAuliffe and thousands of businesses, labor organizations and individuals from every walk of life across the region. Reasons for support: #1. The tax benefits to the County will bring in approximately 125 million dollars annually and this would help compensate for the 10% real estate tax increase that was voted for this year. Construction would support some 17,240 jobs. In Virginia some 1300 jobs would be supported annually after construction. Noise levels must meet strict government standards. In summary I support the gas pipeline because it is legal as defined by both the Federal and State constitutions. It will provide for our County with badly needed well-paying jobs. It will significantly add to the County's tax base. It will provide clean abundant energy for consumers. And it will provide some 371 million dollars in savings for consumers. According to the U.S. Department of Transportation...

**Bickford:** That's time sir. Time I'm sorry we've run out. Thank you sir.

**Hevener:** Thank you.

**Gormus:** Joseph Anthony.

**Hevener:** Sorry, I didn't see the red light come on.

**Bickford:** That's ok. I appreciate it sir.

**Gormus:** Marie Flowers on deck.

**Joseph Anthony:** Hello I'm Joe Anthony. I live in Maysville. I know we have to move away from a coal based energy system somehow. I don't know if this is the right or best way to do it. But after looking at the specifications and what's proposed, it seems to me that the general good of Buckingham is not going to come out to the good. The costs outweigh the benefits in my opinion. That's all I have to say.

**Gormus:** Thank you sir.

**Bickford:** Thank you sir.

**Gormus:** Marie Flowers.

**Marie Flowers:** I'm third district. I've just tried to put myself in your place and think of what questions you need to ask yourself. The benefits: permanent jobs 7-9 permanent jobs; taxes one million dollars a year for how long and who determines how much that will be and will the Board...what will the Board of Supervisors do with this money? Will they build a library and upgrade the schools which will help those on limited means or lower taxes which will benefit those who have much? The detriments; massive ecological damage will occur and you've probably already heard that from other speakers at the last meeting; air pollution which will cause many health problems. Dominion and groups such as this Sierra Club present contradictory statistics on the degree of pollution. These claims can be and should be verified. And who will pay for the needed health care that may be incurred by this pollution? What about contaminated water? And who will monitor any pollution an independent scientist or Dominion? Is ACP to be trusted? Item 4 of the application states that during normal operating hours the ACP will be will respond to emergencies. Does that mean the gas is pumped 9-5? Will there be someone on site or close by to respond to any kind of emergency? Any equipment needed for emergencies should be provided by the ACP. Is the highest grade material and equipment such as monitoring system used? Somebody mentioned that the what is being proposed is not the best computer system and I think, I think our people deserve the best. In the fall edition of the Sierra Club newspaper there is a comment by David Spears, state geologist and Buckingham citizen, who states that we can expect larger earthquakes than the one in 2010. Also there is an article that mentioned that the Virginia Citizens Consumer Council filed the petition with the State Corporation Commission asserting that Dominion is proceeding unlawfully with plans for more than \$19 billion North Anna reactor. And is there a need for the ACP? There are 3 other pipelines planned...

**Bickford:** Time.

**Flowers:** Form West Virginia. Ok.

**Bickford:** Thank you.

**Flowers:** Remember Flint Michigan.

**Gormus:** Georgianne Stinnett. Michael James-Desamo.

**Georgianne Stinnett:** Hello my name is Georgianne Stinnett and my family has lived in Buckingham for 8 generations with 4 generations now calling the County home. They range from young children to the 90 year old matriarch of the family who still lives in the old home place built and designed by my grandparents. I inherited a home and land through this legacy. Dominion is notorious for bending the rules, breaking the rules or when neither of those is sufficient for their agenda of greed, paying the right people to have the rules changed all together. Past behavior foretells future actions and Dominion has given us no reason to believe any of their promises. For example, as was pointed out in the last public comment session, the ACP is not eligible for the Special Use Permit for which it has applied. The permit is a possibility for utility companies and the ACP is a for profit limited liability corporation. They have yet...yet they have the audacity to expect you to overlook this critical detail and grant their wishes. They have already made a mockery of rules they have agreed to follow for the surveying of potential routes. Yes by law they can survey land without the owner's consent. However in a recent court challenge to this law Dominion agreed to the stipulation that they must and will notify the landowner and wear visible identification. Yet there's a heartbreaking video on line of surveyors and they do the land of a Buckingham citizen with no identification and total disregard for his pleas for them to identify themselves. When local law enforcement showed up they basically scolded the landowner saying the people were obviously surveyors and he should let them continue to violate their rights. Showing identification would have cost Dominion nothing and would have shown that they honor what they have agreed to do. How will they behave when complying with the rules cost them money? Also they make grand claims that the ACP will bring jobs to our community. In this example they could have employed local surveyors yet none of them are local. Not a single one. The compressor station will have gas lines from Williams Transco. In 2008 one of their gas lines exploded obliterating two homes in our neighboring Appomattox County and injuring 5. This was caused by negligence, breaking safety guidelines concerning maintenance. How can they claim that safety is paramount when they are working with a company that the US Department of Transportation, Pipeline and Hazardous Materials Safety Administration has identified it as having a history of neglecting cathodic protection guidelines. At the last meeting Dominion promised us the taxes generated by this compressor station would exceed 8 million dollars over 8 years. That's only about \$69.00 per county resident per year. And at the end of those 8 years the \$69.00 will have run out and we will be left with a shattered tax base. That is if they even pay the \$69.00. In 2015 Dominion was found in an audit to owe the City of Richmond 1.75 million in taxes. Not only did they not pay both houses of the General Assembly passed an exemption from this tax for the future...

**Bickford:** Time ma'am. Ma'am thank you.

**Stinnett:** Thank you.

**Gormus:** Next is Michael Deramo and then on deck is Carlos Arostego.

**Arostego:** Yes ma'am I'm here.

**Gormus:** Ok. I'm sorry I can't pronounce your last name.

**Michael James-Deramo:** I'm representing Blue Ridge Environmental Defense League.

**Gormus:** Ok. Speak into the mic please.

**James-Deramo:** Ok. I'm representing a group

**Gormus:** Representing a group.

**Cobb:** What group are you representing?

**James-Deramo:** Blue Ridge Environmental Defense League.

**Cobb:** Didn't they speak last time?

**Bickford:** Yeah.

**James-Deramo:** Yeah they talked for 3 minutes.

**Bowe:** Where are you from?

**James-Deramo:** I'm from Blacksburg Virginia and I'm working with people here in Buckingham County. So good evening. My name is Michael James-Deramo. I work with Blue Ridge Environmental Defense League. I reviewed the permit submitted by the Atlantic Coast Pipeline and observed the ongoing discussions and have the following comments about safety. Dominion has spoken repeatedly on a commitment to safety beginning with misinformation talk on clean natural gas. This is a falsehood derived from gas having lower carbon emissions than coal but not taking into account methane being a far more potent of a greenhouse gas than carbon. Furthermore fugitive emission from extraction transmission and compression now contribute a greater portion of greenhouse gas than coal in this country. Dominion has supported loopholes which include exempting portions of the natural gas process from the Clean Air Act and Clean Water Act. In fact Dominion executive David Shuford even said climate change could be beneficial. Those are not words from someone worried about the safety of Virginians. We see the same tactics of money driven lack of regulation and misinformation on a state level.

Every member of the General Assembly and our Governor takes money from Dominion. Every bill Dominion wants passed is passed and every bill or regulation they don't like dies. Dominion lobbies against any legislative push and the increase safety standards and regulation. We see examples of this in the state of Dominion not putting safety and transparency first. Recently in Loudoun County a public panic was created when over one hundred 911 calls were made and dozens of evacuations after Dominion failed to adequately alert the public of natural gas venting. Last year Dominion was fined \$365,000 for unreported emission violations of over 100 pounds of ammonia being emitted 27 different times at the Cove Point export facility in Maryland. The public was not made aware of these emissions until after the fine took place. Other examples include misrepresentation of soil samples when they reported that a qualified soil scientist had been hired or had done the soil samples yet that soil scientist was not hired nor did they do any filed work for Dominion. Finally there's an incident in which 33.7 million gallon of untreated wastewater was drained overnight into Quantico Creek, a tributary of the Potomac River. This was unreported until information leaked 8 months later. There are now Virginians drinking bottled water because their wells are contaminated. At that time the Director of the DEQ stated our best information is that no wastewater was discharged into state waters. So I bring up this separate issue and the DEQ because Dominion acts with impunity and they do this by routinely giving to their regulators. Prior to this incident David Paylor, director of Dominion's top regulator of the Department of Environmental Quality, accepted a trip to the Grans Master's Golf Tournament and Dominion picked up a \$1,200 bar tab afterwards. Prior to dumping into Quantico Creek the DEQ's and Dominion's own records showed three decades of leaking contamination from coal ash ponds without action or fines to Dominion. David Paylor and the DEQ have a history of lax regulation allowing Virginia to be the only state on the east coast to waive rights to review seismic permit applications on offshore drilling. Regulations on coal ash have consistently been lower than neighboring states with Paylor testifying against stronger coal ash rules instead favoring Dominion back bills which increase compliance deadlines, make it more difficult for the public to monitor water quality and make it more difficult for companies like Dominion to be sued. David Paylor is also the former president of the Environmental Council of States a group which has ties to the coal industry and The American Legislative Exchange Council. Paylor also added Virginia to the Association of Air Pollution Control Agencies which is led by ALEC and is founded by states that are opposed to natural greenhouse gas emission regulation. This action removed Virginia from the National Association of Clear Air Agencies. ALEC, which Dominion is also a part of, is a group that writes anti-regulation bills and openly denies climate change. Safety is not Dominion's priority. Dominion cannot be trusted with public safety and every one of their experts has a vested interest in this compressor station being built. They have done everything they can to weaken regulations to downplay this plant's emissions. Furthermore the DEQ cannot be trusted to do its job and to regulate Dominion. It is up to the Planning Commission and Board of Supervisors to ensure their county's protection and the protection of the individuals in this room. For the reasons I have outline, the Planning Commission cannot approve this special use permit. Thank you.

**Bickford:** Thank you sir.

**Bowe:** Mr. Chairman I assume that all the local people have already spoken. So there won't be any more local people?

**Gormus:** No they have not.

**Bowe:** Well wasn't one of the rules we established in beginning that the local people would get a chance to speak first.

**Gormus:** We also...

**Bowe:** Now I don't want to see another group come up here from out of town, or out of state, or out of country until all the local people have spoken.

**Carlos Arostegui:** I'm local.

**Bowe:** Come on.

**Gormus:** Alright. You're from Wingina ok.

**Carlos Arostegui:** Before I start where's the red light?

**Bickford:** That's the end of the time.

**Gormus:** Up on the box. See that?

**Arostegui:** Ok. Carlos Arostegui 4443 South James River Highway. Buckingham County's Zoning Ordinance is part of the social contract between the citizens of the County and the County's government that's represented by you, the Planning Commission. We, the citizens of the County, agree not to engage in uses and activities not allowed within our zoning district. For your part, the Commission agrees to interpret and enforce the Zoning Ordinance in a fair and consistent manner. In other words, we behave and you cover our backs. We own a farm near the proposed site of the compressor station. We raise Jersey cows and run a small dairying operation. Nothing that we do at the present time requires permission from the Commission since everything we do is allowed by the definition of the A-1 district. But let's say that we wanted to put up some chicken houses. Depending on the number of birds that we plan to raise at any one time, we may have to come before the Commission to ask for a Special Use Permit. There would be a hearing and we could get the permit with some conditions such as minimum setbacks. If instead we wanted to build a chicken processing plant, like Cargill's turkey plant in the valley which covers a couple of city blocks, we would be told that such a use was not allowed in the A-1 district. The argument that we already own sufficient land for the project would not persuade you. The Zoning Ordinance is clear. Poultry processing belongs in a heavy industrial M-2 district. ACP is asking the Commission to allow them to build their compressor station in the middle of an agricultural district. Again the Zoning Ordinance is clear.

Compressor stations are gas transmission facilities and as such these belong in M-2 districts. I'm not asking that you deny their permit altogether. I am asking you to apply the same principles that you would apply to our hypothetical poultry processing plant. Grant them the permit but only if they built it in the proper district. The citizens of Buckingham County trust you to stand strong, be fair and do the right thing. Please do not violate our trust. Thank you.

**Bickford:** Thank you.

**Gormus:** Alright David Ball. On deck is Katherine Yhimnakis.

**David Ball:** Good evening and thank you. I'm David Ball from District 3. And I'm addressing Commissioners with respect. I pray you proceed with wisdom being thoughtful of the long-term consequences of the application before you. I do not envy the task before you tonight. It is a very difficult and highly charged with emotional... with emotions of the citizens of Buckingham. If you make the right decision the people will applaud you and the matter will soon be forgotten. Should you make the wrong decision, the citizens, your friends and neighbors will never forget you and probably never forgive you. The compressor station is a big deal and not to be considered lightly. With counties looking for quick revenues it's easy to be enticed by corporations touting claims of big money. Do not be deceived. These are continuous and ongoing changes being made to FERC and to the design and capacity of the compressor station by ACP. To give your approval at this time may be in hast. Once you have given the approval the ACP will be able to make changes that you cannot object to without consequences due to changes in the law which is why they put the application in before October 1<sup>st</sup> because it limits your input and conversations with them under new state codes. So let me bring your attention to the Constitution of the great Commonwealth of Virginia. Under the Article XI Conservation Section 1, Natural Resources and Historical Sites of Virginia: To the end that the people have clean air, pure water and the use and enjoyment for recreation, etc. Forevermore it shall be the Commonwealth's policy to protect its atmosphere lands and waters from pollution, impairment and destruction for the benefit, enjoyment and general welfare of all the people of the Commonwealth. Section 2 basically reiterates that and I'm not going to have to read it for you. But I believe that evergreen trees are not adequate buffers for sounds of the compressor. If anything the trees will be adversely impacted by the many noxious gases that are being vented into the atmosphere, as it will also impact wildlife and the citizens nearby. So if a volcano halfway around the world expels noxious gases into the atmosphere and it affects us here, how much more will a compressor station that's located in our own neighborhoods...so and in our own backyard? The term blow-off refers to the rapid venting of methane gas store within the idle compressor. When that compressor vents it's a blueish cloud. The suppressor only muffles the sound but not the expelling gas. When the compressor fails to vent before it restarts it will explode.

**Bickford:** Time's up sir. Thank you.

**Katherine Thimnakis:** Katherine Thimnakis, Glenmore.

**Gormus:** Irene Leech on deck.

**Thimnakis:** Pardon me.

**Bickford:** She was calling the next person over there.

**Thimnakis:** In 2004 Buckingham advocates created a committee called Concerned Citizens for Animal Protection. I cofounded with the late distinguished Dr. Anderson, our county veterinarian. My presentation is on behalf of the animals. All life is scared is the political agenda. Mother earth is our only home. Environmental scientists report high incidents of crimes against nature at extraction industry sites. What are specific crimes against nature? Simple. Judged by the well-being of animals both domestic and wild. The Richmond Dominion Commanded Control Center is the profit predator's fortress. At fortress they champion themselves as corporate warriors even heroes. With high dollar purchased immunity corporations can be prosecuted and fined. But persons committing crimes cannot be held liable. Heaven is for heroes. Getting away with murder that is heinous crimes against nature, luxuriating in the infinite potential for profits. In the real world this is moral depravity. Richmond Dispatch, October 2015, Dominion Command Center deployed a contracted team to conduct 12 surveys in the Virginia and West Virginia United States Forests for the ACP potential map to run pipeline through the forest. The forest service filed charges to federal regulators alleging: 1. the soil scientists were not qualified. 2. The surveys were conducted without determining the protocols to do the work. 3. The scientists did not notify the forest service before conducting the survey. In its public statement Dominion Transmission denied any misrepresentation by the team and promised a new expanded soil survey by qualified scientists and other professionals. At Buckingham's peril, Dominion completes its strategy to overpower all community leadership. Then its pseudo experts can sabotage protective regulations without scrutiny. This is what corporate warriors do. The National Forest stewards stopped these pseudo experts in their tracks but can you? A rural county is not the power like this federal agency. Empowered awareness requires understanding that Dominion deploys warriors, soldering to dominate this entire region. Buckingham is just one stop on the map. Please acknowledge that the fossil fuel industry's worst enemies are Mother Earth's steward's defenders of life. To gain the system Dominion transmission's greatest allies are three governors: Virginia; West Virginia and North Carolina who are devoted to Duke Energy and Dominion Resources' billionaires. Any tactics which are effective to disable and eliminate the defenders of life are exercised. The devil is in the details judged by Dominion procurers in this peace loving community. They are not worthy of your confidence. Sweetheart deals are the moor of predators. Beware of profiteers pandering sweetheart deals. Thank you.

**Gormus:** Paul Barlow on deck.

**Irene Leech:** Did any of you get to go to the Harvest Festival that was in Nelson County on Friday? It was in West Virginia on Saturday and finished up in Roanoke County yesterday. I

did have the advantage of doing that and one of the people that we heard speak talked about his community and how they had raised a big garden, a lot of vegetables and gave them to everybody they knew. And they tried to sell them to a grocery store and found out that they couldn't because they had been grown in the shadow of a big industrial facility and they were tainted. As a farmer I'm worried about what this compression station is going to mean to us down the road because my farm is within 4 miles of the compression station. I'm worried about what it's going to do to our crops. Are they going to be productive? I'm worried about our cattle. Right now babies are being born, 10 a day. What if this was a time when the ceiling was low, clouds low and we're really dealing here with a point pollution facility. And when you talk about the limits and so forth it's not going to be spread all over the county. It's the people in the immediate area who are going to take the brunt. And the wind can move it further. The schools and the prisons are only 10 miles from the proposed facility. Historically we weren't really concerned about pollution but it's getting to be more and more important. And you are a really important part of the system, the most important part. We can't count on federal or state inspectors no matter how much they tell you about how many of them there are and how many regulations they're under. The truth is as a country we have not been adequately funding that kind of work. And so the conditions that you write are critically important. I don't have time to talk about all of this but what I've done is put together in the handouts that I gave you 12 things that I think need to be considered and that we need to have strict standards written into the conditions. We can't come back and add them later. We could loosen them probably but we can't make them more stringent later. So what you do right now is critically important. And as I said I will be glad to talk with you all or to share with you information...

**Bickford:** Time ma'am.

**Leech:** That I have.

**Bickford:** Thank you.

**Gormus:** Cynthia Tate on deck.

**Paul Barlow:** Hello my name is Paul Barlow. My wife and I live 4 miles away from the proposed site. We bought 20 acres back in 2011. We're going to start a small organic farm. We have concerns about the amount of pollution this thing will cause and plus the noise. Dominion says they want to be a good neighbor. Their website states their origin was actually in Appomattox since 1787 so I guess that does make them our neighbor or maybe a second cousin. The four companies involved in this pipeline are Piedmont Natural Gas with revenues of 1.2 billion last year, AGL Resources 4 billion last year, Dominion 16 billion in revenue last year and then Duke Energy 23 billion. That's 45 billion dollars. That's a lot of money. They're like the 800 pound Goliath. That's a lot of influence in Richmond. Governor McAuliffe says this is the most environmentally friendly pipeline that's ever going to be built. So how come no one is telling us that there's actually two types of compressor stations? One is a gas fired that they're proposing, that pollutes all over the place and then there's an electric powered compressor

station which doesn't pollute as much and it's a lot quieter. Columbia Gas a few years ago wanted to put a gas turbine station up in Fallston Maryland. The neighborhood had concerns about it. They have a lot of children there. So Columbia they said they would be a good neighbor. I guess it's a common phrase amongst gas corporations. But Columbia actually solved this dilemma and selected putting in an electric compressor in that neighborhood. They actually revamped the building to make it look nice too. Dominion has that option. Electric powered compression station powered from an already existing polluting power plant that they probably own. It's probably their power. They can power this thing. If the Governor is serious about being environmentally friendly and if Dominion is serious about being a good neighbor then electric is the only way to go. Look I'm a realist ok. I know Dominion has a lot of money and a lot of power. Forty-five billion buys a lot. They have an army of lawyers who will litigate and litigate and litigate until they get their way. We request that you table this motion until adequate research is done and alternative methods are investigated to reduce or eliminate pollution and station noise. Once they get that permit in their hand they're going to do whatever they want to do. Thank you.

**Gormus:** Chris Arbo on deck.

**Cynthia Tate:** My name is Cynthia Tate. I'm a Buckingham resident and today represent PAUSE, Peaceful Action Uniting Stewards of the Earth. We ask you to deny the Special Use Permit to Dominion and we offer this video in support of our request. (Trying to get video started.)

**From Audience:** Start from the beginning please.

**Bickford:** You can start that when they get the video.

**Tate:** There's no speakers on the computer...

**Cobb:** No.

**Tate:** That can't run that? That's quite a shame. Well as I mentioned our group asks you to deny the Special Use Permit. We are as a group extremely concerned about the toxic emissions that are associated with these types of compressor stations. We're concerned about the air quality, about water, about the land itself, the wildlife, the plants, of course the crops and especially the health and safety and welfare of the citizens of this county. And so I regret that we're not able to show this video. I would certainly like to give you a link to this video so that you might watch it yourself. It contains some very scientifically based information concerning not only the ACP but also the compressor stations themselves and the types of dangers that are associated with these activities. And specifically personally I'd like to mention my concern from last time. I remember hearing that Dominion Power is expects the first responders of this county to handle any emergencies that might arise particularly when the compressor station is running in the middle of the night and is not manned. I remember hearing that supposedly there's a

computer system that would notify somebody in West Virginia and that that's the way some kind of emergency would be relayed back to the county and then it would be up to the volunteer first responders to respond. That's very concerning to me personally. I used to be a volunteer emergency medical technician. I'm working in Bethesda Maryland. I'm not speaking for the group now. I'm speaking personally because I had hoped to show the video. But I did want to add that. And so I ask you again representing the group PAUSE, Peaceful Action Uniting Stewards of the Earth to deny this Special Use Permit. Thank you very much.

**Bickford:** Thank you ma'am.

**Gormus:** Walter Saxon on deck.

**Chris Arbo:** Oh ok. Hi my name is Chris Arbo. I live here in the Court House area and I'm not a native to Buckingham but we've lived here for 23 years and I love Buckingham. I love Buckingham. I used to work in London. I used to work in New York City. You could not pay me a billion dollars to go back to any of those places. And, and I'm not exaggerating. And one of my favorite things to do is to go down the roads in Buckingham and like explore and find out all who lives where and what wonderful things there are here. But I want to ask you guys a question. Is, is Dominion going to be doing any alternative like solar or wind things here? Does anybody...? No? Well there's this wonderful ad, by the way I'm an illustrator and I've done a lot of advertising art. There's this wonderful ad in the Buckingham County 2016 phone book. It says "Rising to face the challenge. We're building an even brighter future for Virginia by investing in solar and other renewable energy sources." But it's not going to happen here right? We're supposed to get a compressor station right, ok. How about do they... do they... does Dominion do any community service here that you know of? Do they...well there's this other ad in the 2015 Buckingham County phone book. And this is the book where all the local merchants advertise. And these things sucked me in. This one says "We know what it means to roll up your sleeves and get dirty. So let's dig, plant and make repairs and pick up trash and do all this community service." And at first I was sucked in by these until I found out about what's really going on and this really bothers me. So and I have one other thing I want to tell you about. A lot of people in this county know my daughter Alena Anthony. She has Down Syndrome. She has autism. She was voted prom queen in her senior year. That's how wonderful these kids are here. And, and, but what a lot of people don't know about her is she has chronic respiratory illnesses. Every winter we are up with her in the middle of the night because she can't breathe and she's coughing her head off. And, and she, she's emotionally and physically and intellectually challenged. She does not know enough to blow her nose. She wipes her nose raw until it bleeds. Is Dominion going to send somebody over to my house in the middle of the night to stay up with my daughter while she can't breathe and her nose is running so bad that she drops this all over her pillow? I...this thing makes me very upset and whatever carrot that this company wants to dangle in front of the powers that be in our county, it's just not worth it. It's not worth it. That's all.

**Gormus:** Next on deck is Amena Siddiqi.

**Walter Saxon:** Ms. Cobb has an email with it in color where you can read it much easier. I'm Wes Saxon District 4, live essentially across the street, life-long resident here. My comments tonight are not aimed at any of the Virginia Power employees. They've been great citizens of the county for many years. This is a corporate action. And I expect there'll be some nice bonuses depending on how cheaply the project can be done. I've been here for the last two meetings and I've learned a lot. And you all should be commended especially for \$50.00 a night. As a long-time member of the Piedmont District Planning Commission I know that there are three key ingredients in attracting industry: a skilled workforce; interstate highways and natural gas. This proposal would not help in that attraction of industry. I attended a snowy February informational meeting. I was escorted the whole time because I could not sign in saying I was opposed or against. I did not know. I did learn two things that night. One our property will be impacted and two that part of this pipeline is so Duke can move jet fuel to Cove Point. Despite the legal notice that they put in the Farmville Herald on March 30<sup>th</sup> of this year we have yet to receive any information from them even though we're considered an effected property owner and I'm wondering who the others are also that didn't get it. My biggest concerns deal with the LLC status of the applicant, the noise and the pollution that goes along with a compressor station, reluctance of Virginia Power to offer full disclosure, the negative impacts of the county citizens and the security risks. An LLC offers great protection for an entity. However, I've dealt with one and we got left holding the bag, and had to clean up and they even took assets illegally. With the Special Use Permits I'm not sure that they might not turn around and walk away and they mean nothing. I hope that you got language that will protect us. Pollution of noise and chemicals a valid concern. I live here. One of you all talked about the noise at 7 in the morning. That was a noisy time compared to most times around here in the Court House. I'm used to my grandparents lived on a river in the valley with a dam. That was nice. You took some getting used to but it didn't put off pollution like this will. And if I'm reading the conditions correctly the 55 sound reading, I'm not sure that that is a top. That may be an average over time. One of the pollutions being emitted is volatiles organic chemical. Don't forget we have our own superfund site over here. It was a perfectly legal, licensed and operated entity that EPA is here and we're still paying for it. There was a national gas pipeline rupture in San Bernardino Valley last year which resulted according to the L.A. County Health Department in higher chemicals staying in the homes of the residents. This was not transit. This stayed in there after the gas was out. It permeated in the air. In your August meeting Dominion denied knowing information about Transco yet later on they did come back with some of that information when you asked different questions. There are 5 lines that apparently going to be joined here. If they don't know the information put your foot down now and say no, application denied. I've already mentioned they haven't informed property owners. Back in the 90's Cumberland County was supposed to get a power plant. Cumberland County didn't realize that had already been had that deleted. The communication between the company and the counties is not the best. It's going to be a negative impact on us. Look at the security things. If we can do...if software can be done to blow up centrifuges in Iran then look what they can do to this compressor station possibly. Those of us in business are facing risks every day due to things coming in from the internet which essentially we have to have to operate. This proposal's changed three or four times. In

retail they call that bait and switch. Highlights of the things I've given you and I'll answer questions and Ms. Cobb has information to contact me but electric motors, compensation for the landowners, larger I'm sorry, thicker pipe dimension, the pressure coming down, and I understand now it may be going up, but thinner pipe they're putting in here because we're less density populated area and shutoff valves further apart. That's a nice recipe for disaster. We can't afford that. Website being put up and maintained, annual warning, adding fiber optic, 24/7 staffing, I mean we've got to have that. You can't expect our first responders to go there and provide coverage for 2/3 of the time. Any mechanism to establish the base health line and monitor it. Those are just a few of the things. And I appreciate your time and your commitment. Thank you.

**Bickford:** Thank you.

**Gormus:** Do I see Amena...Is that you?

**From Audience:** I don't believe she's here.

**Gormus:** Ok absent. Therefore she gives up her time. We'll then call Vicki Wheaton.

**Cobb:** Alice you do have on page 2 #9 is here and I know that is a Yogaville resident.

**Vickie Wheaton:** Would they rather speak first? I'm fine with that.

**Gormus:** Hopefully. #9. Ok that's one that left early last time. Ok I have Swami Sariacroch. I'm sorry.

**Swami Sarvananda:** That's alright. (Inaudible.)

**Gormus:** Ok.

**Wheaton:** I'll be able to speak though right?

**Gormus:** Yes, yes, yes.

**Wheaton:** I want to speak.

**Gormus:** Yes, yes thank you.

Commissioner Charlton arrived.

**Swami Sarvananda:** Jee is helping with a video because I'm computer illiterate. Thank you for letting us have an extra night to get the extra people on. We're particularly concerned that Yogaville with sound, with clean everything and we're looking for how it's going to affect our

daily life. I've been voting, property owner, tax person for 36 years in this county. And I am from the District 5. I have worked at Yogaville all those years. I actually am a person in Yogaville that has lived on the property the longest of anyone. I came in 1979 and I've been on almost every committee we have over there. So I've suffered like you're suffering to serve on a committee and I've been a Chaplin for Hospice of the Piedmont. When I went to the Union Church the first night I was amazed because I went by three houses of people that I had been there with their grandparents or parents as Hospice patients so it's...we do a lot with that. We're very concerned for a number of reasons. We are one of the top growth engines for Buckingham County. We have a 5 year growth and a community expansion plan. We require a quiet and pristine environment to do our practices. Like everyone else we require clean air, water and soil. And our community and the residents are not assured by Dominion's inadequate plan, poor routing, and dangerous compression station placement. We're going to show you a particular site of a compression station and then infer on top of it the infra-red video. These are things that happen all the time and we can't see them, smell them or anything. But here's a compression station and there is what that same scene looks like with the emissions done in infra-red. And that's a blowdown of a station; I believe it's in Texas. Notice that the wind is carrying the emissions from the gas and the gas is heavier than the regular other things so where ever the wind is wind takes it quickly to that site. The particular building I live at Yogaville is 6.1 miles from here but we have other buildings that are even closer. Second thing is the compressor station blowdown and hopefully we'll be able to get this correct,

**Jeeva Abbate:** I can play that so you can at least here the sound (sound of blowdown).

**Sarvananda:** That's a blowdown that could happen at any time and it's a mild one according to lots of the things that we looked at. We'll also show you part of another one. This one shows a family that lives nearby the site and their kids are being scared and upset because of the noise and because of the different kinds of sounds. Just another thing of how a family living near the site would hear these sounds at any one time. So blowdown is a considerable problem.

**Bickford:** That's time.

**Sarvananda:** And the Comprehensive Plan of Buckingham County says that we're a rural agricultural forest area to preserve and enhance...

**Bickford:** That's your time ma'am.

**Sarvananda:** That's the time. Ok we've shown you the blowdown. That's what we wanted to do. Thank you.

**Abbate:** Thank you.

**Gormus:** Alright now we'll hear from Eleanor Amidon. We'll hear you first and she's on deck. Eleanor you're on deck. Ok.

**Vicki Wheaton:** My name is Vicki Wheaton. I live in Nelson County but I have many heart connections here in Buckingham. My newest heart connection is Pastor Paul. My heart is heavy with the circumstances of his recent arrest for standing up against the powers that threaten his beloved parish. I saw him do this once before here in Buckingham during a panel discussion that Dominion held under the guise of an open honest discussion of concerned residents have... that the residents had regarding the proposed compressor station. He asked two questions at the meeting. The first was why was there so many police officers present for a panel discussion? Dominion's answer was that they didn't know. But I knew this wasn't true because another member of the audience had asked one of the officers just that question. And the officer's answer was that Dominion had paid them to be there. I was appalled by this and even though the audience was told by Dominion that we couldn't speak, I spoke anyway. I said what the officer said. That Dominion representatives got very embarrassed and apologized. I was further appalled but sat down. Then Pastor Paul asked a second question. Why did Dominion hand the public panel members the volume of information that was about to be discussed as he entered the room instead of sending it to him ahead of time as promised for the logical reason that this was very complicated and technical information? Their answer was they wanted it to be very accurate and that this took longer than they had anticipated. The bottom line is they were very well versed in their accurate information but it was totally unknown by the public panel what was about to be...they had to discuss with those that had...and they obviously had an unfair advantage. Again I stood up and I challenged them. I suggested that between the lie they had just confessed to telling and the fact that the public panel needed time to digest the material they had just been given warranted this meeting be cancelled and reconvened at a later date. I was probably as shocked as Pastor Paul was when there was basically radio silence, no accountability and the meeting continued. I tell you this story so you hear firsthand the subterfuge Dominion uses to its advantage. There are countless other stories to be told but you've limit me to three minutes. However I leave you another subterfuge to contemplate. Why was Dominion allowed to enter the building before the public when you had legally publicized that it was a public hearing? Then Dominion representatives were allowed to take the floor for 45 minutes when you had already heard them in prior meetings. Public Hearings are for the public. If the public wanted to know the details of Dominion's project they would have attended prior meetings where they were discussed. The Planning Commission agenda is always published so residents can attend if they're interested. So I pray that you are brave enough to deny the permit...

**Bickford:** Time ma'am. Time.

**Wheaton:** Especially...

**Bickford:** Time, time. Thank you.

**Gormus:** Ruth Wagner on deck.

**Eleanor Amidon:** My name is Eleanor Amidon and I live in Nelson County. I come here because I am very concerned for my friends who live in Buckingham. The proposed compressor station of the Atlantic Coast Pipeline in Buckingham County would create an unwarranted imposition of pollution to the area. It would degrade the air quality of the Yogaville Historic District because of its proximity. The practitioners of Yoga who moved to Yogaville specifically chose this rural area because of its pure air and water which are beneficial for health. If built the compressor station would vent methane and emit other toxic substances into the air negatively impacting the health of everyone in the area. Commonly reported physical maladies of individuals living near compressor stations include respiratory impacts, sinus problems, throat irritations, eye irritations, nasal irritations, breathing difficulties, vision impairments, sleep disturbances and severe headaches. Another factor related to human health is that compressors emit constant low frequency noise which can have negative, physical and mental health effects. People of the Yogaville community practice and teach healthy life styles. If the air is contaminated by toxic emissions they will suffer personally and they will lose part of their economic base since attendance to their workshops will decline. The planned site of the compressor station is in a historic African-American area currently predominately inhabited by elderly people who would be especially susceptible to the adverse effects of breathing toxic emissions. Preservation Virginia has listed this community as a most endangered historic place in Virginia. A study in New York's Department of Environmental Conservation reported that quote "More than 40% of the air samples from compressor stations exceeded federal regulations for certain chemicals like methane, benzene and hydrogen sulfide." I object to defiling Buckingham County with the toxic pollutants that the proposed compressor station would generate. A new study by Synapse Energy Economics of Cambridge Massachusetts has examined the mid-Atlantic's demand for natural gas and has determined that no new natural gas pipelines are necessary to provide Virginia with its peak energy demands. Existing pipelines can supply more than enough fuel to power the region through the year 2030. The proposed Atlantic Coast Pipeline is unnecessary and the compressor station...

**Bickford:** That's time ma'am.

**Amidon:** Is unnecessary.

**Bickford:** That's time. Thank you.

**Bowe:** The last two have been from Nelson County.

**Gormus:** I know. I've got one more from Buckingham. Ruth Wagner. You here? Are you here? Are you Ruth? Ok. I assume that Ruth is absent and she gives up her time. All the rest are from...

**Bickford:** Alice.

**Gormus:** Who's Ruth? You are Ruth?

**Ruth Wagner:** I am.

**Gormus:** Ok. Come, come. Come Ruth we are waiting for you.

**Smith:** You didn't win anything.

**Bickford:** No, no prizes. We didn't give any prizes.

**Ruth Wagner:** Hopefully I'm going to...

**Smith:** And your last name?

**Ruth Wagner:** Wagner

**Smith:** Ok is that who you were looking for?

**Bickford:** Yes that's who. Ruth Wagner.

**Ruth Wagner:** I think I'm number 53 if I remember.

**Gormus:** Yes Ruth go.

**Ruth Wagner:** Are you ready for me to talk?

**Gormus:** We are ready and waiting.

**Ruth Wagner:** Ok. Hello everybody. I am calling this place one of the cleanest places in the east coast. There's a surprising amount of pollution on the east coast that people probably aren't aware of. And people don't think or give much value to clean air and clean water and clean soil because they don't know how wonderful it is to be healthy. A lot of more and more people are eating organic food. They go to Whole Foods and spend a fortune and you wonder what in the world are these people doing. Well they're trying to stay healthy and they're trying to avoid cancer. People are getting really tired of having cancer and having all these weird diseases come up. So we're kinda in a way on the cutting edge of a new life that's going to be taking over hopefully in America where we're going to become healthier as a population. And there's an opportunity here for us to start a new economy of you know organic growing and healthy whatever you guys want to grow. You know like this is an agricultural area and it's also an area for people to live that want to have a healthy lifestyle and the value of being able to breathe and walk and be happy is enormous. And a lot of people forget it. They forget how valuable it is. So I just want to say I know you know from some studying I've done the compressor station emissions that can literally take a couple of thousand years to clean up. It's not light stuff. It's benzene and it's some really serious toxins that come out of the emissions. There may not be a

lot of heavy you know tons, it is a lot of tons but it's not a lot of them, it's more the toxicity of those tons that are coming out that is the danger to all of us. And we are giving up a lot of quality of life. And so I'm in hopes that you guys will consider the long term for the future generations but also for your own personal health and the health of those here. We have a very weak you know economy compared to a lot of places. We have a low population. We have low education. You know we have a lot of these things that are not really inspiring I suppose. But we have clean air which is hugely valuable. So I just hope you consider you know when you make your decisions that this is so much more valuable than people give it credit for. So thank you so much.

**Bickford:** Thank you.

**Gormus:** Ok call on Swami last name Gurudoranavanda.

**Oba:** She could not be here. She's asked me to speak on her behalf.

**Gormus:** Is that allowed or no? Mr. Chairman I call on you.

**Bickford:** She couldn't be here?

**Gormus:** She was not here...she was not here at the last meeting and gave up her time to this lady and now she's not here again and wants to... Words of wisdom please Mr. Chairman.

**Oba:** She's elderly and she couldn't be here.

**Bickford:** Well my question is if she already had somebody speak on her behalf...

**Oba:** No. Nobody took her place.

**Gormus:** A lady by the name of Vidya, last name Nonda.

**Oba:** She signed up. Gorucharananda signed up on her own.

**Gormus:** Ugh no.

**Oba:** Yes.

**Gormus:** Well I don't know my paper says circle and her name was there.

**Cobb:** Page 3 #4 was the one who spoke last time. I think just moved up in order but they both signed up.

**Bickford:** So she did sign up? She just didn't get a chance to speak. And nobody spoke on her behalf? Ok I'll allow it then. Come on.

**Chad Oba for Swami Gurucharanananda:** So I'm speaking on behalf of Swami Gurucharanananda also known as...

**From Audience:** Speak into the mic.

**Oba:** Oh I'm sorry. I'm speaking on behalf of Gurucharanananda also known as Modachi. She lives in Yogaville District 5. This reads "I am deeply concerned about the negative health impacts which can be caused by the air pollutions from the compressor station. I'd like to bring to your attention a list compiled by Pennsylvania Alliance for Clean Water and Air which lists over 21,500 people who have experienced various health problems caused by pipeline infrastructure. Health damages from compressor stations are included in the list. This list has been submitted to you to all the Planning Commissioners. I ask that you consider having a comprehensive health impact assessment study done to protect the health of Buckingham citizens especially our children, elderlies and special needs population. Earlier this month Dominion's Leesburg's compressor station had an incident that caused more than 100 emergency calls. There's too many risks much that needs to be studied and considered well before you allow a heavy industrial compressor station in the midst of rural densely residential area. This is our home. Please either deny or require more study. Thank you."

**Bickford:** Thank you.

**Gormus:** Ok we have up next Lena Davis. Yes, no? Absent? Ok absent gives up her time. Louis Zeller. Yes?

**Bowe:** Did he speak last time?

**Gormus:** He did not speak last time. He...his father-in-law last time. John Ausenault is on deck. Present? Yes? Time. Reset time please. Thank you sir, ma'am.

**Louis Zeller:** Thank you. My name is Lou Zeller and I'm Executive Director of the Blue Ridge Environmental Defense League. Thank you for allowing me to speak here tonight. Blue Ridge Environmental Defense League has identified two fatal flaws in the proposed compressor station's Special Use Permit noise pollution and toxic air emissions. Toxic air emissions have been covered by my colleague Mr. Michael James-Demaro. I will talk about noise pollution. Noise alone must lead to denial of the Special Use Permit. Sound is measured on a logarithmic scale. The difference between 55 decibels outlined in the permit and 60 decibels is not just a few percentage points. It's a difference of 5 times as loud. Sound travels at 786 miles an hour in dry air. It travels at 3,300 miles an hour in water. Moisture in air affects the distance and the intensity of sound levels. Persistent unpleasant levels of noise produced by compressors running 24 hours a day lead to high blood pressure, heart disease and diabetes. Allow me to play an

example of that noise for you now. (Plays noise.) Right now your blood pressure is probably going up because of the stress created by this noise. This is noise pollution. The Special Use Permit totally lacks an enforcement mechanism.

**Bickford:** That's all sir.

**Zeller:** Buckingham County has a legal responsibility...

**Bickford:** That's all sir.

**Zeller:** To safe guard its residents. Thank you.

**Gormus:** Laney Sullivan on deck.

**From Audience:** She's not here.

**Gormus:** Absent gives up her time.

**John Arsenault:** Hello my name is John Arsenault. I live in Prince Edward County. And I'm here to support this pipeline and compressor station project in which I feel will be a benefit to Buckingham County. I base this support on my background. In 1971 to 2001 I lived in Alaska and worked in the oil and gas industry up there spending many years in the trucking construction and oil field support services. I worked on the Trans-Alaska Pipeline with artic drill rigs across frozen ocean artic ice, worked inside large, you could say huge oil fields facilities, worked outside in wind chill factors that hit 110 degrees below zero. Working inside is better. Basically I've lived and seen the whole oil and gas process from drilling oil rigs to delivery of petroleum products to gas stations. My personal experience there is why I support this project here. There are three areas I would like to discuss. I personally witnessed engineering design adaptations that addressed and mitigated the fears and concerns heard during these public hearings. Earthquakes was one of them. In 1964 Alaska experienced a 9.2 Richter scale earthquake, largest ever recorded in North America. As a result the entire Trans-Alaska Pipeline system was designed to withstand large quake events and during 40 years...in the last 40 years in Alaska has experienced dozens of quakes larger than the 5.4 one here with no damage to the pipeline. I've also worked in pump stations and gathering centers that are over 10 times larger than the one proposed here. These facilities are safe. They're quiet and a marvel of American engineering. Prudhoe Bay has a 40 year record of safe operation in American's harshest and most delicate environment. And I'll testify to that which is reflective of what to expect here. Significant tax benefits to the County will greatly increase the quality of life here. The... as an example of what can happen, living in Alaska for 40 years Alaskan has had no state income tax, no state sales tax and pays every living resident in the state an oil dividend of over \$1000.00 to \$2000.00 a year. Run well you folks could do something similar here.

Audience talking.

**Gormus:** Shhhhhh...

**Arsenault:** And that's all. I'm out of time. Thank you.

**Bickford:** Thank you. Thank you. No I'm going to remind you please I asked not to interrupt when someone is speaking. And I'll only ask this the last time.

**Gormus:** Can I have the speaker Phil Teel? Phil Teel. TEEL He's absent. Gives up his time. The Rev. E. Weston Mathews.

**From Audience:** Rev. Mathews couldn't come but I'm his parishioner. I have his statement if you'll let me read it.

**Bickford:** We'll accept that.

**Gormus:** Yes sir.

**Bickford:** Can you give you name?

**Robert Dulday for Rev. Mathews:** Sure my name is Robert Dulday. I'm a member at the Episcopal Church in Richmond where the Rev. Mathews has preached and I have a statement on his behalf. I bring a statement of faith from him. When you've heard from all the citizens of Buckingham County you'll have some choices. Among those choices does not have to be that the heart of Virginia will be a sacrifice zone which could happen with a compressor here. In Virginia we have a long tradition of resisting forces that undermine the places that we love. The mountains that we call home, the rivers that give us life and the people we love the most, our elders, our children, our grandchildren and the generations to come. Around Virginia we have a dark history of massive resistance. It's born of a legacy of chattel slavery and racism of extractive energy in the form of human bondage of commodified souls and bodies. No more. Now we're called to new form of massive resistance. Resistance to that feeling fossil fuels that must be kept in the ground for the survival of our species and resistance to investments in new infrastructure which would entrench the use of those fossil fuels. That extraction divides us from each other and divides us from creation, the source of light and life in which we live and move and have our being. Tonight we stand with Union Hill, with Yogaville, with Buckingham and thousands of protectors around Virginia and its Standing Rock in North Dakota fighting for their scared land, their scared water and their children. Their spirit is our spirit. And it was in that spirit that the Rev. Paul Wilson of Union Hill joined 22 others including myself from around the state to takes acts of civil disobedience to be arrested in front of the Governor's mansion two weeks ago. Our asks are simple. No compressor station, no pipelines. We need each other. Climate justice is what love looks like in public. Thank you.

**Gormus:** Mary Beth Keller.

**Mary Beth Keller:** Good evening. I'm Mary Beth Keller. And I'm a property owner in Buckingham County. I attended the last meeting. It was heartbreaking to hear our neighbors tell us how they are going to suffer from Dominion's compressor station. The sole purpose of Dominion is to provide more profits for its shareholders. To assume that this purpose coincides any way with the good of Buckingham County would be a serious mistake. Let's take a look at Dominion's presentation. Dominion discussed emission levels from their compressor station. But if they are not in our county the level is zero. They said safety is their number one priority. But if they are not here we will not have safety problems caused by them. They believe it is better to put the compressor station here in a low population area. Is there some reason it's not to expose more people to their compressor station? Finally let's examine their claims that they will pay 8.5 million dollars over 8 years. That would be taxes that they would be required to pay. They are giving us nothing. Eight point five million dollars over 8 years is pennies to them. Let's put this in perspective. According to Forbes as of May 2016 Dominion Resources' revenues are 11.58 billion. Their assets are 58.8 billion and their profits are 1.9 billion. Our lives, our health, our peace and quiet, our religious institutions are not for sale. In light of Dominion's presentation I have two questions. First why are we here in Buckingham County? We are here because we want to enjoy the quality of life that only a rural area can provide. We want fresh country air without pollution from Dominion's compressor station. We are here to exercise our freedom of religion without a noisy compressor station right next to our places of worship. The benefits of the pipeline and compressor station will go to Dominion while the residents of Buckingham will pay the price. My second question is does the Planning Commission serve the residents of Buckingham County? Our Comprehensive Plan was written to protect us from just this sort of situation. It is your responsibility to protect us from pollution, to a graded quality of life and dangers to our health. You are not responsible for this large corporation that only cares about profits for its shareholders. I sincerely request the Planning Commission to act in the best interest of the citizens of Buckingham County and deny the Special Use Permit for the compressor station. Thank you.

**Bickford:** Thank you.

**Gormus:** David Klein. David Klein.

**David Klein:** My name is David Klein. I'm a resident of Buckingham County. My bride and I were at the last meeting. In fact on the way up...on the way out at the last meeting she signed me up to speak and that's why I'm here. And if any of you know my bride you know why I'm speaking. Actually I speak for our family who's been in Buckingham County for a long time. She lives on a farm that's been in her family for about 75 years. These folks are good folks. They are not here for our benefit. They're here because they need you to say yes to a project that will bring benefit to them but not a lick to us. I ask you to say no. Thank you.

**Gormus:** So ends the reading of all the names that had signed up.

**Bickford:** Does that agree with what you have Ms. Cobb?

**Cobb:** I'm doing one last check but I think so.

(Inaudible.)

**Gormus:** Yes she just spoke.

**Bickford:** That's everyone? Ok. Alright we'll close the public hearing now. Mr. Toms will you come forward? Normally at this time I would allow the applicant to answer any questions that had been posed. I'm going to suggest to the Commission as well as yourselves...we've got a lot of information here and what I would like to do is just close and reconvene next week and go into the questions. That will give you time to prepare. It will give us time to go over all this information and get our questions together if that's satisfactory?

**Toms:** Certainly. That's certainly good with us. We had prepared for tonight but we've gotten more questions so that will give us time to cover it all. And we'll look forward to doing that next Monday night.

**Bickford:** Ok. I would rather do that rather than doing some questions now and then having to go back and start up pick it up next week. We'll just go right into it and give both you time to fix as well as ourselves.

**Toms:** I appreciate your consideration. We'll certainly try to address all of the things that have come up here tonight and be glad to address anything that you come up with between now and then or that night so.

**Bickford:** Ok.

**Toms:** We look forward to that. And we're going to convene at 7?

**Bickford:** Yes now we do have 2 public hearings before that, three excuse me yes. I'm sorry Mr. Spangler has 2 doesn't he? So it will probably be 7:30 maybe quarter to 8 and we'll reopen then sir.

**Toms:** We do have a health study that's been done by FERC that we have submitted to you and get an opportunity to look at that so. Several questions have been asked about doing health studies. FERC has done a lot of those and a lot of those questions are addressed.

**Bickford:** Ok.

**Toms:** And those studies we'll certainly share that with you ahead of time and we'll also be glad to address any of the other stuff that we have heard here tonight. Thank you for your time.

**Bickford:** Ok. I appreciate that sir. Alright what I do need is...

**From Audience:** Can I ask a question?

**Bickford:** Yes quickly sir.

**From Audience:** If they're going to get a chance to present something else again will we have the chance...I just want to make sure that I'm following this. Will we have a chance to refute or some type of rebuttal? They're speaking for a corporation. They're not speaking for us.

**Bickford:** Right. That's what the Commissioners are here for.

**From Audience:** What was that?

**Bickford:** That's what we're here for the Commissioners. When an application...he'll just give some answers to questions we ask on behalf of ourselves as well as the County's questions and comments and everything that have been provided in the public hearing.

**From Audience:** Oh ok alright.

**Bickford:** Yeah so you...but they do have a chance to answer those questions so we can try to conclude and get answers to the community but also for ourselves before we make a decision.

**From Audience:** You're waiting to ask your questions then. You're not going to give them your questions.

**Bickford:** No sir.

**From Audience:** They're going to have to answer them on the spot.

**Bickford:** Exactly.

**Maxey:** Well they've gotten quite a few questions from you all.

**From Audience:** Say what now?

**Maxey:** The citizens have provided quite a few questions.

**Bickford:** Right. There...

**Maxey:** Well they need to address your questions.

**Bickford:** They'll respond to a lot of the questions and comments that have come up at the public hearing next week.

**From Audience:** As I'm taking my seat when they provide the answers they just going to provide the Dominion answers? That's all I wanted to ask to make sure.

**Bickford:** Well they'll provide their side yes sir.

**From Audience:** Their side?

**Bickford:** Yes sir.

**From Audience:** Ok and we know what their side is. That's all.

**Bickford:** Ok.

**From Audience:** What time is the hearing?

**Bickford:** I'm sorry.

**Gormus:** What time is the hearing? Our meeting starts at 7.

**Bickford:** The meeting starts at...I'm sorry I didn't hear you. The meeting starts at 7. That will probably like I said we have 3 public hearings.

**Cobb:** Are we recessing to reconvene. Does that mean that we need to...

**Bickford:** Recessing to reconvene because technically I don't feel like we finished...

**Cobb:** Does that mean that we need to set a different time than what we originally scheduled when we recess to reconvene?

**Carter:** Next month's the regular meeting right?

**Bickford:** Yeah we just...

**Bowe:** You all are making this too complicated.

**Carter:** This is a continuous of the current meeting?

**Bickford:** Start at 7:00? That's what I was going to say.

**Wright:** (Inaudible.)

**Bickford:** I can't hear you Mr. Wright. You're going to have to come in.

**Wright:** You can start early. Since you're recessing to reconvene you can start earlier and take whatever you want to do in regards to that and then do your regular meeting.

**Bickford:** And then start the other meeting?

**Wright:** It is purely the Boards pleasure.

**Bickford:** Ok. Alright. Why don't we do this? And if this sounds satisfactory we will start at 6:00 reconvene, finish out this and then we'll do the public hearing...I mean we'll do the regular meeting at 7:00. Is that satisfactory?

**Bowe:** I'm not sure one hour is going to answer all these questions.

**Wright:** Once you reconvene you can always when you get to the 7:00 hour stop and then come back.

**Bickford:** We'll do our best. How about that? Alright so we will reconvene at 6:00 next Monday and answer questions as well as Dominion Power. And then at 7:00 we'll start our regular scheduled meeting which will entail the 3 public hearings. Alright with that I guess we need a vote to do that Ms. Cobb for the record? Do we need a vote to do that?

**Wright:** You don't need a vote at this time. Recess to reconvene.

**Bickford:** Alright very good. Alright Commission Matters.

**Re: Commission Matters/Concerns**

**Bickford:** Mr. Maxey has something.

**Maxey:** I have one. I'd like to thank the citizens for coming out and expressing their concerns. It's important in the process. We had a, I don't know 7 or 8 years ago, a pipeline come into the County. Bear Island was built. Not many concerns made. A lot of concerns now. Good to see everybody out. I appreciate it. I would like to ask the Commissioners at the next meeting I have a gentleman that I would like to bring before the Board who had experience. He actually was a nuclear plant operator, one of four that ran the nuclear plant in Maryland and he can put some of these numbers that I don't understand with respect to compressor stations as far as megawatts comparing them to how what they produce, what revenues they provided to the county and he can do a better job of it than I can. I would like to ask the Commissioners if that would be somebody they would like to come up and talk.

**Bickford:** How does the Commission feel about that?

**Smith:** Yeah.

**From Audience:** Is he (inaudible) the pipeline?

**Maxey:** No he's not associated with Dominion. He's a resident of Buckingham. He grew up in Buckingham and a good friend of mine Charles Morgan. He's been in Buckingham all his life until he went away for college at the Naval Academy and after the Naval Academy he...

Audience Members Talking

**Gormus:** Shhhhh.

**Maxey:** After the Naval Academy he served his country and then he came back to Maryland and ran a nuclear plant for 20 some odd years. He's retired. He's got a lot of experience with the very thing we're dealing with now. I think he would make an excellent resource person and I've talked to him and I just want to ask the Commissioners if they would like to hear him. If not that's fine. He's good at comparing apples to apples, not apples to oranges.

**Bickford:** Ok apparently it looks like it's consensus the Commission will be fine to hear him. I'd like to get some clarification on some of this stuff myself. I don't know, I also talked to Ms. Cobb, she's in touch with representative of DEQ and may ask that they come and talk a little bit too in regards to the restrictions and criteria that they have...that Dominion has to meet to build the plant and protections for the environment from that so. I thought maybe that might be also something to do if the Commissioners are fine with that.

**Maxey:** I think so.

**Bickford:** Ok. Ms. Cobb...

**Maxey:** They're a regulatory agency.

**Bickford:** Right. Alright any other commission matters? Seeing none we'll go into recess...which we'll recess. Excuse me I'll get it right.

**Re: Recess to Reconvene**

There being no further business, Chairman Bickford declared the meeting recessed to reconvene on October 24, 2016 at 6:00 p.m.

ATTEST:

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Rebecca S. Cobb  
Zoning Administrator

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John E. Bickford  
Chairman

**Buckingham County  
Planning Commission  
Regular Meeting  
October 24, 2016**

At a regular meeting of the Buckingham County Planning Commission held on Monday, October 24, 2016 at 6:00 p.m. in the Peter Francisco meeting room, located within the Buckingham County Administration Complex, the following members were present: John E. Bickford, Chairman; Alice T. Gormus, Vice-Chairman; Patrick Bowe; James D. Crews; Sammy Smith; Chet Maxey; and Danny R. Allen, Board of Supervisors' representative. Royce Charlton, III was absent. Also present were Rebecca S. Cobb, Zoning Administrator; Rebecca S. Carter, County Administrator; and E.M. Wright, Jr., County Attorney.

**Re: Call to Order, Invocation and Pledge of Allegiance**

**Bickford:** I'm going to reconvene the Planning Commission meeting. Please come on in and have a seat as orderly as you can. A couple of announcements. One, as usual, please silence or cut off your cell phones. We have a lot of people here and a lot of discussion to do. I ask again that you show courtesy. We've finished the public hearing but Planning Commissioners will be asking a lot of questions to the applicant. It's very important that we hear those answers so we can make replies. I would suggest that you in the audience take notes as you listen to the information too. It may be valuable in the future for you. The third thing is the sign-up sheet. Mrs. Cobb has put a sign-up sheet out there to sign up and it's for the public comment period. If you want to speak at that. We do have three public hearings. Those sign-up sheets are not for that. Only the public comment period. Alright, with that, would you please stand as Commissioner Smith leads us in the invocation and Commissioner Bowe will lead us in the Pledge of Allegiance.

**Re: Quorum Present**

Chairman Bickford certified there was a quorum – seven of eight members were present. Commissioner Royce called today from the hospital. He has a serious family health issue. He apologized to the Commission for not being here, as well as the citizens and applicant. That was more pressing for him.

**Re: Adoption of Agenda**

**Bickford:** With that, Mrs. Cobb, any changes to the agenda?

**Cobb:** Yes, you have the amended agenda before you.

**Bickford:** Is there a motion to approve as presented?

**Allen:** So moved as presented.

**Gormus:** Second.

**Supervisor Allen moved, Vice-Chair Gormus seconded and was unanimously carried by the Commission to approve the agenda as amended and presented.**

**Bickford:** Mrs. Cobb, you say those are out for the public. Where are they at?

**Cobb:** The agenda is on the table as they enter the doors.

**Bickford:** Ok. Did everyone hear that? The new agenda is on the table at the door. Alright.

**Re: Discussion-16-SUP236 ACP Compressor Station**

**Bickford:** Mrs. Cobb that brings us back the compressor station. Do you have anything to introduce or we can move forward to the questions?

**Cobb:** I would just draw your attention to a couple of things. Included in your packet was some emails between myself and DEQ. They could not be here tonight due to the short notice. I have also mentioned that I contacted EPA. At the time I put your packets together I had not heard from them. I have now received an email from them that said basically that they would be happy to answer any questions that you have just the way DEQ has so if you have some questions for them, if you could get them to me and they will...I think they are planning on drafting a letter or something like that to answer any questions that you have. Also, I have other attachments. One from ACP as well as several from the public. There are the conditions as were edited on 8/22 for your consideration.

**Bickford:** Thank you Mrs. Cobb. Any questions from the Commission for Mrs. Cobb before we start the discussion?

**Smith:** I don't believe so.

**Bickford:** Ok. Mr. Toms would you step forward to the podium. I know you had a slide show but you decided to hold off on that and let us ask some questions. It's necessary to show that?

**Toms:** We do. I want to thank you for having us here this evening and we do have some slides and subject matter experts. We have our operations, engineering and construction folks here tonight, so we thought it might be more valuable to address those questions that you may have and we do have some slides we can refer to. We want to direct it toward answering your questions. We really heard a lot of questions about safety and fire prevention and those kinds of things so we have our operations manager here, and director here, Kevin Zink. We'd like to start off with him just to give you a review of what we do and how we interact with DOT, like Transco does in this area. You have a compressor station in Appomattox and a compressor station on Transco in Albermarle County/Fluvanna line there. So Kevin Flippen, your Emergency Management Coordinator is very familiar with how Transco trains and we'll be

required to do the same thing with the local fire departments and those kinds of things once we are here so with that, I'd like for Kevin to start off and we'll entertain any questions you have and try to address those as best we can. Kevin Zinc is our Director of Operations for our compressor station and pipeline.

**Kevin Zinc:** Good evening, sirs. Again, my name is Kevin Zinc. I'm Director of Operations with Dominion Transmission. I've been operating natural gas facilities for Dominion for the last 37 years. Currently I live in Leesburg, Virginia. Dominion right now operate 109 compressor stations across 5 different states. There's 308 engines associated with those stations. Over 800,000 horsepower that we operate. We actually have 5 stations that we operate in the northern Virginia area. From our standpoint, one of the critical core values of our company is the safety aspect of it. I know you've heard a lot of comments relative to that. That is something that is a primary focus from the standpoint of our employees. One of the things that I'm really proud of with our group, is as of November 12<sup>th</sup>, we will have achieved 8 years without loss or accident with our employees that work in Pennsylvania, Virginia, and Maryland. That's a real significant safety focal point to our employees as well as the public. When we design, construct, operate, and maintain these facilities, that is our core value, the number one thing we focus on. We work a lot...of those 109 compressor stations, a majority of them are located in areas very similar to what we have here in Buckingham County. We work with a lot of volunteer fire organizations, county emergency responders. We've got a lot of training interaction. We have those folks into our facilities on a routine basis, pretty much annually. More if they request. We do training with them. We do fire schools with them. We do simulations where we get the emergency responders from a county together and do a mock up drill. Bring them in the facilities to see what we have onsite. Talk about how to respond to a natural gas emergency and what to do in the event if we have a situation. Very fortunate from our standpoint, of the 109 compressor stations we have we have very few issues that we have to involve the emergency responders. When we do from our standpoint, it is to develop a safety perimeter and let us go in and address the issue. Also, I wanted to mention from a compliance standpoint, that is a very focal point for us, we are regulated from a number of federal and state agencies. The Federal Energy Regulatory Commission, DOT Pipeline, PHMSA, Pipeline Hazardous Materials and Safety Administration, the Virginia DEQ, the EPA and a number of local municipalities as well. We are subject to regulatory inspections by those agencies on an annual basis. Through the end of September, we've had 54 regulator agency inspections at our facilities. Each one of those inspections entails dozens and dozens of inspections. Anything from air, water, waste, is primarily what they are focused on. To date, of those 54 inspections, we've had one identified deficiency. We are very proud of that. We really work hard to ensure compliance with all of our facilities with all of our regulations that govern how we operate and maintain our facilities. Those are just a couple of points I wanted to make from a safety and compliance perspective and again we look forward to working with the local emergency responders here in the County and fire department basis to get to know them and work with them. Like I said, we have lots and lots of volunteer fire companies with deal with across our 5 state area that we operate facilities.

**Bickford:** What is normally the manner or form of equipment that you provide to the county volunteer fire departments?

**Zinc:** From the standpoint of equipment, that's nothing that we routinely supply. We do have monetary contributions that we give out to local fire companies on an annual basis. But in terms of equipment from our standpoint in terms of the compressor station, the compressor station is set up with controlled protocols in such that if there's an emergency in the facility in such that it needs to be shut down, it's isolated from the main pipelines and gas is vented from the facility so there is really, there is really nothing at the facility that burns. It's all metal and steel. The buildings are all metal, the pipes are steel. It's just really setting up the safe perimeter and there might be a couple ancillary fires but the gas is vented out. If that occurs, our facilities are designed in 5-8 minutes all the gas is vented in the event of an emergency situation.

**Maxey:** There's been some concern with the communication, realizing you are not going to be here. You are going to be in West Virginia, so we've been told, the system...it's important to know the system that communicates through Wi-Fi, fiber optic, I don't know what you're going to use. Can you speak to that?

**Zinc:** Our primary communication system will be our own microwave system that will utilize...actually we are going to have the tower here in Buckingham at the station so we will communicate with our own microwave system. We will have approximately 9 people who will be working full time at this facility. We expect to hire some local people to work at the facility. A lot of times the people that are working at our facilities are also volunteer fire fighters. It's not uncommon for our employees to be volunteer fire fighters and such. So they will have that and will be there...we are shut up with duty people even though there are not people there at night, there are people that are identified to respond in the event of a call out situation.

**Maxey:** Compare this compressor station to the others you have. Is this the largest one or a medium sized one?

**Zinc:** I currently have the responsibility to operate one of our facilities in north central Pennsylvania, called our Leidy facility and there's at that complex, there's 20 engines comprising 59,000 horsepower. We are expanding our one facility in Pleasant Valley in Northern Virginia, will be 82,000 horsepower as of next spring.

**Maxey:** Ok.

**Bowe:** I can see where if a fire broke out, you could cut off the valves and so forth.

**Zinc:** Yes, sir.

**Bowe:** What happens at 2:00 a.m.? No one's on site. No one, here comes a couple four wheel drive vehicles down the power line. They pull up beside the fence, they hop the fence, it's only 6-7 feet tall, and they throw charges every which way and there's a massive explosion. How is the aid from West Virginia going to help this?

**Zinc:** The isolation valves are underground. I couldn't sit here and tell you specifically that if they knew where to charge underground right at that valve that they couldn't do something.

Those valves are going to be 3-4 feet deep and they are still made to isolate. They are a fail shut kind of operation to isolate the compressor station from the pipeline facility. That way there is no gas coming back off the pipeline into the compressor station.

**Bowe:** If they get closed before damage is done to them.

**Zinc:** I guess depending on where they put a charge.

**Bowe:** I'm not a terrorist, I don't know.

**Zinc:** We do have a security team. We have a very robust security group out of Richmond office.

**Bowe:** It's over an hour away. Well over an hour away.

**Zinc:** What we do...we do a lot of work with the local law enforcement. We do a lot of work with the FBI because these are considered critical infrastructure facilities...

**Bowe:** I bet you the nearest FBI agent is 2 hours away. We've got a sheriff with a bunch of fine deputies that carry pistols. We are talking about realistically you could be creative and terrorists started in this county. Now, how do Sheriff Kidd, what are your plans for him?

**Zinc:** We work with local enforcement people with our security folks. We meet with them at least on an annual basis to talk about those kinds of scenarios and what we would do in the event that we have a scenario like that occur. We do. Our security people come out and meet with local sheriff's and state police regarding the security aspects of the facility. We will have cameras and we will have monitoring equipment at the facility.

**Bowe:** I hope it's enough.

**Zinc:** We operate 109 compressor stations and to date we've never had a terrorist.

**Bowe:** They might be in other places. Right now to me this is the most attractive target in Buckingham County. Better than any I know of.

**Maxey:** This will be an expense to the county too because we don't have the personnel to deal with it. I think you need to address that.

**Bowe:** We can condition yall. We are well aware of how to do that.

**Zinc:** Like I said sir, we work with a lot of local law enforcement to ensure that we address security protocols and concerns of all the counties that we have these compressor stations. We've got a really great working relationship with those individuals.

**Bowe:** I'm sure you do as long as something big doesn't occur. We are trying to prevent something big from occurring. I don't see how TV cameras and so forth help us. I mean it takes two minutes once these people are inside to do whatever it is they are going to do.

**Zinc:** Again, we have the controls in place to isolate the facility. That is what our design is made from and that's what it's intended to do. So, with facilities isolated it blows down within 5 minutes and that's the end really of the immediate threat from the standpoint of any gas issue.

**Bowe:** I'm listening.

**Zinc:** I can't stand here and do a what if scenario like that. I apologize. I can speak to what my experience has been the last 37 years. I can't guarantee that wouldn't occur, what you are referring. But we do everything from our perspective that is in our power in a security perspective to insure that the facilities are secure and the people there living in the area and the local law enforcement are aware of how to respond to those situations.

**Gormus:** I have a question, is there a reason that it's not manned at night?

**Zinc:** These are remote operated facilities. The majority of the facilities that are on our gas transmission lines like these are operated remotely by our gas control. They see all the information. They can stop and start the engines remotely. From our perspective, we operate dozens of the facilities like this for many years since operations made it available for us to do that and it's a proven way for us to operate the facilities.

**Gormus:** Is it possible to work into your plan that someone would be there? I mean, what I'm hearing from a lot of people is they don't think that yall think it's safe enough for someone to be there overnight. Truth, fiction, I don't know. They have a fear that yall are not comfortable enough for one of your employees being in there and they are not comfortable enough with it being in their back yard. It's your job to address these fears.

**Zinc:** I guess to answer your question, we have many facilities that are not manned. We do have some of the larger storage facilities that are much more complex operationally that are manned 24/7. So to answer your question, we do have some facilities that are manned 24/7. Yes, maam.

**Smith:** I have a question and you don't have to answer this right now. Were you ever in the military? Pause, don't answer it. Did you ever guard something that was remote and you felt it was unnecessary to be there to guard it? Don't answer. This is how some people are feeling right now. They don't want somebody to lock the door after the horse is out. They want somebody to be there. I haven't heard anything about anybody saying special ops needs to be there. Somebody needs to be there. Ok.

**Zinc:** Again, we don't have a design right now...we have a design to have approximately 9 people to people to be at this facility on a normal routine basis to be their work location. There will be a duty supervisor that will be on call 24/7 to be able to respond to emergency and then

there will be a compressor station operator that will be responsible for the facility that will also be on call. We operate all of our facilities in Northern Virginia are operated this way. This is the way we operate them. The way this facility is going to be operated.

**Maxey:** Another question along the safety issue. The question was brought up by a citizen here. You are tied into a line that you can go either Transco or take it down to North Carolina. Transco is a 50 year old line I think. It was built when I was a little kid. Is that...explain to me how you are going to take 12,000-1200 lbs. of pressure and put into a line that is 50 years old?

**Zinc:** We have many interconnects with gas transmission companies similar to Transco. Our pretty much in the northeast, right now in my operating area, we have several interconnects with Transco and Spectra, National Fuel, and how we operate those facilities...you are correct in that Transco pipeline operates...I don't know exactly what their maximum pressure is but somewhere in the 700 lb. range in that range, and we could be operating up to 1200 lbs. When we design our facilities and we subsequently operate and maintain them, there are control features what we call regulation valves that basically regulate the pressure between the facility and those are redundant...there is a primary and a secondary valve so if the first valve would have a malfunction issue, the second valve picks it up. We will have more than one delivery...there will probably be a couple delivery points there in the design when we make it. That's a standard industry practice to have a regulation between a higher pressure and lower pressure facilities. We do that pretty much everywhere we have interconnects.

**Maxey:** You also, there is a different classification that you are regulated by. You only have to inspect it so often. You are at the class that you actually have to inspect it but so often. Is...speak to that...I mean...

**Zinc:** The DOT, and PHEMSA regulates the operation and maintenance of a natural gas facilities. We literally do hundreds of inspections every year to validate compliance with a number of provisions and regulations. Like those valves I was talking to you about, those valves are inspected on an annual basis and tested and monitored 24/7 by our gas control. Gas control can operate those valves remotely as well as our people on the ground being able to do that. We are regulated by the DOT, PHEMSA. We literally monthly do hundreds of inspections to validate compliance within the compressor station and also the pipeline facilities. They audit us on a routine basis. They will audit our facilities and look our records to validate we are in compliance.

**Bowe:** You adjust the gas up to 1200 psi, if you had just compressed the gas up to the compressor station up to 1200 psi, are you saying again that you are putting it into another line that's only 700 psi?

**Zinc:** There is equipment that we call regulators, gas regulators that regulate that pressure to ensure that the pressure that goes into their line is not above their maximum allowable operating pressure. Its industry standard. We do that with all interconnects that we have.

**Bowe:** So you don't need a decompression station. So if Buckingham wanted to hook into this line, you could put up one of those valves rather than a decompression station? Is that what you are saying?

**Zinc:** You mean if Buckingham County wanted to...

**Bowe:** Yeah, if Buckingham County and these people all of us wanted to hook into it?

**Zinc:** What we would do in that case is a measurement regulations station where we would basically...

**Bowe:** Decompression station.

**Zinc:** Well, it's a regulation basically controls the pressure delivery to the customers. Again, we do that all over...down here we do it to WGL, Washington Gas Light, Baltimore Gas and Electric, all the way up to New York State where we make deliveries to the National Grid System. It's one of the big things that we do is supply natural gas to utility companies.

**Bowe:** I get totally confused. We are here because you want to put a compressor station in.

**Zinc:** Yes, sir.

**Bowe:** There has been no mention of a decompression station.

**Zinc:** You were just asking me, I thought sir, if Buckingham County wanted or the area wanted to have natural gas service, what you do in that situation is you would put in just basically is just a meter and regulation valve.

**Bowe:** Fine, but you just said you could reduce the pressure from 1200 to 700 psi in the Transco line without a decompression station.

**Zinc:** Yes, sir.

**Bowe:** Well, I'm asking then what about that valve you are speaking of there. Why couldn't we install one at some point? The same valve that you are talking about using?

**Zinc:** Instead of a decompression station. Engineers want to help me out on this.

**Toms:** It's the same thing we are putting at the compressor station. Same thing we've talked about.

**Bowe:** Ok, so you are putting in a decompression station as well as a compressor station?

**Toms:** No, it's basically a meter and regulation. It's kind of like a propane tank on your grill. You have a regulator out there on a propane tank to step the pressure down. That's what we are

doing. That's the same thing needed with the M & R we've talked about with Buckingham tap and those kinds of things. That's what we are doing at the station and the same thing we'd do on the line if we did a tap off of it.

**Bowe:** Ok, I'm just looking for a cheaper way out of this thing.

**Toms:** We are putting the same thing in the station. That's basically what he's saying.

**Bowe:** Ok. I'm straight now.

**Zinc:** I apologize.

**Bowe:** No problem. Proceed.

**Bickford:** In the public hearing, there was a lot of discussion about the blowdown. Could you elaborate on that and how often and what extent, how much is in the air that goes out? As much detail as possible, sir.

**Zinc:** In regards to the compressor station blowdown, the DOT mandates that we do a full facility blowdown every 5 years where we actually isolate the valves and actually vent the gas to the air basically to validate that all the valves and everything operates as it should. So that's done on a 5 year basis and we are installing a blowdown silencers at this facility. We have blowdown silencers at a number of our facilities. In fact we've installed all the northern Virginia facilities now have blowdown silencers on them which basically significantly reduces any noise coming from the facility in a blowdown. They are live 10ft wide vessels with baffles in them. If you are outside the fence line, you can't even really hear it. You can stand right next to it and talk. But other than that planned outage that we have to do from a compliance standpoint there is no other time that we would be looking to blowdown the facility. We may do maintenance on an engine or a valve or something like that. What we do in that situation is reduce the pressures down...actually in our design we actually installing a recycle component in there in which we can take the pressure down extremely low pressures and then blow off what little is left so we can do the maintenance on a valve or engine or something like that.

**Smith:** So the fears that have been voiced to me about daily, weekly, monthly blowdowns, flames shooting in the air thousand feet. Those are all false?

**Zinc:** Sir, we operate a lot of stations. Our focus is to maintain the gas inside the facility and inside the pipes. If we have an emergency situation, can a blowdown occur? Yes. Our facilities, I operate 14 compressor stations right now. That doesn't occur. It's not something that happens at a facility on an annual basis or twice a month. It's a very infrequent event. We do have planned like I said planned maintenance work that we have to do but like I said the amount of gas is just what's in the piping right there. It's close to that valve or close to that inside of that engine. Like I said we are putting gas recovery systems inside the gas facility in such that we don't have to do that.

**Smith:** So your system is pretty much like my compressed air system. When I start a blowdown, I recycle it back into my tank so when I pull the hose or valve lose all that it does is go phst.

**Zinc:** Yes, sir. That's the way to do it.

**Smith:** I wanted to make sure you said that out loud.

**Maxey:** Do you actually go over the 55 decibels when you do the blowdown?

**Zinc:** Not outside the nearest noise receptor.

**Maxey:** That's not an average actually never go over the 55?

**Zinc:** That's the government mandate that we have relative to design to not exceed the 55 decibels at the nearest noise receptor.

**Bowe:** At the last meeting we had we had to listen to a blowdown for I don't know, long enough I got tired of listening. It doesn't last long like that, is that what you are saying?

**Zinc:** The compressor station is designed for 5-8 minutes. That's the way the design is set up and when we do the 5 year blowdowns, that's pretty much right where we are at.

**Bowe:** So they could hear the maximum of 5-8 minutes once every 5 years.

**Zinc:** These facilities with the blowdown silencers, you won't even hear it. You won't hear it. I've stood right next to the blowdown silencers and you can carry on a normal conversation. That's what they are designed for.

**Bickford:** At this plant you have the ability to recapture the gas that's blowed down? I know you are trying to.

**Zinc:** Yes, sir. That's the design we are putting in these new facilities. I don't have them on the existing facilities but these new ones we are bringing in.

**Maxey:** Of all the facilities that you have in the state and elsewhere, do you run an electric compressor?

**Zinc:** We do have electric compressors. Yes sir.

**Maxey:** The pollution from them is a lot less?

**Zinc:** With the electric compressors, there's no natural gas engine running. It's just the electricity coming into the facility. It would just be...if there was some sort of maintenance

work we would have a blowdown then you would have some gas emissions coming out otherwise there's no...

**Maxey:** Why did you chose the natural gas here versus the electric?

**Zinc:** Whenever I can't speak...

**Toms:** We evaluated the electric here. We do have electric in the compressors in Fluvanna County that are Transco's. But they are a new electric transmission line. The line that serves Buckingham is up near Bear Garden, 17 miles away to bring electric transmission with another 150 ft. corridor and towers 100 ft. tall so it was easier to feed it off the local line and have less impact to the county or whatever. That's the decision that was made there.

**Smith:** Just for clarification, I want you to say again how tall are the transmission lines, how wide is the right of way and what is the sound that a high tension wire makes all day, 24/7?

**Toms:** The height of the towers would be over 100 ft. The new national electric code requires us to have taller towers than what we have out here today. So you are looking at 100-140 ft. towers. You'd be looking at a minimum of 150 ft. clear right of way so that would be more adverse impact to county residents. We'd be 17-18 miles of bringing that there. Particularly on a humid day, you'd hear a hum from a transmission lines, if any of you have experienced it here, but that's the corona effect, the technical term, that the transmission line makes. That's another environmental impact that would have been made to the county doing that. When you compare the pollution from the electric engine or the compressor that's there, you are putting that back at the power station, so it's still even though you are running off electricity, you are burning something to make that electricity.

**Smith:** The only viable source is Bear Garden?

**Toms:** The line that comes by Bear Garden is 17 miles by the way the crow flies and depending on the way we come down it could be 20+ mile investment. So by environmental impact to the county, you will have two things coming through your county rather than one. The decision was made to use the engine onsite.

**Bickford:** Mr. Zinc, I understand that the criteria or mandates by the federal government for the safety standards, emission, whatever, I would assume that if those were changed in the time period that the plant is being constructed, you would be required to meet them correct?

**Zinc:** Yes, sir.

**Bickford:** If the plant is built, and it's required, new evidence comes up or they tighten up on it or oppose stricter, would you be required to meet them also?

**Zinc:** Yes, sir. We have...it's not uncommon over the past 10-15 years, especially the EPA and the local states, like Virginia DEQ to demand stricter air emissions and if they come up with

stricter air emissions, we have to comply with those regulations. We've spent millions of dollars over the last 10 years upgrading our facilities to come into compliance with new stricter air regulations that are enacted. That's not uncommon.

**Bickford:** Alright.

**Maxey:** Why do we hear, if natural gas is so clean, why do we hear all these pollutants coming out of it? I mean, we've been led to believe its clean energy.

**Carla Picard:** I'm Carla Picard. Of course you all heard from me a few weeks ago. If you don't mind I'll tackle this question and we'll just make sure the appropriate expert is up here to answer questions as we go. Several of us have been sitting here listening to all the comments. We've anticipated and heard a lot of all the same comments that you all have heard. And part of the reason we shared with you, the last time we were here last week, we provided copies to you all of a human health risk assessment that was performed by FERC. The materials we left with you related to another project that's actually in the review process right now. It's a Dominion project in the State of New York. We felt like this was particularly relevant and wanted you to have this information directly from FERC because as we were listening we heard a lot of the same concerns and a lot of the same information being brought up in the comments that were being brought up as comments in this other project. In the material that we provided to you, FERC put together a table of all the comments they heard from commenters. They had almost 1200 comments on this new market project and a large percentage of those related to pollution. Concerns about emissions from the compressor station. So, because of the similarity, in fact, specifically one of the studies that was referenced by some of the commenters here, was a study called the Madison County Health Study, I don't know if that stuck out to you but Madison County is in New York, that is one of the counties, and that study was created as part of this project. So, FERC, the federal regulators had heard so many concerns and so many comments that they decided to on their own create this independent health impact study. It includes a quantitative of risk assessment which is one of the things you might have heard in the comments of the last few weeks. So, if, I don't know if you have your handy, but I'm happy to quickly give you a road map of the material that you have because it was done independently and it does very thoroughly address the concerns. They followed a very specific process in evaluating the emissions from the compressor stations that were being proposed as part of that project and I wanted to share this information with you. Very quickly I would just mention that FERC pointed out in their introduction on page 1 of their introduction it says multiple commenters including a local health department provided studies and detailed assessments of potential health issues from compressor station emissions namely hazardous air pollutants or HAPS, we can talk about those, or volatile organic compounds called VOC's and we can talk about those, and releases of natural gas contaminants. Commenters also applied studies from production facilities and compressor stations. FERC says a comparison that we do not believe to be representative. That's a key point where they talk about production facilities. That has to do with one of the questions you asked earlier about flares and flames and venting happening on a daily basis. Production facilities is describing the facilities where the gas is being produced out of the ground. If that gas can't be moved either to areas that need it or to storage it has to be flared or burned where it's being produced. So, those types of facilities have obviously different

requirements. A very different profile as far as emissions and a lot of the concerns about compressor stations are referring to those production compressor station where the gas is coming out of the ground. This is a very different station. So FERC describes that in great detail and tries to clarify some of the different pollutants which may be associated with production facilities but would not find in a pipeline transmission compressor station. They are different animals but can certainly be confused if you are just scanning through information that's available along the internet for example or reading studies that have been done somewhere else for some other facility. So, if you will allow me and I have a couple of slides on a couple of the key pollutants, if you want to see those for reference. I can quickly...

**Smith:** Excuse me, the slide, would it be compressor station for transmission versus production? Explain to me what your slides are.

**Picard:** So the slides that I have, one shows all of what the EPA has listed as criteria pollutants. So these are the pollutants that they are especially concerned with as it relates to the National Ambient Air Quality Standards. So, we can show exactly what we are projecting for our permit for DEQ permit which will be based on the maximum possible emissions from the station compared to Buckingham County as a whole. We have the VOC's and the HAP's listed there and I can show you there are two that we made a note of that commenters specifically mentioned formaldehyde and benzene. I can show you where we are relative to the county as a whole for those two particular chemicals as well, or pollutants.

**Smith:** Everyone on the same page.

**Gormus:** I don't believe we have that information.

**Bowe:** Just put the slide up.

**Maxey:** Explain...of the information you gave us, on paragraph 4 first page, it says FERC Data is from air emission samples taken by Dominion. How is that independent?

**Picard:** So,

**Smith:** Say that while at the mic so everybody can hear what you just said to Mr. Maxey.

**Picard:** Certainly, the letter you shared with me was submitted by one of their commenters. But I'm happy to address what was done in the study. That particular handout isn't from Dominion although it references this project obviously.

**Maxey:** We don't have that copy.

**Picard:** We provided a stack of these last week. We can certainly provide additionally copies and hopefully they are here somewhere but it is about 44 pages. So it's a fairly robust study but this is the study that was done by FERC and we can provide additional copies if you don't have them. I can certainly refer to the slide and as far as the data that was used by FERC, I don't

know of anyone else that could provide emission data from our facilities besides us. We didn't conduct the study, we just provided the data from our facility.

Ok, so as we talked about a minute ago, the criteria pollutants is the list you see on the left hand column. We did share this a few weeks ago but I wanted to come back to this because we heard so many comments about a couple of pollutants in particular. The formaldehyde is one of the HAPS or the Hazardous Air Pollutants which is the last line on the table and then benzene, I don't even know how you pronounce this other one, tylene, thank you, are some of the volatile organic compounds that were specifically mentioned. Again, those particular pollutants are more typical with production facilities but not typically transmission facilities or in very trace amounts because they are also found in nature. So you can see the comparison here the Buckingham Compressor Station. You can see these are the maximum levels we've projected for the air permit with Virginia DEQ compared to the far right hand column which is Buckingham County's existing levels of those same pollutants. The next two slides I thought would provide a little better illustration on these two in particular. So Buckingham County, this graph shows a profile for levels of formaldehyde in particular across the county. You can see there's a little blue dot next to the Buckingham Compressor Station. Over to the right, we are past light duty vehicles. We have a tiny little bar there relatively. The next slide shows benzene which was talked about quite a bit. Here you can see the Buckingham Compressor Station is half way over on the right. Again, relatively speaking a very small amount that we are contributing of these particular chemicals. So again, just a quick illustration of these different chemicals and not all these stations are the same and FERC thought it was worthwhile pointing out the difference between production facilities where you have different types of activities going on and transmission pipeline facilities. We will make sure you have this full study. I can share with you the conclusion that was part of FERC environmental assessment. It's on the screen.

**Smith:** Can you roll that screen back to where you had it? I was just getting to the fire regular heating home firewood burning versus the benzene from the compressor station. Thank you.

**Picard:** So this is part of the summary that was part of FERC's environmental assessment for the other project. FERC concluded that the modeled emissions from the normal operation would be below a level of health concern using consistently conservative assumptions in their analysis. So then they go on to talk about the specific risks and the specific measurements compared to the threshold. Of course their final sentence, FERC concludes there will be no significant impact on health in the project areas from emissions associated with the proposed and modified compressor stations. So, again, this is one example of a project that involved compressor stations but again, I felt it was relevant because so many of the concerns and the comments were very similar to what we've heard over the last few weeks. So, I wanted to provide FERC's assessment of those stations with all of that as background. So we'll make sure that you each have copies of this health assessment.

**Gormus:** Is any of that...do they have anything on the emissions how it would affect crops and livestock and people and that kind of thing?

**Picard:** It's very specific to people and their results were no significant impact. I don't remember any specific mention of livestock. I'll go back through and look for that.

**Gormus:** Ok. Last time there was a video shown that was like an infrared, do you remember that? It was showing smoke coming out of the smoke stack. It looked a lot like vapor and not smoke. Was it smoke and not vapor? I don't know. How would that be addressed?

**Toms:** It's heat. Infrared picks up heat.

**Picard:** It's a heat signature from methane.

**Gormus:** I just know it scared a lot of people.

**Picard:** Understandably.

**Toms:** If you infrared this room it may scare a lot of us but its heat.

**Gormus:** What's that?

**Picard:** He suggested that if you take an infrared of this room it might scare a lot of people.

**Toms:** It picks up heat. It's infrared for heat. We use it in our business for finding overloads in the lines, use it on buildings, use it to look at homes for insulation values. But infrared values picks up heat. So you see the different trends of heat. That's basically what that depicted.

**Gormus:** Ok. Alright, also there was concerns about the fault line in Buckingham running under, near or around where the pipeline is going through and if we have an earth shake or earth quake what that would effect.

**Picard:** Sure, first our lines, the pipelines are designed to withstand geological events. If you remember you have 4 pipelines that pass through the county north and south today. One of those is 42". Obviously in very close proximity where that earthquake happened a few years ago. It also went right by our North Anna Nuclear facility so we've spent a lot of time studying the effects of an earthquake and considering future possible events like that. It's important to remember that we live with these pipelines every day. They are already in our world and we don't give them a whole lot of thought because for the most part out of sight and out of mind. So the pipeline itself will absolutely be designed to be safe. Really one of the great things about having a compressor station located here, when you think about all the counties that pipeline will cross through, here in Buckingham you have extra eyes. There's folks that Kevin talked about that will be working and living here in Buckingham operating this station. They are monitoring everything. They are inspecting every component within that station. They are making sure on a daily basis that everything related to that pipeline and that station is working exactly the way we intend it to. So you have extra eyes, extra ears, and operators as Kevin said, a lot of times these folks are specialist. They might already be volunteer fire fighters in this county. Their focus is safety. They are here working for us and will live in this community. So it's in their back yard too.

**Gormus:** A couple more things that we've picked up on. There was talk about eminent domain is the name that keeps being brought up on the hearings. Is this going to be a tool that Dominion uses?

**Picard:** So well, for the compressor station, it's being built on land that Dominion purchased. For the pipeline...

**Gormus:** Already purchased?

**Picard:** Yes. So that's about 68 acres that we purchased and the station will take about 14 acres within that 68 acres. So we are maintaining the rest of it as buffer, wooded buffer.

**Gormus:** Ok. Two more things and I'll be quiet.

**Picard:** Sure.

**Gormus:** There was talk about jet fuel and is any of it being sent to Cove Point?

**Picard:** Great questions. Thank you for asking. So, this pipeline is to transport natural gas which is primarily methane which is lighter than air. It's not a liquid. It is a gaseous form. That's an important distinction from some of the other pipes and pipelines which do in some cases carry jet fuel for example or other liquid products. This pipeline will only natural gas. That's what it's designed for and that's what every one of the easements that we write with the landowners along the pipeline are very specific. So this pipeline will only be allowed to carry natural gas. As far as the export question, we have contracts already in place. This project is not a speculative project. The customers issued an RFP, a request for proposal, for somebody, anybody to provide the natural gas that's needed in North Carolina and Virginia. Primarily to create electricity. So you've got major electric utilities requesting natural gas to feed new power stations to offset the closing older coal stations that are being retired because of the increasing EPA requirements. So as a country, our utilities are struggling to make sure they can keep the lights on and make electricity using cleaner fuel sources. So lots of investment in renewables but we need a bridge fuel that we can count on 24/7 and for a lot of new power stations, that's natural gas. So there's an increased demand for power stations domestically in Virginia and North Carolina and that's where 80% of this gas will go. The other 16% that's already contracted for will go to local gas utilities like Virginia Natural Gas and Piedmont Natural Gas in North Carolina to deliver to homes and businesses that use natural gas. So this pipeline is already committed for domestic use. Now, I do remember one of the comments and actually they showed a map of the interconnections and how this gas could find its way to Cove Point. The reality is, two things, number one if you remember we talked about that interconnection with Transco and how the gas could go north or south depending on where the need is. That interconnect was actually a requirement by our customers in North Carolina. If you don't mind, I'll explain why. Currently North Carolina is served by a single transmission pipeline. North Carolina is desperately under served in natural gas transmissions. So, they are very eager to have the Atlantic Coast Pipeline which will come down the eastern part of their state along, kind of parallel to 95, but interconnecting with Transco we can also deliver gas from the Atlantic Coast

Pipeline down that existing Transco corridor to serve both areas of the state. So it's a critical interconnection but gas will not be heading north to Cove Point. It will most likely be heading south to North Carolina.

**Maxey:** Likelihood, it can go to Cove Point, Maryland?

**Picard:** It would have to get through northern Virginia first which would be... northern Virginia has a lot of load. So, very unlikely. It's like the electric grid. I can't tell you that an electron wouldn't find its way you know because it's all interconnected. But I can tell you where our customers are and where this gas has been committed.

**Maxey:** It's my understanding Cove Point will be in next year an exporter of natural gas.

**Picard:** That is true. Cove Point is a Dominion project. That's under construction now. They are planning to be in service by the end of 2017 to export gas. Unrelated to the Atlantic Coast Pipeline.

**Bowe:** If you have 80% going to North Carolina and 16 % going south that leaves 4% to go north. Is that what we are saying?

**Picard:** The 80% is to electric utilities. That's Duke Energy and Dominion Virginia Power. So, on the Atlantic Coast Pipeline we've got 96% that's already committed to customers but it is access and availability on the pipeline because we are an open access pipeline. That means that other industrial customers that come along, municipalities that want to tap into the pipeline, there's still supply available for those large customers.

**Gormus:** Ok, last question. Solar power was brought up last time and wind power. Is Dominion looking into those for Buckingham?

**Picard:** I'm sorry what options?

**Gormus:** Solar and wind.

**Picard:** Oh, as projects in Buckingham? We are always looking for solar and wind projects and would love to partner with you if there's like...

**Gormus:** We have lots of sunshine here.

**Picard:** Perfect. No really. We have...

**Bowe:** Let me point something out to you we approved one for Dominion right here in Buckingham. Its 127 acres. It's on Claybank and High Rock Road. It's 127 acres and that result is 142 houses it will serve.

**Picard:** Solar takes a lot of land.

**Bowe:** It takes a terrible amount of land.

**Gormus:** It was just a question.

**Toms:** Let me help you out here a second. We put out RFP's for solar and we've had several customers look at Buckingham. It's kind of a contractual agreement and we haven't announced it yet so you know about it from a planning standpoint but there's not been contracts finalized on these things so we actually have three offers here. Again, it's close to the transmission line is where these folks need to be because they are on the west end of the county then they are responsible for building a transmission line back so we've had three proposals from Buckingham County for solar. Not all of them are going to cut the mustard because they are too far to reach the transmission area.

**Smith:** Touch on the other limits for solar. About the topography, exposure...

**Toms:** Most of the land in Virginia is too beautiful and too expensive to put solar on is what it amounts to in our particular terrain. To get to where most of the solar patches are is swamp land, out in the deserts and in corn fields in Indiana and those sorts of things. The right way to do solar from what experience has found is to put it up on the roof, put it on colleges, put it on schools over parking lots but to go take raw land and put solar on it, it takes a lot of footprint so you've got to decide do you want to give the land up for that. That's how a lot of the RFP's have looked. You are not getting a lot of these coming around urban areas like Richmond and Northern Virginia because we don't have footprints of ground that big to do it. We are partners in Arizona. We have some out west. We have some in California. Those are the places you have big footprints of land that you can put the solar panels in.

**Bickford:** The contractor told me that you have to have the right transmission line to hook up to and that was only available, I think in 3 sites in Buckingham County. 2 or 3, I can't recall at the moment.

**Toms:** We've had a lot of proposals throughout the state to do it. There are a lot of parameters to do it and our RFP relationship with our contractors, we haven't announced all that yet, so you made an announcement here that we haven't announced yet, so thank you.

**Bickford:** We are going to have to stop at this point because we've got other public hearings that we have to go to. Now in saying that we can recess. We have two options here, we could come back after the public hearings and answer more questions. I have some issues with our conditions. Talking to Commissioner Bowe and he has suggested and I think is a good idea is to form a subcommittee to look at the conditions and add some and go over those. What that would require is we would have to recess and come back in November and go over these conditions and ask whatever questions that you want. Now, what I'm asking is two things is do you want come back after the public hearings on these three things and ask more questions, or just wait until then and go over the information we've gotten and ask questions at time and/or go ahead and authorize a subcommittee to look into the conditions and add some or whatever.

**Bowe:** Do you need a motion?

**Bickford:** I need a consensus of the Commission of how they want to pursue.

**Bowe:** What if we make a motion and put it up for vote and find out?

**Maxey:** That's right.

**Bickford:** Ok.

**Bowe:** I make a motion that we set up a subcommittee.

**Maxey:** I second it.

**Bowe:** And myself serve on the subcommittee. By the next meeting we will have it together.

**Bickford:** Ok. In the interim, if the commissioners can think of anything they want to address just give it to one of the two of us.

**Maxey:** But we'll have another time for questions.

**Bickford:** Yes. We can still do that if you want. We can go into recess after the other public hearings. We can come back and reconvene and come back and ask more questions or does it make sense, I suggest that we wait to come back in November, we'll have the conditions and you can finish asking questions. That will give you time to go over everything we've been over and your answers and notes and all.

**Smith:** I realize all of us have a boatload of material from 3 sides. One side of the argument, the left side of the argument and the truth side of the argument. Since I was misquoted, I wanted to make sure that was clear. Yes, I say put it to a vote for subcommittee.

**Bowe:** We have a motion has anybody seconded it?

**Maxey:** I seconded it.

**Bickford:** Ready for vote. Does the applicant understand what we are doing? We are forming a subcommittee and work on the conditions and then when we come back in November which will be short because we have Thanksgiving. I think it's the third Monday, we will present to yall ahead of time a copy of the conditions with changes we've made and at that time we will go over the conditions that we've added and also questions from the commissioners at that time.

**Wright:** Go ahead and adjourn it.

**Bickford:** Go ahead and adjourn. Ok. Gail, do you want us to do it by hand now to save some time?

**Smith:** Pat's motion, Chet's second. All in favor?

**Commissioner Bowe moved, Commissioner Maxey seconded to form a subcommittee to work on the conditions and bring them back in November. This motion passed with a 5-2 vote. Commissioner Crews and Vice Chairman Gormus voting in opposition. Commissioner Charlton absent.**

**Bickford:** Ok. That's what we are going to do then. Mrs. Cobb, do you have that date in November?

**Cobb:** The third Monday which is the 21<sup>st</sup> I believe.

**Bickford:** Now, quick question for the Commissioners, do you feel you want to start at 6:00 to give us plenty of time because we are also going to possibly have the public hearing for the Wise Store. I think we need to start at 6:00. It's a lot of information to go over.

**Smith:** That's fine. 6:00

**Bickford:** We will start at 6 and the first thing we will go over is your application. Alright.

We will now adjourn that and start our October 24, 2016 regular scheduled meeting.

### **Re: Approval of Minutes**

**Bickford:** We have on the docket to approve minutes. Minutes for September 26, 2016 regular meeting.

**Gormus:** Move to approve.

**Smith:** Second.

**Bickford:** Any discussion?

**Vice Chair Gormus moved, Commissioner Smith seconded and was unanimously carried to approve the September 26, 2016 minutes as presented.**

### **Re: Public Comments**

**Bickford:** Very good. Mrs. Cobb, do you have a list of how many people want to speak for public comment period?

**Cobb:** We have 20 names however I think that the last four names are for public hearing just judging by names and addresses. I think they are the letters that I sent out to the adjacent land owners for those public hearings so that means we do have 16 signed up for general public comment time.

**Bickford:** 16. That's 45 minutes, 48 minutes. That's almost an hour. If it's okay with the commission we will move the public comment period and go ahead and do the public hearings and then do that. I don't know if we can get these people for the public comments finished up. That's going to be an hour of talking. I think that would only be fair.

**Smith:** I move that we rearrange the agenda.

**Gormus:** Second.

**Bickford:** Any discussions before we go to vote to change the agenda to move the public comment period to after the public hearings?

**Cobb:** Do you want to move it after the public hearing and prior to the introduction to the new case or after the introduction of the new case?

**Bickford:** We probably should do it after the introduction. So we can get those out.

**Smith:** Then we can stay here until it's all done.

**Bickford:** All in favor raise your right hand. Ok.

**Commissioner Smith moved, Vice Chair Gormus seconded and was unanimously carried by the Commission to rearrange the agenda to put public comments after the public hearings and introduction of the new case.**

**Re: Public Hearing-16ZMA237 Par 5 Development, Retail Store**

**Cobb:** Yes, this is case 16ZMA237. Owner: Frances W. Ellis c/o William Falls. Applicant: Par 5 Development Group, LLC. Tax Map Section 69 Lot 1 containing an approximate 8 acres on N. James Madison Hwy. which is Rt. 15 at the intersection of Penlan Road which is Route 671 in the Marshal Magisterial District. This property is currently zoned A-1. This is a Zoning Map Amendment to rezone a portion of this property to B-1 for the purpose of a Dollar General Retail Store. You have some proposed conditions before you. The applicant has received those and doesn't have any comments on those at this time. The applicant is here if you have questions prior to opening up the public hearing.

Conditions:

1. That all federal, state, and local regulations, ordinances and laws be strictly adhered to.
2. The facility shall meet all safety requirements of all applicable building codes.

3. That commencement of the business shall begin within two years of the approval by the Board of Supervisors or this shall be null and void.
4. That all documentation submitted by the applicant in support of this rezoning request becomes a part of the conditions.
5. Ample parking for deliveries, employees and customers shall be supplied on premises and no roadway shoulders shall be used.
6. Landscaping shall be installed and maintained to screen visibility from adjacent properties to the north, west and south.
7. The applicant will pursue a commercial solid waste container and follow the County Solid Waste Ordinance.
8. During construction dust shall be controlled with water and calcium chloride.
9. Exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties. Any lighting for surveillance will be at minimum foot-candles for visibility and shall be pointed in a down direction.
10. The Virginia Department of Transportation shall approve access to the proposed facility and the applicant will provide all required improvements.
11. A traffic management plan shall be submitted as part of the overall site development plan. Review and approval by VDOT of the traffic management plan will ensure that temporary construction entrances and access roads are provided appropriately; that “wide load” deliveries are scheduled during off-peak times, and that access routes to and from the site are planned to minimize conflicts.
12. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.
13. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the use, if it be the wishes of the Board of Supervisors.
14. Nothing in this approval shall be deemed to obligate the County to acquire any interest in the property, to construct, maintain, or operate any facility or to grant any permits or approvals except as may be directly related hereto.
15. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property at any time to check for compliance with the provisions of this permit.
16. That the applicant (s) understands the conditions and agrees to the conditions.

**Bickford:** Do the Commissioners have any questions before I open the public hearing. I will now open up the Public Hearing for the Par 5 Development for Retail Store.

Please come forward if you want to speak. You have 5 minutes if you are representing a group. You have 3 if you are speaking on your behalf. Please come forward if you would like to speak.

**John McWilliams:** I’m sorry, maybe I’m not hearing so well. I was just wondering if this is the public hearing for the old business or is it #6?

**Bickford:** This is the public hearing for the Par 5 Development Retail Store.

**Smith:** 7-A.

**Bickford:** 7-A.

**McWilliams:** My name is John McWilliams. We live at 29037 James Madison. The adjoining property to the southwest corner of the intersection of Penlan Road. The property you are talking about rezoning, we live on the northwest corner. As we know it's not a perfect world. There is always tradeoffs, but I do know when I go to Fork Union or whatever city, every time I walk in there, everybody in the store including me is from Buckingham. Unless something has changed greatly in the last year that I haven't been involved with it the County receives a portion of sales taxes as well as raising the value of the property by improving it and the County getting better tax revenue. We live in a time here in the county as everyone else where costs are constantly rising. You have unfunded mandates from the state you have to fund. I think it's important to maintain a tax base. Now, I do realize that a Dollar General Store is not going to change the tax base of Buckingham County but if you put together 8-10 small projects it starts to make a difference. I came up here today, I own 3 vehicles. One of them being over 10 years old and I paid \$1190 personal property tax. So, somewhere we've got to get some other funds. We have a school system to run which needs to be a high quality operation. We have...you are looking down the barrel of having to start providing some paid rescue protection because you've got problems covering them. The money has got to come from somewhere. In addition to that having grown up in Virginia and lived here for 69 years it's always my experience until 30 years ago that every small community had a general store if you will. About 30 years ago they quit because they couldn't make enough money. This is probably the closest replacement you can find for it. If you look up and down North James Madison Hwy. you will see a number of properties that used to be stores. So isn't that a store of that type is foreign to the community or to a rural atmosphere. Virginia has been settled for a long time and what we live in now is kind of a patchwork quilt. I don't think anybody wants to see it turn into Richmond or any other built up spot. But for all those years we had small community stores. It didn't seem to bother the rural atmosphere. I don't know why it would bother it now. I would rather spend my money here in the county. I'd rather see the county get the tax income. I think all in all, I can't say the thing would never be inconvenient. I would be lying. There is inconvenience to everything. But, if you put the thing on a balance, I really believe it's probably best for the community. Thank you.

**Valarie VanWitzenberg:** I'm Valarie VanWitzenberg. I live across from Penlan Road on 15. Literally, Penlan Road dumps right into my driveway, if you drive straight across. I agree with some of the things that he said. It would in some ways benefit. The truth is, 19 years ago, we moved here and we picked where we picked because it was half way between Fork Union and Dillwyn. We liked that but we may have to plan our trips, we did not have commercialism on our front door. There are closed businesses in a 2-3 mile area of this location. Why can't they go there? Why do we need a Dollar General every 10 miles down 15? I was speaking to someone earlier today and they said if this doesn't work tell them to bring the Dollar General to Toga. I like that idea. My concern as I said we've lived there for 19 years, in that time we never actually permanently affixed our mailbox into the ground. 4 x 4 post. It sits in a hole because

with just residential traffic going in and out of Penlan Road, if you have someone that isn't paying attention, whether they are texting or talking or whatever our mailbox has been blown out of the ground several times a year. Sometimes it might be every other year. Depends on what's going on. I have to figure that we are going to have more northbound, left hand turns onto Penlan Road if there is a store there. And I know that I'm going to need a pallet of mailboxes so I can keep putting my mailbox back up. Probably need to invest in some extra 4 x 4's. It's something that we could live with but personally I would choose to live without it being across the road from me. I'm also concerned about noise and loitering. Anybody who lives in that general area can tell you there are cars, there's a wide place to pull over instead of pulling directly out into 15. People sit there and wait for someone to come up Penlan Road or turn off 15 to pick them up. The noise from just one car sitting there with their radio on and their windows up or down is noticeable in my home if I have any windows open. I have to figure I'm going to notice the Dollar General across the way.

**Bickford:** Time.

**VanWitzenberg:** Personally we've said no but...

**Bickford:** Thank you, Maam. Thank you.

**Stephanie Woods:** Hi, how are yall? My name is Stephanie Wood. I live at 4798 Penlan Road which take two steps off my front porch I'll be on the property of Dollar General. I have two small children. They are 4 and 2. Like Mrs. VanWitzenberg was saying, she is my neighbor and was also my teacher once upon a time, I'm very worried about my children. It's going to be traffic non-stop which there is right much traffic now as it is but it will be a lot worse. There's going to be trash in my yard, I'm sure. I'm just worried. I mean we live in a small community, why do we need a Dollar General. We have one in Scottsville. We have one in Fork Union. We already have one in Buckingham. We have one in Cumberland. Why do we need another Dollar General? We have Gold Hill School that is vacant. It's not being used. There's a lot of empty buildings. Maybe I'm being selfish. Maybe it would be a good thing. But the location is terrible. I mean I was reading on Facebook that the entrance to Dollar General is going to be on Penlan Road. That just makes no sense to me. Maybe they might have it planned out a little bit better but I think its complete ridiculous. My family has owned that property my whole life I know. It's been passed down. It's nice the way that it is. Maybe something different be there but not something that's going to be noisy. I mean there's a lot of other children that live down that road. My kids get picked up off the bus. Like I said, 2 steps off my front porch, I'm on the property. I'm pretty sure a big fence is going right upside my house. That's not fair. It's just not fair. I'm sorry. Some people agree but I absolutely do not. So, I mean, there's a lot of different places in Arvonnia that could be bought and something can come there to build business. Yes, I agree with that. More jobs, the better. But why right there. It's the most awkward spot possible. So. Thank you.

**Franklin Wood:** Hello, gentlemen, ladies, I'm Franklin Wood. I live in a house joining that piece of property. I'll tell you a little background on it. I helped build that house when I was 11 years old. It was my mothers. I inherited it I guess back in the early 70's. I've lived there all

my life. I've never got to the point, actually I helped build the house. I've lived there all my life. I never in the world would have thought with that little neighborhood right there that I would be living beside a business. It just seems imperil to me. As much open land that's not near a house anywhere, not only that, the lady just talked earlier, there have been numerous wrecks right there at Penlan Road because it's a grave and a curve. It's not a proper place to put an intersection with more and more traffic. It's not a property place. You can check with the deputies and sheriffs and get the count of the wrecks. My wife almost got rear ended. Hadn't been long ago, a trash truck took all the mailboxes down because a car was making a left hand turn and didn't see it. It's just not a good location for it. I just hope yall reconsider. That's all I can do. Appreciate your time.

**Bickford:** Thank you sir. Anybody else would like to speak? Seeing no more, I'll close the public hearing and turn it back to the Commission. I would like for the applicant to come forward if you would sir. I've got a couple questions for you.

**Lance Koth:** Good evening. I'm Lance Koth. I'm the engineer working with Par 5 with this project. I'm happy to answer questions. I have a few thoughts about what's been said here if you are interested in hearing the perspective on it.

**Bickford:** Yes, sir.

**Koth:** Par 5 is known as a preferred developer for Dollar General and they are given locations that Dollar General wants to go in. This is one of those locations that have been identified. When they identified that it's not a parcel that's been identified, it's an area. It's a fairly targeted area when they identify a parcel that's for sale either through a realtor or some other contact. They start an evaluation of that. We look at all the things that have been brought up. We look at the compatibility. We look at the traffic. We look at the maneuvers. All these things in anywhere we go we hear a lot of these concerns. But what our job is, is to try to minimize those things. In this instance, when you look, I guess first of all, when you look at the location it is about half way in between a couple other destinations which I believe is a little speculation as to why Dollar General targeted this area. When we look at the parcel itself, we look at traffic counts. We look a maneuvers going in and out. When we sit down, we sit down with VDOT and look at are turn lanes warranted? Is site distance ok? There's a whole range of things we look at. This site is a probably above average site as far as that goes. It has above average visibility and I realize there are accidents. I don't know that they are worse here than anywhere else. It's something we hear a lot everywhere we go. What we try to do to minimize is, and this is one of the points that was brought up, is we put the entrance on Penlan Road. The idea of that is as you approach this from either side or turn in it's a slowdown but it's not a stop and wait to turn. It gets those maneuvers off of James Madison Hwy. a little bit. The maneuvers of a tractor trailer which admittedly is only one a week, is a smooth maneuver. It doesn't have to stop on any of the roads or back up. It's something that Dollar General looks at is making sure a tractor trailer can come all the way into the site and do it's maneuvering in the site. The corner there and I don't know the specifics of the mailbox across the road, but the corner there is a little bit of an unusual intersection in that it has the small triangular piece in the middle that isn't always easy to see. Those things get run over a lot. I believe what we would do would improve this.

When you put in an actual business there, it actually hi-lights to people coming up to Penlan Road and coming up the highway that there is an intersection there. If that's the issue that she's seeing that people are actually missing that stop, this might help that situation. It won't affect the situation along James Madison Hwy. We are not going to make that curve softer or anything like that. I wouldn't say that we are changing that but the maneuvers, as much as we can, are pulled off of James Madison Hwy. to Penlan Road and into the site. That's a little bit, maybe, it's kind of a minimal effect I guess on what's been brought up here. It's a little better than having the entrance on James Madison Hwy. As far as the neighbors are concerned, part of our plan is to put landscaping in on both sides. We are happy to make that a heavier landscape. There wasn't specific plans for a fence on the sides, but if safety is a concern, we're happy to put in a fence and do that for protection. It's not really the norm that we do but if there is specific concerns we can look at that. Typically, and would be the case here, the hours for the Dollar General are 6 to 10 so it's not an all-night function. It's not a middle of the night, loud noises kind of thing. The trash truck comes in once a week. Tractor trailers once a week. There may be another delivery truck that comes in like a box truck that would deliver snacks, Pepsi filling their own but the large Dollar General tractor trailers is a once a week operation. I'm trying to go through and remember the other things that were said. The bottom line is this area it suits Dollar General because it's in between some areas. It's a small radius they are trying to pull from and that is what draws them when they have a shop in Dillwyn. That's what draws them. The kind of half way point in between. So, it's an explanation. I guess it's up to you if it's a justification or not. It is in their game plan to draw from that small area and be more a community store. The people that work there would live in the area and would likely know each other. They are not driving in from a long ways away. It's the neighbors working in the store. In a nut shell is what I'm looking at. If you have any other questions I'm happy to answer them.

**Bickford:** I've got a couple things that was brought to my attention. One is your signage. What are you...do you just plan to have the normal sign that you would have?

**Koth:** Typically they like to do what they call a pion sign. Which is a post and I believe it's a 6 x 16 sign on a post. They have done other types of signs and I don't remember, trying to remember what we show here, they do a monument sign also which would be on a brick foundation.

**Bickford:** It would be a normal sign that you would see.

**Koth:** It would be one of those. I can't remember what we showed here. But yes, that's the idea.

**Bickford:** As far as your lighting, we are requiring that all lights be pointed to the ground.

**Koth:** That's typically what we do. We use the cut off fixtures and its all dark sky compliant. Typically what we adhere to is the typical no more than .5 candles at the property lines. With this site being the wooded areas that we are proposing around it, it would be less than that.

**Bickford:** At off hour times when you are closed, do you reduce your lighting?

**Koth:** I think they have some lighting. The security type lighting. It's not the full all the lights on lit up.

**Bickford:** How about your outside sign? Does that stay on full or reduced wattage?

**Koth:** You know, I don't know the answer on that. I'll have to get back to you on that.

**Smith:** On your dumpster, screened in? Chain link fence?

**Koth:** It's screened in. It's a brick enclosure with the front gate board on board privacy type style.

**Smith:** Ok.

**Gormus:** How often do you maintain those?

**Koth:** Maintain the dumpsters? I believe that is once a week. But...

**Gormus:** No, the enclosure of it. We've ridden by several and they need a little assistance.

**Koth:** As far as painting? I don't know the answer to that. I assume it would be as needed.

**Gormus:** You believe what you said about the tractor and trailer drivers?

**Koth:** That's my part or a big part of what I do for the...is look at the tractor and trailer maneuvers. That's as far as my clients go, this client is the most interested in that than any client I have. They are adamant. When I, I run a software that actually models the way the truck and it shows where the rear wheels are and overhangs and things like that. After I run it and show the tracking through the site, I send it to them and they do the same thing. They take it very seriously. Part of the reason...it's a little bit conservative. I am running the risk of offending people here, but people that drive tractor trailers are not as skilled as they used to be in general.

**Gormus:** Have you been to the one in Dillwyn lately?

**Koth:** I have not.

**Gormus:** Maybe you should.

**Koth:** Is it getting beat up?

**Gormus:** Yes.

**Koth:** Is it from the tractor and trailer or is it from the trash truck?

**Gormus:** When the tractor and trailers come in there is not enough room for them to come in and make all their maneuvers like you said would be on the property itself.

**Koth:** How old is that store?

**Gormus:** When Jane Doe parks in the wrong spot, then the tractor and trailer is hung out on the street.

**Koth:** How old is that?

**Gormus:** Not to old. 5-6 maybe 10.

**Koth:** I don't know. I've only been involved with them for a couple years now so I don't know how they looked at it a few years ago but I do know it's of the utmost importance to them right now. That may be one of the reasons that it is.

**Gormus:** Maybe. And being on the highway is not good and being off on the side road and if we are coming down the road and say "Oh, there's a Dollar General, let me stop". Screech. There goes the mailbox because somebody is going around you.

**Koth:** I cannot speak to that situation. I've seen it happen everywhere. Where somebody stops short.

**Gormus:** I have too. Especially at Christmas. Those sales are enticing.

**Koth:** Right. This may be a little off subject, but I tell people I've stood here in front of Planning Commissions and things like that and been proposing schools and things, and I get the questions of can you guarantee that no one will ever get into an accident. I can't. There is no way to do that. I've never proposed something on a site and I've been doing this for close to 30 years and I've never proposed something on a site where somebody didn't say there's going to be an accident there. I can't argue with that. It's possible anywhere. I know what we've done here to make the maneuver in and out is very functional. I know the traffic count on James Madison Hwy. is low enough that it does not meet any thresholds for concern. In other words it doesn't come close to what they say needs a left turning lane. It certainly would never meet a traffic signal warrant. Things like that. It's...from an engineer's perspective, it's a nice site to get in and out of and the fact that we were able to pull the tractor and trailer maneuvers through that intersection and then get into the site was a little bit of a bonus for us. It's a good site from an engineer's perspective.

**Gormus:** Did you look at other land that was for sale up and down the 15 corridor before you jumped off on Penlan?

**Koth:** I don't know the answer to that. I get involved when they identify a site they want me to look at. I don't know what other sites were of consideration on this road.

**Gormus:** Did the owner contact you or did you contact the owner?

**Koth:** I work with Par 5 regularly and they are a developer out of North Carolina and they have a team that looks in areas that have been targeted by Dollar General. They look for properties in the area. When they find one of appropriate size and think is a good configuration, they then call me and say go do a study on this site and I'll go out and look at the property in general and are there wetlands out there and things like that. Then I'll look at the way the configuration would sit but I get involved when they've already looked and said this is a potential site and then they bring it to me and look at it from a can we develop it standpoint. So I don't know how many different sites they looked at in this area.

**Bickford:** You did say you would put up vegetated buffers?

**Koth:** Yes. We've proposed landscaping. The site itself, the building is kind of in the middle north and south so we've got landscaping on the north and south side and then in the front, part of that area is a drain field area. There are some areas in there we would landscape as well. Everything in the back is already wooded so that would remain, but the areas that are the three sides...

**Bickford:** You refer to the area in the back that would be to the west going down Penlan Road.

**Koth:** Yes.

**Bickford:** Where you would have to clear, you would still be able to add some vegetated things?

**Koth:** Yes.

**Bickford:** That is the Wood family to the west right down Penlan Road.

**Crews:** How many acres of the eight acres are you going to utilize?

**Koth:** Just the front portion. The overall parcel I think was a little over half of the overall parcel. We are talking about dividing off the front.

**Crews:** What are the plans for the other portion?

**Koth:** It would remain the way it is now. It would be zoned agricultural as it is now. You could put a residents on it or something like that. No plans for future development on it. We aren't buying that. We are only buying the front portion.

**Crews:** Yall will maintain it though, right?

**Koth:** Par 5 remains the owner and maintains, and has a contract with Dollar General for things like maintenance of the property and Dollar General is required to have a maintenance contract

with a landscape company that takes care of the sites. They have in their contract with Dollar General those requirements that the maintenance must happen.

**Bowe:** The one lady that came up and said she had two children and if she steps off her front porch, she's in yalls property. It doesn't sound like setbacks have been met somewhere down the line. I don't know if that's with the house.

**Koth:** Yes, the house that's existing is close to the property line. There is a 25-30 foot distance from where we would stop and that property line. A little more to the house but not much. That's the area we would be putting in landscaping. Some screening trees and we can talk more detail or I can work it out with Rebecca but yeah, that is one of the areas and one of the conditions that showed up. We are aware that is a concern to have some heavier landscape there and on the southside too frankly.

**Allen:** I have no problem with the Dollar General Store but like asking questions now, as much land as we have in Buckingham in different places, why put it on top of somebody? You've got a man right here beside you that you are right up against the side of his house, and you've got this house here where children will be playing at. Right up the road less than a 1/8 of a mile, you've got an old Home Health Center gone out of business that's for sale. They've got an industrial entrance already there. They've got water, septic. You might have to get rid of that building but I'm sure somebody would be tickled to death to buy it from you and get out of your hair. I know you are just the engineering part but to me I feel like you need to take it back to him and ask him to look at another place to me I think that's to close. I don't like that part of it.

**Gormus:** Install you well and septic tank and everything on the property that they are talking about.

**Allen:** The property they are talking about is just too right on top of people's houses. I mean, we've got plenty of land to put something like that without being on top of somebody. I know...

**Koth:** I understand and I can't...don't have the answer. If I were a city planner I would do a lot of things differently. I can drive through any city and say I really wish that had been there. It goes to what the property...what they are asking for the property? What's the visibility of the property, distances and different things? A lot of times we run into it depending on how the entry is configured, if there isn't site distance on the road or if there isn't...one of the big things is entrance spacing right now frankly. VDOT has entrance spacing requirements and if you can't meet that then you have to get waivers from VDOT and frankly having that intersection there is a plus.

**Allen:** That's what I was saying about the home health. Two entrances, industrial entrances.

**Koth:** Existing entrances are great but it doesn't necessarily mean that they will let you redevelop the site and let you use it the way it is. It may have met old codes. I don't know where you are talking about but they may have driven there and looked at it, and it may not have the depth and we can't get the trucks in and out. I don't know.

**Allen:** It may not have been for sale then. It hadn't been long up for sale. Anyway, that's my problem. It's too close where it's at right now.

**Koth:** It can be a little bit of liability too in buying something that has a building on it and take it down and worry about what they did in the past. But again, pure speculation.

**Maxey:** In your professional opinion, looking at that site, you are an engineer, is that an above average site for Dollar General or below average? Be honest.

**Koth:** I've bought some really bad sites. It's a good site based on what I've seen from them. There is enough space. We have room for stormwater treatment in there and some additional low areas that will let the water soak into the ground. Sometimes we run into sites that we can't do that onsite and we have to do underground storage with big pipes and maintenance agreements and things like that. We don't have to deal with that here. The drain field, the soils are good for a drain field. We've been talking to VDOT, and frankly this process we go through here is very proactive when it comes to VDOT. VDOT has given us feedback on the site and is aware of it and we've talked to them at some length anyway to be confident that we know what we are doing is what they want to do. Frankly, it's above average from what I'm getting and that's not setting the bar very high. A lot of our sites are very small and very difficult.

**Bickford:** Any more questions for the applicant?

**Gormus:** Is this the same group that did the Scottsville store?

**Koth:** I have not heard them mention Scottsville. I don't know the answer to that. I hear them talk about other stores here and there but I haven't heard that mentioned.

**Maxey:** That's a poor site.

**Gormus:** Yeah.

**Crews:** You have to go through an obstacle course to get in there.

**Koth:** We try to avoid that.

**Bickford:** Any more questions from the Commissioners? Thank you sir.

**Koth:** Thank you.

**Bickford:** Anybody want to make a motion to accept or approve or disapprove?

**Smith:** I'd like to make a motion that we disapprove the application.

**Gormus:** I'd like to second that.

**Bickford:** Alright, we have a motion and a second to disapprove this application. Any discussion?

**Allen:** Yeah, discussion. Disapprove it because you don't like the location. Disapprove because you don't think we ought to have a Dollar General in that area. I just like to get an idea for them.

**Smith:** I'd be glad to elaborate on my motion. I went down and looked at the site. I'm not an engineer. But I am a human being. If I lived there, I wouldn't want it there. From a traffic point of view, I wouldn't want it there. And I think there's a better way to do it. I'm all for a Dollar General Store. I like them. I shop in them. I think that's the wrong spot.

**Allen:** I agree. I'm just asking do we tell him to go back and look for another location.

**Bowe:** I think we need the business personally. I don't want to run him out the county.

**Allen:** I don't want to run him out the county. I just want to run him to another spot. That's what I'm saying right now. We don't want to tell him we don't like you at all. We like you we just want you to go to another spot. That's my thought.

**Bowe:** That's fine.

**Gormus:** 8 acres is pretty big. Why go right on top of their house?

**Allen:** Because it's not a square 8 acres in my opinion.

**Bickford:** Further discussion? Seeing none, let's vote. That is turned down. Only because of the location sir.

**Smith:** For the record, Mr. Allen voted backwards again.

**Allen:** Again.

**Gormus:** Yes is a no.

**Allen:** I knew it when I hit the button.

**Commissioner Smith moved, Vice Chair Gormus seconded to disapprove the 16ZMA237 Par 5 Development Dollar General Store due to location. This motion passed 6-1-1. Machine vote was 5-1-1-1 with Commissioner Allen opposing and Commissioner Crews abstaining, Commissioner Charlton Absent. Commissioner Allen stated that he pressed the wrong button and intended to vote in favor making the vote 6-1-1 with Commissioner Crews abstaining and Commissioner Charlton absent.**

**Bickford:** We appreciate you bringing the application. As you can see from the consensus of the Board it wasn't the store, it was the location. We hope you will find another one close by. Thank you.

**Re: Public Hearing-16ZMA238 Spangler, Business Development**

**Cobb:** This is case 16ZMA238. Owner/Applicant Samuel G. Spangler, III. Tax Map Section 9 Lot 60, 60A, 61, and 61A containing approximately 8 acres total on South Constitution Route with is Rt. 20 in the Slate River magisterial district. The property is currently zoned A-1. One of the parcels does contain the current feed supply store and Mr. Spangler is requesting approval to rezone these parcels to Business for the purpose of maintaining the existing store as well as marketing the other parcels for lease and sale for business purposes. You have the conditions before you. The applicant is also here for any questions for them.

**Conditions:**

1. That all federal, state and local regulations, ordinances and laws be strictly adhered to.
2. Any new structures shall meet all safety requirements of all applicable building codes.
3. That all documentation submitted by the applicant in support of this rezoning request becomes a part of the conditions.
4. Ample parking for deliveries, employees and customers shall be supplied on premises and no roadway shoulders shall be used.
5. The applicant will maintain a commercial solid waste container and follow the County Solid Waste Ordinance.
6. During construction of any facilities dust shall be controlled with water and calcium chloride.
7. Exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties. Any lighting for surveillance will be at minimum foot-candles for visibility and shall be pointed in a down direction.
8. The Virginia Department of Transportation shall approve access to any proposed facility and the applicant will provide all required improvements.
9. A traffic management plan shall be submitted as part of the overall site development plan. Review and approval by VDOT of the traffic management plan will ensure that temporary construction entrances and access roads are provided appropriately; that "wide load" deliveries are scheduled during off-peak times, and that access routes to and from the site are planned to minimize conflicts.
10. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.
11. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the use, if it be the wishes of the Board of Supervisors.
12. Nothing in this approval shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.

13. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property at any time to check for compliance with the provisions of this permit.
14. That the applicant (s) understands the conditions and agrees to the conditions.

**Bickford:** Do any of the Commissioners have any questions for the applicant before I open the public hearing? Ok. Seeing none. I will now open the public hearing. This is for the, he has two, this is for the first. 7-B. Business development. Same criteria. Come to the front. State your full name and address. 3 minutes if you are representing yourself, 5 minutes if you are representing a group or part of a group.

**Robert Mark Parson:** Good evening. Thank you for the opportunity for public discussion.

**Bickford:** Excuse me, state your full name.

**Parson:** My name is Robert Mark Parson. I am representing my father, Robert R. Parson's interests as he is unable to attend the meeting for medical issues. I am acting in my capacity as his power of attorney and I have a copy of said document if anyone wishes to see it. Small businesses are the backbone of our nation. Mr. Spangler and his farm supply business fills a vital void for the greater Buckingham area and his successful support is critical to future growth in this corridor of the county. It is not our wish to hinder the exercise of use or sale of the property owned by Mr. Spangler but to find a balance between the needs of the residential and commercial interests. Current zoning allows for the diversity of use for the current parcels of property and special use permits can be utilized to develop these current properties without zoning changes. With the current change, the current use of the upper property by Colonial Pipeline residents are experiencing issues with noise and light pollution as well as particulate matter related to dust. This also raises a safety concern as to access and utilization for the current residents. Traffic patterns and visibility for the portion of Rt. 20 raises safety concerns as the residents at the crest of the hill as much of the traffic speeds through alongside this property. In closing it's difficult for the community to accept zoning changes without knowing what type of business will be placed on the lot. In my experience as a general contractor zoning changes are requested when a set of plans have been drawn up for a new use of the property. Thank you.

**Bickford:** Thank you.

**Monica Parson:** Hello. My name is Monica Parson and I have property right opposite Mr. Spangler's. He wants to develop it. The issues that I have thought about since I heard about the trying to get rezoned, I think that the proximity of the business next door to some people who live there, now my house I've owned that house for 30 years but I do not live there permanently. It's a second residence for me. But when I do come there I think we are going to have some issues and the people who surrounds the area that live there will have issues with traffic, noise, light pollution and I think they are going to be disturbed. The peace and all those issues, the peace and quiet of the people in that area is going to be disturbed. I think as far as safety is concerned which is a big issue in my mind, I think that traffic will be a big issue at the crest of the hill where Mr. Spangler has his current business, people will be slowing down to be able to

enter safely but I think that there may be some issues with any further development going down south of his business, Rt. 20 South, I think there is going to be some traffic issues. Depends upon what it is he wants to build which I don't really know exactly what that is. But I do know that the current business is not in an unsafe location but if any businesses that would be built south of his current business may have site line issues as far as people do speed down Rt. 20. There is a lot of money made off of Rt. 20 traffic in traffic tickets and people speed a lot so there's going to be some serious issues in my personal opinion with safety as far as that new business that would be going in there. So, I just wanted to mention that I think safety will be an issue. I don't know if DMV has been consulted or not. I do believe that safety will be the major issue as far as traffic would be concerned with a new set of businesses there. Thank you.

**Bickford:** Thank you. Anyone else?

**Rebecca Tinsley:** Good evening. My name is Rebecca Tinsley and I'm adjacent to his business. My concern would be the lighting from the business whatever it is, the noise and there is a school bus stop right there. Right next door. Possibly the draining issues from a business which we have no idea as to what it's going to be. Those are some of my concerns for a permit for a business.

**Bickford:** Thank you maam. Anyone else wish to speak? Seeing none, I will close the public hearing. Turn it back to the Commissioners. Is the applicant here?

**Cobb:** Yes.

**Sam Spangler:** Good evening. I'm Sam Spangler. I've been there 27 years operating the Spangler Farm Supply. To my knowledge, I've never had any complaints from any of my neighbors. At the present time part of the property is leased to Progressive Pipeline who will be leaving in approximately a month. They are there temporarily testing 21 miles of the existing pipeline. They are creating more traffic than I anticipate any business coming in there will. One thing they are operating...once they start testing the pipeline they operate 24 hours a day and they do have some lighting there at the present time. So this is not indicative of what kinds of business will be there later on. As far as the highway and safety, all of that has been approved. Highway department has been down there looking as far as the safety standpoint of the road and that kind of thing. I don't foresee such as the one that operate which is kind of what I anticipate will come there at some point and time would be a...any kind of business would be operating at night or brining in traffic or any amount of traffic.

**Allen:** What we are asking to do is change it from A-1 to B-1 to business and then add mini storage.

**Bickford:** That's the next case.

**Allen:** But still might as well ask right now, that's what we are doing right?

**Maxey:** I understood it to be expanding your business. Is that not the case? No, I'm talking about the two parcels.

**Spangler:** Not what I'm talking about now. But expanding the parcel that's coming up where the self-storage is. That would be the one I want to expand.

**Maxey:** The gentleman had a legitimate concern. Normally you would request a zoning change if you have information as to what type of business might be going in there. My understanding is you are staying with the first request as you were expanding your business in the feed supply up on those two parcels. That's not the case?

**Spangler:** It might be the case but I don't know that to be the case at the present time.

**Maxey:** Do you understand, it's hard for us, it's hard for me to say go ahead when we don't know what's going in there.

**Spangler:** I can't expand my business under the present zoning.

**Bowe:** Are you asking us to expand it?

**Spangler:** Not at this time.

**Maxey:** I don't see any point of this first request, personally.

**Bowe:** I don't either.

**Smith:** I do. I have a couple questions to ask. Is this application for B-1 purely for speculative or do you have an ace up your sleeve that you would rather not put on the table right now?

**Spangler:** No, sir. It's all speculative.

**Smith:** It's all speculative.

**Spangler:** Yes. I have in the past been approved for two cases about that property because people were applying for grants under the tobacco money and had identified it as being both close to Charlottesville for the technical part coming out of UVA and the convenience of being close to Charlottesville and being in Buckingham County. That is one of the things that I'm interested in.

**Bowe:** So basically you want business land to sell rather than agricultural land.

**Spangler:** Yes, sir.

**Smith:** That was the answer to my question.

**Bickford:** We have to consider his location is also in a growth corridor that we designated in the comprehensive plan.

**Gormus:** All these years you've been grandfathered under the A-1.

**Spangler:** Yes, maam.

**Gormus:** You just want to change it to B-1 in case...

**Spangler:** B-1 will fit what I'm doing much more...

**Gormus:** You are already B-1 you just don't have the letter? You just don't have the B letter? Right? You are not doing anything different than you've been doing?

**Spangler:** Not at the present time. When I went to do this rezoning and went to the zoning office, I thought it would be appropriate to do it all at one time.

**Bowe:** It says on the application that he wants to sell or lease the parcels.

**Maxey:** There's two parcels. I have no problem with you rezoning the parcel you now sit on, but the additional two, I mean, I kind of agree with the gentleman out there that we need to know what's going there. That's me personally. I can't speak for the Board. I agree we need to rezone where your business is.

**Spangler:** It says to rezone the whole parcel.

**Maxey:** its slip up isn't it?

**Spangler:** its 4 parcels. The business sits on 2 of them, existing business.

**Maxey:** I'd say those 2 we should rezone.

**Spangler:** The 2 on the hill I've been leasing.

**Maxey:** So when you get a business on those two parcels, my personal opinion is, we don't rezone them.

**Bowe:** You can always sell the land, those two parcels, or lease them subject to a B-1 rezoning and ask for 90 days or whatever and we can certainly handle it in that length of time. Does that make sense to you? Advertise it for sell as B-1 and when people come explain to them it's A-1 but you are willing to give them a contingency to sell subject to them obtaining B-1 zoning or you obtaining it for them. Then I don't think you've got a problem at all.

**Maxey:** I agree with that.

**Gormus:** But the application that we are looking at has it all together.

**Maxey:** I know.

**Gormus:** We either have to divide the whole thing or approve the whole thing wouldn't we?

**Bowe:** Would we?

**Gormus:** We can't half it I don't think.

**Bowe:** Mr. Wright, question. Have you been listening?

**Wright:** Yes.

**Bowe:** Can you approve part of his request?

**Wright:** I think you can approve what you want and deny what you want to.

**Bowe:** Ok.

**Maxey:** I make a motion then, unless anybody else has questions?

**Bickford:** Go ahead and make the motion and I can open up for discussion.

**Maxey:** I make a motion that we approve rezoning for the two lots your business sits on, not the two up on the hill.

**Bickford:** Do we have a second?

**Bowe:** I second that.

**Bickford:** Ok. Any discussion?

**Allen:** Now the first thing you got to do is figure out which two lots his business is on so you can separate them.

**Audience:** I know it's against, but I need to say one thing. Where is he putting the storage units because the storage units have to be on B-1? They cannot go on Agricultural.

**Bickford:** This has nothing to do with storage. That's the next case.

**Bowe:** That's the next case.

**Allen:** So which, 60, 60A or 61, 61A?

**Maxey:** I don't know which ones they are.

**Gormus:** B-1 and A-1 change his tax status on this property as far as income tax to the county.

**Cobb:** Taxes are based on current use so I doesn't matter what it is zoned.

**Gormus:** Just so everyone is on the same page.

**Maxey:** We are rezoning where his business is at. His store. There is two lots there.

**Bickford:** Two are not and two are. The two to the north.

**Smith:** Do you know which ones they are?

**Bickford:** No. We need to the tax map number.

**Cobb:** I can't tell you. I don't have the map in front of me tonight, but I can look at the map.

**Bowe:** The store is two buildings right now, right? He's not going to move the store. The one the store is sitting on.

**Allen:** I just thought you'd have it in writing. Ok.

**Bickford:** Any more discussion?

**Smith:** Not on this.

**Gormus:** Alright, I'm going to play devil's advocate. I'm on a roll tonight. Should he have to come back for this to change into B-1 since he's applied for it all under one permit, does he have to come and repermit again?

**Bickford:** If we vote the way the motion is, yes. Those two lots to the side, he would have to come back and have them rezoned when...what we are basically saying because there is no business or a business to come in, he would have to come back at that point when he gets an interested party to get it rezoned to B-1.

**Gormus:** And apply for a permit and pay the fees again?

**Bickford:** That is correct.

**Smith:** Unless Alice Gormus wants to pay it for him.

**Gormus:** I don't think it's fair.

**Bickford:** What he's asking for is to be basically proactive ahead of time by changing them now it would be attractive to potential business people coming in.

**Gormus:** I can't blame him for that.

**Smith:** But we lose control.

**Bickford:** You lose a certain amount of control however, if it's B-1 there is a list of entities or businesses that can go in there and they have to fit that need.

**Spangler:** Should I want to expand my feed supply business up there, would I have to come back again?

**Smith:** If this passes no.

**Maxey:** If it's a business, yes.

**Bickford:** Mrs. Cobb?

**Cobb:** What you are deciding tonight, is to rezone the two parcels where he has existing business. He can expand within those two parcels. If he's talking about expanding into the other two parcels because basically tonight you are doing two things. You are saying you approving two parcels and recommending denial of two parcels. So the other two parcels will remain A-1 if any type of businesses that are not listed as A-1, would need to be rezoned at a later time.

**Bickford:** If he expands himself, he would still need to though.

**Cobb:** Yes.

**Bickford:** Any more discussion? I see two have already voted. Alright, we will vote then.

**Gormus:** We are voting on approving two?

**Bickford:** Approving the two north lots with existing buildings and denying the south two lots.

**Commissioner Maxey moved, Commissioner Bowe seconded to approve the north two lots with existing business buildings to be rezoned to B-1 and deny the south two lots. This motion passed with a 6-1-1 vote. Vice Chair Gormus opposing. Commissioner Charlton absent.**

**Bickford:** We gave you half on that one. Your two north lots will be changed. We agreed to that. But the two south lots will not at this time until you have an active business interest. If you want to sit down we will introduce the other and bring you back up.

**Re: Public Hearing: 16ZMA239 Spangler, Mini Storage**

**Cobb:** This is case 16ZMA239. Owner/Applicant Samuel G. Spangler, III. Tax Map Section 9, Lots 52 & 53 containing approximate 3 acres total on South Constitution Rte., Rt. 20 and B-A-H. Road, Rt. 695 in the Slate River Magisterial District. The property is currently zoned A-1. He is asking a Zoning Map Amendment and Special Use Permit to expand the existing mini storage facility. The conditions are there for your review and as you are aware the applicant is here for any questions.

1. That all federal, state and local regulations, ordinances and laws be strictly adhered to.
2. Any new structures shall meet all safety requirements of all applicable building codes.
3. That all documentation submitted by the applicant in support of this rezoning request becomes a part of the conditions.
4. Ample parking shall be supplied on premises and no roadway shoulders shall be used.
5. The applicant will maintain a commercial solid waste container and follow the County Solid Waste Ordinance.
6. Any exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties. Any lighting for surveillance will be at minimum foot-candles for visibility and shall be pointed in a down direction.
7. The Virginia Department of Transportation shall approve access to any proposed facility and the applicant will provide all required improvements.
8. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable.
9. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the use, if it be the wishes of the Board of Supervisors.
10. Nothing in this approval, shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.
11. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property at any time to check for compliance with the provisions of this permit.
12. That the applicant (s) understands the conditions and agrees to the conditions.

**Bickford:** Do any Commissioners have any questions before we start the public hearing? Ok. I will now open the public hearing. Same criteria. Please come forward, state your full name, address. 3 minutes if you are speaking on your own behalf, 5 minutes if you are representing a group. The floor is now open.

**Monica Parson:** Monica Parson, again. Hello. I just had questions. I really didn't know exactly what Mr. Spangler was planning to do and since his property adjoins my property, that is why I was a little concerned about what is going to happen. I don't exactly know what the plans are but I'm summarizing from what I'm gathering tonight that there is an additional property that he wants to develop into a storage unit. Am I correct on this?

**Smith:** It already has storage units on it.

**Parson:** Yes, it does but then north of the storage units I believe is what he's trying to develop? Correct? Going towards Charlottesville, my house, the storage units then there is a triangular piece of land at B-A-H Road and then Rt. 20 is on. Is that what you are trying to develop, Mr. Spangler? That's what I want to find out. So you are going to add additional storage units? Ok. I just wanted to find out exactly what we are talking about. Thank you.

**Bickford:** Anyone else want to speak?

**Cobb:** I did I think have a couple names, listed, if they still want to speak. I had a Margie Jamison, Evelyn Brown and a Tracy Washington.

**Evelyn Brown:** My name is Evelyn Brown and I live on 377 B-H-A Road and that is on the back side of the storage shed. The entrance into there is on our road and it is more traffic on our road because of that and we've been trying for years to get our road paved and we've been staying on a list for years. Over 30 years I reckon we've been trying to fight for it but still haven't gotten it done. With more traffic, it messes up the road more. School bus in and different stuff. If they would pave our road it would make it much nicer going into the storage unit it is paved but the rest of the road is gravel dirt road. If he extends it that's going to be more traffic so if they do that, is there any way we can hurry up and get our road done? This is something we've been fighting for for years and it doesn't make sense we can't get our roads done and others in the area has gotten their's done since we've been on the list and they've gotten it done and we haven't. That's not fair. We pay taxes in Buckingham just like everybody else does. It's not fair. That's our concern. With more traffic that messes up the road even more and it's already a mess off and on. If he adds in more to me that will be another good reason to get our road done. Thank you.

**Cobb:** Tracy Washington or Margie Jamison?

**Bickford:** Oh ok, very good. Seeing none we will close the public hearing and turn it back over to the Commission. Mr. Spangler if you would come up front sir. If you can give us a highlight of what you want to do sir.

**Spangler:** Yes, petition to have it done so we can expand the storage units which will be in the same style as what it is currently.

**Maxey:** Same entrance coming into it?

**Spangler:** Yes.

**Maxey:** You are not adding an entrance?

**Spangler:** May need to add an entrance somewhere but for the time being use the same entrance. Yes. It has road frontage on the B-H-A Road.

**Maxey:** Is it paved up to the entrance now? I didn't understand that.

**Spangler:** No pavement. When you turn off the road into my storage unit that is paved.

**Bickford:** That's per VDOT.

**Bowe:** How many additional units are you adding?

**Spangler:** Haven't determined that yet.

**Allen:** How many do you have now?

**Spangler:** 50.

**Allen:** Maybe doubling it?

**Spangler:** First we will probably do, we have approximately 40,000 sq. ft. that we think we are going to expand into the part we have now fenced.

**Maxey:** So expand where you already have fenced?

**Spangler:** Yes.

**Maxey:** Is that going north?

**Spangler:** Going north yes.

**Maxey:** Monica, does that answer your question?

**Bowe:** Approximately how far is it from the VDOT paved entrance back to the next road that's paved? How much of a dirt road are we talking in there?

**Spangler:** 300-400 feet.

**Bowe:** That's the only access?

**Spangler:** Yes, sir. It would be helpful to get the road paved if there is more traffic on it.

**Bowe:** We don't control that one.

**Gormus:** That's a VDOT matter.

**Bickford:** Traffic might help.

**Smith:** Traffic count will.

**Bowe:** I've seen these things go where the developer had to pave it. I know that's not what you want to hear.

**Spangler:** That's not going to happen.

**Bickford:** You say 40,000 sq. ft. that you are talking about available. If you utilize that how many storage units approximately do you think you can get on that, realistically.

**Spangler:** Depends on the size. In the 50 we have, we have some 10 x 15, 10 x 10 and 5 x 10's. We might not be able to get quite that many in there because of the setbacks.

**Gormus:** Are you going to be able to put in units and still have a place for people to get their vehicle in there to load and unload?

**Spangler:** Yes, maam.

**Gormus:** Within the fence?

**Spangler:** Yes, for the first expansion that we are talking about.

**Gormus:** First expansion? That leads me to believe...

**Spangler:** In the fenced now.

**Gormus:** Then you are thinking outside the fence?

**Spangler:** Yes, then we'd like to continue north into the...

**Gormus:** Into the triangle?

**Spangler:** Into the triangle.

**Maxey:** Alice, that's something I'm going to look into before I store there whether I can get in and out.

**Bickford:** Any more questions for the applicant? Thank you Mr. Spangler, you can sit down now. Commissioners what's your pleasure?

**Maxey:** I move that we approve it.

**Smith:** I second it.

**Bickford:** Any discussion? We'll vote then. That passes Mr. Spangler. Move to the Board of Supervisors.

**Commissioner Maxey moved, Commissioner Smith seconded and was unanimously carried by the Commission to approve Mr. Spangler's request for 16ZMASUP239 for Mini Storage.**

**Re: New Business: Introduction 16ZMA240 Jeffery Sheffer, Wise Ridge Store**

**Bickford:** Mrs. Cobb, that brings us to new business. Introduction of Wise Ridge Store

**Cobb:** Yes, this is case 16ZMA240, Owner/Applicant Jeffery Sheffer. Tax Map 181 Lot 7A containing an approximate 3 acres on Wise Ridge Road which is Rt. 756 in the Curdsville Magisterial District. The property is currently zoned A-1. He's asking for a zoning map amendment to rezone from A-1 to B-1 for the purpose of expanding an existing store. At this time I'm asking you to set a public hearing. The applicant is here if you have questions for him as well as you have conditions to consider. The applicant is aware of the conditions and hasn't voiced any concerns at this point.

1. That all federal, state and local regulations, ordinances and laws be strictly adhered to.
2. The facility expansion and changes shall meet all safety requirements of all applicable building codes.
3. That all documentation submitted by the applicant in support of this rezoning request becomes a part of the conditions.
4. Ample parking for deliveries, employees and customers shall be supplied on premises and no roadway shoulders shall be used.
5. The applicant will pursue a commercial solid waste container and follow the County Solid Waste Ordinance.
6. Any exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties.
7. The Virginia Department of Transportation shall approve access to the proposed facility and the applicant will provide all required improvements.
8. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect and for this purpose the provisions of this are hereby declared to be severable.
9. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the use, if it be the wishes of the Board of Supervisors.
10. Nothing in this approval shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.
11. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property at any time to check for compliance with the provisions of this permit.
12. That the applicant (s) understands the conditions and agrees to the conditions.

**Bickford:** Will the applicant please come forward? Can you just give us a brief summary of what you want to do?

**Sheffer:** Actually I need to make sure I can actually...I want to rezone because I need financing to buy equipment and I'm having trouble getting off of regular residential A-1. I need to switch to B-1 so I can get business financing so I can actually afford to actually do remodeling on the store such as get new coolers, roof repairs on the existing building. I'm not expanding outside my business, I'm just renovating the current business and I need to get business financing for that.

**Smith:** When I saw this the first thing I thought of was is he going to keep the home nature of the Wise Ridge Store.

**Sheffer:** It's repairs. My stepfather died a couple months ago. We are realizing that he was our main repair person so we are going through now and we have a lot of stuff that we have been lapse on that we need to do or have the ability to actually do.

**Bickford:** Any more questions for this applicant?

**Bowe:** I make a motion to send it forward.

**Gormus:** Second.

**Bickford:** All in favor for moving this to public hearing. We will see you November 21<sup>st</sup>. You will be first on the docket.

**Commissioner Bowe moved, Vice Chair Gormus seconded and was unanimously carried by the Commission to move case 16ZMA240 Jeffery Sheffer, Wise Ridge Store to public hearing on November 21, 2016.**

**Re: Public Comment**

**Bickford:** Before we have...I was going to say...let's take about 10 minutes to stand, stretch or whatever you need to do and then we'll invite everyone back in for public comments. We are going back to our public comment period. I know you have heard this for this will be the fourth time. Please come up and state your full name and address. You have 3 minutes if you are speaking on your behalf, 5 minutes if you are representing a group or part of a group. I will now turn it over to Mrs. Cobb. She is going to call the names as they signed up.

**Bowe:** Are we letting all Buckingham residents speak first?

**Bickford:** I assume that's all we've got.

**Cobb:** That is mostly what we have. I think we have 1 or 2 that are not so I will keep that in mind for you.

**Bowe:** They go to the back then.

**Cobb:** First Quinn Robinson and then Marie Flowers.

**Quinn Robinson:** My name is Quinn Robinson and I live out in Andersonville. District 4. I just have a couple of comments tonight. I appreciate the opportunity to present these to you. First thing was that the application that Dominion made according to the packet last time and I think this was raised earlier was complete as of the submission in August. How they've been able to extend this and why it was done I do not know. Effectively, what happened was the meeting on the 26<sup>th</sup> of September precluded people from giving their comments. The presentation by Mrs. Picard was lengthy and off point. But the issue is it wasn't anything that wasn't available elsewhere. I'd like to point out that she said FERC sponsored an independent report on the hazardous materials. FERC is not an independent agency. They are paid, funded entirely by the oil and gas industry. To say they are independent is a real exaggeration. Further, the hazmat, the hazardous materials department of the transportation is underfunded. They do virtually no inspections. They don't have the money and they rely on the industry to do them and they accept them and remember the people at Dominion have already falsified the documents to the forest service and additionally because they submitted those reports and the EPA claims to FERC also. I do want to mention that last time we were here, one of the deputies asked me to sit down and stop taking pictures. I've given you a copy of the Freedom of Information Act that says that pictures are permitted and actually can't even meet in the facility that does not facilitate recording or taking pictures and I just mention this because he said at the time that everyone had to sit down and other people were up and walking around and it just seems strange to me that he would be able to exercise this kind of authority. I'm going to suggest to Mrs. Carter that the deputies have appropriate training in terms of the Freedom of Information Act and what the limits are for their responsibilities. The other thing, a couple other things, but just to be quick about this, the mention of a subcommittee on the conditions to be reviewed and proposed to Dominion. I hope that you open that up to the community. I have one that I've been thinking of for some time and that would be a \$2 billion surety endowment, the money would be given to the County of Buckingham to hold as long as the pipeline is in function and it would cover any needs, requirements, compensation, anything of that nature and it would be interest free and at the end of all this business, it would be given back to Dominion but...

**Bickford:** Time is up.

**Robinson:** Thank you sir.

**Marie Flowers:** I'm Marie Flowers. Third district. I want to comment on your procedure. An applicant is allowed an unlimited amount of time to present an issue and answer questions. Opponents or Proponents are not. For example, a large commercial pig factory is being proposed, health and environmental experts are asked to give testimony but are only given a certain amount of time and are not able to present all the valuable information because of this limitation. Shouldn't a situation such as this be given a little more time? Is the time limit more

important than long term consequences of any decision? The consequences could be good, bad or neutral but I believe the extra time used to get as much information is very important. If this pig farm were proposed next to your property, you would want careful deliberations and I just feel like people especially some of the experts who have information that is valuable not just somebody like me who comes up and says will I don't like this. I don't want to go on and on and say that but people who have information that you really should know and are able to compare against the information that the applicant gives. So, I hope that you know you can be a little bit more reasonable when you listen to people or a little bit more flexible. Thank you.

**Joe Abbate:** Good evening. I'm Joe Abbate from Yogaville and I'll be representing Yogaville. I'm in Sammy's District 5. I appreciate the opportunity to have called some of you and discussed this and given the opportunity to serve I hope I can help you on the subcommittee. I promise you I won't type anything. I'm just joking with Sam Smith about that. I had a chance to serve on the Committee Advisory Group with Dominion and the County to address some the issues in front of you and I've spent about 2 ½ years studying compressor stations and seals and turbines. Went to the Leesburg Station and had questions there and I know we are dealing with an excellent team of people from Dominion, top notch people. So it's not a matter of a quality company, they are a six sigma which means in quality assurance, they are right at the top. What I want to address is I went and saw this movie Deep Water Horizon. Now it is a different animal. It is an oil rig but they deal with methane. There are some similarities that purvey. It was the deepest of its kind at the time and we have a very big compressor station. One of the biggest coming in. Now, Dominion can request a cert or permit for a 57,000 hp compressor station and then in a year or two or less, they can get a certification from FERC to put another 7500 hp or more. That's how they go from 50,000 to 80,000 to 100,000. So as part of our consideration, we need to understand this process. You are not just approving a 57,000 hp compressor station. You are opening the door for Dominion after this is done they go to FERC and add turbine after turbine. Now I'm not saying that that's completely dangerous but for our information we should know that this happens. It did happen at Leesburg. They added a 7500 hp turbine and they didn't show but 1400 hp at the time we went there. They had turned off the bigger turbine and had only showed up the operation sound and we didn't get to hear a blowdown being muffled. So, these are all things when I'm looking at someone doing work for me, I like to go see their work and I like to see it demonstrated to me because they are having subcontractors perform this. So in Deep Water Horizon in the Mexico Gulf, this was the biggest methane explosion in the history of the United States. How did a company like British Petroleum who won 7 years of safety awards somehow come to this point where they have one of the worst accidents in the history of the United States? First of all, they had remote monitoring. They had some people on board but they were under the control of the prime contractor who is then instructing subcontractors what they can do. Now, we've all had work done by subcontractors. So what we have here is the prime contractor Dominion, Six Sigma, Top Company, British Petroleum, top company, instructing subcontractors and it just didn't work out perfectly. In addition they fell behind schedule, 43 days. That put pressure on the prime to push the subs. We've all been in a case like this, building my house, I had to wait a lot of extra time and my wife was pushing me and I was pushing the subs. So this is what happens. They were 43 days behind schedule and its costing them \$50 million. Well, guess what, Dominion is 360 days behind schedule and they in the Farmville Herald are talking to their subs

to pick up the speed to catch up on this project that they are a year behind. Finally, all these elements combined to result in a simple test that they decided wasn't necessary because it would take extra time that might show bad information which would stall them another so many weeks. Just that simple test was bypassed and resulted in the largest methane explosion in the history of the United States. Nothing that BP or these contractors had ever experienced before. So I please urge you to see this movie which is available I think in Farmville and certainly Charlottesville. My wife took me because she likes these disaster movies. So, I'll provide more information because I don't want to waste more of your time but there is a surplus in Southern Virginia and North Carolina and all over the United States of natural gas.

**Bickford:** Thank you sir. Time is up.

**Abbate:** They shut down 40% of the wells. So, there's no drastic need. Thank you gentlemen.

**Swami Sagunananda:** Good evening. My name is Swami Sagunananda. I'm in District #5. That was my main concern but he articulated better. So, I'm going to skip that and go to #2. I'm going to read my statement. Union Hill Community is in the probable impact radius of the compressor station and pipeline. In 2 churches and over a 100 residents lie within the probably impact radius of any explosion or fire in the Union Hill community. The probable impact radius is determined by the Pipeline and Hazardous Materials Safety Administration. This highlights the danger to the Buckingham citizens that could result in any change of zoning for this industrial installation. The lack of quick emergency response threat to safety and property and poor emergency planning by Dominion is key to violating the protection in the Planning Commission's Comprehensive Plan for the Agricultural Zone 1. Lastly the routing of the pipeline and placement of the compressor station converge to create a great risk to our community. Yogaville, our community, lies within the probable impact radius of the Atlantic Coast Pipeline route as well. So I urge you to, and I know you will, to look at this very, very carefully.

**Chad Oba:** Good evening everyone. I'm in Chet Maxey's District 6. I have a very short statement tonight and I want to begin by saying I really appreciate that you have really slowed down and it seems as though you really are considering things that we've presented to you. I really and truly appreciate that because this is such an important decision. The valuing of what I might be short term economic interest because of the diminishing rosella shell reserves and I don't think anybody's talked about that much but it is diminishing and it's getting harder to pull this stuff out and the low market demand which I think you have heard about for gas and the unsubstantiated revenue that Dominion has promised. That needs to be substantiated and I certainly hope you ask Dominion. What is not being considered, it doesn't seem, is the cost to human life and because of that I really feel this business necessitates a need for the health impacts. That's my main concern. Especially when these health impacts are going to fall to a very small discreet group of people in that impact zone. So, we are being asked to be a sacrifice zone for a very questionable venture. So I really appreciate you moving very slowly and considering all of this for those of us who are really going to bare the biggest impact here in the county. Thank you.

**Kathie Mosley:** Good afternoon. My name is Kathie Mosley. I live at 1296 Union Hill Road. I have a letter from Concerned for a New Generation and I think I handed in, did you get a chance to read it? Are yall going to respond to it?

**Smith:** Robert's Rules of Order amended for small groups which we use. You can ask us questions, we cannot answer them but if we chose we can ask you a question and you must answer them. So, I do not believe you are going to get any questions answered tonight. I would be glad for you to ask them and we will make notes like we requested you to do earlier tonight and consider them. It's not a public forum. It's a public comment period. Thank you.

**Mosley:** Thank you.

**Lakshmi Fjord:** Hi, I'm Lakshmi Fjord and I'm here and I'm going to represent Friends of Buckingham and I'm a landowner in District 5 and have been since 1979. I sent you a document earlier today and some of you either read it or had the exact same ideas I did in looking at the health assessment that was submitted by Dominion as if it were a scientific study and I'm extremely concerned. This is the work that I do. I look at studies and I am on a Board that reviews and peer reviews papers and scholarly papers and what we are looking for is are things like who wrote it. So authorship is incredibly important and the fact that on page 1 it says that that report that Ms. Picard stood and held often and showed it as a scientific study, there are not authors. It just says FERC staff. Others will comment on who pays their salaries. Many times, I don't have science about that but what I can tell you is when you don't know who the authors are, you ask yourself, why don't you. Even Dominion's cultural reports they put an author. The cultural reports that they file with FERC. The person that wrote them has a name on there. This study is not a study because it does not. Therefore we cannot check the credentials, we cannot call the person up. Then the data, it's not a minor point that the data was all collected by Dominion and provided by FERC or possibly FERC wrote this and then Dominion read it and signed off on it. That's not unheard of. I wrote to you that this is a huge problem in medicine, industry sponsored so called studies. It creates a huge problem. I ask you to consider that the only compressor stations they were comparing only had one engine and the largest which was 7410 hp and they were then asking you to think about that health study and compare it with 14 engines, you know 10 big ones and, sorry 4 big ones and 10 micro turbines that add up to 57,683 hp which was in Dominion's most recent, July 16<sup>th</sup> 2016 amended permit for minor source air permit. So I have to go by their figures. So as you can see that's 50,000+ hp less. So there again, not science. You can extrapolate from that. I ask you to think about the idea of the methods that they use. So risk assessment, you know, she made it sound like that was really clear science but in fact it is sort of like saying, here is a population, how many people in all of Buckingham County are going to get mesothelioma which is the condition you get from exposure to asbestos. That's a risk assessment study. A weight of evidence study is I'm a doctor and I have these patients who come in with mesothelioma and they have the condition and I am going to see how many of them worked with asbestos and I'm going to say make that connection between mesothelioma. So this is what I'm asking you to do. I'm asking you to look past this kind of faulty science. It's not science. It's actually an industry report. There's other concerns. Mr. Zinc... First of all, let me say thank you so much for all of the really incredible questions that you asked. I'm very touched and impressed by the amount of time you put into it and I want

to thank you. Mr. Zinc talked about PHEMSA. PHEMSA itself, that regulatory agency, has written quite a bit about the discrepancies between rural pipeline materials, distances between valves, one other person talked about this and the urban centers. Please look into that. Promise us that you will look into that because that's huge. The fact of remote monitoring and 9 jobs. They seem to be connected. In that SUP, I saw 9 jobs and only one of them was full time. I don't understand how all these people are going to be moving to Buckingham for jobs that are part time and covering many compressor stations. No, this is not a job generator. As far as I can tell from their Special Use Permit. Just closely reading this thing. Finally I wanted to mention that Mr. Toms said something that was kind of difficult to hear which was Buckingham is too beautiful to put solar on and I'm saying wait a second, that isn't going to do emissions and so forth but it's not too beautiful industrial facility in an A-1

**Bickford:** Time is up.

**Fjord:** In an Agricultural zone. Thank you.

**Swami Dayananda:** Good evening. Thank you so much for this opportunity. My name is Swami Sayananda. I live in District #5. I'm here to speak a little bit also about this FERC study that they refer to which I wrote you to all about. I will just touch on certain things. This FERC study which indicates there is no health risks has been submitted in June 2014 about 2 years back and has not been approved because citizens are not satisfied with FERC's result. So they are really fighting for it. One of the testimonies says that this study which is by the health professional was based on technical, mathematical, theoretical, completely out of touch with what actually happens around compressor stations. In other words, that study doesn't really talk about the real people who are going to be living near, 2 miles, 6 miles. I'm here to speak up for us, all of us, whose health will be impacted. I would just like to read because it seems to me that Dominion can do whatever they can under FERC's regulation. It's a federal governments issue here. So I'd like to read about Chris Gibson who is a Congressman from New York who is a member of House Agriculture Committee, heads a subcommittee on General Farm Commodities and Management. He says, and he's written to FERC, FERC has traditionally relied on reviews of compliance with federal standards for air toxins however there are several reasons why these standards may be inadequate to protect public health. Many of these standards were met many years ago or set many years ago and may be obsolete on the basis of current information concerning risk to humans from inhalation of these chemicals. Most standards and most monitoring around compressor stations are based on average concentrations not on activities over long periods of time and may not produce higher exposure rate at peak. And he says this is a concern because of the protection of health of the people living near to these should be a top priority. I do hope and pray that you will consider the health and wellbeing of your people, our people, our brothers and sisters as top priority. Thank you very much.

**Nelson Baily:** Good evening. Thank you for allowing me to speak. My name is Nelson Baily. I live in the 5<sup>th</sup> district. I am a retired merchant seaman and sailor. I moved to Buckingham for clean air and clean water and peace and love. Benzene is amount the gases that are listed in the compressor station emissions. There is no safe amount of this gas that a human can absorb or breathe without protective equipment. As a member of the Maritime community for over 35

years, having been licensed as a designated Person-in-charge or to supervise, and execute petroleum products transfers. We as mariners as well as most petroleum employees were required to participate in an annual industry wide medical program. This medical monitoring was for determining Parts per Million levels of Benzene gas molecules in your blood system. If the level of Benzene was above a certain parts per million counts, then you were required to seek other types of non-petroleum shipboard jobs such as dry cargo, car carriers, or container ships, but not tankers until your Benzene blood level amount dropped. A United States Coast Guard Benzene card was issued stating that it was safe for an individual to return to petroleum tanker assignments if so desired. One of my concerns is will there be any health monitoring or personal protective equipment issued for Benzene by Dominion to residents if so, this plan should be made available to the public and the monitoring medical provider. I also have grave concerns over particle emissions and deteriorating air quality from this proposed compressor station. I implore you to be wise in your forward thinking, by making all project steps and required construction plans or permits from ACP available for public view and perusal by yourself and residence here in Buckingham. The Department of Forestry has recently denied a needed permit pending for not answering 300 plus required questions.

**Bickford:** Thank you.

**Baily:** Thank you.

**Paul Wilson:** Thank you. I represent...I'm Paul Wilson, Pastor Paul Wilson, and I represent Union Hill Union Grove Baptist Church as you all know who I am, I believe. Thank you. You asked some great questions tonight and I was impressed. I'm really impressed. I'm not here to give a sermon but there's some things I just wanted to bring to your attention. First of all, we are in Union Hill Union Grove community, we have a right to be scared. We have some questions that we are raising. One questions, is why is everyone hiding behind the LLC? That question needs to be answered. Everything. LLC. Why? Because there are some inherent dangers and risks that can pop up. There's a question, we feel there needs to be more than \$1 billion reserve somewhere to protect the citizens of Buckingham County for health reasons and loss of property. We wanted to let you know that FERC, the Federal Energy Regulations Commission that it cannot be trusted. Why? Because it's funded by the industry itself. That's where they get their money from. It's in their interest to continue to be funded and to always act on behalf on the requests that the industry makes. The Department of Environmental Quality here in Virginia, it cannot be trusted because our good Governor purposely underfunded the Department of Energy, um Department of Environmental Quality so that they will have to rely on the opinions and reports from entities such as Dominion Power. That is where they get their basic information from. They tell you about the possibility of tapping into the gas line that's coming through Buckingham County. I heard no one tell you though that it's going to cost more than \$5 million to tap into that line. I live in Amelia County. But I spend more time in Buckingham lately than I do in Amelia. So I actually feel like I'm a resident of Buckingham so I feel like I have a responsibility to let you know that there is a cost for tapping in. They talk about there is no significant impact, there is no SIGNIFICANT, that's the word that they use, impact on health. I call that into question. We don't have the college people like Dominion has but we've done our research as well and we've had to go out of state and take reports to other things because there is

so much technical stuff and it's really confusing. They are so polished. Their job is to sell you on what they are presenting. They have already taken for granted, I was told by one of their representatives that they bought the land here in Buckingham because they knew they were going to get the permit. Now, that's taking advantage...that's like buying a car with no driver's license no insurance and no tags and I'm going to drive my car anyhow. So they are taking advantage of the situation. The most likelihood...I wrote some notes here, let me look to see what else is here. I want to ask about the newly subcommittee that you are establishing? I want to know if the public is going to be in on this. I too was part of the committee sponsored by Dominion here in Buckingham County. They flew me up to look at a compressor station but I was like a book in the Bible, they almost convinced me but I saw through the shield. I need to ask another question, Dominion needs to explain, what will be lost or what would really happen in a catastrophic ground zero situation such as an explosion? What would be lost? How many homes would be destroyed? How many lives? At midnight when nobody's around. Everything is so remote, how many houses and how much property will be destroyed? They don't tell you that. Commitments for domestic use that Dominion talks about is mainly by the subdivisions that Dominion owns and are contracted with. It's not any new users. That's all I wanted to bring your attention to. Be really aware with what's going on. I look at you all and I believe you love the Lord like I do and I think you would pray about the decisions you make. May God Bless You.

**Bickford:** Thank you.

**Carlos Arostegui:** My name is Carlos Arostegui: I live at 4443 S. James River Hwy. I didn't come tonight...I wasn't going to say anything but I heard some things during the hearing that I thought I was would bring up. Up until a couple of years ago, when I had the opportunity to retire to full time farming, my wife and I had a computer consulting company. We did accounting software for medium sized companies. Our clients were located in London, Buenos Aires, Mexico City, San Francisco, Seattle, Boston, New York, Washington DC, and Miami so we were far flown and we supported all that from Buckingham County by way of the internet. Here where we are in the western part of the county, we don't have much in the way of fiber optics or DSL or anything like that so we rely on satellite. Part of our responsibilities once a year was to do a system upgrade which required taking the company down at close of business on Friday and converting the data over the weekend and have them up and running first thing in the morning. I could guarantee no matter what we did to schedule one of these conversions we would have a gigantic thunderstorm come and park itself over our satellite. Ok. That made for some very long and scary nights hoping we were able to get that. The discussion earlier turned to what would happen if terrorist targeted the compressor station. My first thought was about that satellite in the thunderstorms. What Dominion or ACP seems to be proposing is that they are going to be managing this compressor station remotely from West Virginia and that is going to be done through that microwave tower. Ok. I'm not a terrorist and have not had any terrorist training, but I can tell you that if I were wanting to cause a great deal of hurt to Buckingham, the first thing I would do is target that microwave tower. In the next hearing when these folks come back, you should ask them what kind of redundance they have in the communications. What happens if that microwave tower goes down? Do we now have a rogue compressor station that cannot be managed, cannot be shut down? I think that is a frightening question and we don't

know the answer to that. So I think if you could, please...I sat on my hands to not jump up and ask the questions right then, but I think, you know, it's an important question. We are about ½ mile from the compressor station and if that goes up, we are toast. Ok. We need to be careful. Thanks.

**Bowe:** Just to ease your mind a little bit, we've got conditions that will cover all of that. Believe me.

**David Ball:** Commissioners, thank you very much for your thoughtful and very deliberative process. I'm very impressed. But the slide show caught my attention.

**Smith:** For the record, you name?

**Ball:** Oh, David Ball, District 3. Andersonville Area. My apologies. Again, thank you. The slide show they presented really caught my attention. Part of that was they went a little too far on the slides and then backed up because they didn't want you to see something and I wonder what it was they didn't want you to see. But somebody who has been educated and went to college and learned about the scientific method, seeing that slide show, there was nothing there scientific. There was no evidence of methodologies. How they collected, where they collected, sample size, calibration equipment source. All of those questions? A lot of unanswered questions about that. The other part of it, as a Buckingham citizen, and somebody who moved here because of the quality of the environment, I take offense to the fact that they imply that we have all these toxic chemicals floating around in our environment. From my experience, the only place they are going to find that at is if they sat next to a piece of machinery and sampled the air coming out of that machine. I will tell you, Benzene, a little bit about Benzene, it's a chemical that in the process of mirroring, we can take Benzene mix it with silver nitrate and we create mirrors. Because the Benzene frees up the metals. That's one of the properties of Benzene. Ethylene. Ethylene, I don't know if you are familiar with that. It is a glue. It's an adhesive substance. When I worked in a medical laboratory we used to make up our own mixture ethylene and we would coat slides so it can be viewed under microscopes but it protected the specimen. So, this idea that there is formaldehyde in high quantities. Formaldehyde is a very serious chemical. When you breathe it, it can actually begin to deteriorate your lungs. It's basically going to embalm you from the inside out. So to say there is that much formaldehyde naturally in the air, I dispute it. I dispute the numbers because I don't think they are realistic. Honestly I question a lot of what they do. What I did have in a letter last week, I think a berm built around this complex, if you do approve it, a high berm higher than the facility, something that contains it because trees they are not going to be an adequate buffer. Guaranteed. You want something if there is a leak or explosion or whatever, it's going to contain or direct that blast. So, that's a good method of protection onsite to minimize the impact to surrounding areas.

**Bickford:** Time is up. Thank you.

**Cobb:** Andrew Tyler and then Laney Sullivan.

**Bickford:** I believe they may be gone.

**Cobb:** Louis Zeller.

**Louis Zeller:** Thank you. My name is Lou Zeller and I'm speaking tonight on behalf of the Blue Ridge Environmental Defense League, a Virginia Corporation. My comments have to do with the procedures of the Planning Commission and some of the issues that remain to be addressed. I was very interested to hear the questions asked by the Planning Commission tonight. I do have the following comments and suggestions on procedure. Your own ByLaws in Section 8-3-4 state that once the speakers are heard and the public hearing is closed the applicant may have the opportunity to address the Commission. Then it says additional questions from the public may be submitted to the applicant through the Chairman. The applicant shall submit her/her responses to the questions through the Chairman. I guess my comment is most directly pointed at you Chairman Bickford in that questions of the responses made by the applicant in this case Atlantic Coast Pipeline or Dominion Virginia Power. We have the ability, in fact according to the ByLaws the privilege of having questions passed through you to the applicant and they must answer. It says shall submit responses to the questions to the chairman. There are several issues. This is not an abstract discussion. For example, final commenter at the last public hearing was a colleague of mine. Rev. Charles Utley and he raised the issues of environmental justice. There were no questions regarding environmental justice here tonight. There was a particular question and I noticed here tonight coming from the Commission regarding vapor and smoke. Your question was deflected as if it was a heat signature showing up on infrared. That's half true. You don't get a heat signature unless you have a substance, in this case, vapor and smoke heated even at infrared levels. What was shown in the video was a plume of pollution. Your question was deflected tonight for some reason and was not answered directly. I submit that the Planning Commission would do well to heed and seek out questions from members of the public who have some experience or some questions or are simply suspicious of an agency that comes in with a multimillion dollar project promising the moon and leaving the people of Union Hill and Union Grove holding the bag. Thank you very much. Those are my questions. I think the question came up at the last hearing, a suggestion which in one word is a rebuttal, but we are asking for is rebuttal. The questioned embodied in the Concerns for the New Generation raised here by Ms. Kathie Mosley, I think the Commission should answer regardless of its intentions. Regardless of whether it seeks to have further input or not. This is a correspondence from a community member, it seems to me only proper and in fact courteous to pay some kind of attention to a member of the community. Me, you can ignore, I don't live here but I do have information to offer and it's constructive and I will continue to submit questions to you Chairman Bickford under Section 8-3-4. Thank you very much.

**Cobb:** That's all the names I have at this time.

**Bickford:** Ok. I will close the public comment period for tonight. Mrs. Cobb that brings us to your reports and correspondence for September building permits.

**Re: Executive Closed Session**

**Gormus:** Mr. Chairman, I make a motion that we go into executive closed session consultation with legal counsel and briefings by staff members or consultants pertaining to actual or probable litigation, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body; and consultation with legal counsel employed or retained by a public body regarding specific legal matters requiring the provision of legal advice by such counsel under Section 2.2-3711.A.7 and Discussion concerning a prospective business or industry or the expansion of an existing business or industry where no previous announcement has been made of the business; or industry's interest in locating or expanding its facilities in the community under Section 2.2-3711.A.5.

**Allen:** Second.

**Vice Chair Gormus moved, Supervisor Allen seconded and was unanimously carried by the Board to enter into executive closed session under the above stated Codes of Virginia.**

**Re: Return to Regular Session**

**Gormus:** Mr. Chairman, I make a motion to return to regular session and certification that to the best of each Commissioner knowledge only public business matters as were identified by the motion by which the closed executive meeting was convened were heard, discussed or considered in the executive closed session.

**Bowe:** Second.

**Vice Chair Gormus moved, Commissioner Bowe seconded and was unanimously carried by the Commission to regular session and certify that to the best of each Commissioner knowledge only public business matters as were identified by the motion by which the closed executive meeting was convened were heard, discussed or considered in the executive closed session.**

**Re: Reports/Correspondence**

**Bickford:** Reports and Correspondence for September building permits.

**Cobb:** They are there for you to see.

**Bickford:** Very good.

**Re: Adjournment**

**Gormus:** Move to adjourn.

**Wright:** Recess or adjourn?

**Bickford:** If we recess, we can come back.

**Wright:** Anytime you want to.

**Bickford:** The problem I see with that...

**Wright:** You can adjourn if you want.

**Bickford:** This is where I'm going to play devil's advocate. If we recess and we come back and nobody knows about it and word gets out that we done that, I can tell you they are going to think that we...

**Wright:** Adjourn to the 21<sup>st</sup> then.

**Bickford:** Thank you.

**Smith:** Let's finish then. She made a motion to adjourn. We have a second. We need to vote.

**Vice Chair Gormus moved, Commissioner Bowe seconded and was unanimously carried by the Commission to adjourn the meeting. The next meeting will be November 21, 2016 at 6:00 p.m.**

**Bickford:** The meeting is adjourned.

There being no further business to discuss, Chairman Bickford declared the meeting adjourned.

**ATTEST:**

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Rebecca S. Cobb  
Zoning Administrator

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John E. Bickford  
Chairman

**Buckingham County Planning Commission**  
**November 21, 2016**  
**Administration Building**  
**6:00 PM**  
**Public Hearing for Case 16-ZMA240**

**OWNER/APPLICANT:** Jeffery Sheffer 34 Wise Ridge Rd. Dillwyn, VA 23936

**PROPERTY INFORMATION** – Tax Map Section 181, Lot 7A containing an approximate 3 acres, on Wise Ridge Rd (Rt.756 ), in the Curdsville Magisterial District.

**ZONING DISTRICT** – Agricultural District (A-1)

**REQUEST** –Zoning Map Amendment – Mr. Sheffer is asking the Planning Commission to recommend approval of his request for rezoning from Agriculture (A-1) to Business (B-1) for the purpose of expanding an existing store.

**BACKGROUND/ZONING INFORMATION:** The property is located in the southern portion of the County. The property is zoned Agriculture (A-1). [Full application in last month's packet]

Please consider the following conditions for review and possible attachment to the approval:

1. That all federal, state and local regulations, ordinances and laws be strictly adhered to.
2. The facility expansion and changes shall meet all safety requirements of all applicable building codes.
3. That all documentation submitted by the applicant in support of this rezoning request becomes a part of the conditions.
4. Ample parking for deliveries, employees and customers shall be supplied on premises and no roadway shoulders shall be used.
5. The applicant will pursue a commercial solid waste container and follow the County Solid Waste Ordinance.
6. Any Exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties.
7. The Virginia Department of Transportation shall approve access to the proposed facility and the applicant will provide all required improvements.
8. In the event that any one or more of the conditions is declared void for any reason whatever, such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose, the provisions of this are hereby declared to be severable

9. That any infraction of the above mentioned conditions could lead to a stop order and discontinuation of the use, if it be the wishes of the Board of Supervisors.
10. Nothing in this approval shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto.
11. The County Zoning Administrator and one other County staff member, as appointed by the County Administrator, shall be allowed to enter the property at any time to check for compliance with the provisions of this permit.
12. That the applicant (s) understands the conditions and agrees to the conditions.

What is the recommendation of the Planning Commission?

November 1, 2016

The attached adjoining landowners letter was mailed by standard mail by prepaid postage to the following list of landowners on November 2, 2016 to let them know about the public hearing to be held by the Planning Commission on November 21, 2016

Roy Banks  
c/o Harold Banks  
2058 34<sup>th</sup> St SE  
Washington, DC 20020

Harry E. Wise, Jr.  
843 Wise Ridge Rd  
Dillwyn, VA 23936

Pocahontas Spencer  
88 Loop Rd  
Dillwyn, VA 23936

I *Meghan Allen* do certify that the above information is correct. Date 11/2/16

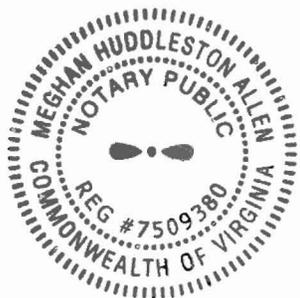
Notary Public  
Commonwealth of Virginia

County of Buckingham  
State of Virginia

Subscribed and sworn to me on 2 day of November, of the year 2016

My Commission expires on 9/30/2019

Notary Public Signature *Meghan Allen*  
Stamp: 7509380





REBECCA S. COBB  
Zoning Administrator/Planner

## Buckingham County Planning Commission

Office of the County Administrator  
13360 W. James Anderson Highway  
Post Office Box 252  
Buckingham, Virginia 23921-0252  
Telephone 434-969-4242  
Fax 434-969-1638

John E. Bickford  
Chairman  
District 1 Commissioner

Royce E. Charlton, III  
District 2 Commissioner

R. Patrick Bowe  
District 3 Commissioner

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District 6 Commissioner

Alice Gormus  
Vice-Chairman  
District 7 Commissioner

DANNY R. ALLEN  
Board Representative  
District 7 Supervisor

Harry E. Wise, Jr.  
843 Wise Ridge Rd  
Dillwyn, VA 23936

November 1, 2016

To Whom It May Concern:

The purpose of this letter is to make you aware that the Buckingham County Planning Commission is holding a public hearing for case number 16-ZMA240. This is a rezoning request to rezone property from Agriculture to Business for the purpose of a maintaining and remodeling an existing store. The owner and applicant is Jeffery Sheffer. This request is for tax parcel 181-7A on Wise Ridge Rd. You are being contacted because your property is located adjacent to the parcel on which the permit is requested.

Detailed information is available for your review in the Zoning Administrator's office in the Buckingham County Administration Office Building. The public hearing will be held at a regularly scheduled Planning Commission Meeting on November 21, 2016 (Monday). The meeting begins at 6:00 P.M. and will be held in the Buckingham County Administration Building Board Room. The public hearing process includes a public comment time where you may speak in favor or against this matter. If you have any questions regarding this case please call or come to the Zoning Office located in the County Administration Building.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rebecca S. Cobb'.

Rebecca S. Cobb  
Zoning Administrator

## Rebecca Cobb

---

**From:** Jackie Newman <jackie.newman@farmvilleherald.com>  
**Sent:** Monday, October 31, 2016 1:17 PM  
**To:** Rebecca Cobb  
**Subject:** Re: public hearing wise ridge store

Thank You

Jackie Newman

Advertising Director  
Farmville Newsmedia

The Farmville Herald | The Charlotte Gazette | The Kenbridge Victoria Dispatch | 434 Digital

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On Mon, Oct 31, 2016 at 10:41 AM, Rebecca Cobb <[rcobb@buckinghamcounty.virginia.gov](mailto:rcobb@buckinghamcounty.virginia.gov)> wrote:

Please print the attached ad in the 9<sup>th</sup> and 16<sup>th</sup> editions of the paper.

*Rebecca S. Cobb*

Zoning Administrator/Planner

Buckingham County Administration

13380 W. James Anderson Hwy

Buckingham, VA 23921

Ph: 434-969-4242 Fax: 434-969-1638

[www.buckinghamcountyva.org](http://www.buckinghamcountyva.org)

Buckingham County Planning Commission  
Notice of Public Hearing  
Monday, November 21, 2016  
Buckingham County Administration Building  
13380 W. James Anderson Hwy  
Buckingham, Virginia

The Buckingham County Planning Commission will hold a public hearing on Monday, November 21, 2016 to hear public input regarding the following request. The meeting will begin at 7:00 PM in the County Administration Building Board Room.

**Case 16-ZMA240** – Owner/Applicant: Jeffery Sheffer, Property Information: Tax Map Section 181 Lot 7A containing approximately 3 acres. Location: Wise Ridge Rd (Rt. 756), in the Curdsville Magisterial District. The property is currently zoned Agriculture (A-1). Request: Approve rezoning the property to Business (B-1) for the purpose of a maintaining and remodeling an existing store.

The full application and request is available for review in the Office of the Buckingham County Administrator, 13380 West James Anderson Highway, P.O. Box 252, Buckingham, Virginia, 23921, on regular business days of Monday through Friday from 8:30 A.M. to 4:30 P.M. or by calling 434-969-4242.

Special accommodation will be provided upon five days notice to the Office of the County Administrator at 434-969-4242.

By Order of the Buckingham County Planning Commission  
Rebecca S. Cobb, Zoning/Planning Administrator

**Buckingham County Planning Commission**  
**November 21, 2016**  
**Administration Building**  
**6:00 PM**  
**Discussion for Case 16-SUP236**

**OWNER/APPLICANT:** Atlantic Coast Pipeline, LLC 120 S. Tredegar St. Richmond, VA 23219

**PROPERTY INFORMATION** – Tax Map Section 91, Lot 60 containing an approximate 68 acres , on S. James River Hwy (Rt. 56), in the James River Magisterial District.

**ZONING DISTRICT** – Agricultural District (A-1)

**REQUEST** –Special Use Permit – Atlantic Coast Pipeline (ACP) is asking the Planning Commission to recommend approval for a Special Use Permit (SUP) for the purpose of installing and operating a natural gas compressor station.

**CONTINUED INFORMATION/UPDATE:** Attached for your review is a Human Health Risk Assessment and Responses to Comments for The New Market Project. This was submitted by ACP for reference on emissions and health claims. There are also additional letters and emails from the public.

In addition, the conditions have been revised by the subcommittee and are here for your consideration and discussion:

1. The compression of natural gas will occur through natural gas fueled turbines with no greater than a combined 55,000 ISO horsepower rating and no turbine shall have an ISO horsepower rating greater than 22,000. An increase in horsepower will require new permitting.
2. The only use of the property shall be compression, measurement and regulation of natural gas and its transfer above ground and underground, except that a Microwave Tower shall be permitted provided a separate SUP is approved by the Board. No other non A-1 use shall be made of the property.
3. There shall be no abatement of local property taxes in association of this request.
4. During normal operating hours, the applicant is responsible for providing the first response to any emergency in relation to the compressor station. The applicant shall prepare, at its own cost, an Emergency Preparedness Plan, in accordance with the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety

Administration regulations, to be submitted to the County for review prior to implementation of operations.

5. During construction, activities that produce noise between the hours of 10:00 p. m. and 6:00 a. m. shall not exceed a noise level of 60 dBA (decibels) at the property line, without prior notification to the County.
6. Noise attenuation measures will be implemented making all reasonable efforts such that noise levels attributable to normal plant operations will be kept to an L90 reading of 55 dBA (decibels) or less at the property lines with the exception that the front property line (along Route 56, S. James River Hwy) may have a dBA of 60. If testing by a qualified noise consultant shows an exceedance of these levels Dominion will consult with Buckingham County regarding the reasons for the exceedances and reasonably available noise mitigation measures. Also, noise levels attributable to normal plant operations will be less than 55 dBA at any adjacent existing building that is not on the subject property.
7. During construction dust shall be controlled with water or water and calcium chloride.
8. Exterior lighting will be directed downward and inward to the extent feasible in order to prevent any glare on adjacent properties. In addition, the facility will be designed to enable exterior lighting for work areas of the station to be switched off while not in use. Any lighting for surveillance will be at minimum foot-candles for visibility and shall be pointed in a down direction.
9. Site lighting shall not exceed 5 foot-candles in exterior working areas and 2 foot-candles in parking and non-working areas.
10. Light trespass shall be limited to and should not exceed 0.5 foot-candles at the property line. All exterior luminaries shall utilize full cut-off optics.
11. All driveways, parking areas, and access roads shall be maintained in a manner that will keep dust to a minimum so as not to adversely impact adjacent properties. Driveways and parking areas will have asphalt surface or better, exception may be applied if not feasible and dust can be controlled otherwise.
12. The compression station and accessory facilities, used for the compression, measurement and regulation of natural gas and its transfer above ground and underground, shall be centrally located on the property to the greatest extent feasible and shall conform generally to the layout shown on the drawing submitted with the application.
13. A natural colored chain link fence or similar security device shall be placed around the facility at least seven (7) feet in height and will feature prominent "No Trespassing" signs.

14. There shall only be one (1) permanent detached sign for project identification purposes (exclusive of directional signs) which shall be a ground-mounted monument type sign with landscaping. Any lighting of the sign shall be from above and shielded away from adjacent properties.
15. Fencing and all structures shall have a minimum setback of 100 feet from all property lines.
16. Existing trees along the northwestern property line and along the front of the property (as noted on the site layout submitted with the application) shall be maintained as a buffer for the life of the station. East of the station access road and east of the existing Transco lines there shall be trees planted and maintained after construction to provide a buffer and block visibility from the highway and adjacent properties.
17. Main Buildings and structures above the tree height, with exception of the microwave tower, shall be a neutral earth tone color (example: muted browns, greens, grays).
18. Silencers shall be used during blowdowns.
19. The Virginia Department of Transportation shall approve access to the proposed facility and the applicant will provide all required improvements.
20. A traffic management plan shall be submitted as part of the overall site development plan. Review and approval by VDOT of the traffic management plan will ensure that temporary construction entrances and access roads are provided appropriately; that "wide load" deliveries are scheduled during appropriate times, and that access routes to and from the site are planned to minimize conflicts.
21. All necessary permits shall be acquired from all applicable regulatory bodies of the state and federal government and copies of such permits shall be provided to the County upon request. The applicant shall maintain periodic reports as required by permits and these reports shall be provided to the County upon request.
22. This facility shall utilize Best Available Control Technology (BACT) in accordance with the most current DEQ air permit; to include but not be limited to Selective Catalytic Reduction (SCR) for the reduction of Nitrogen Oxides (NOx) emissions and Oxidation Catalyst (OC) for the reduction of Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs) emissions.
23. Prior to construction, the applicant must demonstrate that all wetland requirements applicable to the facility, if any, have been achieved to the satisfaction of the U. S. Army Corps of Engineers.

24. At such time as the facility is granted abandonment authorization by the Federal Energy Regulatory Commission, the applicant or its assignee shall remove all personal property, fixtures, buildings and other structures, and leave the site in a reasonably comparable condition to that which existed prior to construction of the facility; provided that the applicant or its assignee at its option may, except for any underground fuel storage tanks, abandon any below ground utility infrastructure facilities, foundations and pavings in place.
25. The applicant shall operate in accordance with all permits, laws, rules and regulations of Federal, State and local law, including this special use permit. If a violation of any state or federal permit applicable to the facility is reported to the local government by the applicable regulatory agency, the Board of Supervisors, and/or the County Administrator, may request the applicant to provide, at the applicant's sole expense, the services of an appropriate firm to review the nature of the violation if any, and the remedy, if any. This firm shall be selected by and report solely to the county.
26. Any non-compliance of this permit's conditions could lead to a stop order and discontinuation of the special use permit, upon proper action of the Board of Supervisors, unless the non-compliance is cured within 30 days of the date applicant is first notified. If such a cure cannot reasonably be accomplished within such 30 day period, Applicant shall have additional time beyond that 30 day period provided that Applicant has commenced such cure within such 30 day period and thereafter diligently prosecutes such cure to completion within a reasonable period of time.
27. Upon start-up a report will be prepared and provided to the County showing operational factors associated with the compressor station that includes the name(s) and contact information for on-site supervisors, and verification of current, valid state and federal licenses and permits. The County will be promptly notified of any changes, normally within thirty business days.
28. Any complaints or inquiries by the Board of Supervisors, County Administrator, or Zoning Administrator will be responded to promptly. In the event the applicant is notified of any violation of applicable federal, state, or local laws, regulations, or permit conditions applicable to the facility, the applicant shall notify the Zoning Administrator in writing within two business days of receiving such notice and within 10 days fully inform the Zoning Administrator of the current steps being taken to correct and/or remediate the violation. Authorized county personnel or their authorized agents will be permitted to inspect the facility, with 24 hours prior notice and in accordance with Applicant's safety procedures, to ensure that all physical structures and plant operations comply with local regulations.
29. Nothing in this approval shall be deemed to obligate the County to acquire any interest in property, to construct, maintain or operate any facility or to grant any permits or approvals except as may be directly related hereto , i.e. microwave tower.

30. The applicant shall certify to the County annually that it is in compliance with all conditions of this special use permit.
31. In the event that any one or more of the conditions is declared void for any reason whatever; such decision shall not affect the remaining portion of the permit, which shall remain in full force and effect, and for this purpose the provisions of this are hereby declared to be severable.
32. A minimum of one employee, contractor or third party security personnel shall be onsite 24/7 for the first year of operation.
33. Shut off valves shall be installed on both the inflow and outflow lines of the compressor station as well as at the connection with Transco. These valves shall be designed to operate automatically, remotely and manually.
34. The monitoring system and valves must be programmed to alarm and call out personnel to investigate and manually monitor the station when monitoring communications are lost.
35. A back-up system for monitoring communications and emergency notification must be installed.
36. A fire break shall be created between the facility and adjacent properties, with the exception of the border of Route 56 and the existing Transco right-of-way. The break, which may be located in any required setback, shall consist of 50 feet of grass or gravel and shall be clear of trees and shrubs, where feasible, so as to not impact visual screening and noise attenuation, or conflict with Conditions 16 and 23.
37. Air quality studies, required by the Virginia Department of Environmental Quality and the Federal Energy Regulatory Commission, will be conducted to demonstrate compliance with the federal National Ambient Air Quality Standards (NAAQS) in the area potentially impacted by the compressor station. The air quality studies will be conducted by a third party company and a report will be submitted to the County at least 60 days prior to the start of construction.
38. Initial NOX, PM10, PM2.5, VOC, and CO stack testing will be completed within 180 days of first turbine startup to determine emission rates to demonstrate compliance with applicable Virginia Department of Environmental Quality and federal Environmental Protection Agency regulatory requirements. Additionally, periodic NOX stack emissions testing will be conducted to demonstrate compliance with 40 CFR Part 60 Subpart KKKK emissions limits. All emissions tests will be conducted by a third party company and all data and reports will be submitted to the County within 60 days of completing the test.

39. Any physical structures must be designed and located within the property, such that, should all or a portion of the structure(s) collapse, the structure(s) will fall completely within the subject property lines.
  
40. Applicant will develop, in consultation with the County, a Crisis Response Plan that will incorporate appropriate notifications with the Buckingham County Dispatch office so that if a gas leak, fire or other eminent danger occurs, the Buckingham Dispatch is promptly notified of the incident. Thereafter, the Buckingham Dispatch office will be contacted with further details for dissemination in the code red alert system. Applicant will also coordinate an emergency simulation with Buckingham County Emergency responders to practice the Crisis Response Plan within the first year of operation. Applicant will also implement a prior notification process with the County relative to planned blowdown events.

## **Appendix B**

### **Human Health Risk Assessment and Responses to Comments**

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## LIST OF ACRONYMS

AEGL	Acute Exposure Guidelines
AERMOD	AMS/EPA Regulatory Model
Acute HQ	Acute Hazard Quotient
Acute HI	Acute Hazard Index
AIEC	Acute Inhalation Exposure Criteria
AIHA	American Industrial Hygiene Association
Acute REL	Acute Reference Exposure Level
ATSDR	Agency for Toxic Substances and Disease Registry
CalEPA	California Environmental Protection Agency
CNS	Central Nervous System
CO <sub>2</sub>	Carbon Dioxide
CO	Carbon Monoxide
DTI	Dominion Transmission, Inc.
EA	Environmental Assessment
EPA	United States Environmental Protection Agency
ESD	Emergency Shutdown
ERPG	Emergency Response Planning Guidelines
FERC or Commission	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
HAPs	Hazardous Air Pollutants
HHRAP	Human Health Risk Assessment Protocol
HI	Hazard Index
HQ	Hazard Quotient
IRIS	Integrated Risk Information System
lb/day	Pound per day
mg/m <sup>3</sup>	Milligram per cubic meter of air
N <sub>2</sub>	Nitrogen
NA	Not Available/Applicable
NAAQS	National Ambient Air Quality Standard
NO <sub>x</sub>	Nitrogen Oxide
NYSDEC	New York State Department of Environmental Conservation
OEHHA	Office of Environmental Health Hazard Assessment
PADEP	Pennsylvania Department of Environmental Protection
PAHs	Polycyclic Aromatic Hydrocarbons
pCi/L	Picocuries per Liter
PM	Particulate Matter
PPRTV	Provisional Peer Reviewed Toxicity Values
RfC	Reference Concentration
RME	Reasonable Maximum Exposure
SO <sub>x</sub>	Sulfur Oxide
SUV	Sport Utility Vehicle
TEEL	Temporary Emergency Exposure Limits
TENORM	Technologically Enhanced Naturally Occurring Radioactive Materials
URF	Unit Risk Factor
µg/m <sup>3</sup>	Microgram per cubic meter of air
VOC	Volatile Organic Compound

## 1.0 INTRODUCTION

The staff of the Federal Energy Regulatory Commission (FERC or Commission) prepared this human health risk assessment as a supplement to the environmental assessment (EA) for the proposed New Market Project by Dominion Transmission, Inc. (DTI). On June 2, 2014, DTI filed an application with the Commission in Docket No. CP14-497-000 for authorization under Section 7(c) of the Natural Gas Act and Part 157 of the Commission's regulations for a Certificate of Public Convenience and Necessity (Certificate) to construct and operate natural gas pipeline aboveground facilities in Chemung, Madison, Montgomery, Tompkins, Herkimer and Schenectady Counties, New York. DTI's proposed project is referred to as the New Market Project (Project).

DTI proposes to construct and operate two new compressor stations in Chemung and Madison Counties; add compression, a new meter and regulator station, and other facilities to one existing compressor station in Montgomery County; add facilities to two existing compressor stations in Tompkins and Herkimer Counties; and modify an existing meter station in Schenectady County. As of September 30, 2015, approximately 1,184 comment letters have been posted to the FERC docket for this Project.

Approximately 12 percent of the comments received on the Project focused on specific emissions and/or air quality and their effect on health. The comments primarily focused on the topics listed below in Table 1. Multiple commenters, including a local health department, provided studies and detailed assessments of potential health issues from compressor station emissions, namely hazardous air pollutants (HAPs<sup>1</sup>) and volatile organic compounds (VOCs), and releases of natural gas contaminants. Commenters also applied studies from production facilities / compressor stations to the proposed transmission compressor station; a comparison we do not believe to be representative. DTI also filed a detailed analysis of potential contaminants. The comments and studies on the docket present widely varying viewpoints on the health risk from the proposed Project. Therefore, FERC staff prepared this human health risk assessment from the emissions for the proposed Sheds, Horseheads and Brookman Corners Compressor Stations to independently analyze human health risks.

This appendix was developed to address the above comments and concerns with the New Market Project, including air modeling and exposure assessments performed by FERC staff and their contractors.

Chapter 2 differentiates the sources of air emissions at the proposed compressor stations, including natural gas emissions and an analysis of transmission gas quality;

Chapter 3 presents the methodology and air emissions modeling cases;

Chapter 4 presents the results of the quantitative human health risk assessment evaluating potential compressor station HAPs emissions from normal full-capacity operations;

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<sup>1</sup> Unless otherwise stated, in this Appendix "HAPs" refers to hazardous air pollutants as defined by the EPA plus other typically recognized air toxics.

Chapter 5 discusses full-station blowdowns and presents the results of a quantitative human health risk assessment evaluation of full station blowdown events;

Chapter 6 discusses air emissions from a regulatory standpoint and puts them in regulatory context and compares them to other rural sources of pollution;

Chapter 7 addresses other comments such as conventional vs. unconventional (i.e., fracked) gas, radon, and effect of potential emissions on food supplies;

Chapter 8 draws conclusions based on the content of this assessment; and

Chapter 9 provides a list of references used in the preparation of this document.

Comment	Topics
Specific emissions and resultant air quality impacts from the proposed compressor stations	Volatile organic compounds (VOCs) and specific air toxics such as benzene; toluene; ethylbenzene; xylene; 1,3-butadiene; n-butyl alcohol; carbon disulfide; carbonyl sulfide; chlorobenzene; chloromethane; 1,2-dichloroethane; diethylbenzene; dimethylbenzene; methyl ethyl sulfide; naphthalene; 1,1,1,2-tetrachloroethane; trimethylbenzene; styrene; methane; ethane; butane; and propane
	Carbon monoxide (CO); nitrogen oxides (NO <sub>x</sub> ); formaldehyde; and ground level ozone
	Greenhouse gases (GHGs)
	Blowdown emissions (odors, radioactivity release, health impacts)
Impact of emissions from specific compressor station locations	Brookman Corners (Montgomery County) (primarily higher emissions than other stations)
	Sheds (Madison County)
Impact of emissions on environment	Unique valley topography
	Impact on food supply (crops, homegrown vegetables, water, fish, game, livestock)
Impact of unconventional gas ("fracked gas")	
Radiation	
Health Effects due to emissions	Specific and non-specific effects including: cardiovascular, respiratory and neurological damage, birth defects, cancer, leukemia, infertility, burning of lungs, eyes, and throat, muscle aches and pains, mental impairment, severe headaches, and other acute and chronic effects
	Use of tons per year to evaluate health effects

## 2.0 SOURCES OF AIR EMISSIONS

Section 9 in Part B (B.9) of the EA discusses the potential effect of the Project on local and regional air quality as it relates to the criteria pollutants and the greenhouse gases. This evaluation addresses the potential health effects of toxic air pollutants emitted from the natural gas-fired engines as well as the health effects related to releases of pipeline natural gas from fugitive emissions and venting operations.

Air emissions resulting from the operation of compressor stations includes: exhaust emissions from natural gas combustion in reciprocating internal combustion engines, combustion turbines, and ancillary equipment; and emissions resulting from releases of natural gas from fugitive emissions and from venting.

## 2.1 Combustion Emissions

Natural gas combustion results in emissions of nitrogen oxide (NO<sub>x</sub>), CO, VOCs, particulate matter (PM), sulfur oxide (SO<sub>x</sub>), greenhouse gases (primarily carbon dioxide (CO<sub>2</sub>)), and hazardous air pollutants (HAPs including formaldehyde). NO<sub>x</sub> is formed by various mechanisms. SO<sub>x</sub> is formed by oxidation of the trace amounts of sulfur in natural gas, which are typically very low since sulfur is removed during gas processing (EPA, 2000; Branosky et al., 2012; Moore et al., 2014). PM consists primarily of particles in the intake air that are not removed by filters, particles formed by secondary reactions involving SO<sub>x</sub>, and condensable gases in the exhaust. CO, VOCs, and HAPs are the products of incomplete combustion (EPA, 2000).

The estimated concentrations of potential HAPs (including VOC HAPs) emissions as a result of Project operations are considered for this analysis. In general, reciprocating internal combustion engines generate more individual HAP pollutants than combustion turbines. The air quality impacts of criteria pollutants are addressed in section B.9.1 of the EA. The potential emissions of air toxics on the extended HAPs list were estimated using operating parameters obtained from compressor engines and turbines, oxidation catalyst specifications and emission factors provided by vendors (for formaldehyde), and the 5<sup>th</sup> Edition of AP-42 Sections 3.1 and 3.2 for other HAPs (EPA, 2000). Potential emissions were estimated for the maximum load case for each compressor engine or turbine.

The combustion emission sources are as follows:

- Sheds Compressor Station
  - One new natural gas-fired Solar Taurus 70 combustion turbine, rated at 10,880 horsepower
- Horseheads Compressor Station
  - One new natural gas-fired Solar Taurus 70 combustion turbine, rated at 10,880 horsepower
- Brookman Corners Compressor Station
  - One existing natural gas-fired Solar Taurus 60 combustion turbine, rated at 7,410 horsepower
  - One new natural gas-fired Solar Taurus 50 combustion turbine, rated at 6,393 horsepower
  - Two new natural gas-fired Caterpillar G3608 reciprocating internal combustion engines, each rated at 2,370 horsepower

## 2.2 Natural Gas Releases

We received a number of comments expressing concern regarding the potential health effects from fugitive and blowdown emissions of natural gas itself. Natural gas releases consist

of hydrocarbons plus small amounts of nitrogen (N<sub>2</sub>) and CO<sub>2</sub>. The hydrocarbons are comprised primarily of methane, plus small amounts of ethane, propane, butane, pentane, and hexane. The natural gas composition modeled in this analysis was determined using gas data collected at four different stations over a period of five years by DTI (see chapter 2.3 below for more information). Natural gas would be released as a result of Project-related venting and fugitive emissions.

Vented emissions are defined as those emissions which pass through a stack, vent, or equivalent opening. A compressor may be vented for startup, shutdown, maintenance, or for protection of gas seals from contamination. Individual system components, including the filter/separator, fuel gas meter, and/or fuel filters may be vented for inspection and maintenance. An individual compressor or the entire station may be blown down (i.e., vented) for testing or in the event of an emergency.

Fugitive emissions are defined as those emissions which do not pass through a stack, vent, or other functionally equivalent opening<sup>2</sup>, and include natural gas leaks from valves, flanges, pumps, compressors, seals, connections, etc.

Potential fugitive and vented emissions of natural gas were accounted for in the quantitative risk assessment discussed in chapter 4. The gas vented during startup and shutdown of the Sheds and Horseheads Compressor Stations' centrifugal compressors would normally be released to the atmosphere and was therefore included in the evaluation. The gas vented during startup and shutdown of the Brookman Corners Compressor Station's centrifugal compressors would normally be combusted by one of the compressor engines. However, this evaluation conservatively assumed vented gases would still be released to the atmosphere. Natural gas vented to the atmosphere as a result of an emergency shutdown (ESD) event was evaluated separately in chapter 5. The U.S. Department of Transportation regulations require that the ESD system be tested fully on an annual basis. The full station must be blown down to the atmosphere once every five years. In other years, a capped test (a full activation of the ESD system with the blowdown vent capped to prevent release of natural gas to the atmosphere) may be conducted in lieu of a full station blowdown. A full station blowdown may also occur during an emergency condition.

### 2.3 Natural Gas Quality

Natural gas, comprised primarily of methane, is commonly found in nature mixed with other hydrocarbons and varying amounts of contaminants. Commenters expressed concern over possible contaminants in the transmitted gas, including filing comments linked to health studies and air samples from production areas. While the exact composition of natural gas is chiefly dependent upon the geological source from which it was extracted, all gas must be processed to "pipeline quality" before it is allowed in interstate transmission pipelines (Branosky et al., 2012; Moore et al., 2014). In addition, interstate transmission pipelines interconnect with many other transmission pipeline systems, developing a network that may cross various geological sources. Therefore, the resulting natural gas in most transmission pipelines is well mixed.

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<sup>2</sup> 40 CFR 52.21(b)(20)

The term “pipeline quality” is defined in each individual pipeline’s tariff<sup>3</sup>, and these definitions vary from pipeline to pipeline. Gas quality terms and conditions of the pipeline’s tariff ensure the hydrocarbons and contaminants are within acceptable limits for safe and efficient operation of the pipeline. At typical interstate pipeline operating pressures and temperatures, “pipeline quality” natural gas remains in a gaseous state and pipelines, distribution facilities, and end-user equipment are all designed to handle and burn this gas. Individual pipelines may have different standards, practices, and enforcement mechanisms; however, the specifications for gas quality should be based upon sound technical, engineering, and scientific considerations.

DTI provided daily gas quality data for seven sample locations for the past 5 years. Table 2 summarizes the gas quality data for these locations and shows that the natural gas in the transmission pipeline is comprised primarily of methane (~93.3 percent), followed by ethane (~4.7 percent), CO<sub>2</sub>, nitrogen, propane and butane (each less than 1 percent) and pentane and hexane (each less than 0.1 percent). These compositions are consistent with “pipeline quality” gas, and the tabulated percentages were used in assessing exposures from both fugitive and vented emissions.

Component	Borger Station b/	Utica Higby Rd c/	Brookman Corners Herkimer d/	West Schenectady Amsterdam e/
Carbon Dioxide	0.74	0.75	0.77	0.53
Nitrogen	0.51	0.54	0.55	0.52
Methane	93.47	92.45	93.53	93.86
Ethane	4.58	5.21	4.55	4.60
Propane	0.42	0.77	0.39	0.33
n-Butane	0.13	0.15	0.11	0.08
n-pentane	0.09	0.07	0.05	0.05
n-hexane	0.06	0.06	0.05	0.03
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Notes:  
a/ Values rounded to nearest hundredth  
b/ Sampling conducted at the Borger Compressor Station in Ithaca, New York, and represents average of four pipelines (L-1, L-30, L-31 and L-550)  
c/ Sampling conducted at the M&R Facility at Utica Compressor Station in Utica, New York  
d/ Sampling conducted at the M&R Facility at Herkimer Meter Station in Herkimer, New York  
e/ Sampling conducted at the M&R Facility at West Schenectady Meter Station in Amsterdam, New York

### VOCs in Natural Gas

The commenters cited a number of studies (McKenzie et al., 2012; McKenzie et al., 2014; TCEQ, 2010; Wolf Eagle, 2009; Rabinowitz et al., 2014; Macey et al., 2014) as well as listed VOC and HAPs emissions from compressor stations that potentially impact human health. These compounds included: benzene; toluene; ethylbenzene; xylene; 1,3-butadiene; n-butyl alcohol; carbon disulfide; carbonyl sulfide; chlorobenzene; chloromethane; 1,2-dichloroethane;

<sup>3</sup>. DTI’s Tariff Terms and Conditions for Quality of its natural gas transmission pipelines are publicly available at [https://escript.dom.com/jsp/info\\_post.jsp?&company=dti#](https://escript.dom.com/jsp/info_post.jsp?&company=dti#)

diethylbenzene; dimethylbenzene; methyl ethyl sulfide; naphthalene; 1,1,1,2-tetrachloroethane; trimethylbenzene; styrene; methane; ethane; butane; and propane. While we acknowledge that HAP concentrations may have been documented in communities in close proximity to natural gas production areas, studies documenting these concentrations and emissions from natural gas production areas in general, are not comparable to transmission pipeline compressor stations.

While the term VOCs can refer to highly toxic compounds (such as benzene, toluene, ethylbenzene, xylenes, and others), VOCs are limited to butane, propane, pentane, and hexane in the case of transmission-quality gas in the pipeline. The EPA defines VOCs (40 CFR 51.100(s)) as:

*Volatile organic compounds (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.*

The definition specifically excludes methane and ethane (among other organic compounds), which have been determined to have negligible photochemical reactivity (40 CFR 51.100(s)(1)). The VOCs category is reported as part of a Title V permit as potential precursors for ozone, a criteria air pollutant. Section B.9.1 of the EA discusses the potential impact of criteria pollutants on ambient regional air quality in the Project area.

### **3.0 HUMAN HEALTH RISK MODEL FROM NORMAL OPERATIONS**

Due to the level of concern regarding potential health effects associated with emissions from the compressor stations, we conducted a quantitative risk assessment to evaluate the potential for short- and long-term health effects due to exposure to HAPs as a result of emissions from natural gas combustion and from the constituents in the pipeline gas released as fugitive emissions.

We conducted a human health risk assessment in accordance with the U.S. Environmental Protection Agency's (EPA's) 2005 Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities (HHRAP; EPA, 2005). The Human Health Risk Assessment Protocol (HHRAP) incorporates risk assessment guidance and methods from the EPA, as well as the experience EPA has gained through conducting and reviewing combustion risk assessments, to provide a comprehensive method of assessing human health risk from combustion emissions. It provides a standardized methodology for conducting combustion risk assessments and, therefore, was chosen as the most appropriate guidance to follow.

To estimate the emission of HAPs, we applied the emission factors from AP-42 (EPA, 2000) to the natural gas-fired engines, emission estimates from fugitive emissions provided by DTI, gas composition data from DTI, and area-specific meteorological data to predict representative concentrations of HAPs for the Brookman Corners, Sheds, and Horseheads Compressor Stations. Specifically, we modeled concentrations from the station property lines. In contrast, concentrations of criteria air pollutants are described in the EA and were modeled from the station fence line, as the fence line is used for permitting purposes. We then conducted a human health risk assessment evaluating exposure to the HAPs to determine whether the

predicted air concentrations from the potential station emissions would be above a level of health concern within the specific communities.

The human health risk assessment provides modeled estimates of individual risk for the theoretical Resident Reasonable Maximum Exposed (RME) adult and child receptor associated with direct exposures to potential emissions from natural gas combustion, from the constituents in the pipeline gas released as fugitive emissions, and as a result of blowdowns and venting. Potential natural gas combustion by-product emissions and fugitive emissions were evaluated for acute (1-hour) and chronic (long-term) exposure, while potential natural gas emissions as a result of blowdowns and venting were evaluated for acute (1-hour) exposures. These methods used to evaluate exposures and risks, specifically the assumed Resident RME, are consistent with current EPA guidance, and as a conservative measure tend to overestimate potential risks (i.e., be health protective).

### **3.1 Modeling Compressor Station Emissions**

#### **3.1.1 Air Dispersion Model**

To assess potential impacts from operation of the Project facilities, we ran the EPA's AMS/EPA Regulatory Model (AERMOD version 14134) for the proposed Horseheads, Sheds, and Brookman Corners Compressor Stations. AERMOD is the EPA-preferred program for short-range (up to 50 kilometers) regulatory air dispersion modeling (EPA, 2014a).

The risk assessment used the same meteorological data sets used to evaluate the criteria pollutants (CO, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>2</sub>), as described in section B.9.1 of the EA. The data sets used for each site were:

- Elmira Airport (2008 – 2012 surface data) and Buffalo Airport (2008 – 2012 upper air data) for the Horseheads Compressor Station.
- Syracuse Airport (2008 – 2012 surface data) and Buffalo Airport (2008 – 2012 upper air data) for the Sheds Compressor Station.
- Rome Airport (2008 – 2012 surface data) and Albany Airport (2008 – 2012 upper air data) for the Brookman Corners Compressor Station.

As noted in section B.9.1 of the EA, the closest surface weather stations were selected as most representative for each Project site. Elmira Airport is 8 miles southwest of the Horseheads Compressor Station site, and Syracuse Airport is 26 miles from the Sheds Compressor Station site. Rome Airport is 40 miles from the Brookman Corners Compressor Station site. Upper air data from Buffalo, New York were used with the Elmira and Syracuse surface data, while Albany upper air data were used with the Rome surface data. The use of these data locations for the New Market Project sites was approved by Ms. Margaret Valis, Chief of the Impact Assessment & Meteorology Section at the New York State Department of Environmental (NYSDEC).

Per risk assessment guidance (EPA, 2005), the starting point for locations of modeled concentrations begins at the facility property line. Concentrations were modeled out to 5 kilometers at regular "receptors" programmed at decreasing resolution with distance. Terrain

elevation at each modeled location was obtained using the AERMAP terrain processing program, which includes routines that extract National Elevation Data at 10-meter spacing based on the North American Datum of 1983. The four nearest data points surrounding each receptor point were used to determine receptor point terrain elevations (by interpolation) for air quality model input. The spatial extent and density of receptor points was sufficient to capture the highest predicted concentrations in the study region, which generally occurred near each site's property lines and decreased in magnitude farther downwind.

Since the stack exhaust plumes would be expected to experience building downwash effects, exhaust stack data and the dimensions and orientation of nearby structures were provided by DTI and used as input to the Building Profile Input Program-Prime (BPIP-Prime) program for each of the Sheds, Horseheads, and Brookman Corners Compressor Stations. BPIP-Prime provides the direction-specific downwash parameters used by AERMOD.

### ***3.1.2 Modeling Cases***

#### **Normal Operations**

We analyzed maximum 1-hour and maximum annual ambient concentrations for the expected emissions from normal, full-capacity, operating conditions. These emissions would primarily be from the combustion of natural gas in the compressor engines and turbines, but would also include fugitive leaks of natural gas and natural gas vented to the atmosphere as a result of startup, shutdown, inspection, maintenance, testing and emergency operations (both described more fully under chapter 2.2 of this appendix). The maximum predicted concentration for each air pollutant was used in the exposure assessment.

Fugitive emission estimates were based on a 2014 report by the EPA's Office of Air Quality Planning and Standards with a 50 percent factor added for conservatism (EPA, 2014b). For potential vented and fugitive emissions, 1-hour and long term (5-year average) ambient concentrations were analyzed for each station (see chapter 4.0 of this appendix for results). Fugitive and vented emissions were modeled as a volume source corresponding in extent to each compressor station's aboveground facilities.

One-hour concentrations were determined by modeling each year of meteorological data separately, from which a 1-hour maximum concentration was determined per receptor point per year. At each receptor point, the five maximum values (based on five separate years) were then averaged together. The receptor point with the highest average was selected for use with the exposure analyses. The long term concentrations were determined by selecting the receptor point with the highest 5-year average concentration.

#### **Blowdown Events**

We evaluated full station ESD blowdown events separately from other vented and fugitive emissions. The full station ESD blowdown event was conservatively assumed to occur within a single hour, and the natural gas was assumed to be released through a single 3-meter blowdown stack. This event constitutes the maximum 1-hour release rate for vented natural gas emissions.

The highest 1-hour ambient concentrations from the blowdown events for each compressor station are summarized and discussed in chapter 5, below. The 1-hour concentrations for each compressor station were calculated in the same manner as described above. Note that since blowdowns only contain uncombusted natural gas, the list of air pollutants is much shorter than those shown for combustion.

### 3.2 Methodology for Estimating Human Health Risk

The 2005 HHRAP Guidance requires that once receptor point locations and potential exposure pathways are identified, the concentrations of emitted chemicals are modeled, and then possible chemical-specific intakes by the identified RME receptors are estimated. This methodology uses theoretically possible exposures, not actual exposures, and is designed to overstate what any individual is likely to experience.

For estimating potential health risk, we assumed the Resident RME receptor (adult and child) would be exposed to these potential maximum compressor station emissions through direct inhalation. For direct inhalation exposures, air concentrations were calculated based on the modeled highest 5-year concentration for long-term exposures or the highest 1-hour concentration (average of maximum 1-hour concentrations from 5 separate years) for short-term exposures at the DTI property line.

The Adult Resident RME receptor was assumed to be an individual exposed to the modeled maximum annual concentration at the property line for 24 hours per day, 350 days per year for 30 years. A Child Resident RME receptor was assumed to be exposed to the same modeled maximum annual concentration for 24 hours per day, 350 days per year for 6 years. These conservative assumptions are in accordance with the 2005 HHRAP Guidance (EPA, 2005).

The equation used to calculate chronic exposure is as follows:

$$EC = \frac{C_{\text{chronic}} \times EF \times ED}{AT \times 365 \text{ d/yr}}$$

Where:

EC	=	Exposure Concentration (c – cancer, nc – non-cancer)
$C_{\text{chronic}}$	=	Chronic Air Concentration ( $\mu\text{g}/\text{m}^3$ , maximum annual concentration)
EF	=	Exposure Frequency (350 d/yr)
ED	=	Exposure Duration – 30 years adult; 6 years child
AT	=	Averaging Time – 70 years cancer intake; ED – non-cancer intake

#### 3.2.1 Chronic Toxicity Values

In accordance with the HHRAP, a hierarchical approach was used to select chronic toxicity criteria for the HAPs evaluated in this human health risk assessment. Cancer and non-cancer toxicity values, in order of preference, were obtained according to the EPA's revised hierarchy of toxicological sources of information (EPA, 2003). The hierarchy was updated to reflect the EPA's use of the best science available on which to base risk assessments. This approach was selected to ensure that the most up-to-date information was used. The recommended toxicity value hierarchy is as follows:

- Tier 1- EPA's Integrated Risk Information System (IRIS) (EPA, 2015a). Toxicity values from IRIS are given first priority. These toxicity values have achieved full intra-agency consensus and have undergone external peer-review. The toxicity values in IRIS represent the EPA's scientific position regarding the toxicity of chemicals based on the data available at the time of the review.
- Tier 2- EPA's Provisional Peer Reviewed Toxicity Values (PPRTVs) – The Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center develops PPRTVs on a chemical-specific basis when requested by EPA's Superfund program. Provisional values were obtained from the most recent EPA Regional Screening Level Table (EPA, 2015b).
- Tier 3- Other Toxicity Values – Tier 3 includes additional EPA and non-EPA sources of toxicity information. Priority was given to those sources of information that are the most current, the basis for which is transparent and publicly available, and which have been peer reviewed. Tier 3 values include toxicity values obtained from California EPA (CalEPA), Agency for Toxic Substances and Disease Registry's (ATSDR's) Minimum Risk Levels, and toxicity values obtained from Health Effects Assessment Summary Tables (EPA, 1997). The Tier 3 values were obtained from the most recent Regional Screening Level Table (EPA, 2015b).

The HAPs included in the risk assessment exhibit a combination of potential carcinogenic and/or non-carcinogenic effects. Potential cancer risks were evaluated using inhalation unit risk factors (URFs) expressed in terms of risk per concentration for inhalation exposures (i.e., risk per  $\mu\text{g}/\text{m}^3$  or  $(\mu\text{g}/\text{m}^3)^{-1}$ ). The URF is the upper-bound excess lifetime cancer risk estimated to result from continuous, lifetime exposure to a constituent at a concentration of  $1 \mu\text{g}/\text{m}^3$  in air.

Non-carcinogenic effects from exposures were evaluated using inhalation reference concentrations (RfCs) expressed in units of  $\text{mg}/\text{m}^3$ . Reference concentrations have been determined by the EPA and other State or Health Agencies to be an air concentration to which the most sensitive individual can be exposed without a risk for non-cancer health effects. It can be derived from a No Observable Adverse Effect Level, Lowest Observable Adverse Effect Level, or benchmark concentration, with uncertainty factors generally applied to reflect limitations of the data used (e.g., extrapolation of animal exposure to human, use of the Lowest Observable Adverse Effect Level instead of a No Observable Adverse Effect Level, extrapolation of short-term exposure to long-term exposure, sensitive individuals, and strength of the database). Tables 3 and 4 present the URFs and the RfCs used in this evaluation, respectively.

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Table 3 Inhalation Unit Risk Values for Cancer Risk			
Contaminant	URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup> <u>a/</u>	Weight of Evidence Cancer Guideline Description	Source
Acetaldehyde	2.2E-06	Probable Human Carcinogen	IRIS
Benzene	7.8E-06	Known/Likely Human Carcinogen	IRIS
Benzo(b)fluoranthene	1.1E-04	Probable Human Carcinogen	CalEPA
Butadiene, 1,3-	3.0E-05	Known/Likely Human Carcinogen	IRIS
Carbon Tetrachloride	6.0E-06	Known/Likely Human Carcinogen	IRIS
Chloroform	2.3E-05	Probable Human Carcinogen	IRIS
Chrysene	1.1E-05	Probable Human Carcinogen	CalEPA
Dichloroethane, 1,1-	1.6E-06	NA	CalEPA
Dichloroethane, 1,2-	2.6E-05	Probable Human Carcinogen	IRIS
Dichloropropane, 1,2-	1.0E-05	NA	CalEPA
Dichloropropene, 1,3-	4.0E-06	Known/Likely Human Carcinogen	IRIS
Ethylbenzene	2.5E-06	NA	CalEPA
Ethylene Dibromide	6.0E-04	Likely Human Carcinogen	IRIS
Formaldehyde	1.3E-05	Probable Human Carcinogen	IRIS
Methylene Chloride	1.0E-08	Likely Human Carcinogen	IRIS
Naphthalene	3.4E-05	NA	CalEPA
Propylene Oxide	3.7E-06	Probable Human Carcinogen	IRIS
Tetrachloroethane, 1,1,2,2-	5.8E-05	NA	CalEPA
Trichloroethane, 1,1,2-	1.6E-05	Possible Human Carcinogen	IRIS

a/ = Values provided when available.  
Compounds which have no calculated carcinogenic risk were not included in this table.  
NA = Not available; CalEPA does not have a weight of evidence classification for cancer.

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Table 4 Inhalation Reference Concentrations			
Contaminant	RfC mg/m <sup>3</sup> <u>a/</u>	Target Organ/Noncarcinogenic Critical Effects	Source
Acetaldehyde	0.01	Nasal Cavity	IRIS
Acrolein	0.000020	Nasal Cavity	IRIS
Benzene	0.030	Decreased lymphocyte count	IRIS
Biphenyl, 1,1'-	0.00040	Liver and kidneys	PPRTV
Butadiene, 1,3-	0.0020	Reproductive System	IRIS
Carbon Tetrachloride	0.10	Liver	IRIS
Chlorobenzene	0.050	Liver and kidneys	PPRTV
Chloroethane	10	Developmental toxicity	IRIS
Chloroform	0.10	Liver, kidney, Developmental	CalEPA
Dichloroethane, 1,2-	0.0070	CNS	PPRTV
Dichloropropane, 1,2-	0.0040	Nasal Cavity	IRIS
Dichloropropene, 1,3-	0.020	Nasal Cavity	IRIS
Ethylbenzene	1.0	Developmental toxicity	IRIS
Ethylene Dibromide	0.0090	Nasal Cavity	IRIS
Formaldehyde	0.0090	Respiratory System	CalEPA
Hexane, N-	20	Peripheral nervous system	IRIS
Methanol	0.60	Developmental toxicity	IRIS
Methylene Chloride	0.70	Liver	IRIS
Nonane, N-	0.020	Whole Body	PPRTV
Pentane, N-	1.0	No Observable Effect	PPRTV
Naphthalene	0.0030	Nasal Cavity	IRIS
Phenol	0.20	Liver, Cardiovascular, kidney, nervous system	CalEPA
Propylene Oxide	0.030	Nasal Cavity	IRIS
Styrene	1.0	CNS	IRIS
Toluene	0.00020	CNS	IRIS
Trichloroethane, 1,1,2-	0.0050	Nasal Cavity	PPRTV
Trimethylbenzene, 1,2,3-	0.0070	Whole Body	PPRTV
Trimethylbenzene, 1,2,4-	5.0	Blood	PPRTV
Vinyl Chloride	0.10	Liver	IRIS
Xylenes	0.10	CNS	IRIS

Notes:  
CNS = Central Nervous System  
a/ = Values provided when available.  
Compounds which have no chronic inhalation RfCs were not included in this table.

### 3.2.2 *Acute Toxicity Values*

Acute values, in order of preference, were obtained as specified in the HHRAP (EPA, 2005):

1. CalEPA Acute Reference Exposure Levels (Acute RELs) - The Acute REL is an exposure that is not likely to cause adverse effects in a human population, including sensitive subgroups, exposed to that concentration for one hour on an intermittent basis (OEHHA, 1999; OEHHA, 2015).
2. EPA Acute Exposure Guidelines (AEGl-1) – The AEGl-1 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure. (EPA, 2015c; ORI, 2015)
3. American Industrial Hygiene Association (AIHA) Emergency Response Planning Guidelines – 1 (ERPG-1) - The ERPG-1 is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined, objectionable odor (AIHA, 2014; ORI, 2015).
4. Temporary Emergency Exposure Limits (TEEL-1) – The TEEL-1 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic, nonsensory effects. However, these effects are not disabling and are transient and reversible upon cessation of exposure (NOAA, 2015).

Per the HHRAP recommendation, the CalEPA Acute RELs are used as the first choice when available. For HAPs lacking Acute RELs, acute toxicity values were selected as AEGl-1 values and so on according to the HHRAP hierarchy. The Acute REL and AEGl-1 values are designed to protect a variety of exposure groups including the general public, which includes sensitive subpopulations such as the elderly and children, while the ERPG-1 and TEEL-1 values pertain to nearly all individuals. The acute toxicity values are intended to protect against a variety of toxic endpoints. The Level 1 endpoints used in this hierarchy protect against discomfort or mild health effects and/or objectionable odor. Table 5 presents the acute inhalation exposure criteria (AIEC) used in this evaluation.

Table 5 Acute Inhalation Exposure Criteria		
Contaminant	AIEC ( $\mu\text{g}/\text{m}^3$ )	Source
Acenaphthene	3,600	TEEL-1
Acenaphthylene	10,000	TEEL-1
Acetaldehyde	470	CA Acute REL
Acrolein	2.5	CA Acute REL
Benzene	27	CA Acute REL
Benzo(b)fluoranthene	31	TEEL-1
Benzo(g,h,i)perylene	30,000	TEEL-1
Biphenyl, 1,1'-	5,581	TEEL-1
Butadiene, 1,3-	660	CA Acute REL
Butane, N-	13,090,000	AEGL-1
Butyl/Isobutyraldehyde <u>a/</u>	42	TEEL-1
Carbon Tetrachloride	1,900	CA Acute REL
Chlorobenzene	46,100	AEGL-1
Chloroethane	264,000	TEEL-1
Chloroform	150	CA Acute REL
Chrysene	600	TEEL-1
Cyclopentane	1,722,000	TEEL-1
Dichloroethane, 1,1-	648,000	TEEL-1
Dichloroethane, 1,2-	202,500	ERPG-1
Dichloropropane, 1,2-	136,200	TEEL-1
Dichloropropene, 1,3-	13,620	TEEL-1
Ethane	79,940,695	TEEL-1 <u>b/</u>
Ethylbenzene	143,220	AEGL-1
Ethylene Dibromide	130,730	AEGL-1
Fluoranthene	1,500	TEEL-1
Fluorene	6,600	TEEL-1
Formaldehyde	55	CA Acute REL
Hexane, N-	1,059,000	TEEL-1
Methane	42,642,127	TEEL-1 <u>b/</u>
Methanol	28,000	CA Acute REL
Methylcyclohexane	1,608,000	TEEL-1
Methylene Chloride	14,000	CA Acute REL
Methylnaphthalene, 2-	3,000	TEEL-1
Nonane, N-	1,050,000	TEEL-1
Octane, N-	1,401,000	TEEL-1
Pentane, N-	354,000	TEEL-1
Naphthalene	78,600	TEEL-1

Contaminant	AIEC ( $\mu\text{g}/\text{m}^3$ )	Source
Phenanthrene	760	TEEL-1
Phenol	5,800	CA Acute REL
Propane	9,900,000	AEGL-1
Propylene Oxide	3,100	CA Acute REL
Pyrene	150	TEEL-1
Styrene	21,000	CA Acute REL
Tetrachloroethane, 1,1,2,2-	6,870	TEEL-1
Toluene	37,000	CA Acute REL
Trichloroethane, 1,1,2-	81,900	TEEL-1
Trimethylbenzene, 1,2,3-	688,800	AEGL-1
Trimethylbenzene, 1,2,4-	688,800	AEGL-1
Trimethylbenzene, 1,3,5-	688,800	AEGL-1
Trimethylpentane, 2,2,4-	1,425,487	TEEL-1
Vinyl Chloride	180,000	CA Acute REL
Xylenes	22,000	CA Acute REL

Notes:  
**a/** = as Butyraldehyde  
**b/** = Next TEEL update, methane and ethane and TEEL-1 values will be based on the levels to which a simple asphyxiant reduces the oxygen concentration = 65,000 ppm (Freshwater, 2015).  
 Conversion to  $\mu\text{g}/\text{m}^3$  = 65,000 ppm x MW x 1/24.45 x 1000  $\mu\text{g}/\text{mg}$   
 AIEC = Acute Inhalation Exposure Criteria  
 MW = Molecular Weight  
 TEEL = Temporary Emergency Exposure Limits

#### 4.0 QUANTITATIVE RISK CHARACTERIZATION

The results of the quantitative risk analysis are usually presented in two forms. In the case of human health effects associated with exposure to potential carcinogenic constituents, risk estimates are expressed as the lifetime probability of additional cancer risk associated with the given RME exposure. The inhalation cancer risks are calculated as:

$$\text{Cancer Risk} = EC \left( \frac{\mu\text{g}}{\text{m}^3} \right) \times URF \frac{1}{\mu\text{g}/\text{m}^3}$$

The individual cancer risks are then summed across chemicals to calculate a total excess lifetime cancer risk for each RME receptor. In numerical terms, the excess lifetime cancer risks are presented in both decimal and scientific notation in this report. Thus, an estimated excess lifetime cancer risk of 0.0001 or 1E-4 means an incremental lifetime cancer risk of 1 in 10,000; 0.00001 or 1E-5 means an incremental lifetime risk of 1 in 100,000 and so on. In order to evaluate potential carcinogenic health effects, the EPA has established benchmarks within which they strive to manage risk. To evaluate potential carcinogenic risks, the EPA generally uses a risk range of 0.0001 (1 in 10,000) to 0.000001 (1 in 1,000,000) (EPA, 1990). The risk level of 1 in 10,000 indicates a 1 in 10,000 chance of developing cancer due to lifetime exposure to a

substance. Lifetime exposure to a substance with a cancer risk of 1 in 10,000 would increase one's current chance of cancer from all causes (which is currently a 0.5 (1 in 2) chance for males and a 0.33 (1 in 3) chance for females (American Cancer Society, 2014)) by 0.0001.

For determining whether non-cancer health effects may be a concern, the chronic hazard quotient (HQ) is used. The HQ for inhalation exposures is calculated as:

$$HQ = \frac{EC \left( \frac{\mu g}{m^3} \right) \times 0.001 \frac{mg}{\mu g}}{RfC \left( \frac{mg}{m^3} \right)}$$

The HQs are then summed across individual chemicals to calculate a hazard index (HI) for each RME receptor. The HQs represent a ratio and are presented in both decimal and scientific notation in this report. Therefore, a HQ of 0.25 means, for example, that the estimated exposure dose is 25 percent of the RfC. A HQ of 2.5E-5 means that the exposure dose is 0.0025 percent of the RfC.

In evaluating acute effects, the Acute Hazard Quotient (Acute HQ) for inhalation exposures to potential emissions from normal operations is calculated as:

$$\text{Acute HQ} = \frac{1\text{-hr max air concentration} \left( \frac{\mu g}{m^3} \right)}{AIEC \left( \frac{\mu g}{m^3} \right)}$$

In evaluating acute effects, the Acute HQ for inhalation exposures to potential emissions from the ESD blowdown event scenario is calculated as:

$$\text{Acute HQ} = \frac{1\text{-hr max air concentration} \left( \frac{mg}{m^3} \right)}{AIEC \left( \frac{mg}{m^3} \right)}$$

The Acute HQs are then summed across individual chemicals to calculate an Acute Hazard Index (Acute HI) for each receptor.

In order to evaluate the potential for acute and chronic non-cancer health effects, the EPA generally uses a benchmark hazard index/quotient of 1.0. Acute and chronic non-cancer HIs for each receptor were obtained by adding all HAP-specific HQs regardless of target organ potentially affected or type of health effect. HIs were then compared to the EPA non-cancer benchmark of 1.0. Because RfCs incorporate uncertainty factors designed to provide a margin of safety, a HI above 1 does not necessarily suggest a likelihood of adverse effects and only indicates that a potential may exist for adverse health effects. A non-cancer HI less than 1, however, suggests that exposures are likely to be without an appreciable risk of non-cancer effects during a lifetime. In other words, a hazard index below 1.0 is considered "safe" with a margin of error. It is important to emphasize that the level of concern does not increase linearly as the non-cancer HI value increases (EPA, 1989).

#### 4.1 Horseheads Compressor Station, Normal Full-Capacity Operations

Table 6 provides a summary of the results from chronic exposure to the potential emissions from the Horseheads Compressor Station and shows that the emissions would be below a level of health concern. The cancer risks for the adult and child Resident RME receptors would be 0.00000001 (1 in 100,000,000) and 0.000000002 (2 in 1,000,000,000), respectively, which are well below the EPA's acceptable risk range of 0.000001 to 0.0001 (1 in 10,000 to 1 in 1,000,000). The non-cancer HI for both the adult and child Resident RME receptors would be 0.0024 which is well below the benchmark HI of 1.0.

Pollutant	Modeled Air Concentration ( $\mu\text{g}/\text{m}^3$ ) <sup>a/</sup>	URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Adult Cancer Risk	Child Cancer Risk	RfC ( $\text{mg}/\text{m}^3$ )	Adult & Child HQ
Acetaldehyde	0.00024	2.2E-06	2.2E-10	4.4E-11	0.0090	2.6E-05
Acrolein	3.9E-05	NA	NA	NA	0.000020	0.0019
Benzene	7.2E-05	7.8E-06	2.3E-10	4.6E-11	0.030	2.3E-06
Butadiene, 1,3-	2.6E-06	3.0E-05	3.2E-11	6.4E-12	0.0020	1.2E-06
Ethylbenzene	0.00019	2.5E-06	2.0E-10	4.0E-11	1.0	1.9E-07
Formaldehyde	0.0017	1.3E-05	9.0E-09	1.8E-09	0.0090	0.00018
Hexane, N-	0.095	NA	NA	NA	0.70	0.00013
Naphthalene	7.8E-06	3.4E-05	1.1E-10	2.2E-11	0.0030	2.5E-06
Pentane, N-	0.16	NA	NA	NA	1.0	0.00015
Propylene Oxide	0.00018	3.7E-06	2.7E-10	5.3E-11	0.030	5.6E-06
Toluene	0.00078	NA	NA	NA	5.0	1.5E-07
Xylenes	0.00039	NA	NA	NA	0.10	3.7E-06
<b>Total</b>			<b>1E-08</b>	<b>2E-09</b>		<b>0.0024</b>
<b>Benchmark Level</b>			<b>0.000001</b>	<b>0.000001</b>		<b>1.0</b>

**Notes:**  
<sup>a/</sup> Highest predicted 5-year average concentration at or beyond the property line  
 URF = Unit Risk Factor  
 RfC = Reference Concentration  
 HQ = Hazard Quotient  
 NA = Not applicable. These compounds do not contribute to calculated cancer risk.

Table 7 presents a summary of the results from acute exposure to the highest predicted 1-hour emissions from the Horseheads Compressor Station and shows that the potential emissions would be below a level of health concern. The total Acute HI would be 0.0062 which is well below the benchmark Acute HI of 1.0.

<b>Table 7 Acute Risk Assessment Results Proposed Horseheads Compressor Station</b>			
<b>Pollutant</b>	<b>Modeled Air Concentration (<math>\mu\text{g}/\text{m}^3</math>) <sup>a/</sup></b>	<b>AIEC (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Acute HQ <sup>b/</sup></b>
Acetaldehyde	0.029	470	6.2E-05
Acrolein	0.0047	3	0.0019
Benzene	0.0087	27	0.00032
Butadiene, 1,3-	0.00031	660	4.7E-07
Butane	12	13,090,000	9.0E-07
Ethane	434	79,940,695	5.4E-06
Ethylbenzene	0.023	143,220	1.6E-07
Formaldehyde	0.20	55	0.0037
Hexane, N-	5.4	1,059,000	5.1E-06
Methane	7,830	42,642,127	0.00018
Naphthalene	0.00095	78,600	1.2E-08
Pentane, N-	9.1	354,000	2.6E-05
Propane	64	9,900,000	6.5E-06
Propylene Oxide	0.021	3,100	6.8E-06
Toluene	0.095	37,000	2.6E-06
Xylenes	0.047	22,000	2.1E-06
<b>Total Acute HI</b>			<b>0.0062</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b>			
<sup>a/</sup> Highest predicted 1-hour concentrations at or beyond the property line			
<sup>b/</sup> Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC)			
AIEC = Acute Inhalation Exposure Criteria			
Acute HI = Acute Hazard Index			

#### 4.2 Sheds Compressor Station, Normal Full-Capacity Operations

Table 8 presents a summary of the results from chronic exposure to the potential emissions from the Sheds Compressor Station and shows that the emissions would be below a level of health concern. The cancer risk for the adult and child Resident RME receptor would be 0.00000002 (2 in 100,000,000) and 0.000000003 (3 in 1,000,000,000), respectively, which are well below the EPA's acceptable risk range of 0.000001 to 0.0001 (1 in 10,000 to 1 in 1,000,000). The non-cancer HI for the adult and child Resident RME receptor would be 0.0037, which is well below the benchmark HI of 1.0.

APPENDIX B  
Human Health Risk Assessment and Response to Comments

<b>Pollutant</b>	<b>Modeled Air Concentration (µg/m<sup>3</sup>) a/</b>	<b>URF (µg/m<sup>3</sup>)<sup>-1</sup></b>	<b>Adult Cancer Risk</b>	<b>Child Cancer Risk</b>	<b>RfC (mg/m<sup>3</sup>)</b>	<b>Adult &amp; Child HQ</b>
Acetaldehyde	0.00040	2.2E-06	3.7E-10	7.3E-11	0.0090	4.3E-05
Acrolein	6.5E-05	NA	NA	NA	0.000020	0.0031
Benzene	0.00012	7.8E-06	3.9E-10	7.8E-11	0.030	3.9E-06
Butadiene, 1,3-	4.4E-06	3.0E-05	5.4E-11	1.1E-11	0.0020	2.1E-06
Ethylbenzene	0.00032	2.5E-06	3.3E-10	6.7E-11	1.0	3.1E-07
Formaldehyde	0.0029	1.3E-05	1.5E-08	3.1E-09	0.0090	0.00031
Hexane, N-	0.089	NA	NA	NA	0.70	0.00012
Naphthalene	1.3E-05	3.4E-05	1.8E-10	3.7E-11	0.0030	4.2E-06
Pentane, N-	0.15	NA	NA	NA	1.0	0.00015
Propylene Oxide	0.00029	3.7E-06	4.5E-10	8.9E-11	0.030	9.4E-06
Toluene	0.0013	NA	NA	NA	5.0	2.5E-07
Xylenes	0.00065	NA	NA	NA	0.10	6.2E-06
<b>Total</b>			<b>2E-08</b>	<b>3E-09</b>		<b>0.0037</b>
<b>Benchmark Levels</b>			<b>0.000001</b>	<b>0.000001</b>		<b>1.0</b>

**Notes:**  
a/ Highest predicted 5-year average concentration at or beyond the property line  
URF = Unit Risk Factor  
RfC = Reference Concentration  
HQ = Hazard Quotient  
NA = Not applicable. These compounds do not contribute to calculated cancer risk.

Table 9 presents a summary of the results from acute exposure to the highest predicted 1-hr emissions from the Sheds Compressor Station and shows that the potential emissions would be below a level of health concern. The total Acute HI would be 0.0072, which is well below the benchmark Acute HI of 1.0.

Pollutant	Modeled Air Concentration (µg/m <sup>3</sup> ) <sup>a/</sup>	AIEC (µg/m <sup>3</sup> )	Acute HQ <sup>b/</sup>
Acetaldehyde	0.03	470	7.2E-05
Acrolein	0.01	2.5	0.0022
Benzene	0.00	660	5.5E-07
Butadiene, 1,3-	0.01	27	0.00038
Butane	7.74	13,090,000	5.9E-07
Ethane	284	79,940,695	3.6E-06
Ethylbenzene	0.03	143,220	1.9E-07
Formaldehyde	0.24	55	0.0044
Hexane, N-	3.52	1,059,000	3.3E-06
Methane	5,120	42,642,127	0.00012
Naphthalene	0.00	78,600	1.4E-08
Pentane, N-	5.98	354,000	1.7E-05
Propane	42.03	9,900,000	4.2E-06
Propylene Oxide	0.02	3,100	7.9E-06
Toluene	0.11	37,000	3.0E-06
Xylenes	0.05	22,000	2.5E-06
<b>Total Acute HI</b>			<b>0.0072</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b>			
<sup>a/</sup> Highest predicted 1-hour concentrations at or beyond the property line			
<sup>b/</sup> Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC)			
AIEC = Acute Inhalation Exposure Criteria			
Acute HI = Acute Hazard Index			

#### 4.3 Brookman Corners Compressor Station, Normal Full-Capacity Operations

Table 10 presents a summary of the results from chronic exposure to the potential emissions from the Brookman Corners Compressor Station and shows that the emissions would be below a level of health concern. The cancer risk for the adult and child Resident RME receptors would be 0.000001 (1 in 1,000,000) and 0.0000002 (2 in 10,000,000), respectively, which are at or below the lowest risk level of EPA's acceptable risk range of 0.0000001 to 0.0001 (1 in 10,000 to 1 in 1,000,000). The non-cancer HI for the adult and child Resident RME receptor would be 0.97, which is below the benchmark HI of 1.0. Commenters specifically expressed concern over the concentrations of formaldehyde that would be emitted from the Brookman Corners Compressor Station. As shown in table 10, the resultant cancer risks for the adult and child Resident RME receptors would be 0.0000006 (6 in 10,000,000) and 0.0000001 (1 in 10,000,000), which are below the EPA's acceptable risk range of 0.0000001 to 0.0001 (1 in 10,000 to 1 in 1,000,000). Formaldehyde's non-cancer HQ for the adult and child Resident RME receptor would be 0.013, which is well below the benchmark HI of 1.0.

APPENDIX B  
Human Health Risk Assessment and Response to Comments

Table 10  
Chronic Risk Assessment Results  
Proposed Modified Brookman Corners Compressor Station

Pollutant	Modeled Air Concentration ( $\mu\text{g}/\text{m}^3$ ) a/	URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Adult Cancer Risk	Child Cancer Risk	RfC ( $\text{mg}/\text{m}^3$ )	Adult & Child HQ
Acetaldehyde	0.13	2.2E-06	1.1E-07	2.3E-08	0.0090	0.013
Acrolein	0.019	NA	NA	NA	0.000020	0.93
Benzene	0.0067	7.8E-06	2.1E-08	4.3E-09	0.030	0.00021
Benzo(b)fluoranthene	2.5E-06	1.1E-04	1.1E-10	2.3E-11	NA	NA
Biphenyl, 1,1'-	0.0032	NA	NA	NA	0.00040	0.0076
Butadiene, 1,3-	0.0040	3.0E-05	5.0E-08	9.9E-09	0.0020	0.0019
Carbon Tetrachloride	0.00055	6.0E-06	1.4E-09	2.7E-10	0.10	5.3E-06
Chlorobenzene	0.00046	NA	NA	NA	0.050	8.8E-06
Chloroethane	3.0E-05	NA	NA	NA	10.0	2.9E-09
Chloroform	0.00043	2.3E-05	4.1E-09	8.1E-10	0.0980	4.2E-06
Chrysene	1.0E-05	1.1E-05	4.5E-11	9.0E-12	NA	NA
Dichloroethane, 1,1-	0.00036	1.6E-06	2.4E-10	4.7E-11	NA	NA
Dichloroethane, 1,2-	0.00036	2.6E-05	3.8E-09	7.7E-10	0.0070	4.9E-05
Dichloropropane, 1,2-	0.00040	1.0E-05	1.6E-09	3.3E-10	0.0040	9.6E-05
Dichloropropene, 1,3-	0.00040	4.0E-06	6.6E-10	1.3E-10	0.020	1.9E-05
Ethylbenzene	0.00071	2.5E-06	7.3E-10	1.5E-10	1.0	6.8E-07
Ethylene Dibromide	0.00067	6.0E-04	1.7E-07	3.3E-08	0.0090	7.1E-05
Formaldehyde	0.12	1.3E-05	6.4E-07	1.3E-07	0.0090	0.013
Hexane, N-	0.21	NA	NA	NA	0.70	0.00029
Methanol	0.038	NA	NA	NA	20.0	1.8E-06
Methylene Chloride	0.00030	1.0E-08	1.2E-12	2.5E-13	0.60	4.8E-07
Naphthalene	0.0011	3.4E-05	1.6E-08	3.1E-09	0.0030	0.00036
Nonane, N-	0.0017	NA	NA	NA	0.020	7.9E-05
Pentane, N-	0.37	NA	NA	NA	1.0	0.00035
Phenol	0.00036	NA	NA	NA	0.20	1.7E-06
Propylene Oxide	0.00024	3.7E-06	3.6E-10	7.3E-11	0.030	7.7E-06
Styrene	0.00036	NA	NA	NA	1.0	3.5E-07
Toluene	0.0066	NA	NA	NA	5.0	1.3E-06
Tetrachloroethane, 1,1,2,2-	0.00060	5.8E-05	1.4E-08	2.9E-09	NA	NA
Trichloroethane, 1,1,2-	0.00048	1.6E-05	3.2E-09	6.3E-10	0.00020	0.0023
Trimethylbenzene, 1,2,3-	0.00035	NA	NA	NA	0.0050	6.7E-05
Trimethylbenzene, 1,2,4-	0.00022	NA	NA	NA	0.0070	3.0E-05
Vinyl Chloride	0.00022	4.4E-06	4.0E-10	8.0E-11	0.10	2.1E-06
Xylenes	0.0030	NA	NA	NA	0.10	2.9E-05
<b>Total</b>			<b>0.000001</b>	<b>0.0000002</b>		<b>0.97</b>
<b>Benchmark Levels</b>			<b>0.000001</b>	<b>0.000001</b>		<b>1.0</b>

Notes:

a/ Highest predicted 5-year average concentration at or beyond the property line  
URF = Unit Risk Factor  
RfC = Reference Concentration  
HQ = Hazard Quotient  
NA = Not applicable. These compounds do not contribute to calculated cancer risk.

Table 11 presents a summary of the results from acute exposure to highest predicted 1-hour emissions from the Brookman Corners Compressor Station and shows that the potential emissions would be below a level of health concern. The total Acute HI would be 0.26, which is below the benchmark Acute HI of 1.0.

Table 11 Acute Risk Assessment Results Proposed Modified Brookman Corners Compressor Station			
Pollutant	Modeled Air Concentration ( $\mu\text{g}/\text{m}^3$ ) a/	AIEC ( $\mu\text{g}/\text{m}^3$ )	Acute HQ b/
Acenaphthene	0.00046	3,600	1.3E-07
Acenaphthylene	0.0020	10,000	2.0E-07
Acetaldehyde	3.1	470	0.0066
Acrolein	0.48	2.5	0.19
Benzene	0.16	27	0.0060
Benzo(b)fluoranthene	6.0E-05	31	1.9E-06
Benzo(g,h,i)perylene	0.00015	NA	NA
Biphenyl, 1,1'-	0.00015	30,000	5.0E-09
Butadiene, 1,3-	0.078	5,581	1.4E-05
Butane, N-	0.10	660	0.00015
Butyr/Isobutyraldehyde <sup>el</sup>	16	13,090,000	1.2E-06
Carbon Tetrachloride	0.037	42	0.00089
Chlorobenzene	0.014	1,900	7.1E-06
Chloroethane	0.011	46,100	2.4E-07
Chloroform	0.00069	264,000	2.6E-09
Chrysene	0.011	150	7.0E-05
Cyclopentane	0.00026	600	4.3E-07
Dichloroethane, 1,1-	0.084	1,722,000	4.9E-08
Dichloroethane, 1,2-	0.0087	648,000	1.3E-08
Dichloropropane, 1,2-	0.0087	202,500	4.3E-08
Dichloropropene, 1,3-	0.010	136,200	7.3E-08
Ethane	0.010	13,620	7.2E-07
Ethylbenzene	597	79,940,695	7.5E-06
Ethylene Dibromide	0.015	143,220	1.1E-07
Fluoranthene	0.016	130,730	1.3E-07
Fluorene	0.00041	1,500	2.7E-07
Formaldehyde	0.0021	6,600	3.2E-07
Hexane, N-	2.8	55	0.051
Methane	7.4	1,059,000	7.0E-06
Methanol	10764	42,642,127	0.00025
Methylcyclohexane	0.92	28,000	3.3E-05
Methylene Chloride	0.45	1,608,000	2.8E-07
Methylnaphthalene, 2-	0.0074	14,000	5.3E-07
Naphthalene	0.012	3,000	4.1E-06

<b>Table 11 Acute Risk Assessment Results Proposed Modified Brookman Corners Compressor Station</b>			
Pollutant	Modeled Air Concentration ( $\mu\text{g}/\text{m}^3$ ) <sup>a/</sup>	AIEC ( $\mu\text{g}/\text{m}^3$ )	Acute HQ <sup>b/</sup>
Nonane, N-	0.028	78,600	3.5E-07
Octane, N-	0.041	1,050,000	3.9E-08
Pentane, N-	0.13	1,401,000	9.3E-08
Phenanthrene	13	354,000	3.6E-05
Phenol	0.0039	760	5.1E-06
Propane	0.0089	5,800	1.5E-06
Propylene Oxide	88	9,900,000	8.9E-06
Pyrene	0.0094	3,100	3.0E-06
Styrene	0.00050	150	3.3E-06
Tetrachloroethane, 1,1,2,2-	0.0087	21,000	4.2E-07
Toluene	0.015	6,870	2.2E-06
Trichloroethane, 1,1,2-	0.15	37,000	4.1E-06
Trimethylbenzene, 1,2,3-	0.012	81,900	1.4E-07
Trimethylbenzene, 1,2,4-	0.0085	688,800	1.2E-08
Trimethylbenzene, 1,3,5-	0.0053	688,800	7.7E-09
Trimethylpentane, 2,2,4-	0.013	688,800	1.8E-08
Vinyl Chloride	0.092	1,425,487	6.5E-08
Xylenes	0.0055	180,000	3.1E-08
<b>Total Acute HI</b>			<b>0.26</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b>			
<sup>a/</sup> Highest predicted 1-hour concentrations at or beyond the property line			
<sup>b/</sup> Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC)			
<sup>c/</sup> as Butyraldehyde			
AIEC = Acute Inhalation Exposure Criteria			
Acute HI = Acute Hazard Index			

## 5.0 SHORT-TERM EXPOSURES FROM ESD BLOWDOWNS

DTI provided information regarding quantities of natural gas released as a result of venting and blowdown events from the proposed compressor stations. The quantities and types of events are summarized in table 12.

To prevent a loss of valuable product, transmission pipeline system operators implement methods to minimize the frequency of and amount of air emissions from unit and compressor station venting and blowdowns, limiting venting to when necessary for maintenance or testing. ESD tests are typically capped (the blowdown vent is capped to prevent release of natural gas to the atmosphere) to minimize gas loss except for the required full test every 5 years. The venting of centrifugal compressors for shutdowns greater than 1 hour is necessary to protect the equipment. Since Brookman Corners would have reciprocating engines normally in operation, DTI states that these units would be utilized to combust vented gas from the centrifugal compressors.

Station	Start-up <i>a/</i> lb/event	Shut-down <i>b/</i> lb/event	ESD Blowdown lb/event	Total <i>d/</i> lb/year
Horseheads	1,690	3,379	22,232	88,928
Sheds	1,423	2,801	31,125	88,928
Brookman Corners	NA <i>c/</i>	NA <i>c/</i>	26,679	88,928

**Note:**  
 NA = Not Applicable  
*a/* Gas is purged prior to start-up of centrifugal compressors.  
*b/* Gas is purged from a centrifugal compressor after shutdowns lasting more than 1 hour.  
*c/* DTI stated that the gas vented during startup and shutdown of the centrifugal compressors (both existing and new units) would normally be vented to the new reciprocating engines and combusted. At least one reciprocating engine would normally be running, so it would be rare that any centrifugal compressor startup or shutdown gas would need to be vented at Brookman Corners.  
*d/* Totals not expected to be exceeded. Includes non-emergency and emergency gas venting, but not start-up and shut-down releases. Non-emergency venting includes venting of compressor(s) for maintenance and/or protection of gas seals from contamination. Individual system components can be vented for inspection and maintenance, including the filter/separator, fuel gas meter, and/or fuel filters. The annual quantity of gas vented depends on the frequency of maintenance needed.

To evaluate potential exposure to HAPs from blowdown emissions, we evaluated the venting of natural gas during a full station blowdown for ESD system testing, which would occur every five years. This scenario is also intended to be representative of a full station emergency blowdown event and represents a worst-case scenario. The highest predicted 1-hour concentrations at or beyond the property line were modeled assuming the full-station ESD system testing can potentially occur during any time of the day and that all vented gas is emitted in 1-hour. Note the modeling results are very conservative since full station blowdowns are a rare event assumed to occur at any hour of the modeled year (including evenings, which have meteorological unfavorable conditions for air dispersion such as calmer winds and a stable atmosphere). The resulting air concentrations were evaluated using the acute toxicity criteria discussed in chapter 3.2.2 and the results are presented in tables 13 through 15 for Horseheads, Sheds, and Brookman Corners, respectively.

In addition to the acute health risk assessment, we also analyzed whether trace components of released natural gas would be detectable by comparing modeled concentrations to odor detection thresholds. An odor detection threshold is the lowest concentration of odor compound in air at which 50 percent of the tested population are aware of an added substance to clean air, but not necessarily recognized as an actual odor. The detectible odor threshold of propane is 36,000 mg/m<sup>3</sup> (Patty, 1963). A range of odor threshold values were found in the literature: pentane ranges from 4.13 mg/m<sup>3</sup> (Nagata, 2015) to 2950 mg/m<sup>3</sup> (AIHA, 1966), and hexane ranges from 5.3 mg/m<sup>3</sup> (Nagata, 2015) to 459 mg/m<sup>3</sup> (Amoore and Hautala, 1983). We used the lowest published values for analysis and discussion.

There would be a potential for nearby residents to perceive a gasoline-like odor during the ESD event. Methane and ethane are considered odorless compounds. Propane is described as having a faint petroleum-like odor at high concentrations. The typical “rotten egg” odor many people associate with natural gas comes not from the hydrocarbon constituents of the natural gas itself, but of odorization compounds (typically, mercaptans) added to natural gas distribution systems. DTI does not propose to odorize the natural gas on its transmission system.

### 5.1 Horseheads Compressor Station

Table 13 provides the results of the acute evaluation of an ESD blowdown event. The total Acute HI of 0.87, is less than the benchmark of 1.0 and therefore would be below a level of potential concern. The predicted propane air concentration is 247 mg/m<sup>3</sup>, which is well below the detectible odor threshold. The modeled air concentrations for pentane and hexane are approximately 9-fold and 4-fold higher, respectively, than the lowest obtained odor threshold values. It should be noted however, that these modeled concentrations began at the property line and assuming that the full volume of gas would be released within an hour. In actuality, factors such as venting the gas over a longer period of time and increased distance from the property line would decrease the concentration of gas and also decrease the potential for an odor event. Based upon the current modeling, at a distance of 200 feet beyond the property line, concentrations would decrease by approximately 60 percent. The closest residence to the point of the modeled maximum pentane and hexane concentrations is 1,125 feet; therefore, it is less likely that an odor would be detected at the nearest residence.

Pollutant	Modeled Air Concentration (mg/m <sup>3</sup> ) <u>a/</u>	AIEC (mg/m <sup>3</sup> )	Acute HQ <u>b/</u>
Methane	30,064	42,642	0.71
Ethane	1,667	79,941	0.021
Propane	247	9,900	0.025
Butane, N-	45	13,090	0.0035
Pentane, N-	35	354	0.099
Hexane, N-	21	1,059	0.020
<b>Total Acute HI</b>			<b>0.87</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b> <u>a/</u> Highest predicted 1-hour concentrations at the property line <u>b/</u> Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC) AIEC = Acute Inhalation Exposure Criteria Acute HI = Acute Hazard Index			

### 5.2 Sheds Compressor Station

Table 14 provides the results of the acute evaluation of an ESD blowdown event. The total Acute HI of 0.57, is less than the benchmark of 1.0 and would be below a level of potential concern.

Pollutant	Modeled Air Concentration (mg/m <sup>3</sup> ) a/	AIEC (mg/m <sup>3</sup> )	Acute HQ b/
Methane	19,565	42,642	0.46
Ethane	1,085	79,941	0.014
Propane	161	9,900	0.016
Butane, N-	30	13,090	0.0023
Pentane, N-	23	354	0.065
Hexane, N-	13	1,059	0.013
<b>Total Acute HI</b>			<b>0.57</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b> a/ Highest predicted 1-hour concentrations at the property line b/ Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC) AIEC = Acute Inhalation Exposure Criteria Acute HI = Acute Hazard Index			

The modeled propane air concentration (161 mg/m<sup>3</sup>) is well below the detectible odor threshold. However, there would be a potential for nearby residents to perceive a gasoline-like odor during the ESD event from pentane and hexane. The modeled air concentrations for pentane and hexane are approximately 6-fold and 2-fold higher, respectively, than the lowest obtained odor threshold values. It should be noted however, that these concentrations were modeled beginning at the property line and were modeled such that the full volume of gas is released within an hour. In actuality, factors such as venting the gas over a longer period of time and increased distance from the property line will decrease the concentration of gas and also decrease the potential for an odor event. Based upon the current modeling, at a distance of 200 feet beyond the property line, concentrations would decrease by approximately 50 percent. The closest residence to the point of the modeled maximum pentane and hexane concentrations is 1,375 feet; therefore, it is less likely that an odor would be detected at the nearest residence.

### 5.3 Brookman Corners Compressor Station

Table 15 provides the results of the acute evaluation of an ESD blowdown event for Brookman Corners. The total Acute HI of 0.20 is less than the benchmark of 1.0 and, therefore, would be below a level of concern for potential health effects.

The modeled propane and hexane air concentrations are below the detectible odor thresholds. Although the modeled concentration of pentane is approximately twice the lower odor threshold, there would be a low potential for nearby residents to be able to perceive its gasoline-like odor. These concentrations were modeled at the property line and were modeled such that the full volume of gas is released within an hour. In actuality, factors such as venting the gas over a longer period of time and increased distance from the property line would decrease the concentration of gas and also decrease the potential for an odor event. Based upon the current modeling, at a distance of 200 feet beyond the property line, concentrations would decrease by approximately 20 percent. The closest residence to the point of the modeled

maximum hexane concentration is 1,050 feet; therefore, it is less likely that an odor would be detected at the nearest residence.

Table 15 Acute Risk Assessment Results Proposed Modified Brookman Corners Compressor Station 5 year ESD Blowdown Event			
Pollutant	Modeled Air Concentration (mg/m <sup>3</sup> ) <sup>a/</sup>	AIEC (mg/m <sup>3</sup> )	Acute HQ <sup>b/</sup>
Methane	6,800	42,642	0.16
Ethane	377	79,941	0.0047
Propane	56	9,900	0.0056
Butane, N-	10	13,090	0.00079
Pentane, N-	7.9	354	0.022
Hexane, N-	4.7	1,059	0.0044
<b>Total Acute HI</b>			<b>0.20</b>
<b>Benchmark Level</b>			<b>1.0</b>
<b>Notes:</b> <sup>a/</sup> Highest predicted 1-hour concentrations at the property line <sup>b/</sup> Acute HQ = Acute Hazard Quotient (Air Concentration/AIEC) AIEC = Acute Inhalation Exposure Criteria Acute HI = Acute Hazard Index			

## 6.0 AIR EMISSIONS IN CONTEXT

The potential emissions, as a result of the Project improvements, include the criteria pollutants (CO, NO<sub>x</sub>, ozone, CO, SO<sub>x</sub>, and PM), greenhouse gases (GHGs) (primarily CO<sub>2</sub> and methane), and HAPs (which includes those HAPs as defined by the EPA plus other typically recognized air toxics). The criteria pollutants and greenhouse gases are both heavily regulated by EPA under the Clean Air Act. The criteria pollutants are regulated through the National Ambient Air Quality Standards (NAAQS) and the GHGs are covered by the Prevention of Significant Deterioration and Title V Operating Permit programs. Specific HAPs are regulated under the Clean Air Act (Section 112b). EPA regulates HAPS using emission control standards; however, there are no NAAQS for these types of pollutants. Therefore, these compounds are compared to health-protective toxicity values, screening air concentrations, and reference concentrations rather than air quality standards (EPA, 2015e).

The screening modeling air impact analysis conducted for Project improvements as discussed in section B.9.1 of the EA, indicates that concentrations of criteria pollutants due to operation of the stations would remain below applicable NAAQS standards when combined with background concentrations obtained from the nearest monitoring stations. Additionally, emissions of GHGs from the Project would not have a direct impact on the environment in the Project area.

We considered the impacts of potential HAP emissions on human health for the risk assessment presented in this Appendix. Acute and chronic exposure to HAPs from natural gas combustion were evaluated using health protective toxicity values and exposure assumptions and

were determined to be below a level of health concern. These HAPs are generally products of incomplete combustion and, therefore, are commonly present in ambient air. The modeled concentrations for all three compressor stations would be below what has been typically measured in ambient air. For example, the polycyclic aromatic hydrocarbon (PAH) compounds (acenaphthene, acenaphthylene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluorene, fluoranthene, naphthalene, 2-methylnaphthalene, phenanthrene and pyrene), are present in the environment as a result of natural activities (forest fires and volcanoes) and man-made activities, the largest single source being the burning of wood in homes. Automobile and truck emissions are also a major source of polycyclic aromatic hydrocarbons (PAHs) in ambient air (ATSDR, 1995). Measured rural air concentrations of PAHs range from 0.00001 to 0.00012  $\mu\text{g}/\text{m}^3$  in summer and 0.00008 to 0.00132  $\mu\text{g}/\text{m}^3$  in winter (ATSDR, 1995). The highest concentrations of PAHs were modeled for the Brookman Corners Station and range in concentration from 0.000002 to 0.0012  $\mu\text{g}/\text{m}^3$  which are within the range of background.

The highest modeled concentration of formaldehyde among the three compressor stations was at Brookman Corners. The modeled concentration at the property line is approximately 0.12  $\mu\text{g}/\text{m}^3$ , which is 100 to 300-times less than the typical ambient formaldehyde levels of 12 to 37  $\mu\text{g}/\text{m}^3$  (Sullivan, 2001). Formaldehyde levels measured on the summit of Whiteface Mountain in Wilmington, New York, ranged from 0.98 to 3.2  $\mu\text{g}/\text{m}^3$  (Schulam, et al., 1985) which are approximately 8 to 27 times higher than the modeled concentrations at Brookman Corners. Formaldehyde is present in air primarily from by-products of combustion of fossil fuels (e.g., coal, oil, wood, and natural gas) with cars being the largest contributor (ATSDR, 1999).

## 6.1 Time-Weighted NAAQS

Commenters objected to the reporting of concentration of constituents in tons per year because annual averages minimize periods of peak concentrations and are therefore not appropriate for assessing health risk. The NAAQS were developed to protect the public and sensitive subgroups with an adequate margin of safety and are provided in terms of air concentration ( $\mu\text{g}/\text{m}^3$ ). The NAAQS include standards for long-term (annual) and short-term (1-hour, 3-hour, 8-hour and 24-hour) periods.

Table 15 in section B.9.1 of the EA presents NAAQS compliance results for Horseheads, Sheds, and Brookman Corners Compressor Stations. For each compressor station, pollutant, and averaging period, the sum of the maximum predicted concentration from facility operation plus the background concentration is less than the applicable NAAQS. Therefore, impacts on air quality from operation of the Project facilities would not cause violations of a NAAQS. DTI would also be required to meet all applicable requirements specified in the modified Air State Facility and Air Title V issued by the NYSDEC.

Additionally, as previously discussed above in chapters 4 and 5, the risk assessment included an evaluation of highest predicted 1-hour air concentrations from the compressor stations, both for emissions from normal operations and a full-station ESD blowdown. None of the modeled concentrations of the constituents of concern exceeded a level of health concern using health-conservative assumptions.

## 6.2 Combustion Source Comparison

In order to put the level of potential emissions from the compressor stations into perspective, we compared the proposed emissions to common “everyday” combustion sources such as home heating with fuel oil or wood and with car and light truck vehicle emissions. Table 16 presents a comparison of emissions on a pound per day (lb/day) basis.

Pollutant	Compressor Stations Combustion Emissions (lb/day)			“Everyday” Sources of Combustion Emissions (lb/day)			
	Sheds	Horseheads	Brookman Corners	Home Oil Heating <u>a/</u>	Wood Stove <u>b/</u>	Passenger Car <u>c/</u>	Light Duty Truck or SUV <u>d/</u>
NO <sub>x</sub>	133.7	133.7	363	0.06	0.11	0.05	0.07
CO	36.2	31.8	183	0.012	8.3	0.68	0.86
PM <sub>10/2.5</sub>	35	35	72	0.001	1.1	0.0006	0.0007
SO <sub>2</sub>	3.8	3.8	6	0.0008	0.01	ND	ND
VOCs	15.9	15.9	133	0.003	1.9	0.07	0.09
Formaldehyde	0.55	0.55	12	ND	0.07 <u>e/</u>	ND	ND

**Comparison Scenarios:**  
a/ Based on average use of a home in the Northeast, assuming AP-42 emission estimates (EPA, 2010), 645.4 gallons heating oil/year average consumption (Andrews and Perl, 2014) and October 1 – March 31 heating season (NYSERDA, 2015).  
b/ Based on emissions from a conventional wood stove, assuming AP-42 emission estimates (EPA, 1996), burning 4 cords of firewood/year (Hetzler 2015), and October 1 – March 31 heating season (NYSERDA, 2015).  
c/ Average passenger car mileage of 12,000 miles/year, 24.1 mpg (EPA, 2008).  
d/ Average light truck/SUV mileage of 15,000 miles/year, 17.3 mpg (EPA, 2008)  
e/ From Li, V.S. 2007. Conventional Woodstove Emission Factor Study. On-line at: <http://www.epa.gov/ttnchie1/conference/ei16/session5/victor.pdf>.

**Notes:**  
 CH<sub>4</sub> = Methane  
 ND = No Data  
 HFC = Hydrofluorocarbons/ perfluorocarbons  
 mpg = miles per gallon  
 N<sub>2</sub>O = Nitrous Oxide  
 NYSERDA = New York State Energy Research and Development Authority  
 SUV = Sport Utility Vehicle  
 lb/day = pound per day. Calculated as follows:  
 For Station emissions – tons per year x 2000 lb/ton / 365 days/yr  
 For Home Oil Heating – lb/1000 gallons x 645.4 gallons/yr / 183 days/yr (heating season)  
 For Wood Stove – lb/ton of wood x 4 cords/yr x 3291 lb/cord x ton/2000 lb / 183 days/yr (heating season)  
 Car/Truck Emissions – lb/yr / 365 d/yr

Table 17 presents the same comparison in terms of number of units (e.g., number of homes burning oil or wood, number of cars or light trucks/SUVs) that would be needed to achieve the same level of emissions as the compressor station.

<b>Table 17</b>					
<b>Comparable Emissions to Rural Combustion Sources</b>					
<b>Pollutant</b>	<b>Number of Equivalent "Everyday" Sources of Combustion Emissions</b>				
	<b>Home Oil Heating a/</b>	<b>Wood Stove b/</b>	<b>Passenger Car c/</b>	<b>Light Duty Truck or SUV d/</b>	
NO <sub>x</sub>	Sheds	2,228	1,215	2,674	1,910
	Horseheads	2,228	1,215	2,674	1,910
	Brookman Corners	6,050	3,300	7,260	5,186
CO	Sheds	3,017	4	53	42
	Horseheads	2,650	4	47	37
	Brookman Corners	15,250	22	269	213
PM <sub>10/2.5</sub>	Sheds	35,000	32	58,333	50,000
	Horseheads	35,000	32	58,333	50,000
	Brookman Corners	72,000	65	120,000	102,857
SO <sub>2</sub>	Sheds	4,750	380	ND	ND
	Horseheads	4,750	380	ND	ND
	Brookman Corners	7,500	600	ND	ND
VOCs	Sheds	5,300	8	227	177
	Horseheads	5,300	8	227	177
	Brookman Corners	44,333	70	1,900	1,478
Formaldehyde	Sheds	ND	8	ND	ND
	Horseheads	ND	8	ND	ND
	Brookman Corners	ND	171	ND	ND
<p>a/ Based on average use of a home in the Northeast, assuming AP-42 emission estimates (EPA, 2010), 645.4 gallons heating oil/yr average consumption (Andrews and Perl, 2014) and October 1 – March 31 heating season (NYSERDA, 2015).</p> <p>b/ Based on emissions from a conventional wood stove, assuming AP-42 emission estimates (EPA, 1996), burning 4 cords of firewood/yr (Hetzler, 2015), and October 1 – March 31 heating season (NYSERDA, 2015).</p> <p>c/ Average passenger car mileage of 12,000 miles/year, 24.1 mpg (EPA, 2008)</p> <p>d/ Average light truck/SUV mileage of 15,000 miles/year, 17.3 mpg (EPA, 2008)</p> <p>Notes: ND = No Data</p>					

A few examples from table 17 are as follows:

- The potential level of particulate matter emissions from the Brookman Corners Station would be equivalent to the emissions from 72,000 houses burning oil for heating or 65 houses burning wood in a conventional wood stove;
- The potential level of Carbon Monoxide (CO) emissions from the Brookman Corners Station would be equivalent to the emissions from 15,250 houses burning oil for heating or 22 houses burning wood in a conventional wood stove, or from the emissions of 269 cars or 213 light truck/Sport Utility Vehicles (SUVs);
- The potential level of VOC emissions from the Sheds and Horseheads Compressor Stations are equivalent to the emissions from 5,300 homes burning oil for heating or 8 homes burning wood in a conventional wood stove, or from 227 cars or 177 light trucks/SUVs; and

- The potential level of formaldehyde emissions from the Sheds and Horseheads Compressor Stations are equivalent to the emissions of 8 homes burning wood in a conventional wood stove, while for Brookman Corners, the potential formaldehyde emissions are equivalent to 171 homes burning wood in a conventional wood stove.

Although the potential emissions from the compressor stations would be, in some cases, considerably higher than the common “everyday” combustion sources, there is a potential, based upon the number of units needed, where CO (wood stoves, passenger cars and light duty truck/SUV), particulate matter (wood stoves), SO<sub>2</sub> (wood stoves), VOCs (wood stoves, passenger cars and light duty truck/SUV), and formaldehyde (wood stoves) from these everyday sources are comparable and could potentially exceed those of the compressor stations.

## 7.0 OTHER CONCERNS

### 7.1 Unconventional vs. Conventional Natural Gas

Some commenters expressed concern that the natural gas transmitted through the pipeline is “fracked gas.” Once out of the ground conventional and unconventional natural gas are subject to the same processing, transport and end-use, as well as have indistinguishable atmospheric impacts after production (Moore et al., 2014).

### 7.2 Radon

We received several comments concerning the presence of radon and or radiation present in Pennsylvania-sourced Marcellus shale. The downstream use of natural gas in the market areas, including the effects of burning natural gas and exposure to radon in homes, is beyond the scope of this health assessment. Although the impacts of transportation of natural gas to downstream users are outside the scope of the health assessment and beyond our jurisdiction, we have previously provided a general background and a review of the literature on radon in natural gas.<sup>4</sup>

Radon can be entrained in fossil fuels including natural gas. Because radon is not destroyed by combustion, burning natural gas containing radon can increase the level of radon within a home (ATSDR, 2012). Almost all risk from radon comes from breathing air containing radon and its decay products (EPA, 2014c). Radon levels in outdoor and indoor air can vary widely. Outdoor air radon levels range from less than 0.1 to about 30 picocuries per liter (pCi/L). The EPA identifies the average outdoor radon levels at about 0.4 pCi/L. Radon in indoor air ranges from less than 1 to about 3,000 pCi/L. The EPA identifies that the average indoor radon level is 1.3 pCi/L and recommends that indoor levels be less than 2 to 4 pCi/L. In 1988, the U.S. Congress passed the Indoor Radon Abatement Act, which established the long-term goal that indoor air radon levels be equal or better than outdoor air radon levels.

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<sup>4</sup> New Jersey-New York Expansion Project final Environmental Impact Statement (Docket CP11-56) issued March 2012, Rockaway Delivery Lateral and Northeast Connector Projects final Environmental Impact Statement (Dockets CP13-36 and CP13-132) issued February 2014, and the Algonquin Incremental Market Project final Environmental Impact Statement (Docket CP14-96) issued January 2015.

In addition to the literature review and studies in the above dockets, the Pennsylvania Department of Environmental Protection (PADEP) published its “Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) Study Report in January 2015. The study was initiated in 2013 to collect data relating to TENORM associated with oil and gas operations in Pennsylvania. The PADEP measured radon concentrations in natural gas at the well head in Marcellus Shale (3 pCi/L – 148 pCi/L), Oriskany Sandstone (19.9 pCi/L), Upper Devonian Shale (18.3 pCi/L – 92.2 pCi/L) and in the Utica formation (5.7 pCi/L) (PADEP 2015). PADEP also measured radon in natural gas entering and exiting a processing plant located in Washington County. Concentrations of radon measured in natural gas entering the processing plant were 67.5 and 71.1 pCi/L, while concentrations of radon measured in natural gas at the processing plant outflow were 9.3 and 8.6 pCi/L (PADEP, 2015).

Using the Marcellus Shale data (median value of 43.6 pCi/L, maximum value of 148 pCi/L), PADEP estimated the incremental increase of radon in a typical home that used natural gas for purposes such as cooking and heating. To be conservative, it was assumed that there was no decay during gas processing and transit. Based on the radon and natural gas data collected as part of the study and the conservative assumptions made, the incremental radon increase in a home using natural gas appliances is estimated to be very small (0.04 pCi/L for the median value and 0.13 pCi/L for the maximum value) and would not be detectable by commercially available radon testing devices. Therefore, there is little potential for additional radon exposure to the public due to the use of natural gas extracted from these geologic formations (PADEP, 2015).

We note that several factors that would further reduce indoor exposure to radon from natural gas as compared to PADEP’s conservative model. Radon’s half-life, defined as the time it takes for the element to decay to half its initial concentration, is relatively short (3.8 days). The time needed to gather, process, store, and deliver natural gas allows a portion of the entrained radon to decay, which decreases the amount of radon in the gas before it is used in a residence. Additionally, radon concentrations would be reduced when a natural gas stream undergoes upstream processing to remove liquefied petroleum gas. Processing can remove an estimated 30 to 75 percent of the radon from natural gas (Johnson et al. 1973), as demonstrated by PADEP’s measurements at the Washington County processing plant. Other research suggests that the cumulative decay of radon from wellhead to burner tip is around 60 percent (Gogolak, 1980). Finally, indoor radon exposure associated with the residential combustion of natural gas may be lower now due to the improved ventilation and increased energy efficiency of modern boilers, furnaces, and hot water heaters, as well as new building codes requiring venting of gas-fired stoves and ovens.

The levels of radon associated with the burning of natural gas at compressor stations would be lower than at the wellhead. As is the case for the burning of natural gas in the home, the levels of radon would be reduced due to upstream processing, natural decay, and efficiency of the turbines. Any radon in the compressor station emissions would be vented to the atmosphere and quickly diluted by mixing with the surrounding air. While the FERC has no regulatory authority to set, monitor, or respond to indoor radon levels, many local, state, and federal entities (e.g., the EPA) establish and enforce radon exposure standards for indoor air. Based on the analysis above, we find that the risk of exposure to radon in natural gas is not significant.

We also received a comment concerning the potential buildup of decay products within the pipeline and the risk of releasing these products to the environment either during pipeline maintenance or the removal of existing pipe. DTI would clean the pipeline to be removed prior to its being reused for another purpose. DTI also conducts annual inspections and regular cleaning of its operational pipelines. Any liquids or solids removed during these cleanings would be collected and treated as hazardous material that would be disposed of at a licensed facility in accordance with federal, state, and local regulations. These measures would minimize the risk that any radioactive solids would be released to the environment.

### 7.3 Food Supplies

Several commenters expressed a concern that the deposition of emissions from the compressor stations would impact crops, livestock, waterbodies and fish. With the exception of the PAH compounds (acenaphthene, acenaphthylene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, fluorene, fluoranthene, naphthalene, 2-methylnaphthalene, phenanthrene and pyrene), none of the emitted HAPs are considered to be Persistent Bioaccumulative Toxic compounds (EPA, 2015d). The PAHs do tend to persist in the environment and potentially can be taken up by plants from impacted soils as well as bioaccumulate in fish; however, many plants and animals are able to metabolize and eliminate these compounds (ATSDR, 1995). Additionally, as shown in tables 6, 8, and 10, the emitted air concentrations of these compounds over an extended period are extremely low and therefore are considered to be an insignificant source of PAHs in the environment. PAHs are commonly emitted as products of inefficient combustion and uncontrolled emissions (Freeman and Cattell, 1990; NRC, 1983; Tan et al., 1992 as cited in ATSDR, 1995), and the residential burning of wood is the largest source of atmospheric PAHs (Ramdahl et al., 1982). The most important mobile source of PAHs are vehicular exhaust from gasoline and diesel-powered engines (Back et al., 1991; Johnson, 1988; Yang et al., 1991).

## 8.0 CONCLUSIONS

We conclude that the modeled HAPs emissions from normal operations and blowdown events from the proposed Horseheads and Sheds Compressor Stations as well as the upgraded Brookman Corners Station are below a level of health concern. Further, our analysis uses consistently conservative assumptions such as individuals exposed to maximum concentrations from full-capacity facility operation for 24 hours per day, 350 days per year. We also evaluated short-term maximum concentrations from conservative meteorological conditions. In response to the concerns about VOC emissions, the analysis demonstrates that each compressor station's VOC emission rate would be equivalent to 8 to 70 times the rate of VOCs emitted by a single wood stove. Finally, full station blowdowns would result in the potential to detect natural gas odors near the property lines; however, these impacts would occur for a short duration every five years and would not pose any discomfort, irritation, or mild health effects. We conclude there would be no significant impact on health in the Project areas from inhalation of emissions associated with the proposed / modified compressor stations.

## 8.1 Normal Operations

We concluded that the modeled emissions from normal operations would be below a level of health concern, using consistently conservative assumptions in our analyses. Potential total excess lifetime cancer risk and non-cancer hazard indices (measures of non-cancer risk for chemical mixtures) were calculated for a theoretical “reasonably maximally exposed” (RME) adult and child as a result of chronic (long-term) exposures to the highest predicted five-year average HAP concentrations emitted during normal operations (i.e., exhaust emissions from natural gas combustion and emissions resulting from releases of natural gas from fugitive emissions and venting). Total excess lifetime cancer risks were below 1 in a million and non-cancer hazard indices were below the benchmark level of 1.0, below which the EPA and other State or Health Agencies have determined a sensitive individual can be exposed without a risk for non-cancer health effect.

The results of the evaluation for all three stations indicated that acute exposures to the highest predicted 1-hour emissions during normal operations would be well below these benchmark criteria. The potential for acute (short-term) health effects due to exposures to the highest predicted 1-hour HAP concentrations emitted during normal operations was evaluated to account for periods of high exposures. Air concentrations were evaluated against acute inhalation exposure criteria (AIEC) which are intended to protect the general public, including sensitive subpopulations, against a variety of toxic endpoints. The AIEC that were used also protect against discomfort, mild health effects, and/or objectionable odor.

## 8.2 Blowdown Events

While the predicted concentrations would be below a level of health concern, we found some potential for odors from concentrations of pentane and hexane, native to the natural gas itself, to be detected during full station blowdown events near the station property line. This analysis focused on the full station blowdowns which are scheduled to occur every five years and/or during true emergencies; smaller venting activities occur as part of regular maintenance and were taken into account in the normal operations model. Air concentrations were evaluated against the same AIEC criteria described above. The results of the evaluation for all three stations indicated that acute exposures to the highest predicted 1-hour vented natural gas emissions during a full station blowdown would be below a level of health concern.

While the natural gas would not be purposefully odorized, we determined that there may be some potential for odors to be detected during the station blowdown events especially near the station property lines. The predicted 1-hour concentrations of pentane and hexane exceed their respective odor threshold by approximately 2 to 9 times for pentane and 2 to 4 times for hexane. The concentrations of these constituents decrease by 20 percent (Brookman Corners Compressor Station) to 60 percent (Horseheads Compressor Station) at 200 feet from the property line of each respective station. We note that the distances from the nearest residences to the predicted points of maximum 1-hour concentrations range from 1,050 feet (Brookman Corners Compressor Station) to 1,375 feet (Sheds Compressor Station).

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## **Rebecca Cobb**

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**From:** Emmett Toms (Services - 6) <emmett.toms@dom.com>  
**Sent:** Thursday, November 10, 2016 1:12 PM  
**To:** Rebecca Carter; Rebecca Cobb  
**Subject:** Op- ED in Farmville Herald

**Rebecca Carter,**

**Could you please forward/distribute on to BOS or put in Tuesday's Board package so they will see this perspective. Some may not have seen or received Farmville Herald.**

**Rebecca Cobb,**

**Could you please distribute/forward on to Planning Commissioners for their information and awareness as well.**

**Thanks,**

**Emmett**

### **The real story of compressor stations**

**By Danny Watson | Farmville Herald | Thursday, November 10, 2016**

Buckingham County has been swarmed by outside groups sharing misleading facts about the proposed compressor station.

As a boilermaker, I have spent years in the field working on projects that require identical skills needed to build the Atlantic Coast Pipeline. First and foremost, building projects safely is our number one objective. I can attest to the high-quality training and standards workers on this project must meet, as my occupation requires the completion of several thousand hours of field work through an apprenticeship, ensuring each new generation of workers meets the high safety and quality standards of the previous one. The people hired to construct the pipeline and compressor station will be the best-trained workers in the field simply because our occupation requires it.

Compressor stations are the working piece of any compressed natural gas pipeline. Pressure provides the energy to move the gas through the pipeline from the starting point to the end user. Building a compressor station is much like building other commercial sites. Most compressor stations have regulators, generators, gas coolers and heaters, metering equipment, fans and those types of state-of-the-art technology to make the compression work. These advanced technologies are typically housed in other constructed buildings with industry-guided standards. Modern standards and regulations will keep this compressor station at or below 55 decibels, a sound quieter than a home HVAC system. Noise from the site will not impact the daily lives of anyone who lives nearby.

To the concerned landowners impacted by this project, I understand your fears, but please know workers on this project take your safety, your way of life and your cherished community very seriously. Some of them will come from Buckingham County itself, while many others come from similar rural communities and understand the value of quiet, rural communities. Projects like this have been built all over the country to very little fanfare and will continue to be built and operated safely.

This compressor station will be no different.

This project will have an enormous impact on thousands of workers. Trade workers who live and work in Virginia stand to gain work and wages.

We train for many years to develop the skills necessary to build massive projects such as the Atlantic Coast Pipeline, but seldom do we get the chance to be directly involved on a large project that will directly benefit the community around us.

On behalf of the many likely workers of this project and the many job seekers in Virginia, please support this project.

DANNY WATSON is the business manager for International Brother of Boilermakers Local 45, representing members throughout the state, including Buckingham County and surrounding counties. He resides in Amelia. His email address is [l45dwatson@gmail.com](mailto:l45dwatson@gmail.com).

<http://www.farmvilleherald.com/2016/11/the-real-story-of-compressor-stations/>

## **Emmett Toms**

**DOMINION – State & Local Affairs**

**Phone 800-416-8553 Fax 540-245-4184**

**Email: [Emmett.Toms@dom.com](mailto:Emmett.Toms@dom.com)**

**Mail: 2 Technology Drive, Staunton, VA 24401**

*Follow us on Twitter: [twitter.com/DomVAPower](https://twitter.com/DomVAPower)*

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**Items submitted by public since the October 24<sup>th</sup> meeting**

**Rebecca Cobb**

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**From:** Evan Johns <ejohns@appalmad.org>  
**Sent:** Monday, November 14, 2016 1:06 PM  
**To:** Rebecca Cobb; Rebecca Carter; E M. Wright  
**Subject:** Case No. 16-SUP236: Second Set of Written Comments  
**Attachments:** Second Set of Comments on Buckingham Special Use Permit.pdf

Good afternoon,

Please see attached written comments of the Virginia Chapter of the Sierra Club, the Chesapeake Bay Climate Action Network, Friends of Buckingham, and Yogaville Environmental Solutions regarding Case No. 16-SUP236. I have placed hard copies into the US Mail today as well.

Please contact me if you have any questions.

Thank you,

--

**Evan Johns**  
Staff Attorney  
Appalachian Mountain Advocates  
415 Seventh Street Northeast  
Charlottesville, Virginia  
434-738-1863  
[ejohns@appalmad.org](mailto:ejohns@appalmad.org)



# Appalachian Mountain Advocates

West Virginia  
Post Office Box 507  
Lewisburg, WV 24901  
(304) 645-9006

Virginia  
415 Seventh Street NE  
Charlottesville, VA 22902  
(434) 529-6787

[www.appalmad.org](http://www.appalmad.org)

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November 14, 2016

## VIA ELECTRONIC AND UNITED STATES MAIL

Buckingham County Planning Commission  
c/o Mrs. Rebecca S. Cobb  
Zoning and Planning Administrator  
13360 West James Anderson Highway  
Buckingham, Virginia 23921  
[rcobb@buckinghamcounty.virginia.gov](mailto:rcobb@buckinghamcounty.virginia.gov)

Buckingham County Board of Supervisors  
c/o Mrs. Rebecca S. Carter  
County Administrator  
13380 West James Anderson Highway  
Buckingham, Virginia 23921  
[bcarter@buckinghamcounty.virginia.gov](mailto:bcarter@buckinghamcounty.virginia.gov)

### **Re: Atlantic Coast Pipeline, Case No. 16-SUP236**

Please accept these written comments of the Virginia Chapter of the Sierra Club, the Chesapeake Climate Action Network, Friends of Buckingham, and Yogaville Environmental Solutions regarding the July 6, 2016 Application for a Special Use Permit (the "Permit Application") submitted by Atlantic Coast Pipeline, LLC (the "Pipeline"), requesting authorization to construct a natural gas compressor station and associated appurtenances (the "Compressor Station" or the "Station") in Buckingham County's A-1 Agricultural District.

These comments are intended to build upon our initial comments, submitted to the Commission on September 19, 2016, and to respond to comments submitted by the Pipeline on October 14, 2016. To that end, these comments cover two important issues:

- ☞ *First*, we urge the County to participate in the parallel proceedings before FERC—either by formal intervention as a party to the proceeding, or by submitting written comments detailing its concerns about impacts to the County's land use plan. By participating in the FERC proceeding, the County can ensure that its interests in upholding the requirements of its ordinances are considered throughout the federal review
  
- ☞ *Second*, the Pipeline has failed to carry its burden of demonstrating that its proposed compressor station is a permitted use in the County's Agricultural District. Rather than make out an affirmative case for why it *does* qualify for the special use permit it requests, the Pipeline raises several counterarguments to the points and authorities addressed in our initial comments. As explained in detail below, those counterarguments are unpersuasive at best. The fact remains: the County has declared that "gas transmission facilities" like the proposed compressor station belong in the County's Heavy Industrial District, not in its Agricultural District. Accordingly, the Pipeline remains ineligible for the requested special use permit and issuing it would constitute an error of law. The Commission must recommend the Board deny it accordingly.

**I. IN ORDER TO ENSURE ITS CONCERNS OVER LAND USE, SAFETY, AND OTHER ISSUES ARE ADEQUATELY CONSIDERED, THE COUNTY MUST PARTICIPATE IN THE FEDERAL REVIEW OF THE PROJECT.**

For almost two decades, the Buckingham County Zoning Ordinance has guided the decisions of landowners at crucial turning points in their lives—deciding where to settle and put down roots, deciding whether and where to invest in real estate, deciding whether to invest in improvements on their property, and deciding how best to finance other important life decisions.

We commend the Commission for taking its obligation seriously and for investigating ways to protect Buckingham County landowners who have relied on the Ordinance in making important personal and financial decisions. But to ensure its efforts in this regard are maximally effective, the County must also ensure that the other governmental entities reviewing the Pipeline are aware of the County’s land use plan and can address other local concerns in reviewing the project. Foremost among these other entities is the Federal Energy Regulatory Commission (FERC), which must issue a “certificate of public convenience and necessity” to the Pipeline before it begins construction on its gas transmission system.

The interplay of federal, state, and local regulation of pipelines is complex, but this complexity “does not mean that local interests are or can be ignored” by FERC.<sup>1</sup> To the contrary, FERC actively encourages local governments to participate in its pipeline certificate proceedings—either by intervening as a party in the certificate process or by submitting written comments on FERC’s environmental review of the project.<sup>2</sup> This provides FERC with an opportunity to incorporate recommendations from local governments into the federal certificate,<sup>3</sup> and it provides local authorities with several important tools to protect their interests and the interests of their constituents.

By participating in a FERC certificate proceeding, the County can advise FERC on how best to “fit the construction of pipeline facilities into [the County’s] overall plan for land development.”<sup>4</sup> This includes, importantly, siting pipeline facilities like compressor stations in areas “more appropriately zoned” for those activities.<sup>5</sup> The County can also advise FERC on how to address safety concerns associated with “[p]otential terrorist attacks,”<sup>6</sup> how best to

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1 *Algonquin LNG v. Loqa*, 79 F. Supp.2d 49, 52 (D.R.I. 2000).

2 *See Maritimes & Northeast Pipeline*, 81 FERC 61,166 at 61,730 (1997); *Transcontinental Gas Pipe Line*, 141 FERC 61,091 at ¶ 108 (2012) (reciting FERC’s long-standing “goal to include state and local authorities to the maximum extent possible in the planning and construction activities of pipeline applicants”).

3 *Id.* at ¶ 61,731.

4 *Id.* at 61,730 n.29.

5 *Dominion Transmission*, 141 FERC 61,240 at ¶ 60 (2012) (*Dominion Transmission I*).

6 *Id.* at ¶ 125.

collaborate with emergency responders,<sup>7</sup> and how to ensure that changes in operating pressure are safely managed.<sup>8</sup>

If it ultimately decides to issue a certificate, FERC has traditionally incorporated reasonable recommendations from local authorities and appropriate local land use requirements into the federal certificate,<sup>9</sup> ensuring that these recommendations and requirements become federal law.<sup>10</sup> At times, FERC has even adopted state and local requirements in order to study whether FERC itself should impose similar requirements in future certificates.<sup>11</sup> However, FERC can only do so when local authorities actually raise their concerns before it. If state and local authorities neglect to express their concerns to FERC, they run the risk that the federal review will overlook these issues.<sup>12</sup> And although a FERC decision granting a certificate does not overrule all local land use requirements—only, instead, those that directly conflict with FERC requirements or would cause *unreasonable* costs or delays<sup>13</sup>—participation in the certificate proceeding can bypass costly or time-consuming disputes over which local requirements apply to FERC-approved facilities.

We therefore urge the Planning Commission and the Board of Supervisors to participate in FERC’s certificate proceeding for the proposed pipeline. This will ensure that the County has a seat at the table throughout FERC’s review process and will allow the County to inject local concerns—especially those related to the County’s land use plan—into the conversation.

## II. THE PIPELINE’S INSISTENCE THAT THE COMPRESSOR STATION IS A PERMITTED USE IN THE COUNTY’S AGRICULTURAL DISTRICT IS INCORRECT.

On October 14, 2016, the Pipeline submitted a response to several legal arguments raised in our September 19, 2016 letter to the Commission. We would like to briefly address several of the Pipeline’s counterarguments and explain why they are invalid or do not ultimately support the Pipeline’s position.

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7 *Id.*

8 *Transcontinental Gas Pipe Line*, 141 FERC 61,091 at ¶ 69.

9 *Maritimes & Northeast Pipeline*, 81 FERC at 61,730

10 *Dominion Transmission*, 143 FERC 61,148 at ¶ 23 & n.22 (2013) (*Dominion Transmission II*); *Maritimes & Northeast Pipeline*, 81 FERC at 61,730.

11 *Id.* at 61,732.

12 *See, e.g., Iroquois Gas Transmission System*, 59 FERC ¶ 61,094 (1992) (town could not request FERC reconsider pipeline route after formal approval of route); *Kern River Gas Transmission v. Clark County*, 757 F. Supp. 1110, 1113 (D. Nev. 1990) (county that failed to object to proposed pipeline route before FERC could not raise “concerns already exhaustively” addressed during federal review).

13 *Dominion Transmission II*, 143 FERC 61,148 at ¶ 21 & n.20;

But before discussing some of those individual arguments, we must address an important, overarching point about how the Commission should interpret the County’s Zoning Ordinance. We agree with the Pipeline that “[t]he meaning of the term ‘public utility’ is controlled by the intent of the Board of Supervisors.”<sup>14</sup> But this does not, as the Pipeline suggests, mean that “dictionary definitions[,] decisions from courts outside . . . or inside Virginia,” or other ordinances are irrelevant.<sup>15</sup> Virginia law dictates *how* the Commission determines the intent behind the Ordinance and requires it apply the same rules that courts use in interpreting statutes.<sup>16</sup> These “well-settled” rules require the Commission look to the actual language of the Ordinance and determine the common, accepted meaning of its terms.<sup>17</sup> And in doing so, the Commission may consider interpretive tools like dictionaries,<sup>18</sup> related statutes,<sup>19</sup> judicial decisions,<sup>20</sup> and the context in which the terms appear.<sup>21</sup>

These are not controversial claims, but given the Pipeline’s dismissal of these and other relevant interpretive tools, we feel it necessary to clarify these “well-established” principles of interpretation.<sup>22</sup> With that framework in mind, we address several of the Pipeline’s counterarguments below.

**A. The Pipeline misrepresents the statutory definition of a “public utility” under the Virginia Code.**

In our initial comments, we pointed out that Virginia’s Utility Facilities Act defines the Pipeline as a “non-utility natural gas service” rather than a “public utility.” The Pipeline responds by

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14 Pipeline Comments at 2.

15 *Id.* at 2, 5–6.

16 *Sansom v. Board of Supervisors of Madison County*, 257 Va. 589, 594, 514 S.E.2d 345, 349 (1999).

17 *Fritts v. Carolinas Cement*, 262 Va. 401, 405, 551 S.E.2d 336, 338–39 (2001).

18 *See, e.g., id.* at 339; *Trustees of Christ & St. Luke’s Episcopal Church v. City of Norfolk*, 273 Va. 375, 383 n.4, 641 S.E.2d 104, 108 n.4 (2007); *Higgs v. Kirkbride*, 258 Va. 567, 574, 522 S.E.2d 861, 864 (1999).

19 *City of Virginia Beach v. Board of Supervisors of Mecklenburg County*, 246 Va. 233, 237, 435 S.E.2d 382, 384 (1993). *See also, e.g., Patton v. City of Galax*, 269 Va. 219, 231–32, 609 S.E.2d 41, 47–48 (2005) (Agee, J., concurring and dissenting) (interpreting term “designated streets” in zoning ordinance according to statutes in the Code of Virginia).

20 *See, e.g., Patton*, 269 Va. at 231–32 (Agee, J., concurring and dissenting) (interpreting term “designated streets” in zoning ordinance according to prior decisions of the Supreme Court of Virginia); *American Tradition Institute v. University of Virginia*, 287 Va. 330, 341–42, 756 S.E.2d 435, 441 (2014) (interpreting term “proprietary” in statute according to prior decision of the Supreme Court of Virginia).

21 *Patton*, 269 Va. at 229–230; *Virginia Beach*, 246 Va. at 237.

22 *Higgs*, 258 Va. at 573; *Virginia Beach*, 246 Va. at 236–37.

arguing that our comments cited to the wrong definition of “public utility” within the Act, and that another definition in the statute is more applicable.

Setting aside that the definition the Pipeline cites is in fact the precise definition cited in our initial comments, the Pipeline isolates a single, misleading fragment of that definition rather than looking at the entire definition. It is true, as the Pipeline points out, that the *general* definition of a “public utility” under the Act is “any [company] which owns or operates facilities within the Commonwealth of Virginia for the . . . transmission . . . of natural gas.”<sup>23</sup> But what the Pipeline fails to mention is that the definition goes on to list several exceptions to that general definition. One of those categorical exceptions excludes from the definition of “public utility” any company that “provides non-utility gas service.”<sup>24</sup> And as explained in our initial comments, the Pipeline is not a public service company, nor is it a “natural gas utility” as defined by the Code.<sup>25</sup> It is therefore considered a “non-utility gas service” under the Utility Facilities Act, not a “public utility.”<sup>26</sup>

The Pipeline fails to address our argument that it is a “non-utility gas service” rather than a “public utility,” opting instead to provide the Commission with an isolated and misleading fragment of the Utility Facilities Act and an interpretation that is plain wrong. We’ve attached to this letter complete copies of the relevant statutes, highlighting in pink the fragment cited by the Pipeline and highlighting in yellow the other relevant language discussed in our comments. We encourage the Commission, the Board, and the County Attorney to consider the Pipeline’s arguments in light of the full statutory language.

**B. The Pipeline also misrepresents its status as a public utility under federal law, and the federal authority it cites actually refutes its status as a public utility.**

Despite previously suggesting that other sources of law are an improper tool for interpreting the Ordinance,<sup>27</sup> the Pipeline boldly asserts that it *is* in fact a public utility under the Ordinance, in part because it is considered a utility under federal law. The sole authority for this statement, however, is a single sentence buried in a FERC regulation labeled the “Uniform System of Accounts Prescribed for Natural Gas Companies” and relating only to the *accounting* practices of pipeline companies.

This accounting regulation is of no value in interpreting the Zoning Ordinance. As an initial matter, FERC’s regulation of rates under the Natural Gas Act falls within a specific, specialized

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23 Virginia Code § 56-265.1(b).

24 Virginia Code § 56-265.1(b)(11).

25 See Virginia Code § 56-265.4:6(A).

26 Virginia Code § 56-265.1(b)(11).

27 See Pipeline Comments at 2.

field of accounting known as “utility accounting,”<sup>28</sup> and within that field, it is common to refer to rate-regulated entities as “utilities” in order to distinguish them from “unregulated enterprises” whose prices are set by the open market.<sup>29</sup> This terminology is used even if the rate-regulated entity is not a “utility” under the common usage of that term. For example, the Financial Accounting Standards Board—an entity that the federal government recognizes as the authority for setting accounting standards<sup>30</sup>—has issued utility accounting standards that apply both to “public utilities” as well as “other companies,” like the Pipeline, whose rates are set by regulators.<sup>31</sup> By referring to natural gas companies subject to FERC’s accounting regulations as “utilities,” FERC’s regulation is not declaring the Pipeline a “utility” (let alone a “*public* utility”) under federal law; it is merely using the technical jargon of utility accounting.<sup>32</sup> There is no reason to believe the Board also had jargon from this narrow sub-field of accounting in mind when it drafted the Ordinance.<sup>33</sup>

It is also telling that FERC’s accounting regulation refers to natural gas companies as “utilities” and not “*public* utilities.” FERC’s omission of the word “public” was no accident. The regulation mirrors a similar FERC regulation—also labeled as a “Uniform System of Accounts,” but applicable to electric utilities rather than natural gas companies.<sup>34</sup> This electric utility Uniform System of Accounts predates its natural gas counterpart by approximately three years, but the two Systems are substantially similar.<sup>35</sup> Yet there is one significant difference: while the Uniform System of Accounts for natural gas companies refers to those companies as merely “utilities,” the Uniform System of Accounts for electric utilities refers to those entities specifically as “*public* utilities.”<sup>36</sup> FERC’s decision to change this language in the corresponding natural gas regulation sends a clear message. While interstate pipelines may be “utilities” in the

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28 For a discussion of how utility accounting differs from general accounting, see generally National Regulatory Research Institute, *Generally Accepted Accounting Principles for Regulated Utilities: Evolution and Impacts*, 63–88 (1994), available at <http://bit.ly/2eDqe6D>.

29 See, e.g., *id.* at 63.

30 See *City of Monroe Employees Retirement System v. Bridgestone Corp.*, 399 F.3d 651, n.22 (6th Cir. 2005) (quoting *Ganino v. Citizens Utilities Co.*, 228 F.3d 154, 159 n.4 (2d Cir. 2000)).

31 See Financial Accounting Standards Board, FAS 71: *Accounting for the Effects of Certain Types of Regulation*, 4 (1982), available at <http://bit.ly/2fCUS4Y>.

32 *Ippolito v. United States*, 223 F.2d 154, 157 (5th Cir. 1955) (“[T]echnical words are always interpreted in their technical sense”).

33 See *Ricks v. Commonwealth*, 290 Va. 470, 477, 778 S.E.2d 332, 335 (Va. 2015) (“[T]he plain, obvious, and rational meaning of a statute is to be preferred over any curious, narrow, or strained construction.”).

34 See 18 C.F.R. § 101.

35 See generally *Washington Public Interest Organization v. Public Service Commission*, 393 A.2d 71 (D.C. 1978).

36 See 18 C.F.R. § 101 (29) (emphasis added).

jargon of utility accounting, they are never considered “public utilities.”<sup>37</sup> This is an important distinction because, as explained in our initial comments, the Pipeline must serve the general public in order to qualify as a “public utility” under the Zoning Ordinance.<sup>38</sup>

In any case, FERC has explicitly stated that it does not consider natural gas pipeline companies subject to its jurisdiction to be “public utilities.” In holding that natural gas companies subject to its jurisdiction are exempt from state law requirements applicable only to public utilities, FERC has plainly stated that a company like the Pipeline is a “*not a public utility*—it is a natural gas pipeline company within the meaning of [the federal Natural Gas Act], engaged in the business of transporting natural gas in interstate commerce and subject to [FERC] jurisdiction.”<sup>39</sup> In short, the Pipeline’s insistence that it is a “public utility” finds no real support in federal law.

**C. Transco’s pre-Ordinance land uses are absolutely irrelevant to the question now before the Commission.**

Next, the Pipeline suggests that it should be allowed to build a compressor station in District A-1 because “Transco has maintained and operated multiple pipelines through Buckingham County for decades prior to the enactment of the Zoning Ordinance . . . , including in the A-1 district.”<sup>40</sup> But Transco’s pre-Ordinance land uses in District A-1 are completely irrelevant here. As the Pipeline itself admits, these land uses began “decades prior to the enactment of the Zoning Ordinance.” As pre-existing land uses, they are only subject to the provisions of Article 3 of the Zoning Ordinance—not Article 2, which governs new land uses like the proposed compressor station.

And if the Pipeline is arguing that Transco’s pre-Ordinance land uses should inform the Commission’s interpretation of the Ordinance, this argument turns land use law on its head. The law does not presume that the uses permitted by an ordinance will be similar to pre-existing land uses. Indeed, an overabundance of certain pre-existing land uses is often the very reason *why* a locality enacts a zoning ordinance in the first place.<sup>41</sup> As such, there is no support in logic or in

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37 Outside of this isolated regulation, federal law consistently refers to entities like the Pipeline not as “utilities” but as “natural gas companies” in every other context—including, notably, laws regarding the construction of facilities like the proposed compressor station. *See, e.g.*, 15 U.S.C. § 717(b); 15 U.S.C. § 717f(c)(1)(A).

38 *See* Written Comments I at 3–4. *See also, e.g., Holder v. Mississippi Fuel Co.*, 317 So.2d 891, 892 (Miss. 1975); *Phillips Petroleum Co. v. Public Service Commission*, 545 P.2d 1167 (Wyo. 1976); *Hawkeye Land Co. v. Iowa Utilities Board*, 847 N.W.2d 199, 213–19 (Iowa 2014).

39 *See Transcontinental Gas Pipe Line*, 141 FERC 61,091 at ¶¶ 104–105 (2012) (emphasis added).

40 *See* Pipeline Comments at 3.

41 *See, e.g., Northern Ohio Sign Contractors Association v. City of Lakewood*, 513 N.E.2d 324, 330 (Ohio 1987); *State v. Reinke*, 702 N.W.2d 308, 311–12 (Minn. 2005).

the law for the Pipeline’s argument that Transco’s pre-Ordinance land uses should inform the Commission’s interpretation of the Ordinance.<sup>42</sup>

**D. The Pipeline fails to appreciate the significance of the Virginia Supreme Court’s opinion in *WANV v. Houff*.**

The Pipeline next attempts to distinguish this case from *WANV v. Houff*, in which the Supreme Court of Virginia held that when a zoning ordinance allows for public utility facilities within a residential district, the category of public utility facilities must be interpreted in accord with the nature of that district.<sup>43</sup> Instead of addressing the *WANV* court’s reasoning, the Pipeline argues that the *WANV* holding applies only to the particular language of the ordinance addressed in that case. Because that language differs somewhat from the County’s Ordinance, the Pipeline argues that *WANV* does not apply.<sup>44</sup>

The holding of *WANV* is far more general than the Pipeline lets on. As stated in our initial comments, the interpretation of an undefined term in an ordinance requires consideration of “the context in which [the term] is used.”<sup>45</sup> *WANV* merely applies this principle to language that, like the language found in the County’s own Ordinance, allows a general category of utility facilities within a certain district. In doing so, it holds that the land uses permitted under the general category of utility facilities must be of the kind *generally* associated with the district in which they are permitted. This is merely another way of saying they must be “consistent” with the surrounding land uses—which, after all, is the entire aim of land use planning<sup>46</sup> and a specific requirement for public utility facilities under the Virginia Code.<sup>47</sup>

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42 The Pipeline’s argument also relies on an assumption that Transco’s pre-Ordinance underground pipelines would fall within the category of “other [public utility] facilities.” But if that were the case, it is unclear why the Pipeline has not applied for a special use permit—which is required both for “other facilities” and for “booster stations”—for *its* proposed underground pipeline. Cf. *BASF Corp. v. State Corporation Commission*, 289 Va. 375, 404, 770 S.E.2d 458, 473 (Va. 2015) (distinguishing between “transmission lines” and switching stations serving those lines, as the latter are “facilit[ies] . . . more intrusive to surrounding environment than transmission lines”). Its failure to do so undercuts its own argument.

43 219 Va. 57, 60–61, 244 S.E.2d 760, 762 (1978).

44 See Pipeline Comments at 4.

45 *City of Virginia Beach v. Board of Supervisors of Mecklenburg County*, 246 Va. 233, 236–37, 435 S.E.2d 382, 384 (Va. 1993)) (quoting *Department of Taxation v. Orange-Madison Cooperative Farm Services*, 220 Va. 655, 658, 261 S.E.2d 532, 533–34 (Va. 1980)).

46 See *Board of Supervisors of Fairfax County v. DeGross Enterprises*, 214 Va. 235, 237–38, 198 S.E.2d 600, 602 (1973).

47 Virginia Code § 15.2-2232(A).

The Pipeline appears to believe that the *WANV* court was merely remarking that the particular utility facilities enumerated in the Rockbridge County ordinance were the types generally associated with residential areas.<sup>48</sup> This interpretation, however, ignores the fact that the *WANV* court used the residential nature of the district to limit the scope of the *general* category of “utilities” so as to exclude a radio tower.<sup>49</sup> Accordingly, at least one Virginia court citing to *WANV* has interpreted the decision as requiring that facilities permitted under a general use category of “public utilities” must be consistent with the character of the district.<sup>50</sup>

**E. The Compressor Station is in fact a “Gas Transmission Facility” permitted only in the County’s Heavy Industry District.**

The Pipeline also argues that its Station is not within the category of “Oil Gas Transmission Facilities” permitted only in the County’s Heavy Industry District. In support of this argument, the Pipeline states that this category refers only to a specific type of facility known as an “Oil Gas Facility” used to transport liquids like crude oil and refined petroleum products.<sup>51</sup>

The Pipeline does not point to a single incidence where the precise term “Oil Gas Transmission” is used to describe the transmission of liquids by pipeline—no statute, no regulation, no government document, no industry record, no judicial opinion. After searching multiple Internet databases and speaking with two energy industry experts, we are unable to find any evidence that the term “Oil Gas Transmission” is widely used in the energy industry.

Given that the term “Oil Gas Transmission” is so obscure within the energy industry (if, indeed, it is used at all), the far more likely interpretation of the Ordinance is that it intends to permit “Oil *or* Gas Transmission Facilities” in the County’s Heavy Industry District. After all, the terms “Oil Transmission” and “Gas Transmission” are common in the energy industry and have well-settled definitions. As explained in our initial comments, the Pipeline has consistently referred to *itself* as a “gas transmission pipeline system.”<sup>52</sup>

Because the Pipeline’s proposed compressor station is a facility within a “gas transmission pipeline system,” the Ordinance’s provisions regarding the siting of “Gas Transmission

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48 See Pipeline Comments at 4.

49 *WANV*, 219 Va. at 60–61.

50 See *Wilson v. City of Salem*, 50 Va. Cir. 429, \*4 (Salem 1999) (holding that water tower was permitted “public utility” use in residential district and noting that water towers have long “been deemed to be consistent with residential neighborhoods”).

51 See Pipeline Comments at 4.

52 See Atlantic Coast Pipeline, Abbreviated Application for a Certificate of Public Convenience and Necessity and Blanket Certificates, FERC Docket No. CP15-554, 6 (September 18, 2015), available at <http://bit.ly/1V4vUrQ>; Atlantic Coast Pipeline, Resource Report 1: General Project Description, FERC Docket No. PF15-5, 1-1 (September 18, 2015), available at <http://bit.ly/IPFkvIh>.

Facilities” apply.<sup>53</sup> Those provisions require that facilities like the proposed compressor station be placed within the County’s Heavy Industry District.<sup>54</sup> And in doing so, those provisions clarify by implication that interstate pipeline compressor stations are *not* permitted in the County’s Agricultural District as “public utility booster stations.”<sup>55</sup>

**F. The Zoning Administrator’s interpretation of the ordinance is not binding on the Commission or any other entity, and, in fact, the Commission must disregard it as plainly wrong.**

Finally, the Pipeline argues that its proposed compressor station must be considered a “public utility booster station” because the Zoning Administrator appears to have considered it as such.<sup>56</sup> Assuming the Buckingham County Zoning Administrator did consider the proposed station a “public utility booster station,” this determination is not binding upon the Commission or the Board. The Supreme Court of Virginia held in *James v. City of Falls Church* that a planning commission is under no obligation to adopt the zoning administrator’s prior interpretation of a zoning ordinance where the applicable ordinance contemplates that the commission itself will “interpret and apply” the terms of the ordinance.<sup>57</sup> Like the ordinance in *James*, the County’s Zoning Ordinance requires the Commission “determine if the contemplated use is in accordance with the district in which the construction lies” and “consider application[s]” referred to it by the Zoning Administrator.<sup>58</sup> As such, the Commission and Board are free to disregard the Zoning Administrator’s interpretation.

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53 See Written Comments I at 7–9. See also generally, e.g., *St. Clair v. Colonial Pipeline Co.*, 202 A.2d 376, 379–80 (Md. 1964) (upholding trial court’s decision that petroleum storage tanks were more appropriately characterized as “fuel line storage facilities” permissible only in industrial district, rather than as “public utility structures and properties” permissible in agricultural district); *Peconic Bay Broadcasting v. Board of Appeals of Town of Southampton*, 99 A.D.2d 773 (N.Y. App. 1984) (upholding trial court’s decision that “the fact that the ordinance specifically refers to communication facilities” precludes an attempt to categorize radio transmission tower as a “public utility structure”); *AWACS, Inc. v. Warwick Township Zoning Hearing Board*, 656 A.2d 608 (Pa. Comm. 1995) (upholding trial court’s decision that cellular telephone tower was more appropriately characterized as a “telephone central office” than a “public utility” under zoning ordinance, thus restricting it to zone reserved for more intensive land uses).

54 See Zoning Ordinance at 36.

55 See *Campbell v. Commonwealth*, 13 Va. App. 33, 38, 409 S.E.2d 21, 24 (Va. App. 1991) (“When the General Assembly uses different terms in the same act, it is presumed to mean different things.”).

56 See Pipeline Comments at 5.

57 280 Va. 31, 44–45, 694 S.E.2d 568, 575–76 (2010).

58 See Zoning Ordinance at 49.

Furthermore, the Commission and Board *must* disregard the Zoning Administrator’s interpretation in this case because it is “at odds with the plain language used in the ordinance as a whole.”<sup>59</sup> As detailed in our initial comments, the proposed compressor station is not part of a public utility service and therefore cannot qualify as a “public utility booster station.” Any contrary interpretation strikes the word “public utility” from the ordinance and thereby fails to “interpret[] the ordinance as written” and is “plainly wrong.”<sup>60</sup> As such, not only are the Commission and Board permitted to disregard it, they are obligated to do so.

**G. The Pipeline altogether fails to address other important points raised in our comments.**

The Pipeline failed to address several important issues raised in our initial comments:

- The Pipeline itself admits it would be inappropriate to place its compressor station in the County’s Village Center District (VC-1). Yet this district, like A-1, allows “public utility booster stations” as a special use.<sup>61</sup> The Pipeline fails to address this inconsistency.
- If the Pipeline *is* in fact a public utility, it has yet to explain how it intends to comply with the consistency-review requirements of Virginia Code § 15.2-2232.<sup>62</sup>
- Beyond a conclusory statement that the station is “in compliance with the Comprehensive Plan’s designated land use [sic] and policies for the area,”<sup>63</sup> the Pipeline fails to address the specific inconsistencies identified in our initial comments between its proposal and the County’s Comprehensive Plan.<sup>64</sup>

Until it is prepared to address these and other deficiencies in its proposal, it is not eligible for a special use permit.

### III. CONCLUSION

The Pipeline bears the burden of proving it is legally eligible for a special use permit.<sup>65</sup> Instead of carrying that burden, the Pipeline is content to merely pick at several of the authorities cited in our initial comments. As explained above, its counterarguments are unpersuasive at best. But it faces a more fundamental problem: it has yet to marshal an affirmative case for why it *is* a public

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59 *Board of Zoning Appeals ex rel. County of York v. 852 LLC*, 257 Va. 485, 489, 514 S.E.2d 767, 770 (1999).

60 *Id.*

61 *See* Initial Comments at 8.

62 *See* Initial Comments at 11.

63 Pipeline Comments at 6.

64 *See* Initial Comments at 10–11.

65 *See Board of Supervisors of Fairfax County v. Board of Zoning Appeals of Fairfax County*, 271 Va. 336, 349, 626 S.E.2d 374, 382 (Va. 2006).

utility and thus eligible for the permit it seeks. In the absence of *any* compelling authority—legal or otherwise—to this effect, the Commission must recommend that the Board reject the Pipeline’s permit application.

Sincerely,

A handwritten signature in black ink that reads "Evan D. Johns". The signature is written in a cursive, slightly slanted style.

**Evan D. Johns**

**Isak Howell**

APPALACHIAN MOUNTAIN ADVOCATES

415 Seventh Street Northeast

Charlottesville, Virginia 22902

(434) 738 - 1863

CC: E.M. Wright, [emwright@buckinghamcounty.virginia.gov](mailto:emwright@buckinghamcounty.virginia.gov)

## Rebecca Cobb

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**From:** Swami Dayananda <swdayananda@gmail.com>  
**Sent:** Friday, November 11, 2016 10:01 AM  
**To:** Rebecca Cobb  
**Subject:** List of harm to animals/plants due to compressor stations emissions  
**Attachments:** Harm List for Animals and Plants.docx

Dear Mrs. Rebecca Cobb,

Please give this document to all the Planning Commissions members. Please inform them that many of the web links under each name may not open. I am looking into it and will let you know what I find. Thank you.

With best wishes,  
Swami Dayananda

Nov. 11, 2016

**List of harm to animals and plants due to proximity to compressor stations is attached.**

Compiled from **List of the Harmed | Pennsylvania Alliance for Clean Water and Air** by Jenny Lisak, Co-director of PACWA.

## **List of harm to animals and land due to proximity to compressor stations and other gas facilities.**

11. Wayne and Angel Smith

Location: Bedford County, PA

Gas Facility: Spectra Energy Steckman Ridge storage field, pipelines, compressor stations

Exposure: Air, water - arsenic

Symptoms: Various health ailments

Symptoms (animal): Death - 5 cows, 3 dogs, 12 chickens and 4 cats

<http://www.shalefieldstories.org/angel--wayne-smith.html>

67. Lloyd Burgess

Location: TX

Gas Facility: Compressor station

Exposure: Air

Symptoms (animal): Horses - sick, death, neurological defect and blind in both eyes

<http://www.npr.org/templates/story/story.php?storyId=120043996>

77. Louis Meeks

Location: Pavillion, Wyoming

Gas Facility: Encana wells and waste ponds, compressor station, high pressure pipeline

Exposure: Water - chloride, iron, glycols

Symptoms: Diabetes, lesions, sores and neuropathy and chronic obstructive pulmonary disease,

and wife Donna has endured eight operations for polyps in her lungs

Symptoms (animal): Two horses dead

<http://www.hcn.org/issues/43.11/hydrofracked-one-mans-quest-for-answers-about-natural-gas-drilling>

<http://www.counterpunch.org/2011/03/25/fracking-the-wind-river-country/>

653. Ronald and Catherine Gates

Location: Corry, PA

Gas Facility: Exco gas wells, compressor station, pipelines

Exposure: Land

Symptoms: Damaged property 30 acres no longer tillable and 20 acres are useless...

<http://extension.psu.edu/natural-resources/natural-gas/news/2010/05/dairy-farmers-recover-damages-against-gas-company-for-failure-to-restore-land-following-installation-of-pipeline>

766-767. Harriet Irby and Betty Clark

Location: Pentango, TX

Gas Facility: DFW Midstream Service Compressor Station

Exposure: Air- diesel exhaust and sweet-smelling chemical fumes

Symptoms: Itchy, watery eyes, shortness of breath and other health problems, exacerbating

breathing problems and causing costly medical bills.

Symptoms (animal): Chickens have died

<http://www.star-telegram.com/2011/09/02/3333836/pantego-women-sure-somethings.html>

5078. Carl Frisinger

Location: Williams County, ND

Gas Facility: Hiland Partners compressor station

Exposure: Explosion, fire

Symptoms: Blew so hard cows ran a mile from where they spend the night

6011. Steve Kohlhase

Location: Fairfield County, CT

Gas Facility: Iroquois Gas Transmission System compressor station

Exposure: Noise

Symptoms: Trouble sleeping, fears sound waves can contribute to an acceleration in any flaws in

welds on these pipelines."

Symptoms (animal): Dog was placed on Prozac due to agitation from noise.

<http://www.nhregister.com/article/NH/20120714/NEWS/307149943>

6154. Michele Beegle and family

Location: Bedford County, PA

Gas Facility: Spectra Energy/Williams compressor station, wells, gas storage field

Exposure: Air (VOC's from uncontrolled release), water (arsenic, strontium and surfactants) and

land (blowout)

Symptoms: Black outs, cataplexy as a result of toxic exposure, daughter - precancer; husband, son -

sterility; property value diminished

Symptoms (animal): Cows - death

<http://www.friendsoftheharmed.com/michele-beegle.html>

7474. Rebecca Williams

Location: Tarrant County, TX

Gas Facility: Compressor station and heavy gas-well development.

Exposure: Air

Symptoms: Rashes, sharp headaches and repeated bouts of pneumonia respiratory problems,

nosebleeds, vomiting, forgetfulness

Symptoms (animal): Dog – rashes

<https://www.publicintegrity.org/2014/12/11/16396/health-worries-pervade-north-texas-fracking-zone>

21657. Lonjino and Raquel Lara

Location: Karnes County, TX

Gas Facility: Encana well - blowout

Exposure: Air

Symptoms: Nosebleeds, muscle pains, breathing problems, headaches; have had to stay away from their property.

Symptoms (animal): 30 of the Laras' goats died.

<http://projects.expressnews.com/is-the-eagle-ford-oil-boom-making-people-sick-blowout-karnes-encana-jennifer-hiller>

21658. Andrew and Shannon Gardiner

Location: Denton County, TX

Gas Facility: Crosstex North Texas Pipeline

Exposure: Air - noise, vibration

Symptoms: Deafening noise interfering with their use and enjoyment of the ranch.

<http://caselaw.findlaw.com/tx-supreme-court/1739926.html>

Compiled from **List of the Harmed | Pennsylvania Alliance for Clean Water and Air** by Jenny Lisak, Co-director of PACWA.

Submitted by Swami Dayananda to Planning Commissions.

November 14, 2016

## Rebecca Cobb

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**From:** Corey Fischer <corey\_fischer@woodberry.org>  
**Sent:** Sunday, November 06, 2016 8:58 AM  
**To:** Rebecca Cobb  
**Cc:** reply@emails.sierraclub.org  
**Subject:** No to Dominion compressor stations

Dear Mrs. Cobb,

As Buckingham County Zoning/Planning Administrator, you are tasked with a tough job needing to consider various perspectives, and I hope the one you consider most heavily is the health and safety of your community. It is unconscionable to expose your residents to the emissions that will be produced, not to mention the risks to the water supply and loss of property value. Buckingham County is a beautiful, pristine region, please keep it that way--vote NO.

Warmly,

Corey Fischer

Woodberry Forest, VA

This is a staff email account managed by Woodberry Forest School. This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify the sender.

## Rebecca Cobb

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**From:** Graham McBride <mcbhsg49@gmail.com>  
**Sent:** Thursday, November 03, 2016 4:50 PM  
**To:** Rebecca Cobb

As a geologist, I know that Fracked natural gas has many potentially dangerous side effects to the environment and the community from which it is extracted. Please do not proceed with the project. Instead, invest in renewable energy sources such as wind and solar.

Thank you.

H. S. Graham McBride. US Geol. Society

## Rebecca Cobb

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**From:** Brian Moss <bmos18@gmail.com>  
**Sent:** Thursday, November 03, 2016 10:40 PM  
**To:** Rebecca Cobb  
**Subject:** ACP Compressor Station

Dear Mrs. Cobb

I strongly feel as though the ACP is not in our best interest, as we grow into a proactive country against climate change. We are destroying our lands and waters at a fast rate, and we need to address our needs in a more efficient manner. The pipeline, and therefore a large disastrous compressor station here in Buckingham, is not the answer! This is a very bad idea. Surely a crime against humanity. I am speaking out against its operation.

Thank you

Brian Moss

**Rebecca Cobb**

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**From:** Fred Harris <fredandpeggy@gmail.com>  
**Sent:** Thursday, November 03, 2016 3:18 PM  
**To:** Rebecca Cobb  
**Subject:** Fracking gas compressor

Ms. Cobb,

I am writing in support of the Union Hill Community to stop the fracking gas compressor from being installed in their community. As reported, the station will vent methane and other toxic gases. We do not need any fracking or stations in Union Hill or anywhere in Virginia.

PLEASE DO NOT PERMIT THIS STATION TO BE INSTALLED!!!

Peggy Harris  
Fork Union, VA

**Rebecca Cobb**

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**From:** Jeeva Abbate <jeeva@yogaville.org>  
**Sent:** Wednesday, November 02, 2016 3:58 PM  
**To:** Rebecca Cobb  
**Subject:** Important News Article: Loudoun Officials Caught Off-Guard by Dominion's New Compressor Expansion Plans  
**Attachments:** Leesburg Compressor Station Expansion.docx

**Buckingham County Planning Commissioners:**

As you may remember in my last talking points to the Planning Commission, I noted how Dominion received approval to build their Leesburg Compressor Station within a specific site and size, then after that was done, was able to bypass local oversight and simply add another large turbine, substantially increasing the size and impact of the Station. This is happening again with the same station and this time the local community and Planning Commission there is not happy about Dominion breaking their word. Here's a quote from the article:

"Local lawmakers are bewildered by Dominion Resources Inc.'s latest plans to upgrade a natural gas pipeline compressor station in Loudoun County, Va., less than two years after the company promised no new compressor expansions in the area would be forthcoming."

Here's the location of the complete article on the web:

<http://www.dcmediagroup.us/2016/10/27/loudoun-officials-caught-off-guard-dominions-new-compressor-expansion-plans/>

I have also copied the entire article to a Word file and now attach it to this email for anyone's easy review.

This article is important for our consideration of Dominion's request for a Buckingham County Special Use Permit for a number of reasons:

- 1) It shows that we cannot trust what Dominion tells us, particularly in terms of the truth about the details re: the ACP and Compressor Station.
- 2) It demonstrates Dominion's common practice of saying one thing and doing another. Since they have not legally committed to their statements, they simply violate their word and proceed to do whatever they want, ignoring local government and community concerns.
- 3) It demonstrates that once the Special Use Permit is granted, Dominion will use it to expand beyond their original specification, ignoring local government and community concerns and their own verbal commitments.
- 4) It shows that Dominion will tell us that they are obliged to grow the size of their industrial installations for "growing" domestic need, but do not provide any data to back that claim up. In actuality, this is a common Dominion script, but is not based on actual need. Trend data from the U.S. Energy Information Administration does not show this need either in the short term (we have a growing domestic surplus) or for the long term.
- 5) Most glaringly, this article shows Dominion's long term strategy to build their pipeline supply lines to their Cove Point LNG Terminal for overseas shipment, where the real corporate profit lies. This exposes their plan to use their "domestic need" argument to utilize a short and inadequate FERC approval process to apply "eminent domain" to violate private property rights to gain permission to proceed with their projects, only to end up shipping domestic natural gas to foreign markets. Rather than serving the American public as a needed utility, these actions harm the American citizens in a number of ways:
  - a) Dominion shipping our resource overseas raises domestic ratepayers prices (currently a low price due to the surplus of gas) since we must compete with foreign market prices.

b) Dominion also can charge back the cost of building this supposedly domestic utility infrastructure to the existing American ratepayers, further raising their rates, to fund their project for foreign profit.

c) Dominion can violate private property rights in the name of building a domestic utility, thus impacting private property use, impacting property values, impacting the health and safety of those communities, farms, homes, rivers, streams, and rural settings that must make way for these installations.

I believe this article presents some important issues for the Buckingham Planning Commission to consider, and underscores the smart decision for the Commissioners to take some additional time to study the issues around Dominion's request for a Special Use Permit for the proposed Compressor Station in our community.

Thank you for your consideration of the community's concerns,  
Joe Jeeva Abbate

--  
Joseph Jeeva Abbate  
Yogaville Environmental Solutions  
108 Yogaville Way  
Buckingham, VA 23921  
office: 434-969-3121, X172  
mobile: 703-626-6385  
email: [jeeva@yogaville.org](mailto:jeeva@yogaville.org)

## Loudoun Officials Caught Off-Guard by Dominion's New Compressor Expansion Plans

October 27, 2016 | Posted in DCMediaGroup  
Written by: Mark Hand



(Dominion Transmission's Leesburg Compressor Station in Loudoun County, Va./Photo by Mark Hand)

Local lawmakers are bewildered by Dominion Resources Inc.'s latest plans to upgrade a natural gas pipeline compressor station in Loudoun County, Va., less than two years after the company promised no new compressor expansions in the area would be forthcoming.

The planned compression expansion is part of a project that Dominion is calling Eastern Market Access, a project that will increase capacity on its Dominion Cove Point pipeline by about 294,000 dekatherms per day. Washington Gas, the natural gas utility for the Washington, D.C., metropolitan region, and Panda Power Funds, developer of the proposed Mattawoman Energy Center in Maryland, have agreed to long-term firm contracts for equal shares of the planned new capacity.

"In the similar application a couple years ago, they said they weren't going to do this again," Tony Buffington, Blue Ridge District supervisor on the Loudoun County Board of Supervisors, said in an interview at an Oct. 26 informational meeting held by Dominion at a local elementary school. "They said they wouldn't be coming forward with anything like this. If anything, they would downsize. So there's a concern that, well, if you said that last time and now you're coming forward with this, why should anybody believe anything you're saying?"

Buffington's district includes the community that is home to two Dominion compressor stations as well as a Columbia Gas Transmission compressor station. "They basically are apologetic for the previous instance where they made that statement, and they said they shouldn't have made that statement," the Republican supervisor said of Dominion.

The previous company statements referred to a proposed compression upgrade related to Dominion's Cove Point liquefaction and pipeline project, Dominion said. For a subsequent project, Dominion filed an application with the Federal Energy Regulatory Commission (FERC) in 2015 to install one new 8,000-horsepower electric compressor unit at its Leesburg Compressor Station as part of its larger Leidy South Project. After receiving a FERC certificate of approval in August, Dominion has begun work on the Leidy South Project, with a projected in-service date of October 2017.

In its latest announcement, Dominion said it plans to add 7,000 horsepower of compression to the Loudoun Compressor Station as part of the Eastern Market Access project. Buffington said Dominion officials told him that the Eastern Market Access project application is based on the amount of pipeline capacity and compression the company knows it will need now. But the company did not rule out the possibility of another similar request in the future, he said.

In an Oct. 27 statement, Dominion said demand for natural gas to meet residential, business and power-generation uses continues to grow quickly in the region. “Just as local officials and community planners must manage the demand for new schools, roads and other services that comes with a growing population, we too must expand our pipelines and power lines to meet increasing energy demands,” the company said. “We have designed this project to have the least impact possible on neighboring property owners, including the addition of electric compression.”

#### **Va. House Member Opposes New Compression Expansion**

Virginia Del. J. Randall Minchew, who represents the 10th district, which includes the community around the compressor stations, expressed disappointment with Dominion and is urging the company not to file the application with FERC for the Eastern Market Access compression expansion.

Public officials had an understanding, Minchew emphasized, that Dominion would not add new compression at either the Leesburg or Loudoun compressor stations. Minchew said he plans to work at both the state and county levels to stop the project to ensure the health and welfare of the residents who live near the compressor stations can be protected.



(Entrance to Dominion's Loudoun Compressor Station southeast of Leesburg, Va./Photo by Mark Hand)

Dominion created a stir in the county when it vented its Loudoun Compressor Station on Sept. 26. Natural gas, mixed with an odorant for detection, spread as far as 10 miles east and north of the station. The local police and fire departments received more than 100 emergency calls.

Buffington said his office received “very late notice” about the venting. “My office got notice Friday afternoon and they did it Monday morning. It’s hard to get a news flash typed up and sent to constituents in order for them to read it and understand what’s going on,” he said.

Dominion is planning to conduct another round of venting at the compressor station on Nov. 1 and 3. But the company and county officials plan to make sure the community is better informed beforehand about what is happening, Buffington said.

Dominion owns the Leesburg Compressor Station, which serves its Dominion Transmission Inc.'s PL-1 line. On the opposite side of Watson Road southeast of the town of Leesburg, Dominion also owns the Loudoun Compressor Station, which serves the Dominion Cove Point Pipeline, a transportation system that interconnects with Dominion Transmission's PL-1 line.

The Eastern Access Market project represents the third proposed expansion at its two compressor stations in Loudoun County in the last four years. In 2012, the community protested Dominion's plans to add compression to its Loudoun Compressor Station as part of the Cove Point liquefaction project. The Loudoun County Board of Supervisors passed a resolution opposing the company's plans to add the compression. In response to the county's concerns, the company changed its plans and opted to add 62,500 horsepower of compression to its Pleasant Valley compressor station in neighboring Fairfax County as part of the Cove Point liquefaction and pipeline project.

### **Residents Rally Against Compression Expansion**

About 20 people held a rally at Dominion's Oct. 26 informational meeting to demonstrate their opposition to the Eastern Market Access project. The open house occurred one day after Dominion held a similar informational meeting in Charles County, Md., where the company plans to build a new compressor station as part of the project.

The demonstrators in Loudoun County expressed concerns about the potential health effects from the routine venting and blow-downs that occur at the compressor stations and questioned why Dominion announced the Eastern Access Market project so soon after receiving approval for the Leidy South Project. "Compressor stations have been shown to pose a health risk to those who live close by. Greene Mill Preserve is a community of over two hundred residents and is only one mile from the station," local climate justice group 350 Loudoun, organizer of the rally, said in a news release.

Loudoun County Board of Supervisors Chair Phyllis J. Randall also attended the Dominion open house. "Part of the reason I'm here is to learn why they're doing it, why they need it, how it will affect Loudoun and how it will affect people in other counties and even in other states," Randall said.

Randall, a Democrat who became the first African-American woman in the history of Virginia elected to chair a county board of supervisors, said she used both the "frequently-asked-questions" sheet provided by Dominion and the list of questions handed to her by the demonstrators to learn as much as possible about the project. "I'm pushing very hard for Dominion to give me the answers that are not on their frequently-asked-questions list," she said.

After the venting incident in September, Randall said she heard complaints from residents. But she also has heard concerns about natural gas pipelines and shale gas drilling in general. "It's not just about, 'Are you going to expand the compressor station?' It's about how healthy is this for our neighbors." Randall, along with her fellow board colleagues, may hold an informational session on the project "because I think it's important for everyone to know," she said.

"Some of what I'm hearing is concerning," she said. "What's really concerning is mostly not what's happening in Loudoun, but what's happening where the natural gas is being produced. For me, I'm, of course, here as chair of the Loudoun County board. That doesn't mean I don't care about people in other countries and other states."

## Rebecca Cobb

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**From:** Lakshmi Fjord <lakshmi.fjord@gmail.com>  
**Sent:** Wednesday, November 02, 2016 10:27 AM  
**To:** Rebecca Cobb  
**Subject:** Please give to Planning Commissioners?  
**Attachments:** Harman Pipeline Tax disc.docx; Harman Draft Tax Revenue.docx

Dear Rebecca,

Joe Abbate informs me that the Planning Commissioners would like any information we have garnered from accountants about the issue of tax benefits to the county from the proposed Buckingham compressor station.

David Harman, an accountant in North Carolina gave me this background work he has done for the county to consider adding to conditions for needed information to better make a decision about the special use permit.

I have attached two documents:

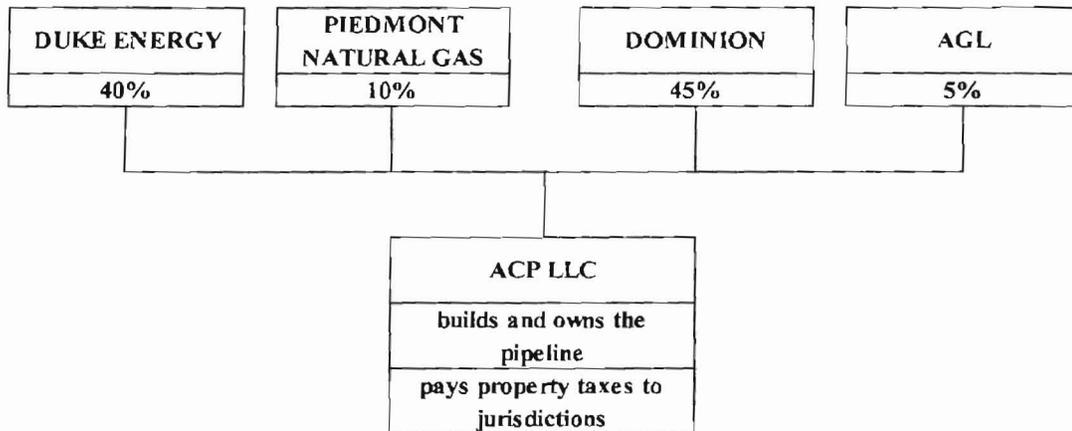
1. Harman's ACP corporate tax discussion
2. Harman's tax accounting method summary

Dave has said it is fine to circulate this document as long as he is cited and it is considered preliminary based on the lack of evidence for tax revenues provided by ACP LLC.

Sincerely,  
Lakshmi Fjord

## ACP LLC Tax Discussion

The entity ACP LLC will build and own the Atlantic Coast Pipeline if it gets approved. An LLC is a legal entity that is taxed like a partnership (pass-through), but enjoys the legal protections of a corporation. That entity will be owned as follows:



Note that Duke Energy will own Piedmont Natural Gas by the end of 2016, giving it an effective 50% stake in ACP LLC.

It is important to note the distinction between an entity's income tax reporting to the US Treasury and various states, and its liability for property taxes due to various counties and towns.

Much of the following discussion is based on general concepts of accounting and income tax reporting, and may not apply to the ACP in the exact way I illustrate it. At this writing, I have no way of knowing what ACP LLC will use for accounting policies and income tax reporting elections. Also, I am not in a position to discuss how the pipeline cost will be added to the rate base for Duke and Dominion, affecting their cost of electricity. This discussion is hopelessly complicated and I'll do my best to make it understandable.

**Income tax reporting:** An LLC determines its taxable income annually by recording sales (in this case revenues it charges the users of the pipeline for transporting gas through it for them) and then deducting allowable costs and expenses. Costs include salaries of personnel, back office costs, legal and professional costs, travel, insurance, repairs, property taxes, and so on. Importantly one allowable cost is depreciation.

To understand depreciation, you have to distinguish between an asset (something you own) versus an expense (a cost to operate, deducted annually). An important concept is that the cost of building the pipeline is accumulated on the books of ACP LLC and recorded as an asset, not a cost or expense. That

asset is then depreciated, which is an annual, ratable, paper write off of the total cost against income for a portion of the accumulated cost (estimated to be \$5 billion). So, if the pipeline has a useful life of 40 years, the company would record depreciation of \$125 million per year (1/40 of \$5 billion). Even though all the money to build the pipeline was spent in the 1-2 years it will take to build it, this construction cost must be written off over its useful life, not in the year you spend it. So, in my example, even though ACP LLC spent \$5 billion to build the pipeline, only \$125 million could be used as an expense in each year. (Note: the useful life may be less than 40 years; they may use accelerated methods of depreciation which allows them to front-end load the write offs, not take an equal amount annually. There are other variables.)

The net taxable income of ACP LLC, determined annually, is then reported by the companies that own it in proportion to their ownership. So, if ACP LLC calculates a net income (revenues minus expenses including depreciation) of \$100 million for the year 2020, for example, Duke Energy would pick up \$40 million as an addition to its other taxable income, Dominion would pick up \$45 million, and so forth.

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The reason you care about this taxable income discussion is that it leads indirectly to how much ACP LLC is appraised to be worth each year—what is its appraised fair market value? Its appraised fair market value each year becomes the basis for how much of the entire company value is assigned to separate jurisdictions, including Buckingham County, to add to the property tax base.

Company valuations can be done using three methods: Cost Approach, Market Approach, Income Approach.

The Cost Approach begins with how much money the company spent to acquire its assets. That cost is then depreciated, and other adjustments are made, to arrive at value.

The Market Approach requires the appraiser to find other companies that are similar to the company being appraised and look to see how much they sold for recently.

The Income Approach starts with net income (see discussion above), and then converts that net income to net cash flow (by making adjustments) and then applying a Cap rate to back into value. That is, if a company is expected to provide \$800 million in cash flows each year, using an appropriate capitalization rate might mean that the company would be valued at a multiple of its estimated annual cash flow, and in my example, could be as much as \$5 billion. Note in this example, the \$5 billion number has very little to do with how much the company spent to acquire its assets. The cost of its assets has an indirect effect on cash flow because of financing, staff required to operate it, and so forth. But in my example, if the income approach arrives at a value close to what the company spent for its assets, it's mostly coincidence.

I was told by the North Carolina Department of Revenue that pipeline companies are appraised using the income approach, not the cost approach or market approach. It is my belief that Virginia recognizes and uses the same approach, but I am unable to confirm that as to date I have not been able to get anyone on the phone in Richmond.

Here is a short discussion of the income approach (specifically the Discounted Cash Flow version of the income approach). I took it from the internet.

### **Meaning of Discounted Cash Flow**

([http://www.readyratios.com/reference/analysis/discounted\\_cash\\_flow.html](http://www.readyratios.com/reference/analysis/discounted_cash_flow.html))

The discounted cash flow is a quantification method used to evaluate the attractiveness of an investment opportunity. The Discounted Cash Flow analysis involves the use of future free cash flow protrusions and discounts them so as to reach the present value, which is then used to calculate the potential for investment. This is done by using the weighted average cost of capital. The opportunity is considered to be a good one if the value reached at through the discounted cash flow analysis is greater than the current cost of investment.

A discounted cash flow is considered as the most primarily accurate way of evaluating an investment. Many other methods of evaluation, like valuation ratios, can, to some extent, be considered as simplified estimates of a discounted cash flow. The various assumptions and estimates required by a discounted cash flow bring forward a lot of uncertainty, thus making it no better than simpler forms.

The free cash flows provide the firm with its investment value. The calculation of a present value helps in adjusting the future cash flows to replicate the fact that money planned to receive in future features lesser worth than what is being received at present.

The discounted cash flow analysis is, therefore, a balance of the amounts of cash which are being paid as well as received by the business during a specific time period. Many a times, these payments and receipts are tied to particular projects. But, sometimes, these cash flows and payments might also originate from particular companies. The value of a project or company is determined by these calculations.

During the valuation process of a business, the discounted cash flow, implicating the cash flow (inflow as well as outflow) generated by the business discounted by a rate equivalent to the risk to those prospective cash flows. Thus, the accretion of the future cash flows discounted by the risk minus debt indicates the value of a business.

So, if ACP LLC shows county commissioners a high value expected to be added to the tax base (\$1.3 million in taxes, which portends many \$ tens of millions of value), which means high tax revenues to the

county, that amount is subject to ACP LLC's ability to continue enjoying strong positive net cash flows. Any number of things can negatively influence those projections of cash flows:

- Errors in estimated future cash flows because of having to use estimates for revenues and expenses. Actual operating data may prove that initial estimates were naïve or intentionally rosy.
- Overestimating revenues because of a drop in demand for natural gas caused by reduction in need for electricity
- Overestimating revenues because of fluctuations in the price of natural gas
- Overestimating revenues because of a drop in demand caused by the imposition of a carbon tax or fee
- Overestimating revenues because of errors in estimating natural gas supply in the Marcellus and Utica shale plays
- Underestimating expenses and costs because of cross-charges or other administrative costs passed to ACP LLC by the companies that own it

The point I am trying to make is that the property tax revenue held out to your county by the folks at ACP LLC is only an estimate, and it's based on some estimated fair value. It could be wrong even in its first year. It could be based on assumptions that are totally unreasonable. It could change by cross-charges or other costs passed on to ACP LLC by its owners. It could be wrong because natural gas is fraught with uncertainty regarding supply and demand. It doesn't matter how much ACP LLC spent for the pipeline and compressor station, its final value for property tax purposes is dependent on how much cash flow it expects to throw off to its owners. That number can simply be estimated incorrectly or it could even be manipulated, and you'd never know it. I'm not accusing anyone of intentional misrepresentations as I write this.

The commissioners would be imprudent to accept the company's estimates for value in year 1 and beyond without having a thorough understanding of how those estimates were arrived at, and how reliable they seem. The county will be giving up a lot of valuable attributes in return for a promised windfall that could be incorrect from the outset. It could be correct, of course, but prudent people would do all they could to ensure that the promised values are correct and reasonable and will be likely to be maintained. The county would also be imprudent not to reflect on the loss of property taxes caused by the decline in value to other properties in the county caused by the pipeline and compressor station, as well as the possible additional costs for emergency management equipment, personnel and training.

## Atlantic Coast Pipeline Property Tax Study September 19, 2016

Pipelines and compressor stations are considered business personal property for tax purposes and are valued by appraising the entire company that will own the pipeline at fair market value using the 'income' approach, which is dependent on company profitability, not what they have spent. That entire company value is assigned to the states involved, and then to counties within each state based on assets. Those profit-dependent values determine the amount of actual tax going to a locale.

Rosy initial projections of profits will result in a projected high value initially. This method of determining value also carries at least the following downside risks:

1. Future supply of natural gas is not known with certainty, and low volumes in the future may make the pipeline unprofitable, resulting in low valuations and low tax revenues.
2. Future prices of natural gas are unknown, leading to instability in supply and demand of natural gas, with possible lower demand that could reduce profitability, with resultant lower values for property taxes.
3. Profits in the LLC that would own the pipeline could be manipulated by administrative cross-charges or ~~the~~ recording of other costs or expenses from the companies that own it in order to show artificially low profits and therefore low valuations and low tax revenues. Unless such fundamentals are negotiated and controlled initially, there is no assurance that promised profits which beget high valuations will be maintained.
4. Future legislation to impose carbon fees or taxes could result in less demand for natural gas and less profitability for the pipeline company, resulting in lower valuations for property taxes.
5. The presence of a pipeline and/or a compressor station is likely to reduce property values for other properties in the region, resulting in lower property tax revenues for a locale.

6. The presence of a pipeline and/or a compressor station in a county may require the incurrence of additional costs, such as for emergency management equipment and training, liability insurance, and so forth, with no assurance that the property taxes from the infrastructure will be adequate to pay for these costs.

Any county considering approval of the pipeline and/or a compressor station should demand to know at least the following:

1. How were the projected property taxes calculated? Are the assumptions in the calculations reasonable for future years? Can they be controlled?
2. What is the cost of additional emergency management equipment, personnel, training and liability insurance required by the addition of this infrastructure?
3. What is the expected loss of tax revenue by the drop in values of other property in the county?

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This paper focuses solely on additional tax revenues to be expected, compared to possible additional costs to be incurred. There is no comment on other issues to be considered, including, but not limited to:

- Safety issues from the presence of a high-pressure pipeline containing explosive gas
- Health effects from air and noise pollution
- Need for the pipeline
- Loss of habitat and biological diversity
- Loss of tourism revenue
- Carbon pollution that is rapidly changing the Earth's climate to the detriment of living things
- Damage to water, air, human health and climate from fracking method of natural gas harvesting
- Loss of viewshed
- Loss of desirability of the county as a place to visit or to live
- Use of eminent domain for private investor purposes

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David H Harman, Retired Accountant and Businessman  
454 Huckleberry Trail  
Boone, NC 28607

## Rebecca Cobb

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**From:** Swami Dayananda <swdayananda@gmail.com>  
**Sent:** Thursday, October 27, 2016 11:57 AM  
**To:** Rebecca Cobb  
**Subject:** Congressman Gibson's Letter of request to FERC  
**Attachments:** Gibson FERC Letter Feb 2016 (3)-1.pdf

Dear Mrs. Rebecca Cobb,

This is the letter I presented to the Planning Commissioners during the public comments last Monday October, 24th. Kindly add this to the Buckingham County record on it's website.

Thank you.

Swami Dayananda

**CHRIS GIBSON**

19th District, New York

1708 Longworth Building  
Washington, DC 20515  
(202) 225-5614

<http://gibson.house.gov>



**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515**

**HOUSE AGRICULTURE COMMITTEE**

Subcommittee on General Farm  
Commodities and Risk Management

Subcommittee on Livestock,  
Rural Development, and Credit

**HOUSE ARMED SERVICES COMMITTEE**

Subcommittee on Tactical Air and  
Land Forces

Subcommittee on Intelligence,  
Emerging Threats, and Capabilities

Subcommittee on Military Personnel

February 19, 2016

Norman Bay, Chairman  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

RE: FERC Docket No. PF16-3

Dear Chairman Bay,

This is a follow-up to my March, 2015 letter to Chairman LaFleur regarding the compressor station issues that many of my constituents have contacted my office about. Because of the rapid development of natural gas extraction in Pennsylvania and other nearby states there are several new natural gas pipelines proposed to cross New York State, as well as expansion of several existing pipelines. I have questions about the proposed compressor station in the Town of Highland in my district in Sullivan County, and the issues that need to be addressed should be of interest to FERC.

There is evidence that leaks and releases from compressor stations in other areas are associated with elevated concentrations of organic compounds that are components of natural gas. This includes methane, hexane, benzene and a variety of other compounds. Some of these compounds are known to be carcinogenic, and any cancer caused by them may appear only after a number of years to those persons exposed. In addition, there could be additional negative effects on the respiratory and nervous systems for residents living near these compressor stations.

FERC has traditionally relied on review of compliance with federal exposure standards for air toxins. However there are several reasons why these standards may be inadequate to protect public health. Many of these standards were set many years ago, and may be obsolete on the basis of current information concerning risks to humans from inhalation of these chemicals. Most standards and indeed most monitoring around compressor stations are based on average concentrations measured over relatively long periods of time, and may not address higher exposure rates at peak release times.

FERC should routinely include public health experts in its review process, a practice that is not done routinely at present. This is a concern because the protection of the health of the people living near to these sites should be a top priority. Workers and nearby residents must be protected against negative health impacts that may result from exposure both in the short and long term.

I request the FERC immediately take the following actions before issuing any approval for the Highland, NY compressor station:

1. Include public health expertise on all Environmental Assessment and Environmental Impact Statement teams assigned to this project. Such individuals must be independent, credible and free from conflicts of interest.
2. Convene an independent expert panel to review the current federal exposure standards around compressor stations to assure that they are adequately protective of human health.
3. Insure that all approvals with respect to compressor stations comply with whatever health standards are developed through this process.
4. Work closely with local and county officials to take into account and mitigate as much as possible our constituent's concerns regarding the siting and impacts a compressor station may have.

It is only through a transparent and effective review process that our citizens can be assured that there are no negative health impacts with any projects that FERC and other governmental agencies are charged to regulate. And it is therefore only through satisfactory mitigation and prevention actions that citizens can be assured that all reasonable steps have been taken to address these issues before any approvals are issued.

Thank you very much for reviewing this information. Please direct any response to my District Director Steve Bulger at [steve.bulger@mail.house.gov](mailto:steve.bulger@mail.house.gov).

Sincerely,



Chris Gibson  
Member of Congress

**Buckingham County  
Emergency Services**

P.O. Box 252  
Buckingham, VA. 23921  
434-969-7734

October 21, 2016

Buckingham County Planning Commission  
Mr. John Bickford - Chair

RE: ACP safety Concerns

Commissioners;

I have been contacted by Dominion in regards to the ACP project and safety concerns specifically fire hazards and response by the Buckingham county fire departments. I am unable to attend tonight's meeting but I would like to share with you some information from the safety and response meetings we attend sponsored by Transco Pipeline annually per Department of Transportation regulations..

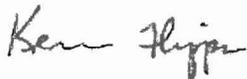
As you know, the Transco lines will share the site with the proposed compressor station and ACP lines. In our annual training with the pipeline operators here in Buckingham, the response from the fire departments will be the same for any pipeline incident. We will secure the area around the pipeline incident, limiting traffic into the area to only the pipeline operators to allow them to close any necessary valves. Our other responsibility would be to handle any fires that have gotten off the site of the incident. Again, this is annual training and we have a good working relationship with the pipeline operators in Buckingham

Although the ACP project will add a building here in Buckingham, the response will be the same as any other pipeline incident. If something were to happen at the compressor site, the local fire departments will respond with the purpose of limiting access to the site to ACP personnel. After the area is secured, the response of the fire department will be to respond to any fires off the site; brush fires for example.

The same annual training we currently attend as sponsored by Transco will have to be offered by the ACP.

If you have any further questions, I will be glad to address them with you.

Thank you.



KEVIN FLIPPEN  
Emergency Services Coordinator





