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**From:** "Cathy & Randy Mayberry" <crmayberry@bellsouth.net>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/22/2009 5:23 PM  
**Subject:** Cathy Mayberry comments on Plant Washington  
**Attachments:** Cathy Mayberry Plant Washington commentsr Oct 20.doc

Thank you so much for the opportunity to comment on the proposed permits for Plant Washington. The EPD staff were very considerate in allowing everyone to comment and extending the time to allow this to happen. Thank you so much for your consideration.

I am attaching the full text of the abbreviated comments I gave at the hearing.

Thanks again,

Cathy Mayberry

crmayberry@bellsouth.net

October 20, 2009

Name: H. Catherine Mayberry  
Home Address: 632 Evergreen Dr.  
Mailing Address: PO Box 191  
Sandersville, GA 31082  
Occupation: Educator  
Number of years lived in Washington Co.: 34

**Plant Washington Comments**

Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 – East Tower  
Atlanta, Ga. 30334

Dear Dr. Carol Couch,

I am writing to register my opposition to the construction of a coal-fired plant in Washington County, Georgia. The primary concern I am addressing in this public comment is the environmental impact of the plant's emissions on the vegetation and wildlife in this area.

Since my husband and I own a farm on property that **adjoins the site for Plant Washington**, we are very concerned about the impact that this plant will have on the vegetation and wildlife in the immediate area. I read with great interest the section of the PSD application related to this. In assessing the impact that this plant would have on vegetation in the area, Power4Georgians (P4G) states (pg. 301) *"As a first step an intensive surveillance of the area surrounding the proposed plant site was conducted. . . . The vegetation present was identified and compared to the listing presented in the guidance document as being potentially sensitive to the compounds of concern. (Tables B.1 through B.4 of the USEPA Screening document). No plant species were identified as being sensitive to nitrogen dioxide, however, there were species identified that are sensitive to sulfur dioxide and ozone."* P4G goes on to list blackberries, ash, tulip trees and black willows as sensitive to SO<sub>2</sub> and boxelder, American Elm, and White Oak as being of intermediate sensitivity to SO<sub>2</sub>. When I examined the listing in the USEPA screening document, it was evident to me that P4G **did not** conduct an **intensive** surveillance of the area. If they had conducted an intensive surveillance of the area, I believe they would have seen 100 acres of wheat that was planted on our farm, 40 acres of which was immediately adjacent to the public road, approximately 1600 feet from the plant site, during 2007 and 2008. Wheat is listed on the USEPA Screening document as being sensitive to SO<sub>2</sub> and of intermediate sensitivity to NO<sub>2</sub>.

A drive through the area, a phone call to ask us about our farm, or looking at Washington Co crop reports (the annual reports we have filed each year with the US Dept. of Agriculture would indicate that wheat has been planted here) are pretty simple things to do in making even a cursory surveillance – but failing to do any of these leads me to believe that they were not accurate in telling you that they did an intensive surveillance. In the draft permit, EPD states that in regard to area vegetation, the analysis of the significance levels appears to indicate that Plant Washington's emissions will be of an acceptable level. I would like to believe that, but how can we believe anything that they have said in this application if we have not checked out every figure, every table, every statement?

Can EPD and the citizens of Georgia depend on P4G to provide you accurate information? And how extensively have you verified it? In my letter to the EPD in June, 2008, I pointed out an error in their initial application concerning their statement that there was no state park within 50 km. of the plant site. If I had not pointed this out to you and to Mr. Ledbetter and Mr. Alford, would that misstatement still be in the revised application?

Once I started looking at the screening procedures, and read the document cited by EPD in assessing the impact of emissions on the vegetation in the area (*EPA's Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals #450/2-81-078*), I noticed that the document provides cautions for its use. In the overview of this document, the authors caution that "*a source which passes through the screen without being flagged for detailed analysis cannot necessarily be considered safe*" (pg. 10). That is perhaps my greatest concern about Plant Washington: that it may meet the minimal requirements for all the screening procedures that EPD utilizes, and yet, still not be safe for us, our children, and our grandchildren. This document goes on to list additional cautions. On pages 15 and 16 of this document, the authors caution that acid precipitation presents a concern saying that "*adverse effects on vegetation have been noted in areas with low soil buffering capacities and subject to heavy annual precipitation. Such areas appear to be most susceptible. Observed effects include reduced growth, reduced germination of seeds and pollen, accelerated leaching of nutrients, decrease in soil calcium and other bases, and reduced microbial activity, particularly that of nitrifiers and nitrogen-fixers.*" This raises the question of EPD's and P4G's analysis of this threat in relation to the annual precipitation in Washington County. Has EPD considered this? The reference to nitrifiers and nitrogen-fixers also raises the question of the impact that this plant will have on the peanut crop that is currently planted on our farm and may be planted there if and when this plant goes into operation.

In more recent EPA research documents, I have read about the impact of NO<sub>2</sub> deposition on trees: that while this may lead to more rapid growth of some species, that root development is impaired resulting in greater susceptibility to drought and wind damage. Has this been considered in the analysis of the impact of Plant Washington on our forests?

The 1980 EPA document you and P4G are using also cautions that the effects data in this guidance were derived from studies under acute, short term exposures (3 hours) to these pollutants and may not reflect the impacts that may take years or decades to develop. Since Plant Washington is expected to have an impact on the soil and vegetation for several decades, EPD should be using a more reliable measure to determine the level of safety for these pollutants on a long term basis. What guidance have you used in assessing the long-term impacts of NO<sub>2</sub>, SO<sub>2</sub>, etc. and any synergistic impacts of these pollutants on area vegetation? I also noted that in your draft permit, appendix D, you state that the analysis you are relying on does not consider the additional emissions that will exist during periods of start up and shut down when the pollution controls on this plant will not be fully operational. I think this should be considered since plants that are susceptible to NO<sub>2</sub> or SO<sub>2</sub> damage may endure significant harm in just a few hours of over-exposure. I also question the acceptability of not applying the same criteria during these time periods. If the emissions limits vary during these times, should there not be in place limits on the time allotted each year for start up, shut down, or for the plant not operating at full capacity in order to activate the most stringent emissions controls?

Finally, in the last section of this 1980 EPA document, the authors caution that not enough information is available to assess the impact on wildlife of their ingestion of trace elements deposited on vegetation. The document does cite cases of fluorosis in deer and states that honey

bees are particularly susceptible to arsenic poisoning. Since fluorides and arsenic are pollutants emitted by this plant, has the EPD considered the impact on the wildlife (especially deer and honey bees) in the area of the plant?

I realize that the EPA standards and rules are derived based on averages, but in looking at the impact this plant will have on Washington County, I think that the particular characteristics of our community need to be considered just as you consider specific plant species. Washington County already has a high incidence of cardiovascular disease, diabetes, and asthma. The pollutants emitted by this plant will exacerbate those conditions. This needs to be considered. It is not environmental justice to put polluting coal plants in areas where there are high risk populations susceptible to these pollutants. I find it quite troublesome that the EPA and EPD would have in place screening protocols for specific plant species and not consider the susceptibility of the elderly, the asthmatic, the diabetic, those genetically predisposed to respiratory or cardiovascular disease, the very young, and other subgroups.

I appreciate your attention and consideration of my concerns. I sincerely hope that you will not issue a final permit for this plant which will pose such a threat to our community and our state. If Plant Washington was our only option for providing needed energy to Georgia, EPD might be able to justify issuing permits with many unanswered questions as to the plant's safety; but available data on energy consumption and projections indicate this need does not exist and other options for energy generation are available. I trust EPD to fully examine all the issues involved and protect the citizens of Georgia.

Respectfully submitted,

Cathy Mayberry

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**From:** "Cathy & Randy Mayberry" <crmayberry@bellsouth.net>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/22/2009 5:25 PM  
**Subject:** Randy Mayberry Plant Washington Comments Oct 20  
**Attachments:** Randy Mayberry Oct 20 comments.doc

Thank you for the opportunity to provide public comments on the draft permits for Plant Washington. I am attaching the full text of the oral comments I made at the hearing.

Thank you for your consideration.

Randy Mayberry  
crmayberry@bellsouth.net

October 20, 2009

Name: C. Randall Mayberry  
Home Address: 632 Evergreen Drive  
Mailing Address: PO Box 191  
Sandersville, GA 31082  
Occupation: Sales  
Number of years lived in Washington Co.: 56

Plant Washington Comments  
Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 – East Tower  
Atlanta, Ga. 30334

Dear Dr. Carol Couch,

I am writing to register my opposition to the construction of a coal-fired power plant in Washington County, Georgia. The primary concern I am addressing in this public comment is the environmental impact of the proposed plant's greenhouse gas (GHG) emissions. I was born in Washington County 56 years ago and have lived here all my life, other than the four years I spent earning my degree at the University of Georgia. My family has been in Washington County since the 1930's and we currently own a farm located adjacent to the proposed site of Plant Washington.

As our world struggles with the issues related to GHG emissions, the United States of America must assume responsibility for its disproportionate part of these emissions and take steps to deal with this global problem. The U.S. House of Representatives has passed its version of climate change legislation and the U.S. Senate proposed legislation on September 30 to deal with climate change. On September 15, 2009, the U.S. Environmental Protection Agency (EPA) has, along with the U.S. Department of Transportation's National Highway Traffic Safety Administration, issued a joint proposal to establish GHG emissions standards for light-duty vehicles expected to be effective by the end of March, 2010. On September 30 of this year the U.S. EPA further proposed a GHG emissions regulatory program for stationary sources requiring facilities that emit at least 25,000 tons of GHG's a year to obtain construction and operating permits covering these emissions. These permits would include the use of best available control technologies and energy efficiency measures to minimize GHG emissions *when facilities are constructed* or significantly modified. According to current news reports, it is the EPA's position that new pollutants become subject to PSD and Title V when a rule controlling these pollutants is promulgated. Accordingly, as soon as GHG's become regulated under the light-duty motor vehicle rule, GHG emissions will be considered pollutants subject to regulation under the Clean Air Act and subject to PSD and Title V requirements. Since Plant Washington is expected to emit 6 to 7 million tons of CO<sub>2</sub> (a major component of GHG) each year for the next 50 years, Plant Washington would be subject to these regulations and would be expected to utilize BACT for GHG's.

Notwithstanding our moral and ethical responsibility to preserve the environment we have been blessed to enjoy during our lifetime and to leave it to future generations in the same or better condition than it is now, which Plant Washington would undermine, as a citizen of Georgia, I am

concerned that the Georgia EPD would approve an air permit for this plant knowing that this permit will be invalid based on proposed rules and will subject the state to the costs of litigation and additional permitting revisions. For these reasons, I respectfully request that no final permits be issued until such time that Plant Washington can comply with these soon to be effective regulations and control its emissions of GHG's.

Respectfully submitted,

Randy Mayberry

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**From:** "Cathy & Randy Mayberry" <crmayberry@bellsouth.net>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/23/2009 4:26 PM  
**Subject:** additional Plant Washington comment  
**Attachments:** Mayberry Watertable Comment Oct 22.pdf

I am attaching an additional comment on Plant Washington related to property we own on the western side of Washington County.

Thank you for your consideration and the opportunity to provide public comment on this important issue.

Cathy Mayberry



October 22, 2009

Name: H. Catherine Mayberry/ C. Randall Mayberry  
Home Address: 632 Evergreen Dr.  
Mailing Address: PO Box 191  
Sandersville, GA 31082  
Occupation: Educator / Sales

Plant Washington Comments  
Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 - East Tower  
Atlanta, Ga. 30334

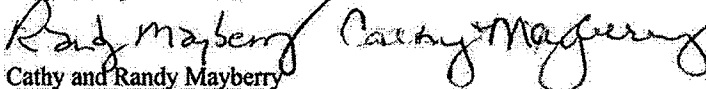
Dear Dr. Couch and Georgia EPD Officials,

We are writing an additional comment to express our opposition to the construction of a coal-fired plant in Washington County, Georgia. The primary concern we are addressing in this comment is the impact that this plant's use of water from the Cretaceous Aquifer will have on the water table in Washington County.

We attended the EPD's Question and Answer session in Sandersville on October 6 and listened to Dr. Kennedy's presentation on the water modeling completed by EPD. Dr. Kennedy explained that the Twiggs Clays will insulate the Cretaceous Aquifer and prevent drops in the water table in the areas of the county where the Twiggs Clays exist. Our concern is for the areas of the county not protected by these Twiggs Clays. We are part-owners of a 620 acre tract of land that has been in our family for over 60 years. This land is located on Buffalo Creek in western Washington County in the area where wells identified in your modeling as wells B and C are located. According to the modeling data presented at the Oct. 6 Q & A, the "Drawdown of the Watertable Caused by Operation of Plant Washington Wells During 100-Year Drought" would be 2.76 feet for well B and 2.82 feet for well C. During less severe droughts when the coal plant relies on water drawn from the aquifer, the impact on the water table may not be as significant, but will still be of some significance. Since this is property we use for timber production, we are concerned that should that 100-year drought occur when our trees are young and developing root systems, they would be adversely affected by such a drawdown. Without adequate water, these trees could die, have their growth severely retarded, or be of greater susceptibility to insect infestation and disease. Since Washington County has a vibrant timber industry, the impact of the water table drawdown on timber farms on the western side of our county could be detrimental.

We do not think that a projected drawdown of almost 3 feet in our water table is acceptable. If the extended droughts we have witnessed during the last 30 years continue to occur, this 3 foot drop could multiply and result in significant damage to our forests. For this reason we urge you to not issue final permits for this plant that will require an inordinate proportion of water relative to the needs of the timber, agriculture, fishing, and other industry that is currently or may at some future time exist in our county. As the recent state-wide water crisis has made very clear, our water resources are limited and must be protected. We are asking that Georgia EPD insure the equitable use of water and provide for its protection for Georgia's current and future citizens by not permitting wells for the withdrawal of multi-million gallons of water each day for a coal-fired power plant.

Respectfully submitted,

  
Cathy and Randy Mayberry

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**From:** "Cathy & Randy Mayberry" <crmayberry@bellsouth.net>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/24/2009 12:34 PM  
**Subject:** one additional comment on Plant Washington  
**Attachments:** C Mayberry additional comments Oct 23.pdf

Please find attached an additional comment I am sending related to the permitting of Plant Washington. These are additional concerns that I did not address in my previous comments.  
Thank you.

Cathy Mayberry  
478-552-2384  
crmayberry@bellsouth.net

October 23, 2009

Name: H. Catherine Mayberry  
Home Address: 632 Evergreen Dr.  
Mailing Address: PO Box 191  
Sandersville, GA 31082  
Occupation: Educator  
Number of years lived in Washington Co.: 34

Plant Washington Comments  
Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 – East Tower  
Atlanta, Ga. 30334

Dear Dr. Couch and Georgia EPD Officials,

I am writing an additional comment to register my opposition to the construction of a coal-fired power plant in Washington County. The primary concerns I am addressing in this public comment are (1) the mercury to be emitted by Plant Washington and its impact on our health and our water, (2) the impact that drawing water from the Cretaceous Aquifer will have on our water supply, (3) the danger to our water and environment from storm water runoff from the plant and (4) the danger of coal ash storage.

Since I am sure that Georgia EPD is fully aware of the dangers associated with mercury and the methylation process, I will not address that in this comment. I will however address the mercury limits proposed for this plant which are unacceptable. Since my husband and I own a farm adjacent to the plant site and since our farm contains a fish pond of approximately 40 acres, we are very concerned about the mercury emitted by the plant that will be deposited in our pond and which may make the fish in this pond unsafe for our consumption. Since this plant is expected to be operational for 40-50 years, the fish in this pond may not be safe for our children, grandchildren, or any future generations to consume. This pond is part of our family heritage, built by my husband's grandfather in the mid 1940's. It is a part of our heritage we want to pass down to our descendants as a valuable legacy, not as a dangerous pool of noxious substances emitted by a coal-fired power plant.

At the March Q&A session in Sandersville, EPD presented information on the mercury emissions from current coal-fired power plants in comparison to Plant Washington. The presentation indicated that Plant Washington is projected to emit much higher levels of mercury (122 lbs/yr) than Plant Branch (44 lbs/yr), about 3 times as much mercury from a plant that is considerably smaller. As Mr. Capp explained to me, this is the result of Plant Washington burning a different type of coal than Plant Branch. At the October Q&A session, EPD indicated that the actual annual emission of mercury will be 106 lbs/year which is still well above the emissions of Plant Branch. Since it is anticipated that less than 10 lbs. of additional mercury will have a detrimental impact on the Ogeechee River which is near Plant Washington (and most mercury is deposited within 30 miles of the source), these levels of mercury emissions should not be allowed. While I applaud the efforts of Southern Company working with the EPD to reduce the mercury emissions from Plant Branch, to then nullify this reduction with additional emissions of mercury from Plant Washington prevents Georgia from fully benefiting from this needed reduction.

My second concern is the 16 million gallon per day water withdrawal from the Cretaceous

Aquifer at times that the water for the plant cannot be provided by the Oconee River 30 miles away. While EPD indicates that during the "100 year drought" (which might occur much more frequently due to global warming) the aquifer levels in the area of the plant (where our farm is located) would not drop more than 24 feet. The water application from Power4Georgians indicates that (pg. ES-1) according to their modeling, recharge can take place when the plant switches back "to surface water, allowing the aquifer to recover". But P4G also reports on page 4-6 of their Water Modeling Report that "a value of 6 inches per year represents an average groundwater recharge due to infiltration of precipitation"; the report goes on to project that based on a recharge scaled at 12.8 percent of the reported annual precipitation at Sandersville, annual recharge would vary from 4.5 - 9 inches. If we have the recurrence of years like 2007-08 when the coal plant would have had to use ground water for multiple consecutive months, how can the aquifer be expected to recover a loss of 24 feet annually when the recharge is a matter of inches? While P4G anticipates using groundwater only 4 months every 5 years, they have reported that "During the drought of record, which occurred in 2007 and 2008, groundwater withdrawal would have been required for 9 months: May 2007 to February 2008." (p. 3-6) It seems to me that over several years of drought or near-drought conditions, the aquifer will continue to fall by multiple feet each year and will only gain a few inches during recharge, leading to its depletion. As is evident in the modeling by EPD, the plant is located at the northernmost point of the Cretaceous Aquifer, the aquifer recharge area where the aquifer is at its shallowest and least able to support the needs of this coal-fired plant. In spite of the Twiggs Clays, it does not make sense to continue to pull water out from under them and expect them to continue to protect the water table. When Dr. Kennedy stated at the October 6 Q & A that the "water *has a hard time getting through*" the Twiggs Clays, he did *not* say that the water *would not get through* the Twiggs Clays. Once again, our concern is for our farm and our pond. We depend on well water to drink and enjoy the pond that is fed by springs and ground water. We are concerned that this plant will take the water out from under our land and leave us with land that has inadequate water and a dried up mudhole where our beautiful pond now is. This impact will also be felt by other property owners in our county and surrounding counties.

When I first began researching the issues involved in the water to be supplied for Plant Washington, I began searching for comparable coal plants that relied on well water for their operation. Of the over 1000 plants I investigated, I found fewer than a dozen that depended on well water. One was a coal fired plant in Kansas which, due to the strict water rights laws in that state, was forced to purchase the water rights for 29,000 acres of land in order to obtain the water sufficient to operate the plant. Georgia does not have such strict water rights laws in place so we must depend on EPD to protect our right to have fresh water. Is it fair for one industry to take the water out from under the land of its neighbors - whether those neighbors are 1 mile, 3 miles, 30 miles, or more away? I don't think so.

In the 2007 document by U.S. Geological Survey Geologist John S. Clarke entitled, **THE MONITORING AND MODELING APPROACH TO SUPPORT GROUND-WATER MANAGEMENT IN GEORGIA**, it is stated, "In the northernmost Coastal Plain, pumpage has resulted in rapidly declining ground-water levels and the potential for pumpage-induced stream-flow reduction and aquifer dewatering." Allowing a coal-fired power plant to utilize water from the aquifer for a process that will result in the consumption of such a massive amount of water will contribute to this dewatering. Removing this water from wells in the eastern part of Washington county where the heaviest pumping will be utilized, also raises the question of interbasin transfer since these wells are in the Ogeechee River watershed where the water is pumped out and then the unusable water (after its use in cooling) will be released to the Oconee River, possibly raising its level at the expense of the Ogeechee and its downriver users.

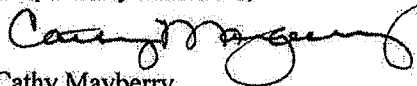
If permits are issued for this plant, should not consideration be given to the dry cooling process? This process is currently proposed for the 750 MW power plant being developed by Sithe Global Power, LLC's subsidiary, Toquop Energy Company, LLC to be located in Eastern Nevada. By using dry cooling, the plant is expected to reduce water consumption by 80%. To use up to 16,000,000 gallons of water each day is not a wise use of Georgia's limited water resources. There should be a better plan in place.

A third concern I have about the water use of the plant is the storage of the contact storm water from the coal plant. Since this water will be runoff from the coal storage facility, the plant, and other materials storage, this water will contain hazardous materials present in the coal. While P4G indicates that this will be stored in retention ponds, I have not been able to locate the specifications for any liners under these ponds or what controls will be in place to prevent this water from entering the local groundwater. Could you identify these for me?

Along similar lines, I am concerned about the coal ash storage. From what I have read, I believe that the toxicity of the ash will prevent its reuse in any construction and that this ash will continue to build up posing an increasing threat to our area. What is the life expectancy of the liners for this landfill and how will increasing amounts of coal ash be contained to avoid its polluting our air and water? How will the condition of the liner be monitored to insure there is no leakage before the soil and water is impacted? And when Mr. Alford said at the October 6 Q&A that the transportation of this ash from the plant to the landfill would be done completely on plant property, I think he must be assuming that the public road, Mayview Rd., will be closed or rerouted. At this time, I am not aware of any public hearings that have been held to discuss this so I don't think that is a valid assumption.

I realize this is a lengthy letter, but I do have very many grave concerns and the permitting of this plant will greatly impact my future and the futures of my children and grandchildren. I appreciate your consideration and careful analysis of all these issues.

Respectfully submitted,



Cathy Mayberry  
[crmayberry@bellsouth.net](mailto:crmayberry@bellsouth.net)  
478-552-2384

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(331)

**From:** "Katherine Cummings khc83@alumni.guilford.edu" <khcummings@bellsouth.net>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/26/2009 12:17 PM  
**Subject:** public comments on Plant Washington  
**Attachments:** KHC public comments.pdf

Please confirm delivery.

Katherine Cummings

Join me in the fight to stop the proposed coal burning power plant in Washington county. Ask how you can help.

Katherine H. Cummings  
3204 Hamburg State Park Rd  
Warthen, GA 31094

October 20, 2009

Plant Washington Comments  
Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 - East Tower  
Atlanta, Ga. 30334

My name is Katherine Cummings. I appreciate the opportunity to comment in opposition to the construction of a coal-fired plant in Washington County. I have been a resident of Washington County for over 22 years. My husband and I restored an old farm house which is over 150 years old, and is located at 3204 Hamburg State Park Rd., approximately five miles north of the proposed coal fired Plant Washington. We raised two daughters here and made a conscious decision to live in a rural part of our county when we completed our graduate school programs and returned to Georgia. We now have two grandchildren under the age of three living nearby.

I am fortunate to be part of a family with deep roots in Washington County. My husband's maternal and paternal families have lived in Washington County for several generations. Our family owns land approximately five miles to the east of the proposed plant site where we have been recognized by the state as a bicentennial farm. The Ogeechee River crosses through the eastern side of our farm. We rely on forestry revenues and hunting leases to maintain our property. Additionally, we have restored an old house there that is enjoyed by four generations for family gatherings in the country.

I have worked as the executive director for a non-profit statewide rural health organization for the past five years. I am also President of the Fall-Line Alliance for a Clean Environment (FACE). FACE was organized by local residents who are concerned about the negative impact coal fired Plant Washington will have on the health of our family and friends, in addition to our water, air, land, and wildlife resources. The short and long term economic impacts of a coal-fired plant are also serious concerns.

This coal-fired facility will use up to 16 million gallons of water per day, and will rely on 15 wells as well as water piped in 30 miles from the Oconee River. Those of us who live in rural areas rely solely on groundwater for both our home and agricultural water. When water resources are low in the Oconee, as we know has been the case until very recently, the plant will use the 15 wells to supply its needs. Groundwater use at such high levels can result in the depletion of groundwater reserves, excessive depletion of stream flow as a result of induced infiltration, and a reduction of levels and/or extent of lakes, wetlands & habitats.

In addition to the large amounts of water required each day to operate this coal-fired plant, based on Power4Georgians application, 105 pounds of mercury will be emitted each year in our community. Mercury is a neurotoxin that interferes with brain and nervous system. According to

the EPA, 1 in 6 babies are born each year having been exposed to excessive mercury in their mother's womb, resulting in brain damage, low IQ and developmental disorders. How can it be acceptable to permit a facility whose emissions endanger the most vulnerable of our community, our children?

The Ogeechee River, which is just a few miles east of the proposed coal-fired plant, currently receives 36.16 lbs of mercury per year as a result of air pollution. That amount is already more than two times what the EPA estimates makes the fish in the river too toxic to eat. Currently the state has advisories in place which urge women of child bearing age to not consume any fish from the river. Many people enjoy fishing the Ogeechee for the sheer joy of being at the river. However, many people also count on the fish as a ready source of food and consume well above the state recommended serving levels. Plant Washington alone will emit over five six times more mercury than the EPA recognizes as making the fish in the Ogeechee too toxic to eat. How can adding more be a positive decision in protecting our water resources?

The Medical Association of Georgia (MAG) estimates that power plant pollution results in:

- 26,442 asthma attacks
- 1,362 heart attacks
- 113 deaths due to lung cancer

MAG has urged the adoption of efficiency programs and conservation of energy before any coal-fired plants are approved in the state. The impact on health will be negative, resulting in increased cases of respiratory conditions, aggravated heart disease, decreased lung growth and capacity in children, and premature death.

In a report issued by the Department of Community Health Minority Health Advisory Council in the spring of 2008, Washington Countians experience 230.4 person-years of life lost each year in the African-American community alone. An increase in environmental pollutants will further decrease the health status of all populations in the county. Based on current health indicators, the expected health status and outcomes among African-Americans already at higher risk for premature death will be further exacerbated with any increase in air and water pollutants.

In addition to respiratory and cardio-pulmonary risk factors, vision is also impaired and further aggravated by smog and haze resulting from coal-fired plant emissions. Based on the application submitted by Power4Georgians, annual emissions will include 1,896 tons of sulfur dioxide (SO<sub>2</sub>) and 1,836 tons of nitrogen oxides (NOx) for the next 50 years. The applicant estimates an additional 110 tons of volatile organic compounds, 3,642 tons of carbon monoxide, 145 tons of sulfuric acid, and 1,160 pounds of lead will be released every year into the air and water.

Additionally, the air quality in Washington County and nearby Wilkinson County, is already testing at non-attainment levels for particulate matter (PM) PM<sub>2.5</sub>. The PM emissions of this proposed coal-fired plant will result in PM<sub>10</sub> emissions forty five times higher than the EPA air permits as a "significance level" for PM<sub>10</sub>, and PM<sub>2.5</sub> emissions will be thirty times higher. The EPA reports that particulate matter harms our health because it contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs resulting in serious health problems. Numerous scientific studies have linked particle pollution exposure to a variety of



problems, including:

- increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing, for example;
- decreased lung function;
- aggravated asthma;
- development of chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease

Combustible coal waste (CCW) and its storage are also serious threats to my community. The leaching of waste in our ground water will be a serious threat to the use of well water. Based on EPA statistics, health experts are finding increased cases of cancer liver and kidney damage and other illnesses among neighbors who drink well water near unlined landfills containing coal ash. This waste will also contain arsenic, mercury, lead, chromium, boron and cadmium. For those of us near the plant, whose only source of water is through our wells, being exposed to these known hazardous materials is unacceptable.

The health and environmental impacts of the proposed coal-fired Plant Washington will affect Washington County and surrounding areas negatively in both the immediate and long-term projections. Based on numerous reports and studies conducted by higher educational institutions in Georgia, and across the country, the power which would be generated at Plant Washington is not needed. These reports also urge employing energy efficiency techniques and conserving energy to further reduce the need for new energy production. Based on the numerous negative impacts that Plant Washington would have, and in light of the decreased demand for electricity, I hope that the Environmental Protection Division will deny the permitting of this facility.

Sincerely,

  
Katherine H. Cummings

23-(21)  
565

**From:** Susan Mayberry <susanmayberry@gmail.com>  
**To:** <epdcomments@dnr.state.ga.us>  
**Date:** 10/25/2009 3:21 PM  
**Subject:** Plant Washington Comment  
**Attachments:** PlantWashingtonEPDLetter.pdf; Part.002

I am attaching my public comment for the proposed Plant Washington.  
Thank you for your consideration in this important issue.

October 24, 2009

Susan Mayberry  
38 N Moore Street, #6  
New York, New York 10013

Plant Washington Comments  
Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1152 □ East Tower  
Atlanta, GA 30334

Dear Dr. Couch and Georgia EPD Officials:

I'm writing to express my concern over Plant Washington. I grew up in Sandersville, Georgia. My parents still live in Washington County. My sister and her children will return to Georgia. I have so many fond memories of my family farm that is now directly threatened by the proposed coal-fired power plant. The health and environmental risks for the residents of Washington County outweigh any benefits associated with the plant.

Numerous studies have decisively demonstrated that coal-fired power plants, through the release of pollutants, substantially increase the risks for cardiovascular disorders. A study in Georgia, pollution from power plants causes over 26,000 asthma attacks, 1,300 heart attacks, and 100 deaths from lung cancer every year (Medical Association of Georgia). A recent study in the National Academy of Sciences states that burning fossil fuels costs the US \$120 billion a year in health costs! This staggering number is largely due to the 20,000 premature deaths that occur every year from air pollution. According to the Health Department of Georgia, over 25% of the adult population of Georgia is obese and about 17% of Georgia's children are obese. Adding additional air pollution to the environment will only further exacerbate the current risk factors for cardiovascular disorders among our adults and children.

Georgia's water is at risk because of Plant Washington. The Plant, if built, will pull another 16 million gallons of water every day from the Oconee River. This water is needed already for the businesses and citizens of Washington County. The Plant will also draw from the aquifer under the plant site. The existing aquifer on the Plant Washington site is already overdrawn and has dropped 47 feet in the past 40 years. In the face of such a voracious demand for water resources, one cannot help but come to the conclusion that the citizens and economy of Washington County will suffer as a result. Compounding the negative externalities of air pollution and over-use of scarce water resources is the 105 pounds of mercury, a known neurotoxin, that will be emitted from Plant Washington. This pollutant will build up in the muscle tissue of local fish and wildlife, rendering them unsafe to eat.

Due to the environmental concerns associated with coal-fired power plants, a coal-fired power plant is not the answer to the nation's energy crisis. As citizens, we have a civic duty to preserve the World for future generations. The health and environmental risks of this plant are too severe to proceed. I urge you to reconsider the permits issued for this plant.

Respectfully Submitted,

Susan Mayberry

10 - (22)

(268)

**From:** "Jennifer Sasser" <jennysasser@gmail.com>  
**To:** <epdcomments@dnr.state.ga.us>  
**CC:** "Sasser, Jennifer M" <jmsasser@UFL.EDU>, "Sasser, Anthony" <anthony.sas...>  
**Date:** 10/26/2009 1:13 PM  
**Subject:** Sasser question regarding coal transport to Plant Washington  
**Attachments:** sasser letter to EPD regarding coal transport.pdf

2707 NE 25th Street

Ocala, FL 34470

October 25, 2009

Dr. Carol A. Couch, Director, Georgia EPD  
Georgia Department of Natural Resources  
2 Martin Luther King Jr. Drive  
Suite 1152 East Tower  
Atlanta, GA 30334

Dear Dr. Couch,

We are writing an additional comment to register our opposition to the construction of a coal-fired plant in Washington County, Georgia. The primary concern we are addressing in this comment is the effect that transporting coal will have on the air and water in Washington County.

A recent article in The Post and Courier by Tony Bartelme (Charleston, SC, October 18, 2009) entitled "What are these black particles? Health and safety concerns bring to light a longtime issue for Canadys residents living near coal-fired plant" investigated contaminants in the water near the South Carolina Electric & Gas coal plant. The article states:

"People living in the shadows of the South Carolina Electric & Gas coal plant here have wondered for years about the black specks in their drinking water. When they turn on their faucets, water sometimes pours out in a gray gush. When they do laundry, their clothes get stained."

"After extensive tests, College of Charleston researchers said they're

"fairly confident" that the particles are fine grains of coal. So far, the newspaper's investigation has identified a half-dozen residential wells around the plant that have been affected."

"The railroad coal and the black particles in residents' drinking water had remarkably similar levels of vanadium, strontium, barium, manganese, cadmium and other elements typically found in coal. In other words, Vulava said, "The filtered coal (in the drinking water samples) has very similar characteristics to the coal found on the railroad tracks."

We are concerned about what measures Norfolk Southern and the Sandersville Railroad (the two railroads to which Power4Georgians referred in the Oct 6 Public Meeting) will put into effect to ensure that coal particles will not contaminate the land and water around the rail lines that transport coal to Plant Washington if it is approved. At the public meeting on Oct. 6, it was stated that the exact route of the rail lines has not yet been established. We feel that this information is crucial in order to know what areas will potentially be affected by small bits of coal that will blow from the rail cars. Norfolk Southern and the Sandersville Railroad have the responsibility to protect the people who will be in the path of these rail lines. Has Power4Georgians done any modeling to show the impact of the coal transportation on the wells and air in the immediate area of the plant? What requirements will be mandated for the railroads to ensure that coal debris will not be distributed throughout Washington County and into the wells of the people who live there? Who will be responsible for testing the quality of the water in the wells near these rail lines and providing clean water if contamination from coal debris is found?

We can be reached by email at [jmsasser@ufl.edu](mailto:jmsasser@ufl.edu) or by mail at PO Box 100274, Gainesville, FL 32610. Thank you for your consideration and for all you do to protect the citizens of Georgia.

Respectfully Submitted,

Dr. Jennifer M. Sasser

J. Anthony Sasser

BChE, Georgia Institute of Technology  
Technology

BChE, Georgia Institute of

PhD, Medical College of Georgia

MBA, University of Florida

Pharmacology and Toxicology

2707 NE 25<sup>th</sup> Street  
Ocala, FL 34470  
October 25, 2009

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Georgia Department of Natural Resources  
2 Martin Luther King Jr. Drive  
Suite 1152 East Tower  
Atlanta, GA 30334

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*"People living in the shadows of the South Carolina Electric & Gas coal plant here have wondered for years about the black specks in their drinking water. When they turn on their faucets, water sometimes pours out in a gray gush. When they do laundry, their clothes get stained."*

*"After extensive tests, College of Charleston researchers said they're 'fairly confident' that the particles are fine grains of coal. So far, the newspaper's investigation has identified a half-dozen residential wells around the plant that have been affected."*

*"The railroad coal and the black particles in residents' drinking water had remarkably similar levels of vanadium, strontium, barium, manganese, cadmium and other elements typically found in coal. In other words, Vulava said, 'The filtered coal (in the drinking water samples) has very similar characteristics to the coal found on the railroad tracks.'"*

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Dr. Jennifer M. Sasser  
BChE, Georgia Institute of Technology  
PhD, Medical College of Georgia  
Pharmacology and Toxicology

J. Anthony Sasser  
BChE, Georgia Institute of Technology  
MBA, University of Florida

22 - (22)  
(539)

**From:** "Sasser, Jennifer M" <jmsasser@ufl.edu>  
**To:** "epdcomments@dnr.state.ga.us" <epdcomments@dnr.state.ga.us>  
**CC:** "Sasser, Jennifer M" <jmsasser@ufl.edu>, "Sasser, Anthony" <anthony.sasse...>  
**Date:** 10/20/2009 10:06 AM  
**Attachments:** Sasser opposition to Plant Washington.pdf

2707 NE 25th Street  
Ocala, FL 34470  
October 19, 2009

Dr. Carol A. Couch, Director, Georgia EPD  
Georgia Department of Natural Resources  
2 Martin Luther King Jr. Drive  
Suite 1152 East Tower  
Atlanta, GA 30334

Dear Dr. Couch,

We are writing to register our opposition to the construction of a coal-fired plant in Washington County, Georgia. Having grown up in Sandersville, we have family and friends who still live there, and we have land in our family near the site of the proposed plant that has been a part of our family since the 1930's; therefore, we are very concerned about the potential impact of Plant Washington. Our primary concerns are that the operation of Plant Washington (1) will endanger the health of people both in the immediate vicinity of the plant and around the state and (2) will negatively impact economic opportunity in Washington County. Although we do not currently live in Georgia, we hope to move back to Georgia soon, and we have family and many friends in Sandersville, Augusta, Savannah and throughout the state who will be affected by construction of Plant Washington. Our parents are in or entering into their retirement years, and we are very concerned about the effects that this plant will have on their health as they age. In addition, our nieces and nephews and our friends' children (and our own children when we return to Georgia) will also be put at risk for several health problems, including risks for the next generation, if this plant is constructed.

#### Health Concerns:

Although the representatives from Power4Georgians claim that Plant Washington will be a "clean" coal facility and will use the "best available" technology, they cannot deny that the plant will emit toxic pollutants into Georgia's air and water which will harm public health for the next 50 years. Already in Georgia, pollution from power plants causes over 26000 asthma attacks, 1300 heart attacks, and 100 deaths from lung cancer every year (Medical Association of Georgia). Another coal-fired power plant will only increase these numbers. While the design of Plant Washington may be a significant improvement over the plants of the 1970's, calling it "clean" is quite a stretch. Power4Georgians has estimated that EACH YEAR Plant Washington will release 896 tons of sulphur dioxide, 1836 tons of nitrogen oxides, 678 tons of PM10 and 453 tons of PM2.5, 105 pounds of mercury, and over 500 acre-feet of toxic coal ash. Each of these toxins will have significant detrimental effects on the health of the residents of middle Georgia if Plant Washington is built. The pollutants released and coal ash produced from Plant Washington will increase the risk of heart disease, high blood pressure, chronic obstructive pulmonary disease, lung cancer, kidney disease, and liver disease in Washington County and the surrounding areas.

Heart disease is the leading cause of death in the United States. In the Southeastern US, the risks of cardiovascular disease are even greater due to higher rates of obesity and diabetes in the region. In addition, African Americans (a majority of the population in middle Georgia) are at a greater risk for the development of cardiovascular diseases and death from heart disease. The pollutants that will be released into Georgia's air by Plant Washington have been shown in several studies to aggravate existing

heart disease and raise blood pressure and exacerbate kidney disease, two major contributors to cardiovascular mortality. It is estimated that exposure to fine particulate matter can shorten one's lifespan by an average of 14 years and can increase the risk of cardiac and respiratory disease, high blood pressure and atherosclerosis. Particulate matter has several adverse effects in the body via mechanisms such as cytotoxicity through oxidative stress mechanisms, oxygen-free radical-generating activity, DNA oxidative damage, mutagenicity, and stimulation of proinflammatory factors. A study by O'Neill et al in *Circulation* demonstrates the link between particulate pollution and changes in vascular reactivity, a physiological response known to be associated with adverse cardiovascular outcomes, and these responses were greater among people with existing diabetes. It has been shown that there are higher rates of cardiac hospitalization and mortality on high-particulate-pollution days, also highlighting the link between the pollution that will be released by Plant Washington and premature death.

Washington County and the neighboring counties are rural areas with inadequate access to healthcare. Over 20% of the population in Washington County live below the poverty level, over 53% are African-American, and 12% are over 65 years of age (Census 2000, U.S. Census Bureau). These populations are already at high risk for chronic diseases, and adding toxic pollutants to the air and water in middle Georgia will significantly impact the quality of life and result in premature death for these high risk groups and ALL of the residents of the area.

Children are another group who will be impacted by the operation of a coal fired power plant. As children, we both spent countless hours outside playing in the fresh Georgia air. If this plant is approved, the children of middle Georgia may not have that same opportunity. The nitrogen oxides and particulate matter that will be released from Plant Washington will trigger asthma attacks and damage the lungs of children who live in the areas surrounding the plant. A study by Goren et al followed children in Israel after a 1400 MW plant was built there. The investigators saw a significant increase in the prevalence of respiratory symptoms including cough and sputum, wheezing, and shortness of breath and a doubling in the prevalence of asthma between the initial interview (as 2nd graders) and follow up 3 years later (as 5th graders). Although technologies have improved somewhat since this study was performed and the effects may not be as dramatic in the areas around Plant Washington, this study highlights the effects that these toxins can have on our children. A recent study in the journal *Pediatrics* showed that even small increases in carbon monoxide, particulate matter, and nitrogen dioxide exposure increase the risk of respiratory death in infants, and the risk is even greater for low birth weight or preterm infants. The impact that Plant Washington's pollutants could have on babies and their families in Washington County and the surrounding areas is devastating. This is especially alarming in light of the fact that Georgia has a high rate of preterm birth (>14% vs 7.6% nationwide), a high rate of low birthweight (9.6% vs 5.8% nationwide), and already has a high rate of infant mortality (March of Dimes, PeriStats).

The plant will also release potent neurotoxins, mercury and lead, that will affect the cognitive development of unborn babies and children. Mercury can result in brain damage, low IQ, and developmental disorders. Pregnant women are already cautioned about eating fish caught in the waters of middle Georgia, and these concerns will be magnified if Plant Washington is allowed to add even more mercury to the waters. A study by Perera et al compared children born to mothers in China who lived in the vicinity of a coal plant that only operated 6 months a year in 2002 to children born in the same area after the coal fired power plant had been shut down (2005). Those children born in 2005 had significantly greater developmental outcomes than those born while the plant was operational. In a study by Palmer et al, the authors found that environmentally released mercury was positively associated with rates of autism and special education needs in the school systems in Texas. These studies demonstrate the detrimental effects that the pollution from Plant Washington will have on all of the children born in Washington County over the next 50 years if the plant is allowed.

#### Economic Concerns:

Plant Washington will be a significant investment for Washington County and the members of the EMC's in the Power4Georgians Consortium. The cost is estimated to be approximately \$2.1 billion. While we realize that no one can predict the future, we urge you to consider the impact that such a debt will have on Washington County and the EMC members if Plant Washington fails to recoup this investment. Recently,

the Santee Cooper board suspended permits for the proposed Pee Dee coal plant because of future economic concerns, but this was after already spending \$242 million. Washington County cannot afford that kind of loss. Many changes to environmental law, especially in regard to coal and carbon dioxide emissions, are now coming to the forefront under the Obama administration. What effects will these changes have on the viability of Plant Washington? Will there actually be a market for the electricity produced by the plant? A study by Dr. Marilyn Brown, Nobel Laureate and Georgia Tech professor, indicates that energy efficiency improvements could totally obliterate the need for new coal plants in Georgia.

In addition, we are concerned about the long term economic outlook for Washington County. Plant Washington will create less than 150 permanent jobs, not even close to the number of jobs that will be required to compensate for the loss of the kaolin industry and stabilize the economy in the county. Our concern is that the air quality, which already exceeds acceptable levels for pollution, will be worsened by Plant Washington and then no new industry will be allowed to come into Washington County. Will Plant Washington devastate future economic growth in the county by placing environmental restrictions on future business opportunity?

In conclusion, we urge the Georgia EPD to deny the Plant Washington coal plant draft permits because it will endanger public health of all Georgians and endanger the already tenuous economic stability in Washington County. We can be reached by email at [jmsasser@ufl.edu](mailto:jmsasser@ufl.edu) or by mail at PO Box 100274, Gainesville, FL 32610. Thank you for your consideration and for all you do to protect the citizens of Georgia.

Sincerely,

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BChE, Georgia Institute of Technology  
PhD, Medical College of Georgia  
Pharmacology and Toxicology

J. Anthony Sasser  
BChE, Georgia Institute of Technology  
MBA, University of Florida

2707 NE 25<sup>th</sup> Street  
Ocala, FL 34470  
October 19, 2009

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