

In response to Jill McElheney's request, a question & answer (Q&A) session and public hearing were held on May 4, 2006. At the hearing, it was announced that comments would be received through May 11, 2006. A written comment was received from Transco on May 4, 2006 that requested the Title V Renewal Permit be issued without further changes, other than the changes Transco requested in their earlier comments.

During the Hearing, a number of the people came forward to make comments. These comments are transcribed below, along with responses to those comments addressing air quality.

1. Robert Clements (Secretary of the North East Georgia Children Environmental Health Coalition):

Our group is concerned about environmental pollutants especially from industries and especially on Children's health. I was disappointed that the draft application did not state, in parts per million, of these dangerous chemicals, instead they cited it in tons per year; so we have no measure of how many parts per million. I understand that the Georgia Environmental Protection Division is out every night in the week in a public hearing such as this, and I certainly applaud your good efforts to get public input. With the epidemiologist in the state, I don't know how you could do much more, but it seems like there so much more to be done. Now in this meeting tonight, it came out that things four years ago were not known, now they're known and now steps are taken about that. The gentleman in the pink shirt has an excellent point about the old motors and I understand they're engines and it sounds like some of them are falling apart. But, if it's like anything at the university. We have old buildings, and we could not touch those old buildings because if you touched one thing, the whole structure would have to be redone to come into code. So I suppose there is something analogous to that in replacing engines, that the whole shebang would have all be re-configured. And that is certainly a constraint, and I don't know what can be done about it; but it is my impression about what happened. I am still concerned about the nitrous oxide, and especially after we've heard this is a very large amount, a big amount, a tremendous amount. Because it contributes to global warming and to smog. But I am more concerned about the health effects, lung tissue, breathing NOx reacts with ammonia moisture to form nitric acid and related particles. These can include damage to the lung tissue; particles penetrate deep into sensitive parts of the lungs and can cause respiratory disease such as emphysema and bronchitis. We don't know if that happened tonight. We haven't heard that from the folks here. They talked about breast cancer.

About Formaldehyde, I think we all agree it's dangerous and it is on this HAPs list. They affect the lymphatic and blood systems. OSHA has a law that says that workers cannot get more than 1 part per million in an eight-hour day. But we don't have data on parts per million, so I don't know if folks in the factory get one part per million or if the folks in the one-mile area get one part per million. We don't have any data on parts per million. And apparently there is no money to test for parts per million. My last point is about formaldehyde which comes from Aspartame. Aspartame which you eat and I know you're not involved with Aspartame, but it will break down to methanol and then into formaldehyde. And so if I lived within one mile of this factory, I certainly will not drink aspartame-sweetened sodas. Thank you.

EPD Response:

EPD recognizes that Transcontinental Gas Pipe Line Corporation – Station 130 emits several hazardous air pollutants (HAPs), including formaldehyde, and that the HAPs emissions are a concern to the community near the facility. The majority of HAPs emissions are emitted from the mainline compressor engines (ID Nos. ML01 – ML16).

Under Section 112(d) of the Clean Air Act Amendments of 1990, US EPA was required to develop emission standards for major sources of HAPs reflecting the application of the maximum achievable control technology (MACT). Section 112(d)(2) required US EPA to pass rules which "require the maximum degree of reduction in

emissions of the HAPs..., taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements...” Section 112(d)(3) stated that the emission standard for existing sources could not be less stringent than the average emission limitation achieved by the best performing 12 percent of existing sources in the same category. This is commonly referred to as the “MACT Floor”.

The turbines and engines are subject to US EPA Rules that regulate HAP emissions (40 CFR 63). The Turbines are subject to 40 CFR 63 Subpart YYYY (69 FR 10511 for Final Rule and 68 FR 1887 for Proposed Rule) and the Engines are subject to 40 CFR 63 Subpart ZZZZ for Engines (69 FR 33473 for Final Rule and 67 FR 77829 for Proposed Rule).

US EPA concluded that the MACT floor, for both Turbines and Engines, was no emission reduction because very few existing sources had equipment for controlling HAPs. US EPA further concluded that MACT for both Turbines and Engines was no emission reduction primarily due to the excessive cost of controls.

Mr. Clements is correct that nitrogen oxides (NO_x) contribute to smog (ground level ozone) and fine particulate matter. NO_x is therefore considered a precursor of ozone and is listed as one of the criteria pollutants under the Clean Air Act. It is noted that Madison County is in attainment with the National Ambient Air Quality Standards (NAAQS) for ozone, fine particulate matter (PM_{2.5}), and NO_x.

The commenter made a vague reference to the advanced age of some of these engines along with speculation that more than routine maintenance has been undertaken at the facility to keep these engines operational. At this point in time, EPD does not have any evidence that the facility has made any major modifications (as that term is used in 40 CFR 52.21(b)(2)) to the mainline engines that would have required them to install additional air pollution controls. EPD certainly does not expect these engines to last forever. At some point they will reach the end of their useful life and will have to be significantly upgraded or completely replaced, at which time we would expect the new or modified equipment to have significantly less emissions.

No changes were made to the permit based upon this comment.

2. N. A. Bennett:

First I'd like to clarify the record that my shirt is not pink, it's lavender. Not that I'm not secure, or I'm going colorblind. I realize this is kind of a rubber stamp meeting. As a group, we have been going around in circles with EPD with Colonial Pipeline on the same kind of stuff the citizens here are facing: sickness; cancers. One thing that wasn't brought up tonight is benzene is a carcinogen that does come from Transco that could be causing a lot of y'all's illnesses. Benzene is the more you learn about it, the more you realize that no one really knows what it does. It's widespread blood diseases, etc. You know, when you're a kid, in lunch room you were supposed to clean your plate before you went back and get a fresh plate. And what kind of bothers me about Transco, and I realize this is an Air Quality Meeting, but the contaminations that they left in the ground around the Comer Station hasn't been addressed; the mercury, benzene, they are on hazardous facility list. And U.S. Justice Department, which I was surprised to learn, had to take them to court. That is pretty strong from the Justice Department, and of course EPA was there, too. They were in violation of the Clean Water Act and a couple of other acts. My thing is well, until you clean up your first problem, why would you come back and start talking about the Clean Air Act? If you violate the Clean Water Act and contaminate the ground, then why would you come ask to do this? Are we supposed to trust you with the Clean Air Act? There is nobody monitoring anything out here that I can see. It's just self-monitoring and we've been learning all about self-monitoring through Colonial Pipeline's spill; and it's not working. And the sickness over there is rampant, just like it sounds like the sickness around this pump station is. It doesn't sound like there has been any test wells

done outside the facility. That's something that EPD can encourage or tell Transco to do to answer somebody's question that's here a while back. And I am very disappointed to learn that, if Transco was to updating their equipment, they've got the money to do; they are very profitable, 100 million dollar profit company a year. They can write it off from taxes. They can do it. But it sounds like, on the other hand, they'd be kind a dumb to do it because of the red tags. Anyway, I know that it will be approved and every body will move on, but I hope these citizens around the pump station get some kind of relief because, and they do need medical tests, and their wells do need to be tested.

EPD Response:

The issues raised by the commenter regarding water and/or soil contamination are not issues pertinent to the Title V air quality permit.

Regarding the complaint about "self-monitoring," EPD has subjected the facility to monitoring requirements, in accordance with the applicable federal and state regulations. The company must submit annual compliance reports to the Division. The facility must conduct a NOx performance test on Turbine T1 every other year and monitor the combustor outlet temperature continuously. They must use a Predictive Emission Monitoring System (PEMS) to determine the nitrogen oxides mass emission rate from Turbine G1. These monitoring protocols are required in order to ensure the facility complies with their Best Available Control Technology (BACT) emission limit and PSD avoidance limit. In addition, the Division's compliance engineer conducts an unannounced inspection visit to the facility at least every two years. The facility is in compliance with all the requirements of their current Title V Permit.

If Transco upgrades their compressor engines or replaces them with new equipment, even turbines, the facility-wide emissions will likely be reduced. However, EPD does not have the authority to require Transco to upgrade their equipment in conjunction with the renewal of their Title V permit.

No changes were made to the permit based upon this comment.

3. Jill McElheney:

Hello Everyone. My name is Jill McElheney. I am the mother of 5 children. My husband and I began a ministry in 2003 to help communities who are being harmed from environmental carcinogens. Our personal journey with our 4-year-old son's diagnosis of childhood cancer motivated us to reach out to other families, that like us, have fallen between the cracks of our broken environmental regulatory agency.

I am here on behalf of the community that lives in the Transco area. I believe these toxic emissions of Transco have been and continue to be a source of human suffering. I stand before you tonight bringing hope with Psalm 103, that says "The Lord works righteousness and justice for all the oppressed." The Creator is working good in spite of the fact that no one in government seems to be listening to the needs of the host community around Transco.

In August 2005, at the Madison County Government Complex, Ms. Dawn Pace informed an expert panel of local, state and federal environmental regulatory and public health agencies that the community around Transcontinental Gas Pipeline had many cancers. Since that time, we have also learned of cancer deaths, and autoimmune problems in adults and children in that area. Dawn was told the cancers were not a problem and unrelated to Transco. These agencies, charged with the protection of our health and the environment, downplayed the fact that Transco was a natural gas provider; therefore, did not pose any danger like the other two petroleum pipelines that run through Madison County.

Yet, as we learned here tonight, this is not true. Given these large emissions of formaldehyde from Transco, why did the experts dismiss the community concerns that something dangerous was in the environment? Formaldehyde is a cancer causing chemical, and is so harmful to children that EPA issued new cancer guidelines for children in March 2005 which states young children exposed to formaldehyde are 10 times more likely to develop cancer in their lifetimes than adults.

Micah's Mission consulted an air toxic expert and chemist regarding Transco's emissions listed on the GA EPD website. And I quote her here: "The release of air emissions with 426.8 tons per year of volatile organics is of great concern. The information on the web site does not identify the specific volatile organics. Many of the volatile organics are known and suspected cancer causing agents, developmental toxins and reproductive toxins. The specific chemicals that make up the volatile organic emissions must be required to be provided to the public.

The other chemicals of great concern are Formaldehyde being released at 185.3 tons per year. Formaldehyde is a probable cancer causing agent and a danger when released into the air where the chemical may come in contact with community members. Acetaldehyde is a possible carcinogen and will be released at the rate of 25.7 tons per year. These two chemicals along with the volatile organic chemicals pose a risk to the health of community members in the surrounding area."

As guardians of our children and their health, we are obligated to protect them from harm. Yet, parents and grandparents, have no recourse when chemical trespassing harms their families. They beg public health and EPD to defend their families from these dangerous toxicants only to be told, "There is no harm being done." Well, time has been the test, and science is proving as we speak that harm is occurring from facilities like Transco.

When children are robbed of their God given potential from industrial processes while the government buries its head in the sand, we have to commit ourselves to standing up for our future generations, which are sitting here right beside me. The greatest evil of all is the diminished lives of children from industrial toxicants while we have the power to prevent it.

Micah's Mission petitions the Agency for Toxic Substances and Disease Registry to investigate the hazardous exposures of the community from Transco's emissions. This federal agency is mandated by law to respond to exposures of hazardous chemicals in communities through reports called health consultation and public health assessments.

Micah's Mission petitions GA EPD to not issue this permit until these toxic air emissions are controlled through tonight as we learned, new engines. Not one more day of suffering should be condoned by GA EPD. Combustion pollution, which includes carbon monoxide, is associated with chromosomal changes that lead to childhood cancer and other chronic diseases. Not one parent should have to put their child to bed tonight wondering what harm is coming about from these emissions.

Micah's Mission petitions the Chemicals Hazardous Division of Georgia Public Health to issue a letter to Transco stating these emissions are harmful to human health and should cease. This host community around Transco is in need of just weights in a business where their air has long been compromised resulting in their health deterioration.

In closing, I would like to inform the community that you do not have to beg GA EPD or public health any longer. With thanksgiving, make your requests be known to the Creator. I have no doubt when justice comes, His Hand of Providence will be evident.

I challenge Dr. Carol Couch, Director of GA EPD, and her boss, Governor Sonny Perdue, to examine the evidence of this community and do not issue this permit without modification to protect the people of Madison County.

EPD Response:

In order to respond to Mrs. McElheney's request that the VOC emissions be speciated, the Division re-evaluated the facility's emission estimates, as follows:

The majority of VOC and HAPs emissions are emitted from the mainline engines (ID Nos. ML01 – ML16). Transco tested every engine type in its fleet during early 1990's in order to establish emission rates for NOx, CO, and total hydrocarbon (THC). Based upon EPA's SPECIATE Database, the VOC component of THC emissions from engine sources is approximately 9.31 percent. This was used to calculate the VOC emission rates in the table below.

ID No.	Manufacturer/Model	THC		VOC	
		Rate (lb/hr)	Data Source	Rate (lb/hr)	Data Source
ML01 – ML07	Clark BA-8T	65.96	Stack test	6.141	Stack test
ML08 & ML09	Clark HBA-8T	61.37	Stack test	5.714	Stack test
ML10 – ML13	Clark TLA-6	42.20	Stack test	3.929	Stack test
ML14 & ML15	Clark TCV-12	45.23	Stack test	4.211	Stack test
ML16	Clark TCV-16	128.5	Stack test	11.96	Stack test

VOC Emission Rate of Clark BA-8T Engines

$$= (\text{THC Emission Rate of Clark BA-8T Engines}) * 9.31\%$$

$$= (65.96 \text{ lbs/hr}) * (9.31\%)$$

$$= 6.141 \text{ lbs/hr VOC}$$

According to Table 3.2-1 of the July 2000 AP-42 Emission Factors, the following table lists various VOC components that are emitted in significant amounts, as determined using their percent of total VOCs.

Air Pollutant	HAP?	Emission Factor (lb/MM Btu)	Percent of Total VOCs	Emission Factor Rating
Total VOCs		1.20E-01	100%	C
Formaldehyde	Yes	5.52E-02	46.0%	A
Propane	No	2.87E-02	23.9%	C
Acrolein	Yes	7.78E-03	6.48%	A
Acetaldehyde	Yes	7.76E-03	6.47%	A
Butane	No	4.75E-03	3.96%	C
Isobutane	No	3.75E-03	3.13%	C
Methanol	Yes	2.48E-03	2.07%	A
Benzene	Yes	1.94E-03	1.62%	A
n-Pentane	No	1.53E-03	1.28%	C
Total Percentage =			94.9%	

Please note that at least 32.3 percent (23.9 + 3.96 + 3.13 + 1.28) of total VOC emissions are non-HAP emissions. For the remaining 67.7 percent, the facility did report the major HAPs emissions (46.0% + 6.48% + 6.47% = 59.0 percent) in the Title V renewal application.

In order to estimate potential annual VOC and HAPs emission rates, it is assumed that the facility operates year round. Each HAP emission rate is determined by multiplying VOC emission rate by the appropriate HAP contribution percentage. For example,

$$\begin{aligned} &\text{VOC PTE from Engine ML01} \\ &= (6.141 \text{ lbs/hr}) * (8,760 \text{ hrs/yr}) * (1 \text{ ton}/2,000 \text{ lbs}) \\ &= 26.90 \text{ tpy VOC} \end{aligned}$$

$$\text{Formaldehyde PTE from Engine ML 01} = (26.9 \text{ tpy}) * (46.0\%) = 12.37 \text{ tpy Formaldehyde}$$

Thus, the following table includes the PTE data for the mainline compressor engines (ID No. ML01 – ML16).

ID No.	VOC (tpy)	Formaldehyde (tpy)	Acrolein (tpy)	Acetaldehyde (tpy)	Methanol (tpy)	Benzene (tpy)
ML01	26.90	12.37	1.743	1.740	0.5568	0.4358
ML02	26.90	12.37	1.743	1.740	0.5568	0.4358
ML03	26.90	12.37	1.743	1.740	0.5568	0.4358
ML04	26.90	12.37	1.743	1.740	0.5568	0.4358
ML05	26.90	12.37	1.743	1.740	0.5568	0.4358
ML06	26.90	12.37	1.743	1.740	0.5568	0.4358
ML07	26.90	12.37	1.743	1.740	0.5568	0.4358
ML08	25.03	11.51	1.622	1.619	0.5181	0.4055
ML09	25.03	11.51	1.622	1.619	0.5181	0.4055
ML10	17.21	7.917	1.115	1.113	0.3562	0.2788
ML11	17.21	7.917	1.115	1.113	0.3562	0.2788
ML12	17.21	7.917	1.115	1.113	0.3562	0.2788
ML13	17.21	7.917	1.115	1.113	0.3562	0.2788
ML14	18.44	8.482	1.195	1.193	0.3817	0.2987
ML15	18.44	8.482	1.195	1.193	0.3817	0.2987
ML16	52.38	24.09	3.394	3.389	1.084	0.8486
Total	396.5	182.3	25.69	25.65	8.206	6.423

In view of the data in this table, EPD believes that Transco included accurate and sufficient HAPs emission data in their Title V renewal application. While not all HAPs were listed in the Title V renewal application (i.e. methanol, benzene, and so on), this did not significantly affect EPD's review.

Micah's Mission petitioned GA EPD to not issue this permit until these toxic air emissions are controlled through replacing the old engines with new engines. As already said, EPD does not have the authority to require Transco upgrade their equipment in conjunction with this Title V renewal permit.

Mrs. McElheney also stated that combustion pollution, which includes carbon monoxide, is associated with chromosomal changes that lead to childhood cancer and other chronic diseases. However, EPD has several CO monitors in the state of Georgia and these monitors show that CO concentrations in Georgia are in attainment with the NAAQS for CO.

No changes were made to the permit based upon this comment.

4. Stan Hauntsman:

I work in the forklift industry. I work on industrial forklifts day in and day out. A forklift puts out very little emissions as it is. But they have been required by EPA to ah, every engine that is produced now has to meet EPA standards. It's also coming with lawn mowers and chain saws. Now you can probably take all the forklifts in the United States, put them in a room, and it won't put out the emissions in a year that Transco puts out in a month. We determined tonight that emissions could be greatly reduced, you said 50 percent, I believe, the statistics run a little closer to 70 percent, more efficient. Not to mention that the engines are just better. I would just like to ask that Transco to please consider upgrading their engines. Thank you.

EPD Response:

It is true that upgrading to newer engines may reduce some emissions. Replacing these old engines with new turbines may even reduce emissions much further. However, as discussed previously, EPD does not have the authority to require Transco upgrade their equipment in conjunction with this Title V renewal permit.

No changes were made to the permit based upon this comment.

5. Transcontinental Gas Pipe Line Corporation

In addition to the oral comments in the public hearing, Transcontinental Gas Pipe Line Corporation submitted a written comment on May 4, 2006 that requests EPD issue the Title V Renewal Permit as drafted. Transco is in compliance with all federal and Georgia air regulations and this permit renewal action has no adverse effect to the atmosphere; therefore, Transco recommended permit issuance.

EPD Response:

EPD has applied all applicable requirements to the facility according to the federal and state regulations. The facility is in compliance with all the requirements of their current Title V Permit and Amendment and no non-compliance issues have been identified. Therefore, EPD has decided to issue the final Title V Permit as drafted, with some changes in responding to the facility's comments.

No changes were made to the permit based upon this comment.