North Carolina Division of Energy Mineral and Land Resources

May 27, 2016

Memorandum

To: Tracy Davis
Director

From: Brad Cole *Original Signed by Brad Cole*
Chief Engineer, Land Quality Section

Subject: NPDES Stormwater Permit Hearings – Duke Energy Progress, LLC – Cape Fear Steam Electric Plant
Hearing Officers' Report and Recommendations

On February 29, 2016 I served as hearing officer for a public hearing on the proposed issuance of a NPDES stormwater discharge permit for the Cape Fear Steam Electric Plant, a Duke Energy Progress, LLC facility in Moncure. As hearing officer, my main focus was to consider the public comments received during the notice period and comments given at the public hearing in making a recommendation for final action on the draft permit. The permit under consideration and information about the hearing is included in the table below.

Cape Fear Steam Electric Plant – Permit Number NCS000574:
This facility is located at 500 CP&L Road, Moncure, N.C. – Chatham County. The Cape Fear Steam Electric Plant is a retired steam cycle electric generating plant that formerly operated two coal-fired units, two heat recovery boilers and four Internal Combustion (IC) Turbines in Chatham County. The site was retired in 2011 and is currently being decommissioned. The facility has stormwater outfalls that discharge industrial stormwater to the Cape Fear River and to Shaddox Creek in the Cape Fear River Basin. The hearing was held on February 29, 2016 at Central Carolina Community College in Pittsboro, NC.

There were ten attendees at the public hearing with nine of these providing verbal comments at the hearing. A summary of the hearing is attached in Appendix B of this report. As hearing officer, I presented the hearing officer's speech at the hearing and Bradley Bennett from the Stormwater Permitting Program provided an overview of the proposed permit. After the overview I opened the hearing for public comment. During the public comment period we also received four additional written comments with one of the comment letters being from the permittee, Duke Energy. Division staff have reviewed these comments and made appropriate adjustments to the final permit where warranted.

Background

The fact sheet for the permit outlines in more detail the basis for permit coverage and permit requirements for the facility. The facility is a former steam electric power generating facility. This industry sector is required to have NPDES permit coverage for stormwater point source discharges from the industrial activities at such facilities. The permit documents note that for a major portion of the industrial plant area and ash handling areas of the site, stormwater is collected and treated in the facility's wastewater treatment system. Those drainage areas are covered in a separate wastewater NPDES permit through the Division of Water Resources. For the areas covered by the stormwater permit, the major provisions of the permit are requirements for a Stormwater Pollution Prevention Plan (SWPPP) for the facility, along with monitoring (visual and quantitative) and inspection requirements. These provisions provide comprehensive coverage through the implementation, regular evaluation and adjustment of management measures on each site to minimize the discharge of pollutants during rainfall events.

SUMMARY OF PUBLIC COMMENTS AND RECOMMENDATIONS

As indicated above, we received comments from thirteen separate entities on the draft NPDES stormwater permit. A summary of the public hearing comments and all written comments received are included in Appendix B of this report.

Staff in the Stormwater Permitting Program have reviewed the comments received and have developed responses to their concerns. I concur with the responses and to the recommended changes in the final permit for this facility. The changes included are minor in nature, and the final permit maintains requirements that are in line with those taken to public notice. In the process of finalizing the permit, staff have developed transmittal letters for each permit that address the comments and the Division's responses to these comments. The major issues raised in the comments are summarized below.

- A number of commenters expressed concerns with the self-monitoring requirements of the permit.

  All permits issued under the NPDES permitting program utilize self-monitoring as a component of the permit requirements. These monitoring results help the permittee and the state to assess potential pollutant concerns and respond to those results. These are not, however, the only basis for control. The Division maintains oversight of permitted facilities and performs inspections to ensure that all permit conditions are being met on permitted sites. The agency has authority for inspections and to handle enforcement and compliance as appropriate based on inspections. The permit's General Conditions (Part III Sect D) establish Inspection and Entry requirements for Division personnel.

- A number of the comments received were related to concerns about seeps, discharges from the coal ash basins at the site and groundwater impacts adjacent to the site.

  We understand that these are issues of concern to commenters that participated in the process. These issues, however, are handled by other program areas within the Department. The draft permit regulates stormwater discharges only and does not authorize or control any wastewater or groundwater issues. Reviews of those issues continue to be ongoing within the Department.

- Commenters also expressed concerns about the conditions of the dams associated with the coal ash ponds at the site and asked that the Department follow all the steps necessary to repair the dams and avoid any potential impacts.

  As noted in a previous comment, the permit being considered here addresses stormwater discharges for a few discharges from transportation areas on the project site. The Division (DEMLR) does oversee the N.C. Dam Safety program and staff are involved with ongoing efforts to assure that dams and related structures at all Duke facilities are in compliance and maintained properly. The Division conducts regular inspection of dam facilities across the state and will do the same with this facility to ensure safe operation of the structure.

- Comments were received questioning the issuance of the stormwater permit while other efforts for ash pond cleanup and excavation and disposal at the site were still being considered.

  There are obviously a lot of activities currently under way at power plant sites across the state. Multiple agencies are involved with the process and our Division continues to stay in touch with the ongoing reviews and procedures. At this time, we feel that it is appropriate for us to move forward with the stormwater permit and get all permit components in place and ongoing for the facility. As components of the excavation and disposal procedures are put in place, if it becomes apparent that stormwater permit changes are needed, the Division can pursue any needed modifications to the permit. The permit does include provisions that would require adjustments to onsite stormwater management plans, and monitoring requirements if conditions on the site change. The permit also requires modification in certain circumstances, such as the addition of stormwater outfalls.

  With regard to excavation and disposal the Division also notes that the stormwater permit will not authorize stormwater discharges from areas of excavation of ash material onsite. During excavation of ash material any drainage from the excavated areas must be handled through Duke's wastewater treatment system and not discharged through a stormwater outfall.

- One commenter noted that the permit information outlined that a major portion of the stormwater from the site is currently routed to the ash ponds and covered under the facility's wastewater discharge permit. The commenter questioned what would happen when the ash ponds are closed.

When final closure of the ash ponds is completed the wastewater permits and discharge may go away. At that time, it is anticipated that the drainage areas will have been managed in an approved manner that will result in a reclaimed area that has been stabilized and vegetated or covered in a manner where stormwater pollution issues have been minimized. Areas meeting these criteria may no longer meet the federal requirement of being an industrial activity and may not require stormwater permit coverage. If coverage is required for a stormwater discharge from these areas, then the permit would have to be modified to account for any new stormwater outfall.

- A number of commenters requested that more frequent monitoring be required in the permit, some requesting monthly monitoring.

  Stormwater permits authorize discharges that are not continuous or even frequent events. Rainfall events that lead to stormwater discharge are highly variable and inconsistent throughout the year. Requiring monthly monitoring does not mean that there will be consistent monthly events that produce runoff discharge for sampling. Events that do occur have to meet the criteria in the permit to be representative events and ones that can be reasonably monitored. The Division has reviewed this request and feels that a change to automatically require monthly monitoring is not the most effective tool for this permit. The Division understands the concerns expressed by the commenter and feels that a minor change to the permit requirements can provide additional monitoring data based on initial monitoring results. Initial monitoring will remain at a quarterly frequency, but the permit has been modified to require that one exceedance, rather than two, of a benchmark value will move the permittee forward in the permit's tiered response process that leads to monthly monitoring requirements.

- Comments were presented requesting that monitoring be done by composite monitoring rather than the required grab samples.

  The Division utilizes grab samples in all of our stormwater permitting requirements and feels that the requirement for this sampling method at the beginning of the runoff event gives a conservative result for stormwater pollutants leaving the site. Between storm events pollutants can be made available and build up over a contributing drainage area. Once rainfall starts the pollutants can be picked up and carried through the drainage area to the outfall point. Over time during a rain event pollutants can be washed off of a drainage area so that continued monitoring may produce lower loading numbers than would be found in the initial parts of the storm event. The permit requirement for a grab sample during the first thirty minutes of discharge should produce reasonable information about the potential pollutant loading in the drainage area.

- Comments were received requesting that specific analysis methods be required for monitoring tests.

  Part III Section D of the permit sets out testing procedures for the analysis of pollutants to assure that the methods are consistent with state and federal regulations.

- A number of commenters raised questions about the benchmark values in the permit. Most commenters requested that the values be lower and note health risk factors that were calculated in a different manner resulting in lower values. Duke Energy provided comments requesting that some values be reconsidered in order to increase the benchmark values and notes that some values may be due to background soil conditions rather than due to an industrial activity.

  Benchmarks are numerical action levels for stormwater monitoring. Benchmarks are not effluent limits. Stormwater benchmarks are determined with help from Division of Water Resources' Classification and Standards Unit and are determined using toxicity data from multiple sources including regulations such as EPA's National Recommended Water Quality Criteria, the National Primary Drinking Water Regulation in 40 CFR 141.11, and NC Surface Water Quality Standards (found in 15A NCAC 02B regulations). When federal or state regulations do not contain information for a particular pollutant of concern, benchmarks are calculated per 15A NCAC 2B .0200 using peer-reviewed toxicity data. In general, stormwater benchmarks are calculated to mimic the same level of protection afforded by the federal acute water quality criteria.

  The DEQ follows established Federal procedures for calculation of an acute criteria when developing stormwater benchmarks (acute standard/benchmark is set at ½ of the calculated FAV or Final Acute Value) and, for an additional measure of safety, typically applies those values in NPDES stormwater permits without any dilution

allowance. Benchmarks based on acute criteria calculations reflect the federally approved conservative protection level for aquatic life against negative impacts from short-term, undiluted exposure to higher levels of chemicals. NC DEMLR believes this approach to be the most appropriate for protecting against potential impacts of stormwater discharge exposures and consistent with DEQ's NPDES permitting program.

DEQ acknowledges that background soil containing metals may influence discharge values enough to exceed established benchmark values for metals like copper, zinc, and possibly others that are equally ubiquitous. The Tier Responses in the permit allow DEQ flexibility to relieve monthly monitoring if the permittee demonstrates circumstances are appropriate (discharge levels reflect natural background or background influences beyond the permittee's control, for example) and/or all reasonable stormwater pollution prevention measures have been attempted but cannot bring levels down. In these instances, DEQ must also consider whether there are water quality problems in the receiving waters resulting from these metals before making a decision on whether to grant the permittee's request for reduced monitoring or to require additional efforts to reduce concentrations.

In the case of mercury a benchmark value such as the water quality standard of 12 ng/l is more likely to be exceeded in stream when regional deposition is potentially driving elevated levels. This would prompt monthly monitoring with little gain for the permittee's pollution prevention efforts. Gathering of additional data is necessary to help determine if permit conditions should be changed. Monitoring results will be considered in conjunction with fish tissue monitoring that is required as part of the plant's wastewater NPDES permit. These efforts, along with reductions in air emissions, provide an additional measure of conservatism related to the bioaccumulation potential. Language has been added to the permit to require the submittal of the fish tissue monitoring results to the Division as a part of the stormwater permit also.

- Comments were received about the Tier Response system including that the system require stormwater treatment and that the system require more frequent monitoring.

  The Tier Response system in the permit requires that monitoring results that exceed a benchmark level result in actions by the permittee to address these results. The permittee is responsible for determining the appropriate response, but should include various considerations as outlined in the permit. These responses may include the implementation of stormwater best management practices (stormwater treatment devices) for stormwater control. As a permittee continues through the tier system, the permit outlines potential responses that may be required by the Division including the required installation of best management practices. The Tiered system also already required increased monitoring when benchmark levels are exceeded.

- A few commenters asked that radioactive elements be added to the monitoring requirements in the permit.

  The Division feels that the information we currently have available has lead us to a reasonable suite of parameters to assess the potential stormwater impacts for this type of facility. The Division will continue to monitor available information on this issue, but at this time we do not feel that we have sufficient information to add additional parameters for stormwater discharge requirements.

- A few commenters questioned the idea of Good House Keeping and Pollution Prevention as major permit components at a site like the Cape Fear Steam Station noting that they felt these measures required pollutants to be covered.

  Good housekeeping and pollution prevention are not necessarily limited to covering pollutants at a site, thought that is certainly an effective control method. Good housekeeping efforts may work to minimize the available pollutants in a drainage area, change where activities occur or keep runoff from entering an area. These measures are applicable to all sites and should be utilized to their fullest. One unique example at power plant facilities is the extensive areas where stormwater runoff is collected from the major industrial areas and routed to the wastewater treatment system. This approach removes these stormwater flows from the stormwater system and provides treatment of the higher risk areas.

In addition to the items noted above I would also note that in review of the permit and comments staff also noted a few needed changes in the permit to address areas where language needed to be clarified and to make the permit

requirements consistent with current permit language for other facilities. These changes included some reference corrections in the permit and addressing sampling outside of normal working hours.

Based on our review of the information associated with these permits, public comments received and discussions with stormwater permitting staff, I recommend that the Director move forward to issue the final permit with the modifications that have been included. The final permit is attached to this package for your signature.

In addition to the information contained above I would also like to provide some recommendations based on the comments received during this process. A number of comments seemed to be concerned with ensuring oversight of the permit conditions at the facility. Our staff in the regional office focus on the proper implementation of permits on a daily basis so I am confident in their efforts to ensure compliance. To assist in ensuring that these efforts are handled effectively I recommend:

1. With the issuance of this permit the Raleigh Regional Office should contact the facility to ensure that the facility contacts are aware of the DEMLR stormwater contacts in the regional office so both parties can readily communicate if they have questions. They should also assure that the facility makes the regional office aware in advance of planned movement of any ash material on the site in the future. This contact should be designed to allow the regional office to schedule an onsite visit early on in this process to review the procedures utilized and evaluate any potential stormwater issues in the process.
2. DEMLR has multiple programs that may be involved with activities on the facility site – Stormwater, Erosion and Sedimentation Control and Dam Safety. I'm sure that our staff already do this, but I want to ensure that as regional staff are on site for site visits or inspections associated with any of these program areas they should also be aware of the conditions related to other programs and be ready to assess potential issues and make appropriate programs aware of any concerns. Our staff should also be sure to provide similar information in our coordination with other Divisions as well.

If you have any questions, please contact me to discuss.

ATTACHMENTS

A. Announcement of Public Hearings

B. Comments Received on Stormwater Permit

Attachment A: Announcement of Public Hearing

PUBLIC NOTICE
N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY
INTENT TO ISSUE NPDES STORMWATER DISCHARGE PERMIT #NCS000574

Public comment or objection to the draft permit is invited. All comments received by Feb. 29, 2016 will be considered in the final determination regarding permit issuance and permit provisions.

PERMIT APPLICATION
Duke Energy Progress, Inc., 526 South St., Charlotte, N.C., has applied for a NPDES stormwater permit to discharge stormwater from the Cape Fear Steam Electric Plant, 500 CP&L Rd., Moncure, N.C., Chatham County. The facility discharges to Shaddox Creek and the Cape Fear River in the Cape Fear River basin.

The draft stormwater permit and related documents are available online at: http://portal.ncdenr.org/web/guest/duke-npdes-permits. A printed copy of the draft permit and related documents may be reviewed at the department's Raleigh Regional Office. To make an appointment to review the documents, please call 919-791-4200.

Public comments on the draft stormwater permit should be mailed to: Stormwater Permitting, 1612 Mail Service Center, Raleigh, N.C., 27699-1612.

Public comments may also be submitted via email to: publiccomments@ncdenr.gov. Please be sure to include "Cape Fear Stormwater" in the email's subject line when submitting comments electronically.

PUBLIC HEARING
The N.C. Department of Environmental Quality will hold a public hearing to accept comments on the draft permit at 6 p.m. Mon., Feb. 29, 2016 at Central Carolina Community College, 764 West St., Pittsboro, N.C. Speaker registration will begin at 5 p.m.

Attachment B: Comments Received on Stormwater Permit

The following section includes a summary of the comments received at the public hearing and the written comments submitted during the comment period.

Summary of Public Hearing
Cape Fear Steam Electric Plant NPDES Industrial Stormwater Permit
February 29, 2016
Central Carolina Community College, Pittsboro, NC

Hearing began at 6:00 p.m.

Introduction by Hearing Officer Brad Cole, NCDEMLR, Chief Engineer

Description of proposed stormwater permit by Bradley Bennett, NCDEMLR, Stormwater Permitting Program

Nine speakers:

#1 Martha Giralami
Every time you have one of these hearings, it's a drag because we know little of what we say will be taken into consideration. That's been our experience. Two parts today: One is what I think should be in your permit, and two, what I think should happen at the Duke site. Mr. Bennett made an interesting remark about "good housekeeping." That doesn't even make sense to talk about with Duke -- outdoor manufacturing site that's had buildings blow up, pits of toxic coal ash and mismanaged over the years. Good housekeeping happens where everything is under roof, under tight regulations. They don't constantly put pressure on DENR to change and give them ways out. They don't have violation after violation that's been ignored.

Please consider the following permit requirements: 1. When you have rainfalls monthly, you should be monitoring all coal metals at all outfalls from coal ash handling areas. This must include radioactive elements and mercury and pH. More frequent testing should be done during major rainfalls or when releases are expected. Use a composite sampling methods, not grabs. That could be too late, too little. If going to use grabs, use a series of grabs. 2. Do totals testing of stormwater, not a leachate test. Instead dissolve the entire sample to determine metals content. Do not discard metal-bearing coal ash solids as is done in the leachate procedure. These solids will remain in the environment forever and continue to release metals. 3. Report all stormwater monitoring data to a public access website. 4. Split samples for testing by public environmental groups if asked. 5. I think all metal benchmarks are very high and depend on dilution to cure pollution. Benchmarks should be reduced by one tenth of FAV. In Cape Fear, these coal ash metals will biomagnify by factors of 10,000 to 100,000 in the bodies of fish and other animals that live in the downstream ecosystem. Biomagnification and persistence in the environment argue for much lower benchmarks. 6. Tiered response to high benchmarks must include treatment of stormwater before release. Adequate retention, containment, and pumping capacity must be onsite. Stormwater treatment will require pH adjustment, mixing of coagulants and settling before release. Any released stormwater must be tested as well. 7. Climate change is here. Weather patterns in NC bring 25-, 50-, and 100-year storms every year. Your DEQ stormwater program should be sized and staffed accordingly.

DEQ anticipates that demolition and closure of coal ash sites will be underway in the next couple years. Excavation has potential for stormwater pollution into the Cape Fear River ecosystem. Public has not been informed on excavation and disposal project. What will the coal ash work area look like? Duke Energy must build a coal ash solidification plant onsite. Coal ash in landfills produces millions gallons of leachates which can be reduced with solidification. Alternatively, Duke Energy could build a coal ash reclamation plant onsite as was done in SC.

#2 Dawn Crawley
Live in Sanford, NC. I don't think this water should be discharged. There are so many toxic chemicals. It's upstream from Lee County water intake. We already have 1,4 dioxin in our city water. My pond has vanadium and chromium in it. They're not letting people know what's in this water. Any level of these chemicals is no good. I have high blood pressure. They say vanadium causes high blood pressure. These sites should be regulated by nonpartisan – not DEQ. I do not trust our government. It's the best government money can buy. If county officials, environmental groups, riverkeepers should have free access to these sites. People should know what's in their water. We don't want another Flint, Michigan. Brickhaven is already dumping these chemicals into the river. If you don't have clean water and clean air, you can't live. This will affect the whole county, counties downstream, anyone that pulls water out of Cape Fear River. It should be frequent monitoring. Access to any groups, especially nonpartisan groups.

#3 Shelton Bass
I'm from Lee County. We need a Flint, MI disaster to bring attention to get Duke clean this up. In the meantime, we'll let McCrory do whatever he wants to do. This will be a disaster if you give them permits. Let's just take a bulldozer and push the coal ash into the river. When it's raining, we'll put the bulldozers up. Days it isn't raining, who cares? Might have been 3 million people in NC in 1969. Now there's tens of millions in NC. Nobody cares until something happens. If you give them permits, something's going to happen. I don't understand why you give someone a permit when you know they'll push it into the river, into the groundwater. Duke Energy has a strong background of not caring where it goes. Coal ash problems are coming into Moncure. Go ahead, bury the county in it. As long as it isn't raining, do what you're going to do. Don't give them a permit. This will tie more people up in the courts. I'm paying those judges every time I pay taxes. I've been exposed to enough of these toxic chemicals in my life not knowing they're toxic. I found out recently I was exposed to hexavalent chromium for years as a welder. No one tells you what's bad. Where was the government telling me it was bad? We had dams on the rivers for flood control. In the 1970's environmentalists said these dams are killing the fish, they can't spawn. So we took down the dams. Now we're poisoning all the water and killing the fish. Let's just put a dam of poison in and kill all our fish. Let's take care of the people too. Just like the dinosaurs, something else will take over when all the people are taken off this planet.

#4 John Wagner
I'm a resident of Chatham County. I worked for 3 years with GA Department of Natural Resources doing a nonpoint source pollution study. I was on macroinvertebrate team. I'm going to ask you not to follow NPDES rules. I'm not asking you to break the rules. I want you to follow the rules completely. I'm asking you to do far more than just meet the minimum guidelines. I'm asking you to do everything you can to fix and clean up Cape Fear plant's coal ash ponds. Do everything you can to make up for the plant's incredibly bad history. It's time for you to help make up for decades of leaking metals into waters of Chatham County. DEQ is a state agency, so why should it do more than the minimum? Five

reasons: First, doing minimum for decades is what brought DENR and Duke to the mess we're in now. We've got seeps from Duke's own admissions that are leaking 3 million gallons of coal ash sludge, toxins including lead, cadmium, vanadium, other toxins per day. We have wells across the state contaminated by coal ash. Contamination of Cape Fear River. We've got state crisis that has resulted in a rushed and terribly designed plan to move coal ash dumps from all over the state to new dumps with cheap plastic liners. Second reason is because Duke and DEQ are bringing coal ash from around state to create new dumps at Brickhaven. This has lead us to believe that DEQ to stand for "Don't Expect Quality." But we do expect quality from you. Not just bare minimums. Three, none of the issues in the permit deal with radioactivity. Coal ash ponds have radioactive material that needs to be included in the tests, made available to the public. I encourage you to add that to the permit. Fourth, John Skvarla in 2013 refused and returned EPA grant of $222,595 that had been designated to do surface water testing in the Triassic basin. DENR disbanded the unit that applied for that grant. Tom Reeder, Director of DWQ at that time, told *Charlotte Observer* Division would eliminate 70 jobs and save 4 million dollars a year that could be used for another study. I'm asking you to use some of that money to do more than the minimum and carry out detailed surface water studies of creeks, streams, rivers of Triassic basin, especially around Cape Fear Plant. Four, this is DEQ's chance to correct NC's equivalent of Flint, Michigan disaster. In 2014, Associated Press said DEQ and Duke have known about contamination but failed to notify communities. AP reported that since 2011, monitoring wells surrounding the pits have exceeded state groundwater standards on 226 readings including for high amounts of boron, magnesium, iron, and chromium. Residents living near were not informed of these findings. Nor did state regulators require Duke to test for contamination on any of these properties. Chromium is a concern because in its most toxic form, hexavalent chromium is a known carcinogen.

Do the right thing now. Require Duke to test for contamination and do your own testing. Don't just use the TCLP that EPA has stated is outdated. Instead, use that and use more accurate LEAF test that provides detailed detection of concentration levels of toxic metals. Now Tom Reeder's quote from N&O 11/7/2013: They didn't do a damn thing. And that's what they did. Reeder told Duke's lawyers in June court deposition. Claiming that the risk of coal ash contamination was known to the engineers for years. I'm just completely dumbfounded that nobody ever did anything about it, Reeder said. Everybody had to know the extent of the harm they were doing. And why nobody would do anything about it, it's just beyond my comprehension.

So you, DEQ, know the extent of the harm, and you have a chance to do something about it. Don't let Tom Reeder stay dumbfounded. Do this stormwater permit right this time. Make sure our kids don't have to deal with what's left over from this mess.

#5 Elaine Chiosso

I am Haw RiverKeeper, member of Waterkeeper Alliance. I also served on the Sedimentation Control Commission. I currently serve on Chatham County's environmental review advisory committee. The Haw River watershed includes Shaddox Creek which is receiving stream named in this permit. Permit discusses that anticipated closing of coal ash ponds will result in even more stormwater pollution. But this entire procedure is baffling to me. 4.5 million tons of coal ash sitting here contaminating groundwater. We're looking at how Duke will control stormwater off these roads and railways lines, but entire site is so contaminated. Not even sure what point of this is. Shouldn't state be dealing now with the entire site? Turning it into solids would make sense. Looking at some of contaminants in coal ash as opposed to immense amounts leaking through failing dams straight into CF River now. This permit is

legitimizing this pollution. The system that's described relied on self monitoring by Duke Energy. Same Duke Energy found in 2014 to be illegally dumping water from coal ash ponds, 61 million gallons of toxic water straight into CF River. This was violation. This was huge, and Duke never did consider it a problem. They thought they were doing good management. So time has gone by, we still have leaking dams. Nothing has changed. But state plans to trust Duke Energy to carry out requirements of this permit. What does good housekeeping mean? At a site like this, and by a company with such a poor record. I think the more we hear, the better. What will they be monitoring for? Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, boron, thallium, zinc as well as settleable solids, pH, oils, uranium? Benchmarks in this factsheet sounds more like guidelines rather than real regulations. They're not effluent limits with violations. Tiered system – all sounds like gobbledygook to me. Not straightforward regulatory system that could protect us. Another example of our state government protecting corporations instead of people. Doesn't look at receiving streams in terms of these limits. Shaddox Creek and CF River already polluted by these contaminants. I think we should not accept this permit and get on with the task of cleaning up these coal ash ponds.

#6 George Lucier
Chatham County resident. Former chair of Chatham County commissioners. Former associate director of National Toxicology Program. Former chair of science advisory board for DENR for hazardous air pollutants. Oversaw risk assessments for a number of hazardous air pollutants for the state. Some concerns I expressed that benchmark level is confusing. Normally, that's the level at which either health effects are determined, environmental effects, real data used to determine that. Not extrapolation. Real data to show adverse effects occur at that level. Customary to divide that level by at least ten, sometimes more. That doesn't seem to have been done in this case. Benchmark level has indicated would not be protective of people or the environment. It should be at least divided by ten. Mercury is a good example. Life cycle of mercury when emitted from coal fired power plant, goes up in air, converted to inorganic mercury, falls to earth in waterways, microorganisms in water soil convert it to methyl mercury, toxic form. CDC estimates that 8% of women of child bearing age have mercury levels that put their infants, fetuses at risk for developmental neurotoxic effects. 60,000 babies born each year with development deficit due to mercury exposure. We need to prevent additional exposure. Other metals are like methyl mercury. Levels need to be below benchmark by tenfold. Absolute necessity for this permit to be approved. Role of DEQ is to protect health and environment of citizens of NC. Need to have appropriate level that can at least indicate that it's a virtual safe dose. I would urge you to take these comments seriously.

#7 June Gallagher
You guys need a revolution in DEQ. I worked for EPA for 30 years. You need to stand up to this stuff. Went to Perdue, environmental engineering degree. Dilution not solution to pollution. Something is wrong in an agency that would allow a permit to be given without cleaning up the site. Everyone is demoralized in Chatham County. I haven't read the permit. Vacuous permit. Lots of people that work at Duke Power become soulless. I ask you to push back. With regard to treatment. Treat stuff before you put it into water, use reverse osmosis. People around here are putting in expensive treatment systems to treat for heavy metals. Don't think that people aren't going to go out and do some sampling. They'll do it when you don't want to do it. Ridiculous that it's self monitoring.

#8 Diana Hales
I am a Chatham County commissioner, vice chair. I looked at your factsheet and I was struck that it is

similar to permit issued for the landfill at Brickhaven, which was amalgam of ideas on how to bury coal ash. Try to not call it "landfill," "solid waste," or "hazardous waste." Called it "structural fill." We hope it will sit where it's being dumped and not slide down from its 40-foot pyramid height into the river. About this permit, we've heard speakers talk about it. One of the things that struck me was that everything depends on 25-year, 24-hour storm event, 5.7 inches. I'm not sure how many inches we had last November, but I had 6 inches at my house over two days. 5.7 inch rainfall is not realistic. Needs to be for 100-year storm, 24-hour. 5.7 inches of rain is a drop in the bucket. That is too limiting on this permit. I was also interested in self reporting aspect. I read legal notices in Chatham newspaper to see when things are reported, violations for wastewater discharges, etc. This permit says an outfall would only be monitored at one of those 25-year, 24-hour storms, but it's up to Duke to look at rain gauges and go out and report. Then, another item that I was concerned about, the self reporting is a huge problem. The guarantees – there's assumptions under benchmarks – assumption that permit holder will report when hit exceedances, increasing management, monitoring. When nobody's watching, what happens? I'm thinking that is not good management. I see what you've done away with in this permit is notice of violations, penalties, responsibility. I've also worked at DENR, and I followed NOVs for water quality, NPDES discharges. I found the penalty system faulty, but at least there was a penalty system. The last thing is leaving it up to the permittee to decide what is infeasible – anything is infeasible. Lagoon was infeasible, economically infeasible to require anything more than to dig a hole. What is infeasible – it could be if it costs $2, I don't know. That is a real liability in this SPPP. They should not be the ones to determine what's infeasible. Finally, there is also in your SPPP, you stipulate that majority of stormwater is routed to the treatment system and those discharges are regulated by NPDES wastewater permit. Theoretically, those ponds will be closed. Mercury monitoring – not just about the level of mercury, but permittee can adjust at their whim. That to me is not acceptable because they should have to have clear guidelines. This is a sliding scale. If you don't like it, you can adjust it throughout this permit. Anything goes. Duke should be responsible. They should have numeric numbers. Should not have a sliding scale. Bad policy. Does not protect individuals that live in these counties. I support strengthened permit that has controls.

#9 Karen Howard
Chatham County commissioner. Sense we get is you started with result you want and work backwards to give Duke what they want. I think they should take responsibility. They should not be regulating themselves.

Martha Girolami

Comments--February 29, 2016
NPDES Stormwater Permit Duke Energy (DE) Cape Fear Steam Electric Plant
NPDES NO. NCS 000574

DEQ anticipates that the demolition and/or closure of the Cape Fear Site's coal ash ponds will be underway in the next few years. This excavation activity has great potential for stormwater pollution into the Cape Fear River ecosystem. Staffing?

The public has not been informed on the excavation and disposal project for coal ash. What will the coal ash work area look like? If DE does a bad job of this, more stormwater pollution may be released than ever before. In my opinion, DE must build a coal ash solidification plant on site—blocks of coal ash grout will not release metals to the extent that ash does. Coal ash in landfills produces millions of gallons of leachate which can be reduced with solidification.
Alternatively, DE could build a coal ash reclamation plant together with a brick and concrete plant on site as was done in South Carolina. Why hasn't DE done the research necessary to solidify and reclaim coal ash—where is their superior expertise and engineering?

Please consider the following Permit Requirements:
1. Monthly monitoring of all coal ash metals in all outfalls from coal ash handling areas. This must include radioactive elements and Mercury and pH. More frequent testing should be conducted during major rainfalls or when releases are suspected. Use composite sampling not Grab during storm event,
2. The testing should be Totals testing of stormwater. Do not use a leachate test. Instead dissolve the entire sample to determine metals content. Do not discard metal bearing coal ash solids as is done in a leachate procedure. These solids will remain in the environment forever and continue to release metals.
3. Report all stormwater monitoring data to a public accessed website.
4. Split samples for testing with public environmental groups if asked by these.
5. I think all of the metal Benchmarks are very high and depend on dilution to cure pollution. Benchmarks should be reduced -- perhaps 1/10 the FAV. In the Cape Fear River ecosystem these coal ash metals will biomagnify by factors of 10,000 to 100,000 in the bodies of fish who live in the downstream ecosystems impacted by coal ash stormwater. Biomagnification and persistence in the environment argue for much lower Benchmarks.
6. The Tiered response to high benchmarks must include treatment of stormwater before release. Adequate retention containment and pumping capacity must be on site. Stormwater treatment will require pH adjustment and the addition and mixing of coagulants and as well as settling before release. The treated and released stormwater must be tested as well.
7. Climate change is here or if you prefer to be a denier then weather patterns in NC bring 25, 50, and 100 year rains to our state almost every year. Ask Greg Fishel. Your DEQ and DE stormwater programs should be sized and staffed accordingly.

Martha Girolami, retired chemical engineer and PE; 919-362-5759

Public Comments on the DEQ NPDES Stormwater Permit
for the Cape Fear Plant in Chatham County, NC
February 29, 2016

Good evening, and thank you for holding this public hearing on the Cape Fear Stormwater Permit. My name is John Wagner, and I am a Chatham County resident.

I'm going to do two unusual things in my comments this evening. First, I am going to ask you NOT to follow the NPDES rules. Second, I am going to end my comments with a quote that I really like from Tom Reeder, the Assistant Secretary of the Department of Environmental Quality for North Carolina.

I ask you not to follow the NPDES rules. I'm not asking you to break the rules or the law, I want you to follow the rules and regulations totally, faithfully, and completely. However, I'm asking you to do far more than just meet the minimal guidelines that are set forth in the rules. I'm asking you to do everything that you can to fix, repair, and clean up the Cape Fear plant's coal ash dumps and ponds. I'm asking that you do what is right and what is necessary to make up for the plant's terrible history of leaks, cracked coal ash dikes, mismanaged and partially completed repairs, and many decades of leaking toxic heavy metals into the Shaddox Creek, Gulf Creek, the Cape Fear, and the groundwater of Chatham County. I'm asking you to not do the bare minimum required by law but to do what is right and what is moral.

The Department of Environmental Quality is a state agency – so why should it do any more than the minimum to meet regulations? I'll give you 5 reasons:

1) Doing the minimum for decades is what brought Duke, DENR and now DEQ to the mess that we are now in.
    a. Seeps that leak at least 3 million gallons of coal ash water and sludge containing toxic levels of selenium, chromium 6, lead, cadmium, vanadium, and other toxins.
    b. Wells across the state that have been contaminated by coal ash.
    c. Critical contamination of the Cape Fear and other rivers including the major Dan River spill.
    d. A state crisis that has resulted in a rushed and terribly designed plan to move dangerous coal ash dumps from all over the state to new dumps with

cheap plastic liners.

2) .. which brings me to the second reason to do more than the minimum. Duke and DEQ are bringing coal ash from sites around the state to create new dump sites at Brickhaven and Colon Road. At these sites, the poor planning and minimal protections has led Lee and Chatham citizens to believe that "DEQ" to stand for Don't Expect Quality. Granting permits that make Duke's illegal activities permitted and therefore legal – is not protection and is not Quality. However, we DO want quality, and we do want protections for our air and water. Show us some real quality – not just bare minimums – in how you correct the Cape Fear plants 5 coal ash sites.

3) Go beyond the NPDES minimal regulations because they have no mention of testing for uranium, radium or other radioactive materials and isotopes that are often found in coal ash. I realize that each batch of coal that was burned could have different levels of radioactivity in the ash produced. This means that multiple stormwater runoff sites need to be monitored, and should be monitored monthly. Duke has not provided - any – measurements of radioactive radiation levels. There has been no data from DEQ or Duke about this issue. DEQ needs to do the testing and make the findings available to the public on the DEQ website.

4) In 2013, John Scavarla – head of the North Carolina Department of Natural Resources, refused and returned an EPA grant of 222,595 dollars that had been designated to do surface water testing in the Triassic Basin. DENR disbanded the unit that applied for the grant. Tom Reeder, the director the Division of Water Quality at the time told the Charlotte Observer that the division was going to eliminate about 70 jobs and save 4 million dollars a year. He said that the money could, in the future, be used for a water study. Some of that money should be used NOW – above and beyond the minimal NPDES requirements. DEQ should carry out a detailed surface water study of the creeks, stream, and rivers of the Triassic Basin – including those that are around the Cape Fear Plant. This study should include quarterly macroinvertebrate data, hydrocarbon data, and data on the heavy metals in the Triassic basin surface waters.

5) This is DEQ's chance to correct North Carolina's equivalent of Flint, Michigan's disaster. On June 17th, 2014, the Associated Press released an article entitled "Dukeville concerns over coal ash – 5 things to know". In this news release, it said that Duke and DEQ have known about contamination but failed to notify communities – and I quote

> "Since 2011, monitoring wells surrounding the pits have exceeded state groundwater standards on 226 readings, including for high amounts of boron, manganese, iron and chromium. Residents living near the plant were not informed of the findings, **nor did state regulators require Duke to test for contamination on any neighboring properties.** Chromium is of concern because in its most toxic form — hexavalent chromium — it is a known carcinogen."

Do the right thing now, go beyond the NPDES minimal limits and require Duke to test for contamination **and** do your own testing. Don't just use the old technology known as TCLP that the EPA has stated is outdated. Use the TCLP AND use the newer, more accurate LEAF test that provides greater detection of concentration levels of toxic metals.

Now – Tom Reeder's quote that I promised:

This is a direct quote, word-for-word, from The News and Observer, November 7, 2015 – an article titled "Coal Ash Troubles were Ignored for Decades in NC"

> "They didn't do a damn thing, that's what they did," Reeder told Duke's lawyers in a June court deposition, saying the risks of coal ash were known to utility engineers for years.
>
> "I'm just completely dumbfounded that nobody ever did anything about it," Reeder said. "Everybody had to know the extent of the harm that they were doing. And why nobody would do anything about it – it's just beyond my comprehension."

So, **you**, the Department of Environmental Quality, know the extent of the harm and have a chance to do something about it. Don't let Tom Reeder stay dumbfounded. Do what is moral and what is right. Get Duke to clean up its mess, get Duke to do it right, thoroughly and carefully. Use your enforcement tools make sure that these harms aren't passed to our children and future generations. – Thank you

Cape Fear NPDES No. NCS000574 New Stormwater Permit
Written Public Comment
February 29, 2016

Dear Mr. Mike Randall,

Clean water is crucial to healthy ecosystems and communities as well as for businesses that depend on its ready access for continual economic growth. My concern is that the North Carolina Department of Environmental Quality is unable to adequately conduct monitoring and the enforcement of current environmental regulations to insure water quality. Failure to implement compliance of past violations of state stormwater runoff rules—meant to protect our water supply—have allowed the release of toxic [and possibly radioactive] pollutants to enter State waters and navigable waters of the United States.

We should not disregard the many times that the five, unlined coal ash ponds at the Cape Fear Steam Station have been cited for discharge violations, and that this facility has earned some of the worst rankings [NC High Hazard and EPA Significant Hazard]. In a 2013 formal letter to DENR Sec. John Skvarla, EPA noted the need for remedial action and further studies and investigations. The unsafe conditions at all five of the Cape Fear coal ash lagoons lead to a Poor Condition Rating for structural dam integrity. The close proximity of these dams to the Cape Fear River poses a constant threat to the drinking water quality of municipalities downstream from their point of discharge. Please review detailed accounts listed in the Cape Fear Complaint Filed document.[1] Preemption of this complaint by DENR in 2014 does nothing to reassure us that the DEQ is able or willing to deal with water quality problems of communities living near or downstream from unlined [or subsequent, lined] coal ash waste storage sites.

This is most concerning since pollutants entering the water supply may occur from groundwater contamination via coal ash pond wastewater seepages and from release or discharge into surface water at Shaddox Creek and the Cape Fear River. Since both receiving streams are classified as WS-IV [drinking water sources for many municipalities downstream], discharge monitoring at the outfall into these State waters is important and should be done each month. In addition, Shaddox Creek borders the Moncure Holdings Megasite and the Charah/Green Meadows clay mine property. Million of tons of coal ash from the Riverbend and Sutton Plant sites are being transported through these areas, first arriving by truck and now by rail, to lined, coal ash cell(s). Coal ash train cars run across a bridge spanning the Haw River near Old U.S. 1. Runoff contaminants coming from any of these sites would add to

[1] https://www.southernenvironment.org/uploads/audio/2014-09-03_Cape_Fear_Complaint_Filed.pdf

the cumulative level of toxic pollutants such as 1,4-dioxane, Cr+6, and mercury presently detected in the Haw River. [2]

DENR anticipates that the demolition and/or closure of the site's ash ponds may soon be underway, and that the activity may be begun and completed within the term of the stormwater permit. We would expect that some aspects of the ash pond closure activity may present the potential for stormwater pollution, for example, activities such as transport of ash by rail and/or along on-site haul roads.

Cape Fear Draft Fact Sheet

When this activity begins depends on the final coal ash pond risk classification of the Cape Fear Steam Station. Consider the near record-breaking rainfalls in NC over a 12-day period in October of 2015 that was not related to any tropical system. Fortunately, there were no breaches of the earthen dikes at the time but its possibility was worrisome to the local community.

To reduce further degradation of the water quality in the Cape Fear River Basin, consider modifying the stormwater permit to include the implementation of the following actions:

1. Enforce full compliance of past and future violations.
2. Conduct monthly monitoring of priority pollutant metals, radioactive elements, and pH at seepage areas, channels to Shaddox Creek and Gulf Creek and its wetlands, and at sites above and below outfall(s)—especially during coal ash transport operations. Repeated findings of exceedances above standard levels should trigger more frequent monitoring.
3. Require adequate and regular training of maintenance, safety and emergency personnel to handle contamination incidences.
4. Allow for transparency in reporting of violations and actions taken to resolve problem(s).

Thank you for the opportunity to submit public comments for your careful consideration.

Sincerely,
Jeannie Ambrose

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[2] 2016. C. Lopez, M. Sun and D. Knappe. 1,4-Dioxane Occurrence in the Cape Fear River Watershed, http://chathamconservation.wikispaces.com/file/view/1%2C4%20Dioxane%20Cape%20Fear%20sm.pdf/572900407/1%2C4%20Dioxane%20Cape%20Fear%20sm.pdf

Bennett, Bradley

From: Keely Wood <keely@bionaturae.com>
Sent: Monday, February 29, 2016 11:22 AM
To: SVC_DENR.publiccomments
Subject: Cape Fear Storm water

The five ponds at the Cape Fear Plant ,are all upstream of drinking water intakes for **Sanford**, Dunn, Fayetteville, Wilmington, Brunswick and Harnett counties (500,000 people). Sanford's water intake to its water treatment plant is only three miles downstream from where the coal ash ponds are leaking or are being pumped by Duke Energy into the tributaries of the Cape Fear River. The Cape Fear coal ash lagoon received a POOR structural condition ratings by the EPA in 2013. Since then what has DENR (DEQ) even done for remedial action, critical study, safety updates, fixing natural corrosion? The contaminated groundwater at Cape Fear also flows directly into the Cape Fear River. As a result, the coal ash lagoons are also contaminating the Cape Fear River via this hydrologically connected groundwater, and thus constitute an additional unpermitted point source discharge in violation of the Clean Water Act.

This storm water permit should be denied

- we expect them to carefully and properly fix all the issues at the Cape Fear coal ash dumps.
- we want transparency and independent verification that is available to the public that the stormwater issue are quickly resolved
- we want them to know that there is no reason to trust ANYTHING at Brickhaven and Colon Rd - given their long disregard for safety.
- we want **monthly** monitoring of:

- the existing and previous seep locations on the dams
- the canal from the Cape Fear to the Gulf Creek wetlands
- the canal from the coal ash into Shaddock Creek
- mercury levels in the canals, creeks, and Cape Fear
- the water and sediment below the Cape Fear plant (and upstream for comparison)

This is Duke and DEQ's chance to do the right thing. **Duke has one of the worst coal ash safety records in the country then it shouldn't be creating new coal ash dumps**. SALTSTONE CONTAINMENT should be used

We want more than minimal compliance and what is "legal" (DEQ has permitted and made dumping the coal ash liquids into the Cape Fear legal) - **we want what is moral, what is safe, and what will protect the river and the groundwater.**

Keely Wood
Lee County Resident
919-708-5221

Bennett, Bradley

From: Keely Wood <keely@bionaturae.com>
Sent: Monday, February 29, 2016 4:32 PM
To: SVC_DENR.publiccomments
Subject: Cape fear Storm water

Radioactive elements in coal ash must be tested for. Burning coal concentrates the levels of radioactivity in the ash some of this ash is 50+ years old. Duke Energy lists uranium as a possible contaminant in documents filed with the DEQ.

Duke Energy should utilize salt stone containment away from water ways and on their own property

Keely Wood
919-708-5221

Bennett, Bradley

From: Sharon Garbutt <sharongarbutt@earthlink.net>
Sent: Monday, February 29, 2016 11:51 PM
To: SVC_DENR.publiccomments
Subject: Cape Fear Stormwater NPDES STORMWATER DISCHARGE PERMIT #NCS000574

Division of Environmental Quality,

Below are my comments regarding the issuance of a NPDES Stormwater Discharge Permit to Duke Energy for discharge of stormwater from the Cape Fear Steam Electric Plant coal ash ponds into Shaddox Creek and the Cape Fear River.

- In view of the long history of illegal leaking and seepage from these storage ponds into Shaddox Creek and the Cape Fear River, periodic monitoring of parameters associated with coal ash pond discharges (heavy metals, pH, radioactive elements) must be done in areas close to the outflows from the storage ponds. Sediment studies should also be done to assure that heavy metals and radioactive materials are not accumulating in the stream/river beds.
- SDO monitoring must be done at least monthly in order to assure detection of pollutants, which may vary widely in short periods of time based on what type of activity is occurring at the coal ash storage site. Monitoring dates should be flexible so that they coincide with times when contamination is most likely to occur due to activity at the site.
- All parameters must be monitored on an ongoing basis. The use of tracer elements or a smaller suite of parameters must be prohibited. Variances in coal ash composition and activity at the storage ponds could result in low levels of the measured parameters while some unmeasured parameters remain high.
- Testing for levels of radioactive elements must be incorporated into the permit requirements.
- Given Duke Energy's poor record of protecting human health and the environment, DEQ should demand the highest level of standards from Duke Energy. Furthermore, DEQ must monitor Duke Energy frequently on an ongoing basis, checking to be sure all guidelines are adhered to and imposing maximum fines when any violations are found.

Thank you for your consideration,

Thelma Sharon Garbutt
Pittsboro, NC 27312

Harry K. Sideris
Senior Vice President
Environmental, Health & Safety
526 South Church Street
Mail Code EX3XP
Charlotte, NC 28202
(704)382-4303

Electronic Submittal

February 29, 2016

Mr. Bradley Bennett
State of North Carolina
Department of Environment and Natural Resources
Stormwater Permitting
1612 Mail Service Center
Raleigh, NC 27699-1612

Subject: Cape Fear Steam Electric Plant
Comments on Draft Industrial Stormwater Permit (No. NCS000574)

Dear Mr. Bennett:

With reference to the February 1, 2015 public notice, Duke Energy offers the following comments on the subject draft permit.

Cover Page

States "Duke Energy Carolinas, LLC" is hereby authorized to discharge stormwater... This should say "Duke Energy Progress LLC". is hereby authorized to discharge stormwater...

Part I Page 2 of 2

The location map is labelled "Duke Energy Progress, Inc". This should be labelled as "Duke Energy Progress, LLC".

Part II Page 4 of 14

Under item 6 "Employee Training" Duke Energy utilizes computer based training for SPPP. In this process no signatures are obtained but the records of employee attendance are kept electronically. It is requested that the option to maintain records of employee training electronically be allowed instead of keeping signed records of training.

Part II Page 7 of 13

Under the footnotes it discusses that SW-001 and SW-008 are not regulated as point source discharges because of staff observation on the site visit on November 12, 2014. Duke Energy requests that Outfall SW-008, be removed as a stormwater outfall and be placed in the facilities NPDES permit when new permit wastewater permit is issued.

Part II Page 8 of 13

Under Table 2 Monitoring Schedule it is requested that the dates of the monitoring period be adjusted to reflect the effective date of the permit (e.g. Year 1 – Period 1 begin April 1, 2016). This will allow for any improvement needed to establish access areas for analytical monitoring.

Part II Page 10 of 14

Under Table 4 some of the benchmark values are very low. For Copper the benchmark value is listed as 0.01 mg/l. The Silver value is listed at 0.0003 mg/l. Plus for Silver the practical quantification level listed in the Fact Sheet is 0.001 mg/l, which as noted in the Fact Sheet is higher than the benchmark level. Could these two values be re-evaluated? The potential exists that these parameters could be measured in storm water run-off from the influence of background soil containing metals, instead of an industrial activity.

Part II Page 11 of 13

The second sentence of the second paragraph states, "Qualitative monitoring shall be performed quarterly as specified in **Table 2**..." It should state the following, "Qualitative monitoring shall be performed quarterly as specified in **Table 5**..."

Part II Page 12 of 13

Under Table 5. Monitoring Schedule it is requested that the dates of the monitoring period be adjusted to reflect the effective date of the permit (e.g. Year 1 – Period 1 begin April 1, 2016). This will allow for any improvement needed to establish access areas for visual monitoring.

FACT SHEET

Page 1

The facility information lists that facility name as Duke Energy Progress, Inc., Cape Fear Steam Electric Plant, the facility name should be Duke Energy Progress LLC., Cape Fear Steam Electric Plant.

Page 1

Under Outfall SW-1 and Outfall SW-8, last two sentences, Outfall SW-1 discharges into the Cape Fear River. Outfall SW-8 discharges into Shaddox Creek which flows into the Haw River just above the confluence with the Deep River which Forms the Cape Fear River. The Outfall descriptions are backwards it should read Outfall SW-8 discharges into the Cape Fear River. Outfall SW-1 discharges into Shaddox Creek which flows into the Haw River just above the confluence with the Deep River which forms the Cape Fear River.

Page 2

Under Outfall SW-3 the last sentence states, at this time Outfall SW-2 will be regulated as a stormwater discharge from an industrial activity. It should read, at this time Outfall SW-3 will be regulated as a stormwater discharge from an industrial activity.

If you have any questions associated with these comments please contact Steve Cahoon at 919 546-7457.

Sincerely,

Harry K. Sideris
SVP, Environmental, Health and Safety

cc: publiccomments@ncdenr.gov