

**MEETING OF THE NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION**

**Raleigh, North Carolina
May 13, 2010
Minutes**

The North Carolina Environmental Management Commission met in the Ground Floor Hearing Room of the Archdale Building, 512 North Salisbury Street, Raleigh, North Carolina. Chairman, Stephen T. Smith presided. The following persons attended for all or part of the meeting:

COMMISSION MEMBERS:

Yvonne C. Bailey	Marion E. Deerhake	Dr. David H. Moreau	Dr. Charles H. Peterson
Donnie Brewer	Tom Ellis	Jeffrey V. Morse	Dickson Phillips III
Thomas F. Cecich	William L. Hall	Mayor Darryl D. Moss	Stephen Smith
Stan L. Crowe	Dr. Ernest W. Larkin	Dr. David B. Peden	Forrest R. Westall, Sr.
John S. Curry	Kevin Martin		

DIVISION OF WATER QUALITY:

Bradley Bennett	Mike Templeton	Tom Reeder	Jon Risgaard
Ted Bush	Bethany Georgoulis	Coleen Sullins	Diane Reid
Kevin Bowden	Connie Brower	Lois Thomas	Jeff Manning
Frances Candelaria	Gary Kreiser	Julie Ventaloro	
Alan Clark	Matt Matthews	Adriene Weaver	
Matthew Faerber	Sandra Moore	Chuck Wakild	
John Huisman	Rob Krebs	Elizabeth Kountis	

DIVISION OF AIR QUALITY:

Keith Overcash
Michael Abraczinskas
Paul Grable

ATTORNEY GENERAL'S OFFICE:

Frank Crawley
John Payne

Chairman Smith: called the May 13, 2010 meeting to order at 9:00 a.m. He then read the Ethics General Statute § 138A-15, which mandates that the Chairman inquire as to whether any member knows of any known conflict of interest or appearance of conflict with respect to matters before the Commission. Commission members were asked if they knew of any conflict of interest or appearance of a conflict to please so state at this time.

I. Preliminary Matters

We have several additions and adjustments to our agenda. The first thing I want to do is to recognize that this is Keith Overcash's last meeting with us. As you may all know he is retiring

at the end of June after 32 years with the department which is now the Department of Environmental and Natural Resources which has gone through several name changes and adjustments over the years. Keith has been the director of the Division of Air Quality for eight years. He was the assistant director for five years before that. He began his DENR career as a permit engineer in the water quality section of central office, then moved to the Mooresville Regional office as a field engineer and for 13 years he was Air Quality Regional Supervisor in the Mooresville Regional office, then supervisor of what was then the Division of Environmental Management which is now DWQ. For the last 13 years as you know he was assistant director and director of DAQ. He has been the lead person we've looked to for help and support on the air quality issues. My personal perspective is that he has been the principal part of my education over the last five years since I became a member of the Environmental Management Commission and has been invaluable to me. It was during our struggles with the mercury rules that I first came to have great trust and respect for Keith and his information, the quality and the reliability of his information and experience. I can say for all of us that the people of North Carolina are better off today because Keith chose a career of public service. North Carolina's water quality, and in particular air quality are better off today because of Keith's efforts. So on behalf of the EMC and myself personally I want to thank you Keith for your time, commitment, professionalism, graciousness, generosity and we will dearly miss you.

Chairman Smith: Thank you. How about a round of applause for Keith Overcash. Now I want to call on Forrest who has an announcement.

Forrest Westall: Thank you Chairman. Many of you that have been around for several years knew Virgil McBride. Virgil was a member of the Environmental Management Commission from 1983 to 1993. It was my pleasure to work with him as a staff member and several of the staff members here remember Virgil. He was from the Winston-Salem area was a lobbyist and was appointed to the Environmental Management Commission. Virgil was known for his blunt speaking, he had a very sharp wit and was a lot of fun to be around. He passed away two or three weeks ago. Steve Tedder from the Winston-Salem Regional Office passed along a note to many of us that there is going to be a memorial for Virgil on May 25, 2010 at the North Carolina History Museum at 4:00 p.m. So for those of you who knew him and are able to be there I'm sure his wife and family would appreciate your attendance. Virgil served both as vice-chair and as chairman of the Water Quality Committee over his career. He was a fine servant of the state. Just want to remember him and make you aware of his passing.

Chairman Smith: Thank you **Mr. Westall.** We move to our minutes. Are there any adjustments, edits or changes to the minutes.

Dr. Peterson: I move to approve the minutes. **Dr. Larkin** seconded. The motion passed.

Chairman Smith: Mr. Crawley reminds me, and I appreciate it, that I need to ask if any of you are aware of conflicts of interest or anything that creates the appearance of a conflict of interest to please notify us now or as soon as you become aware of that as the meeting unfolds.

Kevin Martin: I just want to indicate that I will be recusing myself from what was item number 4 which is agenda item 10-25 on the City of High Point matter.

Chairman Smith: Are there any others? We have one addition to our agenda and that is an information item. The General Assembly asked us last session to give a report on the Falls Lake Septic Systems and Robin Smith is here to do that for us. So I call on Ms. Smith please.

Robin Smith: Thank you Mr. Chairman. All of the members should have received by email a copy of what is still a draft report at this point. It will probably remain a draft for about another week and it is on the website. But if you remember last year during this session the General Assembly enacted a session law that was designed to provide some additional interim protection for the Falls Lake watershed. Among the things that piece of legislation did was extend the date for the Falls Lake nutrient strategy rulemaking. It put in place some additional sedimentation and erosion control methods for the Falls Lake watershed. Then it directed the department to do a study and report back in consultation with the EMC on the need for more stringent septic systems standards for the Falls Lake watershed. That is what this report responds to.

There are a couple of things in terms of the context of this report that I want to emphasize up front. One is the cause of the direction from the General Assembly on what the report should address. What the department focused on was the need for new standards for new septic system installation. That was our understanding of the charge from the General Assembly. Ultimately this report would go back to the Environmental Review Commission of the General Assembly and to the Commission for public health which has the authority to adopt septic system standards. That is the focus of the report. It's not looking, although it talks a little bit about existing failed septic systems and about the existing discharging sand filter systems, and the degree to which those are an issue in the Falls Lake watershed. This specific issue that this report was intended to address was whether we needed new, different or more stringent standards for new septic systems in the watershed. The other thing I want to stress up front is the relationship between this report and projections that were in the lake model with respects to contributions in terms of nutrient loading from on-site wastewater systems. This report is looking at a much narrower subset of systems than the WARMF model does in making its projections and allocations between different sources of nutrient loading in terms of on-site systems. When the WARMF model projects impacts from on-site wastewater systems it is including that entire universe of old malfunctioning or failing septic systems. It includes the discharging sand filter systems some of which were permitted by the Division of Water Quality and some of which are old enough that apparently they were permitted by local governments. There's this third category which is the category this report focuses on which are the more modern septic systems that have been permitted under current regulations. You will see differences in the report notes between the general projections in the WARMF model with respect to contributions from on-site wastewater systems versus the degree to which those problems can be associated with modern septic systems permitted under current regulations. It's difficult to separate those two things out but it's very important to understand that the model in this report is looking at different things on very different scales. Although I think that we are seeing some good correlation between numbers where we have matching data, they're looking at two different things. So the report doesn't undermine the numbers in the model and the model doesn't contradict this report. I think that we have good agreement between the Division of Water Quality and the Division of Environmental Health on the conclusions of this report, but just so there is no confusion about you seeing different numbers that are coming from very

different contexts. What this report is trying to do is focus on a smaller subset of on-site wastewater systems to answer the question of do we need to change current standards for new septic systems.

The conclusion of the report to cut through to the chase here is that the Division of Environmental Health which coordinated the preparation of this report with the Division of Water Quality did not find a basis for concluding that current septic system standards should change. There are a number of reasons for that. One of the reasons is that standards have already changed over the last 10 or 20 years and most of the failing systems that show up in the Falls Lake watershed including the failing systems that ultimately had to be replaced by discharging sand filter systems were installed under a very different set of septic system rules. Most of them are on very small lots and a number of them are on poor soils that would not be permitted for septic systems under current rules. Between the changes in the actual rules applied to septic systems now versus in the 50's, 60's and 70's when many of the problem systems were installed and the fact that development patterns have changed and both because of changes in septic systems rules and other regulations that have tended to lead to larger lot sizes. We don't see the same level of contribution from modern septic systems under current rules that we do from older systems that were put in under very different circumstances. One of the things that the report notes is that we have had very limited data on which to make this evaluation. We do have data that is cited in the report in terms of actual water quality monitoring. Part of that was done by Wake County under a 319 grant and some by US Geological Survey in some streams in the Falls Lake Watershed. That monitoring was specifically done to try to look at what the potential contribution was of septic systems to nutrient loading in those streams. Essentially those two datasets are showing that the levels actually measured in the streams are very close to background levels. They used a forested undeveloped watershed for comparison purposes and actually did not find significant differences in the actual nutrient measurements in-stream as compared to the background stream. Looking at all those factors together the recommendation in the report, if you went to pages 4 and 5 of the report, list a number of recommendations.

The conclusion is that the existing information does not support a finding that new septic systems are a significant contributor of nutrient loading in the watershed because of the refinements to septic systems and septic systems rules as well as changes in the development patterns of the last twenty years. But the report does recommend that we need additional efforts to look at the potential effects of properly functioning septic systems on nutrient levels including potentially an extensive literature review based on data from other areas with similar soil types, continuing monitoring of in-stream nitrogen and phosphorus levels in the watershed to estimate the percentage contribution from properly functioning septic systems. The report also makes some recommendations with respect to what both the Division of Water Quality and the Division of Environmental Health agree as the biggest problem with respect to on-site systems in the watershed. That is that we need to take additional steps to deal with these older failing or malfunctioning systems and get a better handle on the discharging sand filter systems. So another recommendation in the report is that enhanced efforts are needed in the Falls Lake Watershed to identify malfunctioning septic systems and systems that were discharged to surface water, and to have those systems repaired or connected to sewer.

One issue that the report notes is that legislation may be needed to clarify jurisdiction over some of these systems, particularly those that were permitted to discharge prior to 1977 because there are some issues of who authorized those systems to begin with, and therefore who has authority to compel action be taken with respect to those systems. We have two categories of those discharging sand filter systems. We have those that were permitted by the Division of Water Quality. For the most part we know where those are but we also know that we have a number of systems out there that were permitted previously probably by local health departments and there is less knowledge of the number and location of those systems, and less clarity about who has authority to require actions be taken with respect to those systems and their potential nutrient inputs. Another issue that's flagged in the recommendations is one of on-site wastewater system maintenance. This is an issue that has been around for a while and we all know that even a properly functioning system needs to be properly operated and maintained. That is an obligation on the individual property owner. There are some states that have gone to more programmatic approaches to maintaining on-site wastewater systems and a few of those examples are noted in the report. Some states actually have mandatory systems where the homeowner has to have a contract for maintenance of their system with a permitted entity to do the maintenance on some regular schedule. There are also examples of voluntary incentive based programs for maintenance of septic systems including one in Nagshead, North Carolina. They've had a program in place for several years that provides incentives to their citizens to sign up for inspections, actually provide free septic system inspections. I believe the cost is paid by a rebate on their water bills and they have other incentives for maintenance and repair of systems where problems are found as a result of those inspections. So there are a number of models for doing more on a programmatic level to make sure that septic systems that may be properly constructed and properly cited continue to function as they were intended to do by having regular maintenance. That's another issue that the department thinks it's worth taking a look at as we move forward.

Finally there's a recommendation with respect to educating septic system owners about proper use and operation. We've done a lot of outreach efforts with local governments in programs like the Stormwater program where part of the effort is just to make people aware of the need to maintain and operate a system or make them aware of the consequences of the failure of doing those things. There's probably a significant need for that kind of education with respect to septic systems. A lot of folks and in my family when I was growing up had a septic system. I couldn't have told you anything about how that system operated or what needed to be done to maintain it. I think a lot of folks who buy houses with septic systems, the system is there and they know it's there but they certainly don't know much else. That's a real challenge in terms of making sure these systems are properly maintained. If you have any questions on the technical side Ted Lyons is here from the Division of Environmental Health. He had done an oral report at the January meeting of the Commission. He did most of the work of pulling the report together. What I would propose to do is as I said keep this report in draft form until the end of next week and any comments that Commission members have either today or if you would like to send comments by email we will try to accommodate those. We are also doing another round with the Division of Water Quality just to make sure we have the language in this report in terms of relating some of the data, the smaller datasets to the larger datasets that were used in the WARMF model so that we are not misstating the relationship between these things. There may be a few tweaks in language to make sure that it is as clear as we can possibly make it. I think everyone is comfortable with the conclusion and the recommendations. That's just a matter of

making sure we are not creating confusion in this report about figures that appear in the WARMF model versus figures that appear in this document.

Kevin Martin: Is there any thought given maybe into looking into something similar to what Wake County does? They adopted a program over ten years ago where in areas that aren't serviced by sewer they require that a larger amount of soil be required before a lot can be recorded than needed for a septic system and repair. In the watersheds that amount of area is larger than areas that are not in water supply watershed unless there's an on-site demonstration of adequate area of system and repair. My understanding from Steve Bristol at the County is that had drastically done two things. One is that it reduced their failure rates which were already low and number two improved protection to the public when they bought lots because their approval rates of permits on recorded lots were pretty much close to 99% after they adopted that. Because the due diligence was done on the front end. If it was considered and decided that it wasn't a good recommendation then I'd like to hear why. If it wasn't I'd like for you guys to give that some thought possibly as a recommendation for other counties to adopt a similar approach.

Robin Smith: I don't know and I will defer to Mr. Lyon. I know there are a number of local health departments that do things in slightly different ways and they have some degree of discretion.

Ted Lyons: We did not look at increasing area because we have the system and repair requirement which when it comes down to Wake County you can demonstrate that. You can get a lot approved and that's the way the rules are. That is our minimum now.

Kevin Martin: They did it through the planning and zoning, not through the health department but it was done on the front end before the lot was recorded instead of after. Not to imply that there's any kind of political pressure ever exerted on county employees to issue permits when they shouldn't but if you handle it on the front end before the lot's recorded instead of after or in situations where things have happened, then it seems to have been a good preventative. I don't know whether Wake County would agree with my statement or not but I think it has some potential merit.

Ted Lyons: I think most of the counties at least Wake, Durham and Orange are already doing that as far as the preapproval process.

Kevin Martin: Durham and Orange Counties do not.

Ted Lyons: We can look at that as an option.

Robin Smith: If I'm understanding what you're saying about Wake County it sounds like what they have is a minimum lot size in their planning and zoning.

Kevin Martin: It's not just a minimum lot size but it's a minimum lot size and on that lot it has to be documented that there is a minimum amount of useable soil before the lot is recorded. That's before the health department can be asked about a septic system because with the health department you can't apply for a permit until the lot's recorded and the counties have been

instructed by the state that they are not going to support them in doing preliminary evaluations. They are supposed to review permit applications. So that's the way Wake County has handled it. Because they have to come to the state for a change in their septic system rules they did it through their planning and zoning.

Robin Smith: That's an interesting idea but I'm not sure it had actually come to our attention as it's done through their planning and zoning ordinance rather than through their septic system permitting program. I will say part of what the report notes is that we think one reason that we're not seeing a significant contribution from modern systems is that part of it is a result in changes and planning and zoning for a variety of reasons including water supply watershed standards. You are seeing larger lot sizes. Some of those decisions that pushed development toward larger lot sizes are coming from directions other than septic tank regulation but having beneficial impact.

Kevin Martin: The inspection thing is important because there has been a number of studies where when inspections were done they were not required. In Union County 65% of the systems were found to be failing 15 years ago. But almost all of those failures were due to very simply rectified problems, not due to improper sitting like broken pipes or bad pumps and stuff. I thought the rest of the report looked very on target.

Yvonne Bailey: I was interested in this mandatory program that you looked at because one of the problems is enforcing things against individual homeowners. Part of what your report said is that you have clarify who has authority especially over those created prior to 1977. I was thinking about when you have to get your car inspected every year you can't get your registration or your license tag until you have that done now. So what kind of provisions do they have in these mandatory programs that you looked at?

Robin Smith: I don't think we really went down to that level of detail. We didn't look to see how they set up their enforcement mechanisms. We were actually just looking to see on a general level what types of programs exist in terms of mandatory or on a voluntary incentive base on management of septic systems. I think that if they were interested in pursuing that obviously that's a big question in terms of how you do get enforcement on a mandatory requirement. I don't have anyone in North Carolina who does that. The voluntary programs are incentive based and so they're relying on the property owner coming to the local government and getting an inspection done. They're using rebates to encourage people to do that in providing some low interest funding for repairs that are identified.

John Curry: This is somewhat related. In paragraph 3 under recommendations the jurisdiction question seems to suggest that if you have a number of failing systems and they were permitted prior to 1977 nobody knows who is going to enforce or get them repaired. Am I reading that correctly? Nothing is being done for many of them that were permitted prior to 1977.

Robin Smith: We are at the point in the process now with the Falls Lake Watershed where addressing these failing systems and/or discharging sand filter systems is something that can be addressed through the nutrient strategy. So this is basically flagging the fact that one thing we need to do more work on as we go into and perhaps starting before actually implementation of

the nutrient strategy but certainly as part of it is to understand better where all these systems are, who permitted them and what failable modifications or solutions might be available and how to get there.

Chairman Smith: Other questions or comments? If you would consider this a draft report and direct any comments, suggestions or questions you have into Secretary Smith by the end of the day a week from tomorrow.

Dr. Moreau: I just want to comment that EPA did an excellent report on management of decentralized of systems about five years ago laying out five different management models. If you haven't referenced that report you might want to.

Robin Smith: I believe that we mentioned it in the report because many of these mandatory programs in other states are based on those EPA guidelines.

Dr. Moreau: I find that to be an excellent report. That was very good.

Chairman Smith: Other comments or questions? Thank you Ms. Smith and Mr. Lyons. Next we move into our printed agenda.

II. Action Items

10-22 Request to Proceed to Public Notice with Proposed Rule Amendments and Rule Adoptions in Accordance with Session Laws (S.L.) 2006-246 and 2008-211

Summary (Robert Patterson): This is the same presentation that was presented at the March Water Quality Committee meeting in order to request permission to go to public notice. I have a real short presentation which I will give you some background of the Phase II rules. There were originally some temporary rules adopted by the Commission and then permanent rules were adopted in 2006. It went to the legislature where they were disapproved and replaced by S.L. 2006-246 which became effective July 1, 2006. We then implemented those as per the session law. Both of the session laws that we will talk about today have language found in attachment D that explained that the session law can be placed back into the Commission's rules as long as there is no substantive changes. S.L. 2006-246 includes both federal and state stormwater requirements related to the Phase II program. This is consistent with the original Commission's rules that the federal NPDES requirements would be placed into 2H .0100 and then the state stormwater portion would be put back into 2H .1000 along with the other state stormwater rules. It does include technical corrections that came from a third S. L. 2008-198. There were minor corrections about deed restriction language. Again, there are no substantive changes. There is some minor reorganization to better fit into the rule format. On the coastal stormwater rules the Commission originally adopted rules back in 1995 and those were revised in 2008. The legislature disapproved those and replaced them by S.L. 2008-211. Those became effective October 1, 2008. We have been implementing those as well as per the session law and proceeding to put that session law back into the Commission's rules. The coastal stormwater rules apply to the 20 coastal counties. The original Commission's rules were all in 2H .1005. At this point we are planning to put that entire session law back into that one section .1005. I just

want to note that creates four levels within the rules so we are still talking to APA to see if they are going to allow us to do that. At this point with new rules they can only have three levels but it would hopefully save some confusion if we can put the coastal rules all back to where everybody's familiar with them. Again it includes the technical corrections with no substantive changes. We are here today to get approval and hopefully go to public notice. At that point we will finish amending the fiscal notes. We have the original two fiscal notes for the Phase II and the coastal stormwater rules. We are still talking with OSBM on whether we actually have to amend those considering we are currently implementing those requirements, and that we cannot make any changes to those requirements. We would proceed to public notice and then back to the Water Quality Committee and EMC in July, and hopefully make the legislative session in 2011. The session law does specifically exempt us from doing public hearings but we do have to go to public notice, the RRC and the legislators just as if it was a new rule even though there's nothing that we can actually change in the content of the rule.

Motion (Dr. Peterson): On behalf of the Water Quality Committee I obediently make the motion that we take this out to public hearing. **Mr. Westall** seconded. The motion passed.

10-23 Request to Approve or Disapprove Local Governments' Jordan Nutrient Strategy Stage One Adaptive Management Programs for Existing Development, as Required by Session Law 2009-216 and for Delegation of Approval of Revised Stage One Adaptive Programs to the Director

Chairman Smith: This item comes out of our Jordan Lake rules not too long ago and this is a request to approve or disapprove local governments Jordan Nutrient Strategy Stage One Adaptive Management Programs for Existing Development.

Summary (Mike Randall): First I would like to mention that we did pass out a revised table that should replace the original table as attachment B because of some recent updates that we received from the local governments as far as their programs.

Forrest Westall: Our company does business with Chatham County. I don't think we had any direct involvement and development of their plan but I wanted to recuse myself from the Chatham County decision and would like to be able to vote on the remaining counties.

Jeffrey Morse: I remember years ago the EMC gave the authority to the staff on approval of watershed permits. It used to be that every permit had to come before the EMC for consideration and after a while we decided to delegate the responsibility approving those individual county permits to the staff. Are we heading in that same direction here?

Dr. Peterson: You will be pleased to know the Water Quality Committee voted unanimously that we approve that delegation here at our Commission today.

Mike Randall: Session Law 2009-216 directed the department to require municipalities and counties that were located in whole or in part in the Jordan watershed to implement Stage One Adaptive Management Programs to control nutrient loading from existing development. The session law required local governments to submit a complete Jordan Stage One Adaptive

Management Programs to the department for review by December 31, 2009. It also required the department to recommend that the Commission approve or disapprove these programs within six months of that submittal. Attachment A is a narrative that describes the Stage One programs including the five measures. The Division of Water Quality also provided a guidance document to all the local governments that described the measures and what would comprise an acceptable program. We had a number of conversations and exchanges emailed with several of those local governments. Four of the five measures of the Stage One program are identical to the Phase II measures, therefore the Phase II communities were only required to submit the retrofit opportunity of program. Local governments will also be required to submit annual reports on their Stage One programs. We are recommending this approval of some of the programs. DWQ contacted the disapproved programs and several local governments resubmitted those in time to be recommended for approval. Guilford County which will implement the Stage One program for itself as well as four smaller municipalities, within the county did not submit four or five measures because they were under the impression that they were covered under the Phase II requirements when in actuality they were only delegated to implement the Phase II post construction requirements for new development. Two local governments, Alamance and Rockingham Counties, must be more specific about the measures and in particular the timeframes when they plan to implement those measures. Alamance County resubmitted their plan on Tuesday but staff has not had an opportunity to review that submittal. The division recommends that the EMC approve or disapprove the submitted Jordan Stage One Programs as indicated in the revised table that was provided. The division also seeks delegation from the EMC for the authority to approve those Stage One programs that were disapproved and must be revised and resubmitted to meet the requirements of the Session Law 2009-216. Any revised programs that do not meet those specific requirements in the session law will be brought back to the EMC.

Chairman Smith: Let me say before we move into questions or comments. We're going to do this with three motions. One is this list except for Chatham, the second is Chatham alone and the third is the delegation.

Motion (Dr. Peterson): The Water Quality Committee met yesterday to hear this item. The committee unanimously recommended approval of what the division has presented to us. So I make the motion that we approve all but Chatham as requested. Dr. Larkin seconded.

Chairman Smith: asked for discussion or questions.

Kevin Martin: This just covers part of the Jordan rules. Will there be other local government like the parts that address buffer requirements that will come before us for approval for consistency with the state or will that not come before us?

Jason Robinson: Yes. We are actually reviewing buffer ordinances now and we will be bringing those before you as a separate item.

Kevin Martin: This is just delegating this portion.

Jason Robinson: Just the Stage One Adaptive Management.

Kevin Martin: But you may ask for that same delegation for the other stuff?

Jason Robinson: Possibly.

Kevin Martin: I just wanted to clarify what we were voting on, Dr. Peterson's motion. When you say approval are you saying approval of the one staff recommended and disapproval and approval?

Dr. Peterson: That's correct. Approval and disapproval as staff recommended. Thanks for clarifying that.

Dr. Moreau: On the Guildford County you mentioned the four municipalities of which all of these disapproved municipalities are Guildford County and will be covered by that issuance.

Mike Randall: Yes. All four of those municipalities. We have the two counties that were separate that were also not approved.

Dr. Moreau: But Guildford is going to manage for these four municipalities.

Mike Randall: Yes they intend to.

Chairman Smith: So in referring to this one page document that's headed Recommendations for Local Jordan Stage One Adaptive Management Programs for existing development. We have a motion that relates to all of the local government entities on that list except for Chatham. The motion is to approve those which the division recommends approval and disapprove those for which the division recommends disapproval. Any other discussion? Hearing no other discussion the motion passed.

Motion (Dr. Peterson): I recommend that we approve the Chatham County submission. **Dr. Larkin** seconded.

Chairman Smith: Any discussion? The motion passed.

Motion (Dr. Peterson): Finally, as Jeffrey anticipated like many others, the hard work has been done by staff and so they suggest and the Water Quality Committee agreed that I should make the motion that we delegate this process to the director in the future.

Chairman Smith: And this process being the approval or disapproval of local government Adaptive Management programs for existing development, is that correct?

Dr. Peterson: That's correct. **Mr. Westall** seconded

Chairman Smith: Any discussion? No discussion the motion passed. Mr. Martin thank you for pointing out that this relates only to the Adaptive Management Programs and not to the other sections of the Jordan Lake rules, particularly the buffer issues.

10-24 Request for Consideration of Hearing Officer Recommendations on the Animal Operations Monitoring Rules, 15A NCAC 2T .1310 - 1311

Summary (Dr. Peden): In June of 2009 Mayor Darryl Moss, Tom Ellis and I presided over public hearings on the proposed adoption monitoring rules for animal feeding operations. Among other requirements the proposed rules require the sampling and analysis of five water quality parameters. The proposed rules require these parameters be sampled from three locations three times per year. As a result of public input the hearing officers recommend the removal of fecal coliform and BOD from the list of required parameters. The three remaining parameters are ammonia, nitrate and chloride. Although this does not meet the threshold of a substantial change in the Administrative Procedures Act the hearing officers are interested in receiving additional comments on these proposed changes. Further review of the additional comments or after review of the additional comments we will make a final recommendation at a future EMC meeting. So on behalf of the hearing officers I recommend and move that the proposed rules as presented in the attachment A be published in the register for an additional comment period.

Chairman Smith: Would you modify that motion to make that additional comment period 60 days?

Dr. Peden: So modified. **Mayor Moss** seconded.

Chairman Smith: Before I ask for discussion let me give you a little additional information and update. If you remember back in the January meeting these proposed rules, I believe were on the agenda for the January meeting and we took them off. The reason was that, in December, I became aware that there was discussion and movement within the department particularly at the administrative level looking into trying to find funding for a study of the surface water impacts of CAFOs. That possible funding for a possible study had developed some significant interest and energy. Out of that grew a joint request from Secretary Freeman and this body, me as the chair of this body to Division Four of EPA, Stan Meiburg who has been acting director of Region IV that EPA consider funding a study and possibly either staffing it or helping to staff it. Secretary Freeman and I put that in a letter request. It was accompanied by a draft study of the parameters for EPA to consider that would entail a 2-year program of sampling surface water impacts from CAFOs particularly from the swine industry across North Carolina focusing on eastern North Carolina. That request to EPA is still working its way thru the EPA. The latest report that I have leads me to be very cautiously optimistic. Those of you that know me as an optimist will take that with a grain of salt but I am very cautiously optimistic that it may or may not work out. In the meantime the hearing officers thought that additional public comment on the change of those on the adopting of those two parameters would be a beneficial thing, gathering additional information but also giving the public ample opportunity to comment on those changes. The Waterkeepers Association have had a number of communications with the division and me and now with EPA about the possibility of EPA funding the study and about the specifics of the draft study. They recently submitted a multiple page set of comments on the specifics of the proposed study. All of this means that the efforts to look at surface water impacts of CAFOs, particularly the swine production facilities continues to be alive and well.

How it will all turn out we don't know yet but we have two parallel tracks going on at the same time. Having said that by way of update I open up discussion on the motion and the second.

Dr. Peterson: David, could you tell me and others what fraction of \$400 cost savings in making the changes from the original five parameters is associated with the fecal coliform? In a sentence or two what the logistics were for removing that as one of the parameters to be measured?

Dr. Peden: I'll get to the logics of the decision first. There was concern that was voiced that the fecal coliform was not clear whether we would be monitoring swine coliform or coliforms from other mammal sources or other animal sources. The potential confounding with that coupled with the technical aspects of the time requirements for taking the sample and making sure there's a very narrow time window that an operation has to get that particular sample analyzed or to get that sample properly analyzed. We were worried that there would be substantial muddy data as a result of that.

Dr. Peterson: Thanks.

Chairman Smith: Other questions or discussion? We have a motion and a second to send these rules out for additional public comment. This is not a public hearing but additional public written comment for 60 days.

Dr. Moreau: If we're going to pursue this study then we are talking about 60 days. Does that imply that we are going to take action on these prior to the study any conclusion that could be drawn from the study?

Chairman Smith: No it doesn't imply that. That 60 day comment period after that the comments would need to be digested and it may well result in modifications to the draft hearing officers report, and may well result in changes to their recommendations. What this 60 day comment period does do though is restart our APA clock so that we would have a year. These proposed rules would stay alive or viable for an additional year after the close of that 60 day comment period. Sometime during that period it is my hope that we are going to get word from EPA on if there's some other funding source. The department is looking into other funding sources and we will know whether or not there's money for a study and we then can decide whether we allow the study to be in lieu of the rules or whether we undertake the approval or disapprove the rules parallel to the study.

Dr. Moreau: These are very complex issues. Drawing instances from limited monitoring it would be helpful to be enlightened by intensive studies of what kinds of information you're going to get from the monitoring program. That would require more intensive investigations to understand how the sampling is representative or not representative of what's coming out of the system or not. For one thing I suggest that we talk to the Waters Resources Research Institute about setting a priority on this. We have some of the nation's best people working on problems like this and I just think we need to be enlightened by some more intensive studies.

Chairman Smith: The Waters Resources Research Institute is an excellent suggestion.

Marion Deerhake: Just for clarification are the comments being sought strictly on the change in the test methods.

Chairman Smith: Yes in the reduction from five parameters to three. There are some technical changes that have been made in the present set of proposed rules compared to what went out to original public hearing but this is not a request for additional comments on those technical changes.

Ms. Deerhake stated that she personally had some comments and she would be glad to talk to Keith Larick about it. **Chairman Smith** acknowledged her comments and to feel free to talk to any of the three hearing officers also.

Dr. Larkin: It seems that Dr. Moreau alluded to that there are additional data that may be forthcoming that would weigh on whether we should take these two parameters off the list or not. I don't know that the rationale that Dr. Peden talked about is in detail enough to understand whether we need to measure these things or not at this point. So even though we can send these out I hope that when it comes time to vote on what that list of parameters is that we were going to require to be measured we will have sufficient information to make a decision logically on what that list ought to be.

Chairman Smith: It might be helpful if the draft of the proposed study were sent to all the Commission members to review. That proposed study includes more than these three parameters. It includes the five original parameters. I think that the thinking is exactly like what **Dr. Larkin** and **Dr. Moreau** say if this study, or a study like it, gets funded the information that may come from that study would be valuable information for us whether it's deciding on these proposed rules or in modifying them down the road, either way. We would have to cross that bridge on what we do about these proposed rules once we learn whether or not there is funding for a study. But if there is no funding for a study we are back to where we were in December.

Dr. Peden: I think that it is useful for the Commission to know that while the three hearing officers may not have agreed on every aspect of this process we all agreed with **Dr. Larkin** and **Dr. Moreau** that we welcome the opportunity to see more data that is going to inform us as to which parameters were useful or not. My explanation suffices for why I agreed with removing it but nonetheless I think that we are all in favor of a study that would yield more data so that we would be regulated on the basis of better information and whatever rules get proposed moving forward would have enough support to survive the remainder of the process that would happen after our votes.

Chairman Smith: The big question right now is whether or not we can find the money.

Dr. Peterson: I point out that this action was precipitated by a request for rulemaking, a petition for rulemaking that we agreed with. So postponing this indefinitely looking for a study doesn't seem the right course but rather amending if we find from the study that follows that there are better ways to do this.

There was no other discussion and the motion passed. Chairman thanked **Dr. Peden, Mayor Moss** and **Tom Ellis** for their continuing service.

10-25 City of High Point's Request for Reconsideration of the November 18, 2009 WQC's Major Variance Decision

Chairman Smith: By way of orientation you may get this again. We changed our process in affect delegated the variance decision to the committee level with the opportunity for appeal to the full Commission. The Water Quality Committee heard this variance request November 18, 2009 and the City of High Point has requested that it be heard before the entire Commission. Mr. Martin has recused himself.

Amy Chapman: Back in November 2009 the Water Quality Committee approved a major variance from the Randleman Lake buffer rules which is 15A NCAC 2B .0250. The variance was needed to bypass contamination at the landfill. There is currently a stream on-site that's piped that will need to be moved because leachate is currently leaching into the pipe necessitating having to raise the pipe and move two streams that currently aren't piped on-site which requires a major variance. The PSS stream is currently an intermittent stream that is not piped that is going to be raised and altered and moved in order to bypass that existing NIS pipe under the landfill. An NIS stream which is called the Northern Intermittent Stream is intermittent and perennial is going to be raised and moved as well in order to bypass that existing pipe. Moving and raising the NIS stream and the PSS stream is what's requiring a major variance. Mitigation that the Water Quality Committee approved back in November 2009 was reduced from what is normally required for major variances. Zone 1 was at a 2:1 ratio instead of at a 3:1 ratio that is normally required so they will have to pay 26,656 sq. ft. of mitigation instead of the 39, 984 sq. ft. for Zone 1. For Zone 2 they had to reduce the ratio from 1:1 instead of 1:1.5 which is normally required so they had 12, 247 sq. ft. mitigation instead of the 18,370.5 sq. ft.

Amos Dawson: This is a project for the City of High Point and also impacts the Seaboard Group which is a group of companies that is performing a remedial action along with the City of High Point at the former Seaboard Chemical Corporation Facility in High Point. This is actually surrounded by the landfill on three sides. The major variance was approved by the Water Quality Committee in November and we received our water quality certification approval in December. We got the revised approval letter from DWQ that has the current mitigation requirements in January. That mitigation requirement is 38,903 sq. ft. which would result in a payment to the EEP of \$37,346. The city has already paid for wetlands and stream mitigation with a total of \$72,000. So if we're required to pay this \$37,346 we are basically being required to pay \$110,000 to perform this project. DWQ has given us an extension until July 1 to make this buffer payment. In February we requested reconsideration of this decision by the Water Quality Committee. We also filed a petition in the Office of Administrative Hearings to challenge the decision. It is hoped that we can resolve this today and be able to dismiss that petition in OAH.

The landfill, the subject of this project has been in existence since the 1950's. The Northern Intermittent stream was piped under the landfill at that time and is now covered with about a

hundred feet of garbage. It has leaks in it which allow leachate from the landfill which have merged with the contaminated plume from the Seaboard site which contains water chlorinated solvents and SVOCs. We are trying to avoid having stormwater coming through this pipe. As part of the remedial action plan for this site we are going to collect the leachate as it comes out of the Northern Intermittent stream. The sole purpose of this project is to protect and improve water quality in the reservoir. This is not a development project and there will be no additional built upon area. If the current situation were left in place, if this buffer was not impacted the effect on water quality in Randleman Reservoir would be far worse than if this project is allowed to go forward.

This is a very unique situation. In leaving the status quo not impacting the buffer actually has a worse water quality impact than removing this buffer by diverting the flow of this stream around the landfill so that it doesn't get mixed with contaminated leachate from the landfill. The city and the Seaboard group will spend an estimated forty million dollars on the remedial action at this site. We've already spent twenty-three million dollars. The companies that are paying for this didn't do anything wrong. They simply sent waste to a permanent facility that subsequently went bankrupt which is the Seaboard Chemical Corporation. They have spent the last 20 years investigating this site and vetting a settlement agreement with the state to perform this remedial action. These parties have done everything that the state has asked. We have done remedial study after remedial study. In 20 years we have spent twenty three million dollars out there. The plan is to bypass the flow from the intermittent stream around the landfill. Currently this flow is piped for over fifteen hundred feet under the landfill. We're going to impact about 109 ft. of buffer whereas fifteen hundred feet in this stream is in a pipe. This is not a high quality stream. The existing pipe will remain in place and the contaminated leachate will be collected, stormwater will be routed around the flow from what was the Northern Intermittent stream which will be around the landfill through the pump station stream. There is really no buffer on the pump station stream that is being impacted. The impact is almost exclusively to the Northern Intermittent stream.

The way we are going to treat this contaminated leachate is to extract groundwater from groundwater pumps that are located along the Deep River. We are going to pump the leachate and the extracted contaminated groundwater up to the top of the landfill. On top of the landfill we have planted 34-1/2 acres of trees which is 15,000 trees and in our opinion that ought to be enough buffer mitigation to satisfy the state. We are going to irrigate the trees and we are going to run the groundwater through wetlands which will extract the VOCs, and then irrigate the phytoremediation tree stands with the remaining 1,4-dioxane contaminated groundwater. We have extensive pilot studies and a number of species of trees both conifer and hardwood so if we can irrigate year round we are going to irrigate the trees with this contaminated groundwater with 1,4-dioxane. The trees will actually take the 1,4-dioxane up through their roots and phytovolatilize it through their leaves so we've got as green as treatment system as you can have. We will be pumping this groundwater far beyond the life span of anybody in this room 30, 40 or 50 years recirculating this groundwater. There is no practical way to pre-mediate the liquid chlorinated solvent that is in the bedrock at this site. That is why this project is so expensive.

The Randleman buffer rules currently do not require mitigation and no mitigation provision in the rules. There are new proposed rules that will require mitigation. Nevertheless the Water

Quality Committee in their discretion decided to require these 39,000 sq. ft. of mitigation. There was a slight reduction in ratio and we do appreciate that. We went into this variance thinking that we would not be required to make buffer payments. We knew we would have to pay for the 401/404 impacts which is the \$72,000. We budgeted and planned on that. But we did not expect to be charged for this buffer mitigation on this highly degraded stream when the only purpose of this project is to protect water quality. We would not be doing this if we weren't trying to keep this contaminated water from getting in and around the reservoir. The other reason we didn't anticipate that any buffer mitigation would be required was that previously the city had gotten a variance for at the Kersey Valley landfill. In that case in 2006 the Water Quality Committee granted a variance without any mitigation. The purpose of that project was to expand the landfill.

Mr. Dawson read to the Commission statements from the minutes of the Water Quality Committee by **Dr. Peterson** from November 2006 meeting. The city did not look at other buffer mitigation options for restoration or enhancement because the city did not anticipate that buffer mitigation would be required.

Amos Dawson: We have since done that and Bob Zarzecki here with S&EC will show you briefly the proposal that we have as an alternative. Our request is that no mitigation be required because this is a water quality improvement project and water quality would be worse if this buffer was left in place and this project was not done. So we don't think any mitigation should have been required. If you decide that you want mitigation we have an alternative proposal that would be done on a city park property. We have discussed this project with the staff. There is only 11,000 sq. ft. of our proposed restoration that would be within 50 ft. of the streams. But there is a total of 46,000 sq. ft. that we would be protecting. If you decide that you need some mitigation we think that this is adequate and we would ask that you accept this mitigation in lieu of a \$37,000 payment into the EEP. This would have significantly better impact on water quality in the Deep River Basin. This site is in the same basin very close to the site where the impact will occur. There is no private mitigation bank in our area so this mitigation would provide mitigation in the same watershed in the same area. If you decide in your discretion that you must have some mitigation then we would ask you to accept that. We're impacting a 109 ft. of the Northern Intermittent Stream. After that 109 ft. pipe runs 1500 ft. and the stream runs through a pipe. Most of this stream is a pipe stream and has very low quality.

Mr. Dawson showed the Commissioners a picture of the project area that shows the landfill and the Deep River. When the Seaboard Group and the City started doing this remedial investigation the Randleman Reservoir didn't exist and the Randleman buffer rules didn't exist. This was all from 1996 when the Randleman rules were adopted. The Seaboard is surrounded by the landfill on three sides and the remedial investigation that we've done has shown that the chlorinated solvents that were allowed to leak into the ground at the Seaboard site comingled with a contaminated leachate in the landfill. That's why the city and the Seaboard Group are jointly doing this project in sharing the cost on the Northern Intermittent Stream which is piped and comes out just below the landfill at the Deep River Randleman Reservoir. The PSS stream is where we are going to divert the flow from the NIS through the existing channel for the PSS, around the landfill and discharge in the Randleman Lake.

One of the great ironies of this case which each of you will appreciate is that we feel that we were basically required to do mitigation under the scheme in place for the Neuse and the Tar-Pamlico River Basin. Yet if this site were in the Neuse or the Tar-Pamlico Basin we wouldn't even need a variance. Neither one of these streams are on the USGS map of the Soil Survey Map. We kind of got the worst of both worlds. We were required to do mitigation under rules that don't require mitigation. We are dealing with streams that if we were in an area that required mitigation would not even have required a variance. The Northern Intermittent stream which exists just below the landfill is the stream that we are being asked to pay \$110,000 for mitigation. We have a list of constituents of concern that we have to treat at this site. There are some constituents on the list that have significant water quality detriments and our goal is to keep these from reaching the Deep River which is now the Randleman Reservoir. I understand that sometime this summer they plan to start pumping water, drinking water, out of the Randleman Reservoir. From the treatment systems that we are going to employ we are going to collect leachate from several of the sites around the landfill. We have extraction wells at the Deep River but that will all be pumped up to the top of the landfill where the contaminated groundwater will be run through a constructed wetland treatment system which will remove the VOCs, the hard to remove constituents of 1,4 dioxane. That pretreated groundwater will be used to irrigate these tree stands. There are 15 tree zones comprising about 34-1/2 acres with about 15,000 trees that have been planted. We have planted different species of trees and we have got a mix of hardwoods and conifers which will allow us to irrigate year round. Until this system becomes mature which we expect to take about seven years for these trees to reach maturity we have a chemical oxidation system that is very expensive to operate will be pretreating the groundwater and discharging it to the City of High Point. The east side pretreatment plant is directly across the street from this site. We have different species of trees at the site in case we have a problem with one particular species. The idea is that we are going to treat these systems naturally.

I want to make a few points and then I will turn this over to Bob to present our alternative mitigation proposal to you. First of all this is a water quality project. We believe everybody has been sympathetic to our position here, we've got forty million dollars in cost and we shouldn't have to pay for things that aren't necessary. This property mitigation is not necessary. We are enhancing and protecting water quality by this project. We are not degrading water quality. The Kersey Valley project in terms of impact to a degraded stream was very similar and sets a precedence established by this Commission. No mitigation was required for that variance. The staff seems to be concerned about the precedence that would be set. I would submit to you that this is clearly a project that deserves to have a different result because of its great water quality benefits. It's a project that is easily distinguishable from any other projects that I'm aware of. If you don't do the project you have more adverse effect on water quality than if you do perform it. We intend to protect the water quality in Randleman Reservoir. The Division of Waste Management has approved this project. This site could have been a Superfund site. Bill Meyer who was the director the Division of Waste Management at the time wanted to keep this a state directed site and the state has worked with the members of the group and the city to keep this as a state led site rather than a Superfund site. If this were a Superfund site we wouldn't need these permits and we wouldn't need this variance. We are trying to do our best to protect water quality. We would like some support from the state agencies in terms of helping us get to that end result which everybody wants.

Dr. Moreau: I'm trying to understand exactly what the nature of this project is. My understanding of it is that you are going to divert stormwater around this site thereby reducing the volume of flow through that 1500 ft. pipe. It will make that leachate smaller in volume and therefore easier to treat.

Amos Dawson: That's correct. Of course in extreme storm events it's not practical to treat all that water because you can't contain it all. We looked at alternatives. We looked at trying to line this pipe or put another pipe in but there was not another technically feasible solution for this.

Yvonne Bailey: Are you going to be eliminating the discharge that's going into Randleman Lake right now when you move the pipe? Is the discharge point going to go into that intermittent stream?

Amos Dawson: We will be collecting the leachate. It goes into the pump station stream around the landfill. With the clean stormwater it will go around the landfill through the existing pump station stream. Nobody even knew it was a stream until DWQ came out there and identified it.

Yvonne Bailey: So you're eliminating an unpermitted discharge of contaminated groundwater that is called a stream but it's not a blue line stream and then you're disconnecting that pipe basically and then piping it to another place?

Amos Dawson: Exactly. The pipe will remain in place but we will have a collection system at the bottom to collect the leachate. We can't collect the leachate, the stream flow and the stormwater because it is too much volume.

Dr. Moreau: They're not eliminating that discharge.

Amos Dawson: The treatment system that we employ will eliminate the discharge completely. This is a part of the project. There won't be any flow other than the contaminated leachate that leaks through the holes in the pipe.

Chairman Smith: It might be better if we let the state be heard and then we can ask questions of both sides where both sides can have an opportunity to answer the questions we do ask.

Bob Zarzecki: Once we identified after the November approval that buffer mitigation was going to be a condition of the variance we started working with the city to look at alternative options other than payment into EEP. We worked with DWQ and they granted us an extension for the requirement of the payment until July of this year. That's the kind of timeframe we are working under as well as the timeframe of them proposing they would begin work at the NIS and start doing that construction this year. One of the parameters we looked at was trying to identify properties that were already under control or ownership by the city. That's the largest cost associated with the mitigation project. We identified work with the city and identified six sites. One of the sites which seemed to be a good candidate site is called the Grimes Taylor. It's the stormwater stream restoration project that drains the downtown area of High Point. That is a significantly long project. It's going to do a lot of benefits for the stream for water quality and

we are not asking for any compensatory mitigation credits. We attempted to look at that project as a possible offset for these impacts. DWQ was uncomfortable with the fact of some of the details of that and the city was unable to modify the project such that it would help get closer in line with the standard buffer mitigation projects. So the second site we identified was the Cedar Parks site. The park has an area which is currently a maintained grass field. It's just an open place basically an open field that's being maintained and gets a lot of use by primarily geese. There are two streams one large perennial stream on the southern portion of this site and a stormwater discharge channel that forms into at least an intermittent stream on the eastern portion of the site. The proposed location is between the confluences of those two streams. We only have about 11,000 sq. ft. of restorable area within the first 50 ft. In the next 100 ft. we have almost 19,000 sq. ft. and then if the entire inner stream divide area comes out to a total of about 46,000 sq. ft. It is a pretty significant area that we are talking about. We have not gone into detailed plans with it yet pending the decision today. What's been discussed with the Division of Water Quality staff was to put the area under a conservation easement to meet the minimum requirements of the planning requirements of the rules which would be two native hardwood tree species on at least 320 trees per acre. We're proposing 8 ft. spacing plantings of these trees which would yield 680 trees per acre. We would propose monitoring of those tree species. Also, a clear identification of the area so that park maintenance personnel do not go in there and externally hit the bare root seedlings that would be planted. I think it's a great site just for us to provide an equivalent amount of square footage we do need to go outside of 50 ft.

John Payne: If you have any legal questions I will answer them.

Dr. Peterson: Mr. Dawson made the assertion that there was no Randleman buffer mitigation requirement or a rule in place and that we as the Water Quality Committee acted without that support. That's a question that I pose. We certainly had been advised by staff that there was that requirement in place and that's why we moved to the compromise that we did by reducing the ratio of mitigation from 3:1 and 2:1 stretching from 2:1 to 1:1 in the other. Can you comment on the state's position on whether there was indeed a mitigation requirement in place at the time of our action?

John Payne: From a legal standpoint DWQ went under 2B 104R which allows a variance. The rules do allow for a variance. They do not allow for impacts necessarily. It all just discusses riparian areas but not necessarily buffer mitigation. However it does allow for variances and DWQ went under 2B 104R which allows for the Commission to approve a major variance with conditions and stipulations. Some of these stipulations and conditions were because there were buffer impacts even though it does not allow for necessarily in the rules this is a variance. I would think that common sense would dictate that because buffers were impacted you would then account for them again in the variance procedures. I think legally yes you did have jurisdiction and that's why it occurred that way. That is probably where Amos and I disagree. I would say because you did impact those buffers that it does need to be accounted for even though it is not specifically enumerated in the Randleman Lake rules. Does that make sense?

Dr. Peterson: That does and clarifies matters.

Yvonne Bailey: The variance procedure gives the Commission the authority to make the decision on this. I think that is what you were just saying. Then a variance is normally a request to vary what a requirement is in regulation so what regulation are they trying to vary from. Zone 1 says you can do this but you can't do that. So is it that they are trying to do land disturbing activities? That is the part I can't follow when you go back into the regulations whether they're getting the variance from.

John Payne: It is probably more general than that. If you're asking my opinion it would be that buffer impacts are not even intended in this and you're getting a variance from that even though it is not included. It is the absence of the negative. I understand what you're saying and it is a very good question. Buffer impacts were not even included in the Randleman Lake rules. It doesn't specifically say we don't want buffer impacts. That is what you are getting a variance to.

Amy Chapman: Currently at .0250 there is no use allowed for altering a position of streams so if you're moving and raising the bed of a stream that is prohibited because it isn't listed. If it's prohibited you have to get a variance or you can't do it. So what they are proposing would require a major variance for the NIS and the PSS stream that they reference.

Yvonne Bailey: That helps me. Part of what I was wondering about is when you raise a stream, this is stream that's in a pipe below the ground, so when you say raise the stream you mean that it is now going to become a stream with banks or are you just raising the pipe?

Amy Chapman: Currently there are two small sections of two different streams on the site that aren't piped. There is a piped stream underneath the landfill and that's the one they want to address because currently leachate is getting into that pipe. So they are going to reroute the piped stream and they are going to have to raise and move a portion of the NIS and PSS stream. So there will be small sections that aren't piped now that are going to be altered. Those small sections are the ones that will require the major variance.

Yvonne Bailey: When they do reroute those streams and raise them up as maybe by the 401 program are they going to be having a nice slope of vegetation put in those as part of that program? It's not going to be exactly like it is now.

Bob Zarzecki: We did receive a nationwide permit for activity for that impact to the stream of the wetlands. It's a nationwide permit that's associated with hazardous waste cleanup. The NIS is at a level elevation below the landfill and then it goes in the pipe underneath the landfill. They are raising 109 ft. of it which is the head waters of it. There's no stream above it. It discharges directly into the lakes. There is no parameter stream below it. They are raising that all the way up and then they are putting in the new pipe to carry up and around the landfill, then they are discharging that into the pump station stream. There are no impacts proposed to the pump station stream other than at that discharge point which is about 15 ft. of bank. They have to put in a dissipater to make sure that it doesn't have water supply. 109 ft of stream will be removed and that area will be raised up and there be in a new inlet installed there. Storm flows overland and flows will go over to that inlet and be pumped around to that other stream.

Jeffrey Morse: The streams if I heard an earlier testimony to the fact that they're not intermittent and they are not listed on an existing blue line. Am I going in the right direction?

Amy Chapman: Normally you are going in the right direction but the Randleman rules are different. It's special. It has a "kick in" clause and if staff from DWQ or delegated local government that have been through the stream ID training actually go out and see that there is a stream out there that is not on the maps they can kick it in.

Jeffrey Morse: Now you are using the Randleman rules. So in one sense we are using the Randleman rules and the other sense we are not. We're doing a cafeteria plan.

Amy Chapman: Right. From the variance process we have to go back to another rule.

Dickson Phillips: Really the buffer that we previously said and agreed with being impacted was the buffer on the 109 ft. stream that's going to be newly raised and piped? Is that right? We're not requiring any kind of buffer mitigation for the 1500 ft. of pipe that was under the landfill. It's the 109 ft. upstream from the pipe that's being raised and now piped so there will be no buffer.

Amy Chapman: Right. If the stream is actually piped there is no buffer.

Dickson Phillips: With respect to the 109 ft. upstream was there a functioning buffer?

Amy Chapman: Yes portions of it were.

Forrest Westall: I just wanted to make sure in all of the discussion that my understanding is the project to intercept the leachate stream will be raised above all the natural stormwater flow that comes off flow will be diverted around the landfill. The pipe that is in the landfill will be left in place and any leachate or groundwater or any kind of water that goes through will be collected down at the end and will be ultimately put back to the remediation site and land applied to that.

Amos Dawson: The pipe will no longer be a conveyance. It will be a collection system.

Forrest Westall: So there will be no flow from the landfill. All of that will be recycled.

Dr. Peterson: Could you inform the Commission if this were the applicant's mitigation offer what fraction of the total mitigation would be required if they went through EEP would be given credit for this particular plot that they have suggested that you just described?

Amy Chapman: We would typically give an applicant the credit within that 50 ft. which would include the eleven thousand and some odd feet and then require them to pay EEP for the remaining square footage which is twenty some odd thousand.

Dr. Peterson: I didn't quite catch that. What fraction would they get in credit for what would be owed if they paid twenty thousand or whatever it was to EEP?

Amy Chapman: About 1/3 wouldn't get the credit outside of the 50 ft. for the plantings that they are proposing.

Dr. Peterson: But would those plantings provide some service? It's just not part of the way that we compute the zones and apply a credit.

Amy Chapman: Correct. There are also studies that we have been looking into that say once you go beyond the 50 ft. the nutrient removal drastically decreases.

Les Hall: I don't understand the leachate. I assume that this is the first time that anyone heard about the alternative mitigation. So this Commission would approve alternative mitigation with no additional payment.

Amy Chapman: That's your call.

Chairman Smith: Is the Commission's ability to accept the proposed alternatives in lieu of the buffer mitigation legally allowed? I am directing that question to Ms. Chapman, Mr. Payne and Mr. Dawson.

John Payne: I would say that it would have to fulfill the purpose of the rule that you legally allow if you so make that choice.

Amos Dawson: There was no buffer mitigation required under the rules. Interpreting your general watershed rules and .0204R it says you can require conditions and stipulations so my understanding what the Water Quality Committee did was say that we're going to use our discretion and come up with some mitigation for this project that doesn't meet any rule. If that was your initial determination then it would seem to logically follow that today you could say we are going to require mitigation but it's going to be a little bit different. It doesn't follow on any rule. John and I agree that you have the authority to require conditions or stipulations. What we are asking you to do is if you want mitigation give us full credit for the Seaboard project. We've met with the staff and tried to resolve this informally through a settlement. They basically came back and said we would accept the 11,000 sq. ft. but we want you to pay the difference into the EEP which is not an option for us. That ends up costing us more than making the EEP payment.

Chairman Smith: I understand. In response to **Mr. Hall's** question what I hear is that under our authority to impose conditions to a variance a condition we could impose is the alternative that Mr. Dawson proposes to us. Is that correct Mr. Crawley?

John Curry: Your proposed mitigation alternative to the open area or the park area which is owned by the city that essentially cost you nothing or is there a cost associated with it?

Amos Dawson: Well we have already spent a considerable amount of money with Mr. Zarzecki. If the Commission required us to make the \$37,000 payment we would be in the hole an additional \$10,000. This is a cost where we are going to have to fence that area and plant the trees which are a cost. We estimated that cost to be around another \$10,000. The rules were not exactly followed in this case. If you look at the general watershed rules of the Commission in

.2B104R it says that if the Commission grants a variance with conditions they're supposed to send it back to the local review board for final decision. In this case DWQ issued the final authorization with the mitigation requirements which is what's done under the Neuse and the Tar-Pamlico buffer rules. We have really got a mishmash here. We don't think the proper procedure was followed. We would ask that if you grant our request for reconsideration and allow us either no mitigation or the procedural mitigation that you follow these rules, and send it back to the local review board for a final approval. I think John and I agree on that but I just wanted to make that point.

John Payne: I want to respond to Mr. Hall in a little bit more detail. Under .2B104R subsection 2 and this is what I would be speaking to it says you can issue a variance if it's in harmony with the general purpose and intent of the local watershed protection ordinance and preserve its spirit. I may recommend that you specifically state that when you issue or decide to grant this.

Yvonne Bailey: This is a question for the state. We were talking about this is not a mainline stream. You went out in the field to view the streams to see if it had met the criteria. Then we were talking about the 109 ft. impacted because it's basically going to be filled so can you tell me what upstream of the 109 ft. is being taken out?

Amy Chapman: There's some forested area and open fields.

Yvonne Bailey: Is there any stream channel?

Amy Chapman: Not really.

Yvonne Bailey: So it's headwaters.

Amy Chapman: It is the headwaters.

Dr. Moreau: I have a question that goes to the water quality benefits of the diversion of the water around the landfill and you're going to reduce this periodic stormwater flow through that 1500 ft. pipe by this action, what are the limits on discharge from that 1500 ft. pipe without the diversion and with the diversion?

Bob Zarzecki: Unpermitted discharge.

Dr. Moreau: That's an unpermitted discharge. Is your collection of that leachate a voluntary action or is that part of a mandated cleanup?

Amos Dawson: This is part of the remedial action plan. In your appendix of the agenda item there's a copy of the Remedial Action Settlement Group, Seaboard Group and its members entered into with the Division of Waste Management. We're required to complete this function.

Dr. Moreau: What I am trying to get at is you put in the diversion of this pipe to carry this stormwater around to surface water thereby reducing this volume making it much more

manageable by collecting a smaller volume of water to be treated. Do you have to collect all of what comes through that pipe to be treated if you didn't put in this diversion?

Amos Dawson: Yes we would have to try to treat it all.

Dr. Moreau: Well what is the penalty for allowing overflow or a bypass?

Amos Dawson: There isn't a specific penalty that I know of. We're taking an existing situation. The pipe was put in by the landfill years ago. There was no direct discharge. What's happening is the pipe just started leaking and the leachate started going through the cracks. But we are trying to address the existing situation that is unpermitted.

Dr. Moreau: Well it seems to me if those facts are correct that there will be a significant water quality benefit by eliminating any possible overflows or bypasses during storm events that will make this a much more manageable system so that this diversion pipe has a significant water quality benefit.

Amos Dawson: We are taking an existing NIS stream pipe and blocking off the inlet and so it will not convey stormwater or surface water to the lake but will be diverted around.

Dr. Moreau: So is there an NPDES permit on that outlet that you showed?

Bob Zarzecki: There is not.

Dr. Peterson: I had a perspective on this that's a little different. That is the remediation planning. If it didn't involve destruction of and piping the headwaters to the stream that exists, it strikes me should require the amount of water including stormwater that comes through that pipe inadvertently should be treated. This action is one that makes sense likely economically but the leachate should be required to have been removed from that piping in any event. This becomes economically appropriate but also has the problem that it destroys headwaters of this stream which are not found piped that has a consequence. That consequence is that the stream headwaters are areas where there is substantial treatment by vegetation. I admit it's not all vegetation in that region and it's not all the sort of vegetation that one would like but that's the action we are trying to preserve. That is to say that one can't simply destroy 109 ft. of headwaters of the stream, elevate it and turn it into a pipe by the water quality sorts of philosophy that we apply here and in other places. That generates another question following on Ms. Bailey's comment. If those headwaters are no longer there at that elevation collecting stormwater from the region where does that stormwater now go? In other words there's an issue that this was an outlet for regional focus of stormwater collection that then in part contributed to that stream. I'm curious about the topography and the consequences of that and what that might cause in the way of erosion, new channelization and where that then flows.

Bob Zarzecki: They are going to raise the area by the current intermittent stream to a matching elevation up such that it can drain by gravity flow into a pipe which will then take it around to the pump station stream. Discharge into the pump station stream after the velocities have been adequately addressed to be non-erosive and then flow through the pump station stream to the

reservoir. I don't have any photos today of the pump station stream. There's a lot of question as to the quality of that pump station stream. It is very similar in some regards to the NIS in that this area has been graded out. It's not part of the fill of the landfill but the area has been graded out. This area has been raised years ago. But it hasn't been raised to the point where it requires it to be in a pipe. It was actually raised where you can still get gravity flow over the graded and filled area before discharging into the lake. It's fairly rock-lined already. It's a man made modified stream channel.

Dr. Peterson: I still don't get the direct answer to my question. There's some area that's topographically now with stormwater drains into what we are calling the headwaters to 109 ft. of stream that will be destroyed, elevated and piped. Correct? So you could go on a topographic map and you could identify the area that now drains into that. I don't understand now where it all now drains necessarily from the new topographic delineation that you are identifying and what that drainage area for the headwaters was before and what it's doing under the new plan.

Bob Zarzecki: I don't have a detailed topo of the entire watershed. But I have a USGS map that shows the headwaters of the NIS and pasture land. There are some trees around the NIS and headwaters at the beginning of the stream. There is a pre existing topography of that NIS going into the Deep River and the area around the Deep River drains into the NIS.

Dr. Peterson: So the drainage from that area ultimately goes into the pipe.

Bob Zarzecki: It will capture everything that historically drains to that NIS.

Dr. Peterson: So I don't understand the answer to **Ms. Bailey's** question that if there will be new headwaters created by this section?

Bob Zarzecki: I think that is incorrect. I don't think we are increasing the area of drainage at all.

Dr. Peterson: That is what I was trying to clarify.

Donnie Brewer: Does that pipe sized to carry that upstream drainage area?

Bob Zarzecki: That's right. The engineer is still evaluating that a little bit. It was originally proposed at 36. He is actually considering possibly upsizing that a bit. But that thirty-six is even larger than the current pipe under the landfill. Under the current engineering standards he's had that pipe adequately sized.

Donnie Brewer: I just wanted to make a comment. **Mr. Curry** and I both served on the Randleman rules as hearing officers. We were trying to get some consistency in those rules with the Tar-Pamlico and the Neuse to the point of just referring to the USGS maps and the Soil Survey Maps. It was brought to our attention that cases like this exist quite often in that watershed and most of the local governments wanted to use site specific maps so that these cases where you had streams falling through the cracks didn't occur. So we went back and did that. As a tradeoff to that we also allowed mitigation past the approval date of those rules but having

listened to all of this and also sat in on the original Water Quality Committee meeting where we required the mitigation, it is pretty obvious this is a really good project. The way they are going about it seems like the best way that they could to actually be able to treat the polluted water that they need to, take the clean water and divert it around this landfill area. I personally would like to say that I want to give them every consideration that legally that we could to move this project forward.

Dickson Phillips: I am addressing this question to the staff. Mr. Dawson who is heroically appearing today is really making the argument that because this project has water quality improvement purpose effect that we should exercise our discretion not to require measures that otherwise would be required in the interest of protecting water quality because of negative impacts from a project. I am inferring that the staff has concluded that this project nevertheless does not so clearly fit into some separate category as to justify an exclusion from the requirements that would otherwise apply. Would you like to address that and am I making a proper influence?

Amy Chapman: You are. For consistency sake we have asked for mitigation. This is a different project from most projects that we deal with. Yes they are increasing water quality. This is something that is not going to come before the committee very often because there aren't very many landfills that have to clean up and do this exact scenario. So with that being said we required mitigation for consistency and that is basically all that I can say at this point. I won't say that we can support them not doing the mitigation because the Water Quality Committee had said that they do the mitigation. That is why we are here today. Did that answer your question?

Dickson Phillips: What position did you take back in November?

Amy Chapman: We took the position to require the full mitigation to be consistent with other major variances within the Randleman Lake watershed that had been issued by the Water Quality Committee in the past.

Dickson Phillips: So I guess you are saying that you have concern if we should not require some form of mitigation, then other projects will come forward and say we are actually having a water quality impact notwithstanding building these condos, then we are doing this and it is actually going to have an impact. Therefore we should not have to pay mitigation.

Amy Chapman: I would just ask that today if the EMC does say that there is no mitigation required that it's just very explicit as to why this project is different and why the mitigation wouldn't be required or only partial mitigation.

Forrest Westall: I looked at this really closely. In a perfect world this landfill would have been lined and we wouldn't have had this issue. But it is obviously a 1950 landfill so we are dealing with a situation. They are wrestling with that. Through the Division of Waste Management if they change their mitigation plan it would have to go back to waste management for approval because they have approved what's been proposed right now. I agree with Pete's comment. Typically when you are dealing with uses in buffer area you don't obliterate the buffer. This is a project that obliterates the buffer. There's enough elevation in the drainage basin that they can

raise it so they can still collect the water from that and move it around and send it to the pump station stream to do that. Looking at it from an engineering standpoint there's really not much else that you can do.

Based on this, I make a motion to approve the secondary mitigation plan as submitted by the city to accommodate in the spirit of the rule the objectives consistent with the spirit and the intent of the rules in place for the Randleman Reservoir. I think that this approach represents mitigation that is within the watershed which to me is ultimately better even though some of it is outside the 50 ft. buffer; it is still superior to paying into the mitigation fee which would be built somewhere but not necessarily that close to the watershed. I would make the motion that we approve that and that we allow the alternate mitigation. **Dr. Peterson** seconded.

Chairman Smith: For point of clarification are you talking about the Cedro Park mitigation proposal made by the City of High Point?

Forrest Westall: That's correct. That is based on approval of that in a development of a specific plan.

Yvonne Bailey: What I have a question about is the 104R issue that had been brought up by Mr. Dawson and Mr. Payne about the local Watershed Review Board. I'd like to understand that when we make our decision will it now automatically now go to that local Watershed Review Board for a final decision?

Chairman Smith: My understanding from both Mr. Payne and Mr. Dawson is that they have been in agreement on that point and that is the proper process.

Yvonne Bailey: So once we make our decision then will it be referred to that local Watershed Review Board?

Both Mr. Payne and Mr. Dawson stated yes.

John Curry: I heard the motion and what **Mr. Westall** said prior to the motion. The only thing that was a little confusing to me is I believe you mentioned that the old Randleman rules required mitigation and my understanding from the discussion is that the old Randleman rules don't. The only reason for mitigation is consistency and that the EMC has the discretionary authority to impose mitigation or anything else.

Forrest Westall: The clarification on that is when the proposal came up before staff recommended 3:1 and 1-1/2:1. The Water Quality Committee already modified that. I concur that the Randleman rules themselves don't necessarily include mitigation for buffer impacts but as was pointed out this project is really outside the total realm of what buffer allowances are. It obliterates the buffer. So that is why the staff recommended the mitigation for it because it was that based on the rules we had the authority to require additional conditions changing that. We still have that. Mr. Payne quoted from the rules that say that any action that we take relative to that needs to be in the spirit and trying to accomplish what the rules are. That is why I stated that in the motion.

Dr. Peterson: I wanted to give people a quick respective on the procedure here. We did build in actions or decisions of this sort when we delegated at the Water Quality Committee meeting. We did build in the appeal process to the full Commission so this is the process that we had anticipated and it is perfectly appropriate. I also wanted to say when it came before the Water Quality Committee we were guided by a professional presentation by Mr. Zarzecki and the expertise on the Water Quality Committee in many different areas. We looked at this quite closely and we deviated from staff recommendation by compromising at that time. We reduced the amount of buffer that we should be required to still be consistent with our philosophy about the importance of buffers and maintaining their function. This item today has come as something of a surprise to me because we had already taken an intermediate ground but I actually liked the notion of doing something that the city can themselves do that the city can own and be proud of and protect in the basin. We didn't have it before us then. So that looking at as an alternative that arose today has some appeal to me and I am not wedded to my vote of two months ago. Rather I have been listening and that is why I seconded that motion.

Chairman Smith: I have two questions of Mr. Dawson before we vote. If we pass this motion so that we accept your alternative mediation proposal will that result in withdrawal of the action before the Office of Administrative Hearings? Secondly, I think that this is a singular project and I think that it is easily separated out from future projects when we hear the precedence argument down the road which we will hear. But I think it would be wise for us to have a list of specifics that result in us considering it to be a singular project that is easily distinguishable. I would ask Mr. Dawson, Mr. Payne and Ms. Chapman if you would be willing to put together a list of distinguishing characteristics that would be a part of this record.

Dr. Moreau: One of those as I eluded to a while ago is the fact that if we put in the buffer it's to protect the stream quality. What's happening as I understand it in this case is by moving this stormwater from going through the pipe we're avoiding the contamination of stormwater by the leachate from the landfill. That is a significant improvement to water quality which would not otherwise occur even if you hadn't done mitigation on the upstream end. That's why I am comfortable with the proposal on the floor because it results in an improvement in water quality which is ultimately where we are headed with any question about mitigation.

John Curry: Is it your intention to have some or all of those characteristics included in the language of the motion at a future date? I think that would be a good idea.

Chairman Smith: I would put that question back to the Commission. I would need some advice on how to do that in maintaining our compliance with the open meeting laws. We can't do it by having a proposed draft of distinguishing characteristics submitted by email and approval by email. I hate to put this back on the July agenda.

Dr. Peterson: I believe a half hour might suffice if the parties are willing to invest that and bring it back to the chair and we could vote on it a half hour from now.

Chairman Smith: Could you three caucus and put together a list for us? When you come back in we will put you back on our agenda and we will hold our vote until we see that list. Thank you.

Forrest Westall: I don't agree that the characterization of this stream is not being real valuable. One of the things that we found is that upland streams or intermittent streams and even ephemeral features on the ground are extremely important in removing pollutants before they get to actual larger streams and drainage systems. So it's not with ease that I recommend that allowance of doing that. I just think that it is the only solution that's reasonable in this particular situation.

Chairman Smith: With that final comment we will table this for now and come back to it in a few minutes.

Dr. Moreau: We have a motion and a second on the floor. We need to vote to table that.

John Curry: I move to table that.

Chairman Smith: I have a motion to table the motion. Seconded. Motion passed.

10-26 Request to Proceed to Hearing on Amendments to Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NA NSR) Rules to Include PM2.5

Summary (Joelle Burleson): We had a discussion yesterday at our Air Quality Committee meeting regarding this item. Ms. Deerhake had asked that we provide a slightly revised agenda item description. We plan to take proposed amendments to Rules 15A NCAC 02D .0530 which is prevention of significant deterioration and 02D .0531 which are sources in nonattainment area rules to include particulate matter that is 2.5 microns or less in diameter and regulated as part of the National Ambient Air Quality Standards. Together, these two Rules represent North Carolina's New Source Review permit programs. The amendment action is required by federal law and it may benefit air quality through a reduction of PM2.5.

The USEPA's Clean Air Fine Particulate Implementation Rule guides the states in how we develop our implementation plans in response to annual or daily PM2.5 nonattainment. It establishes a hierarchy of precursor pollutants for PM2.5. Those pollutants include: sulfur dioxide which is always considered a significant precursor, nitrogen oxide which is presumptively a significant precursor, and volatile organic compounds and ammonia which are presumed not to be significant precursors. Under both the PSD and NA NSR programs, primary, condensable, and precursors to PM2.5 are important. The NA NSR program is a bit more restrictive than the PSD program in terms of what it requires. There are requirements for offsets obtained in order for construction to proceed. That is to ensure that the nonattainment area continues to work rapidly toward reaching attainment as part of this process.

The proposed amendments set out in 02D .0530 and 02D .0531 set a significant level for NOx in North Carolina at 140 tons per year instead of 40 tons per year as listed in the federal emissions

guidance document. North Carolina is a state that has an approved NSR PSD vs. a delegated program which would strictly take EPA's program verbatim. We have looked at our monitoring and modeling data and we believe that demonstrates NOx to be less reactive to the formation of PM2.5 as SO2 by a factor of 3.5. Additionally, we have some amendments in these rules that include modified rule language to better reflect USEPA's language and that is primarily in .0531(t) for intent that it just be a clarification of the way the federal program has its notification requirements structured for the FLMs. We also have some language that was inadvertently removed as we have two NSR PSD rulemaking actions in process at the same time. We are recommending that be replaced and that language relates to whether or not we would be adopting future amendments to the federal program that are incorporated by reference or only those as of a specific date. If you see italics in the rules that is language that is in process already and has been through the public hearing process. We are in the midst and will be coming back to you regarding those changes. That is why that distinction is made in the rule. There were some issues that Ms. Deerhake asked us to address.

Ms. Deerhake: We talked about this some more yesterday at the Air Quality Committee meeting. Since the committee approved it we have since received the economic assessment that went along with it. There was some information there that was very informative and actually raised more questions for me. I appreciate the staff taking time to discuss it with the committee yesterday. For those who have not been involved in this on a regular discussion basis just to make sure that everyone understands there's regular particulate matter and PMfine. Chairman Smith said there's a very good display at the Science Museum. It shows how PMfine affects your lungs and I am sure **Dr. Peden** can address this too. But there is also what they call secondary PMfine and that's where it's an aerosol that is acting like a solid and it can be formed through a combination of the presence of gaseous ammonia and gaseous nitrates. NOx, nitrogen oxides, and gaseous sulfur dioxides when they form they create a fine aerosol particulate. That's what this is addressing in many ways today.

We had discussed this in the past. I had asked questions about the fact that they were assuming that ammonia was a non-significant precursor to the formation of PM2.5 and the division explained why they continued to support that. We received the economic analysis. It brought to mind for me why the state is wanting to move from 40 to 140 as the trigger level for this particular scenario for permitting in a nonattainment area. Yesterday we discussed what the motivation was for the state choosing a number different from the EPA's default value of forty. The explanation that was mentioned was dealing with the analysis of monitoring data and modeling information. I asked some questions about how representative the monitoring data was for the year 2009.

We also had a discussion whether or not EPA had been notified if this change was going to be proposed. Sometimes they do talk with EPA ahead of time just to test the waters. In this case they had not discussed it with EPA. Director Overcash spoke of the backstops that are in place to ensure that a higher level of NOx emissions from a limited number of facilities in this situation we can catch if it's going to impact ozone and if it's in a nonattainment ozone area as well. There are other systems in place to prevent any ozone violations in these nonattainment areas. There's an estimate of 10 facilities that could be affected by this rule. One of the things that I pointed out is that the amendment that is being proposed focuses primarily on human

health but in my opinion it may not necessarily look at the ecological impacts of dispersion and deposition to terrestrial and aquatic systems of additional nitrogen.

We discussed this one amendment that Ms. Burleson talked about today. It's an amendment that I think not only to .0530(t) but also .0531(m) where the same language is repeated. The question was to be clarifying about whether or not the director is obligated or intends to notify the federal land manager when a permit application is submitted for these conditions. There is amending language that has been provided today. Since there aren't copies to distribute to everyone and I would like that to be in today's package, maybe I can just make that as a part of my motion. Given all those issues that we discussed yesterday it was still the consensus of the Air Quality Committee to proceed to public hearing with the one amendment that I am about to introduce today.

Motion (Ms. Deerhake): On behalf of the Air Quality Committee I do move that this draft rule be proposed for public hearing with the amendment that in Sections .0530(t) and .0531(m) an initial paragraph be put in that says, "Notwithstanding any other provisions of this paragraph, the Director shall, no later than 60 days after receipt of an administratively complete application, notify the federal land manager for the closest Class I area to a source or modification subject to this rule." It is followed by an existing statement in the rule that says, "when a source or modification may affect visibility of a class one area named in paragraph (c) of this rule the director shall provide written notification to all affected federal land managers." Making this insert will affect the numbering of the subparagraphs. We can put that in the record as well. **Mr. Curry** seconded.

Chairman Smith: I asked Mr. Crawley to make sure that we did not need to waive the 30 day rule on this. The Air Quality Committee heard this earlier than yesterday.

Ms. Deerhake: Yes. The vote was done in March.

Chairman Smith: asked for discussion.

Tom Ellis: Did you say that you had an economic analysis of this?

Ms. Deerhake: Yes. It should be in today's package for the members.

There was no further discussion and the motion passed.

10-27 Hearing Officer's Report on Amendments to Municipal Waste Combustor Rule

Summary (Dr. Peterson): This is a hearing officer's report and a motion that follows from it. These are amendments to the large municipal waste combustor rule with establishment and adoption of a small municipal waste combustor rule that's split off from the large one as part of the process. We as a Commission find this an old friend. We acted on this back in November almost a couple of years ago and we approved these changes in the rules. When they were moved to the RRC there was one company that entered an objection and that objection was over the cost and the necessity of the monitoring and annual requirements and testing for chromium

six. The department looked at that and decided there was merit in the concern, and that public safety could be maintained while reducing unnecessary cost in that monitoring and made changes as well as a minor technical change. The RRC decided rather than accepting that, that it required EMC approval again. The Division of Air Quality elected rather than bringing that directly back to the EMC to be safe and to take this out to a new public notice and public hearing with the revisions incorporated and actually withdraw those rules from RRC consideration. I was named the hearing officer for the new hearing that we had in Wilmington on March 2, 2010. True to my life since the Gulf oil spill the airlines were in control of me and I didn't make it back in time for the hearing and Mr. Brad Newland acted instead as hearing officer and there were numerous staff present. There were no public comments made at that hearing, however there were submissions of some comments and suggestions made at the time in writing. Those comments led to some additional minor changes proposed and displayed in the hearing record that you have before us.

Motion (Dr. Peterson): In light of the fact that we approved these before and they are probably better now I make the motion that the proposed rule amendments be adopted as presented in Chapter 2 of the hearing record. **Ms. Deerhake** seconded.

Chairman Smith: Is there any discussion? Hearing none the motion passed. We thank you Dr. Peterson to the extent to which you served as hearing officer.

10-28 Request to Send 2010 Updates to the Coastal Habitat Protection Plan to Public Meetings

Summary (Jimmy Johnson): Your representatives on the CHPPs Steering Committee are **Dr. Peterson** and **Tom Ellis**. You guys feel free to add anything as you see fit. Ann Deaton and Scott Chappell from the Division of Marine Fisheries are both here with me this morning if you have some technical questions. For those of you that have been around for a while you may remember back in late 2004 we came before the EMC asking you to approve the first Coastal Habitat Protection Plan departmental wide effort to protect the fisheries and the coastal habitats of North Carolina. This plan is required by law to be reviewed and update every five years which is why I am here today. We are presenting the 2010 revision of the CHPP. At this point we are asking you to approve taking this draft plan out for public comment. It will go before a series of public meetings as well as some standing committees of the Division of Marine Fisheries. Matt Matthews has some disks and CDs of the draft plan if you want to review it before it is posted late next week on the website.

North Carolina supports some of the most productive fisheries on the eastern coast of the United States. It is about a one billion dollar industry between recreational and commercial fishing. We all realize in order to continue to have these significant fisheries we need to take care of the habitat in which they live. In the late 80's and early 90's it was noticed that we were seeing a decline in several of the significant species of fish within our coastal waters, primarily river herring, weakfish, striped bass, summer flounder, bay scallops and oysters. We also experienced an outbreak of red tide along the east coast and we were impacted by fishing closures due to pfiesteria. We were also being influenced heavily by folks from Florida who were moving to North Carolina in order to fish after a net ban was put in place in that state. In 1994 a moratorium was put on all fishing licenses and in 1997 the Fisheries Reform Act was passed

which completely changed the way we managed fisheries in North Carolina. Two of the major changes to the way we manage fisheries were that we're required to manage fisheries through fishery management plans. We were also required to write and implement a Coastal Habitat Protection Plan. The goal of the CHPP was the long term enhancement of coastal fisheries associated with each of the habitats identified in the document itself.

There was an inner agency team that was put together formed by some of the technical members of the different agencies with DENR as well as an inner agency group which was made up of two Commissioners from the Marine Fisheries Commission, the Coastal Resources Commission and the Environmental Management Commission. The document itself is a reference and a guide which includes some of the latest scientific studies on requirements and needs. It also includes ecological value of the habitats and some of the threats to those fish habitats. Throughout the document you will see management needs and recommendations which are identified and identification of various gaps in some of the analysis and some of the actions which are needed in order to help protect our coastal habitats. I spoke to the Wildlife Resources Commission on Tuesday and I will be speaking to the Marine Fisheries Commission tomorrow and the CRC will meet next week. As I mentioned we will be taking this per your approval to public meetings. We will incorporate the suggestions and changes that are appropriate during the month of July and early August, and we will be back before the full Commission for their final approval later this summer or early next fall.

About half of the document has been reorganized or has new information. Some of the issues that have been added which if they were even mentioned in the first version of the CHPP are sea level rise, climate change and invasive species. Endocrine disrupting chemicals is obviously a hot topic right now and one that is discussed extensively in a couple of the chapters of the new CHPP. In the executive summary which you have is part of the history of the CHPP as well as the major accomplishments which the Steering Committee has identified as having been a significant part and integral portion of the success of the CHPP. Those six accomplishments are identified. The CHPP identifies six critical habitats to North Carolina fisheries. The first habitat chapter is about the water column which is the media where all the fish live and it connects all of the other habitats in the following chapters. The CHPP emphasizes the need to protect the water column and the conditions which need enhancing and also the maintenance of all the other aquatic habitats. Mr. Johnson showed slides which were divided up into three sections. The first section was status and trends which showed those new areas to the CHPP that have been added. The second section shows some of the accomplishments which have taken place since the first CHPP was passed and the third section lists priority needs which are identified in this new document. We need comprehensive water quality monitoring coverage. There's very little monitoring that goes on and we need to do more to see what impacts are taking place, the changes and we need to know how well what we have done is actually working.

One of the issues that the EMC was very much involved with was the adoption of the coastal stormwater rules. We didn't get everything that we wanted but what we ended up with was better than what we had. Shell bottom is a most unique habitat and also a fishery. Some of the dependent species on this habitat are oysters and clams but also crabs, black sea bass, red drum and the ever present pinfish. The Ecosystems Services which are provided by this habitat include water column filtration, the trapping of sediment, shoreline stabilization as well as the

sequestration of carbon. So far we have protected about 36% of all shell bottom from all fishing gear and 70% has been protected from trawling and dredging as well. We have seen a tremendous increase in spat fall. We have also experienced an increase in the harvest of all shell fish as well. The Oyster Shell Recycling Program has been a huge hit. We have a lot of restaurants and oyster shucking houses which are participating in this. The oyster house gives the shells that are shucked back to DMF and that allows the Division of Marine Fisheries to return them back to the water to provide habitat for Spat to adhere to and begin to grow. Submerged aquatic vegetation is also considered to be an indicator of the healthy ecosystems due to the stringent water quality requirements that it needs in order to be able to survive and grow. Those include low levels of turbidity and also specific types of nutrients needed for it to survive. Species which are associated with SAV include bay scallops and red drum, speckled trout, clams as well as flounder. This also provides some significant ecosystems services including primary production as well as nursery habitat for our fisheries. It's a water quality enhancer through the stabilization of sediment and the SAV also releases oxygen into the water. The global value of SAV is approximately 3.8 trillion dollars per year. Over the past three years we have obtained imagery of the shoreline and we are in the process of delineating that imagery to show us where the SAV thrives. Because of the drought we have seen some increase in some areas where the SAV is occurring. Hopefully we will continue to see that continue to thrive without the drought we have experienced over the past few years. We need to continue to work to complete the delineation of that imagery and develop monitoring programs to track the trends of where that SAV is occurring and where it may be dying back.

Wetlands are another chapter and another habitat that has been identified in the CHPP. This is the area that borders the transition from water to land. Approximately 95% of all commercial and recreational species depend on wetlands for some portion of their life cycle. Some of the key ecological functions include the trapping and the filtration of land runoff. It's a primary producer of detritis food sources for some of the smaller animals that help to feed our growing fisheries. There are approximately 5.1 million acres of wetlands in North Carolina today. Approximately 1,700 acres over the past 7 or 8 years have been permitted to be impacted in the coastal areas of North Carolina. We need to continue to work toward improving our wetlands restoration processes. We also need to improve our monitoring and tracking of wetland loss and the Division of Coastal Management needs to continue to work to update their maps. A big issue which is being discussed and worked on right now is alternatives to shoreline stabilization where now it is so easy to put a bulkhead up. We are trying to find ways to entice and encourage those who own property along our estuarine shorelines to look at more imaginative techniques rather than just a bulkhead, but look at some other ways to stabilize those shorelines and help protect some of the habitats and the functionality of our wetlands. Also they should be able to allow as sea level rise continues to allow the wetlands to migrate inland.

Soft bottom is a key forging habitats for juvenile, adult fish and invertebrates. It is often called the secret garden of the sea. It's a place where benthic microalgae and infauna thrive. The solid bottom serves as a nursery habitat and aids in storing sediment, nutrients, toxins and recycling nutrients between the bottom and the water column. This soft bottom habitat is extensively used by clams and crabs, flounders, rays and shrimp. We want to continue to monitor this habitat as we see an increase in federal and private beach nourishment projects taking place. We have been able to work with the Coastal Resources Commission in getting new sediment criteria rules put

in place recently. We have also worked with them in the dock and pier rules that they have and the impacts that they have in our primary nursery areas. We need to continue to work in updating our existing bathymetric maps and find alternatives to hardened structures.

The hard bottom habitat provides structural refuge in the otherwise large ocean. While there is not a lot of this in the state waters of North Carolina, it is critically important. These are exposed rock out crops or relic reefs which are colonized to a large extent by algae, sponges, soft and hard corals as well as other invertebrates. There has not been a lot of work done in this area. This chapter was probably the least changed of all the chapters within the updated CHPP. Two new habitat areas of particular concern have been proposed off of Cape Lookout and Cape Fear. As you all know we are going to see more and more about oil and gas drilling offshore as well as wind turbines. Some of the priority needs are continuing to monitor the habitat condition and fish uses of hard bottom and also to monitor the effect on the hard bottom of our beach nourishment projects. This last chapter discusses the interaction between the different fish habitats which are due to the diversity of habitats in our coastal waters. There are several habitats which have not been completely mapped out and probably even more which are old as far as the mapping is concerned. The shell bottom and the SAV are incomplete to date and some of the old imagery is from the wetlands and the soft bottom bath imagery. We need an Ecosystems management approach to managing our habitats. This is due primarily to the multiple interdependent species and habitats. Almost all of the habitats are affected by more than one threat and all the threats affect more than one habitat. Currently the Division of Marine Fisheries along with others are working on identifying what we are calling strategic habitat areas. Along the coast using this Ecosystems based approach they've completed work in one area which is the Albemarle Sound and are currently working their way southward are now working on designating strategic habitat areas in the Pamlico Sound, Tar Pamlico and Neuse Rivers. We are identifying the new recommendations we have to date will appear in the 2010 revised copy of the CHPP. A lot of what we have been talking about is continuing to restore SAV habitat and the shallow soft bottom nurseries.

Ecosystem restoration plans also include developing a compensatory mitigation process that will help restore lost fish habitat, and continue to work to sustain and maintain a healthy barrier island system. There is a recommendation dealing specifically with energy development. Also we are discussing endocrine disrupting chemicals, pharmaceuticals and the effect that they will have not only on the fisheries but also the habitat of the fisheries need to survive. There is a recommendation that was added in support of the present and future aquaculture which is something we continue to look at in eastern North Carolina. Also we need to assess the coastal stormwater rules that the EMC passed two years ago. The draft will be placed on the website at http://www.onencnaturally.org/pages/CHPP_Overview.htm the end of next week. Dr. Peterson chairs the CHPP Steering Committee and Tom Ellis serves on this committee. Members of the CHPP team from the DWQ staff are Matt Matthews and Bill Duguid.

Chairman Smith: Nice presentation. Are there any comments or questions from Commission members?

Ms. Deerhake: Was there any discussion about atmospheric deposition of nitrogen?

Dr. Peterson: There has been nothing new in that regard. The whole nutrient loading issue was a huge one and remains a huge one as we looked at Neuse rules. I don't think that we have had any new focus on that. There is a bit of new focus in the context because of global change and changing rainfall patterns, water temperatures and acidity of the ocean because of increased dissolution of CO₂ in the waters, and the interaction among all those processes. That includes wondering whether some of the atmospheric nitrogen positioned will be modified because of those changing water quality parameters as well. But we haven't gone very far. There wasn't any divert recommendation in that direction.

Ms. Deerhake: I think also if the division is monitoring perhaps Chesapeake Bay strategies that are being developed now may be more or less learned what to do and what not to do.

Jimmy Johnson: The Chesapeake Bay and the work that is going on up there are mentioned many times in document itself. The folks that are working on those issues are all watching it closely.

Motion (Dr. Peterson): I move that we accept this Coastal Habitat Protection Plan to send it to public meetings. **Tom Ellis** seconded.

Hearing no other discussion the motion passed.

Chairman Smith: I see that the group from the High Point matter are back in the room. Could I have a motion to bring the motion off the table and back on the floor? The motion was made and granted with none opposing.

Chairman Smith asked the group if they reached a consensus on a list of distinguishing factors for the EMC to consider. The list was given to the Commissioners and they were asked if they wanted to edit the points given or add to them in any way.

Five points the EMC requested be included in the variance approval:

1. Not Development
2. Part of a required Redial Action Plan required by NEDR/DWM prior to the effective date of the Randleman Buffer Rule
3. Best option for the environment to comply with Settlement Agreement
4. Project has significant water quality benefits
5. Mitigation is required

Dickson Phillips: I did want to emphasize the remediation is being required as opposed to being waived based on these conditions. I guess the idea here is that these four points are being bodied in the motion to accept the substitute remediation without additional payment.

Chairman Smith: We will add a fifth one to this list at your suggestion that mitigation is being required here.

John Curry: I want to mention that in determining the amount of mitigation the following factors were taken into account. What somebody could say in the future is well you made a calculation as to the amount of mitigation which was low given the other existing requirements.

Dr. Peterson: I would say the amount, kind and location.

Chairman Smith: Would you accept the modification of your motion that in determining the amount, kind and location of the mediation required the following factors were taken into consideration list the four plus the fifth one that mitigation is being required.

Forrest Westall: I would accept that reminding that the motion was to approve a major variance with the conditions assigned for mitigation.

Chairman Smith: asked for discussion. Hearing no other discussion the motion passed.

IV. Status Reports by EMC Committee Chairmen

A. Water Allocation Committee Mayor Darryl Moss, Chairman

The Water Allocation Committee met yesterday. We had one action item that was the Neuse Regional Water and Sewer Authority was before us to seek advice of potential IBT petition. Their objective was actually to get their petition considered under the old IBT statute and to do that the statute says that the EMC must take action on the petition prior to January 1, 2011. Our discussion focused on two primary areas which were what constitutes action by the EMC and what information needs to be provided under the old statute. There are actually four things in the old statute that are required. The fourth one being other documentation or information as requested by the EMC wasn't one we spent a lot of time on. To cut to the chase the Water Allocation Committee passed a motion that the Water Allocation Committee would consider Neuse WASA's petition upon receipt after basically eighty minutes of discussion and impacting Marion's Air Quality Committee meeting making her a little bit late. That was basically our meeting on yesterday.

Chairman Smith: Before we move into the remaining committee reports there is one thing I neglected to say on the CHPP. Since that is not a set of rules as such it doesn't require the appointment of a hearing officer but I would invite any of you that would like to participate in that public meeting process to contact Ms. Sullins not including but limited to the two members Mr. Ellis and Dr. Peterson.

B. Water Quality Committee Dr. Charles H. Peterson, Chairman

The Water Quality Committee met. We had a brief discussion on an item that will appear on the agenda in the future but was not an action item today because it had been removed. There was a discussion about perspective draft rules for chlorophyll-a threshold for nutrient enriched water body management. These rules are prompted by the desire to get ahead of the curve and not wait until we have our waters degraded before we try to nip a problem in the bud. They are also driven by some EPA mandates to have us move in that direction before they do. We'll hear about those in due time. We had the item related to approval or disapproval of local governments Jordan nutrient strategy State One adaptive management programs that we voted on

here today. We had a very interesting item from my perspective which was to reclassify or proceed to reclassification coming before the EMC next a section of southwest creek in Onslow County from Class C to Class SC. For those of you not in the alphabet game what that means it was discovered to be salt water, not fresh water and therefore we needed to classify it accordingly. That will move to the EMC as a body in our next meeting. Then we had an information item on what are called high rate infiltration basins. These are basins to dispose of and treat water from human wastewater systems and relatively large developments. They are an alternative to a package plant and an alternative to hooking up to a municipal wastewater system because one is not available. They have had a large number of permits granted in the past few years. Only a small percentage of which eventually have been built in part because of the economy and the real estate problems that have been going on. Nonetheless they are interesting systems that I as chair asked for a presentation on and we got that. We will continue to follow up the issue being that there is some novelty to them. They are nondischarge systems yet there's groundwater pumped out from beneath the discharge basin. That groundwater can then be deposited into freshwater, saltwater and freshwater streams. So we had some questions about the groundwater monitoring that go on and the quality of that water discharge. If these are indeed nondischarge we were hopeful that what was discharged was pretty good water linking it to our challenge of looking at spray irrigation fields on the farms and wondering how good the water was that drained through piles and other conveyances that enter our surface waters. I expect that we will be getting more on that and it should interest people when we have it on the agenda again. I would welcome a broader participation from the Commission in that so when and if that comes back for more information be prepared for my notification.

The Groundwater Committee did not meet.

C. Air Quality Committee

John Curry, Acting Chairperson

We did not have any action items however we had some very useful reports to assign a number of topics. We heard about the updated ozone national ambient air quality standards. They are both primary and secondary standards, primary being for human health purposes. Secondary levels are set for welfare which includes ecological protection. We are expecting that the designation of ozone attainment areas to come in 2011. We also had a semi-annual update on Senate Bill 3 the Renewal Energy legislature regarding Best Available Control Technologies. It was reported that there are two applications for wood fired combustors in house at the Division of Air Quality, one in Roxboro and one in the Wilmington area. The division has also sent 13 letters to parties that they anticipate could be future applicants for wood fired energy sources that are located in North Carolina and South Carolina. We got an assessment from the division on woody biomass combustion emission estimates particularly for mercury and arsenic comparing distribution levels to coal emission that are existing style coal and new technology coal. In both cases elements the emissions from wood fired combustion are less than the coal emissions that are estimated. But it was acknowledged that there is a lot of variability in the arsenic and mercury content of wood. We also received a handout on tire derived fuel. We had requested information about that hearing that there is going to be a request for using tires as renewable energy sources and we had a good discussion about that. We were told that the existing state Air Toxics Program already is designed to accommodate the evaluation of air quality impacts and human health impacts through this Air Toxics Program for tire derived fuel. We received an update on the Greenhouse Gas Tailoring rule. We had a consensus that the preliminary list of

the Air Quality Committee's preliminary focus areas for 2010 and 2011 were sufficient to use as a reference as we proceed through the next two years. Finally we also recognized Mr. Overcash for his service to the state, the Commission and the Air Quality Committee.

The Steering Committee did not meet. The NPDES Committee did not meet.

D. Renewable Energy Committee Dickson Phillips III, Chairman

The Renewable Energy Committee did meet to discuss the future work of the committee although part of our discussion was about follow up on the Woody Biomass Report that we approved in March. We discussed the need for a systematic look at whether the existing divisions and regulations within the department or elsewhere do provide sufficient coverage to address or where there may be gaps in the coverage with respect to other renewable energy resources. If we can arrange it at our next meeting we plan to have some reports on ash deposition from wood fired sources as well as poultry litter sources. We are planning to have reports on issues related to the methane capture from swine waste programs.

III. Concluding Remarks

Dr. Larkin: I would like to commend the Commission for the discussion on the High Point variance. Those of you who participated in that did a very good job of sorting out the pertinent facts, legal, tactical, geographic and philosophical arriving at a conclusion that really preserved a couple of our most important principles. That is water quality protection and fairness. Good job.

Ms. Deerhake: I think **Dr. Moreau, Dr. Peterson** and I, maybe **Mr. Morse** were sitting when the Randleman Lake was approved. I have written something to **Chairman Smith** about this. I am concerned that maybe the Commission is not fully aware of that pipe being underneath that contaminated landfill. When the decision was made I know that and I personally was asked specifically are we assured that there are no risks to the lake from that landfill or from Superfund. We were assured that there was not. But I am not sure how that happened and I hate that it happened and we didn't know about the risk that the leachate penetrating into that pipe could cause. What I want to know now are there any risks to the aquatic or human health from the contamination that is entering the lake at this point? You don't have to answer that right now but the whole circumstance has really worried me that this has come up and this happened and we weren't aware of it.

Dr. Moreau: Our distinguished chairman made a very nice presentation to the Commencement for the Graduating Seniors for Environment and Ecology Chapel Hill on last Sunday. He did an outstanding job and his comments were much appreciated.

Dickson Phillips: I omitted one thing from my meeting on yesterday. I should have mentioned that by unanimous consent I will be preparing a letter to thank Steve Wall for his service to the Renewable Energy Committee. Steve has just recently moved on to a job at the Biofuels Center. He provided us extraordinary good work.

Keith Overcash: I was going to thank you for a nice short meeting until we hit the High Point snag. I want to thank Mr. Smith for his kind words at the beginning of the meeting and I

appreciate those comments. It has been an interesting 13 years. I have been here as deputy and as a director. Many of the most interesting moments have been in this room. It's been very challenging and at times very frustrating but I've enjoyed my association with all of you on the Commission that have been here a long time and I'm sorry that the new folks didn't get to know me better. I'm leaving DAQ at a time when it's very tight budgets. We are having to eliminate positions. There are a lot of things going on at the national level that will affect our program but I am very confident about the status of the division. The position that we are in, we are a nationally recognized program and I am proud of that fact. I think I am leaving DAQ in a situation that has good leadership already, very good section chiefs and very good supervisors. We have an outstanding deputy director in place now so I am not too worried. I would like to thank all of you for your work in a very time consuming and thankless, most of the time and non paying positions. I know that you put a lot of time and effort into this and it shows in your work that you do here at these Commission meetings. One thing I would like to remind you of is that your number one assets that you have available are the staffs over the Division of Water Quality and the Division of Air Quality. I know that you realize that but sometimes that fact gets lost in the shuffle with all the things that you have to deal with. I just want you to remember that these are very hard working people and they really believe in the things that they're doing. I would like to thank Marion Deerhake for her leadership on the Air Quality Committee. She has been there a long time and brought a lot of good ideas and thoughts to that committee. I appreciate her work there. Please keep up the good work and I will be keeping an eye on what you are doing. I give you my good-byes today as Commission members but I hope to see you all again in the future.

Coleen Sullins: I just wanted to take this opportunity to recognize Keith. I have been working with Keith for twenty years now and that's hard to believe. It has been a very good working relationship from the regional office up to the Division of Air Quality. So I have had an opportunity to work with him across a multitude of issues. We certainly will miss him. In his role I think that he does have a great staff in the Division of Air Quality and I am looking forward to working with all of them as well. As a gift in his departure I will only say that today I believe the water quality problems come from water quality.

Hearing no further comments the meeting adjourned at 2:40 p.m.

NOTE: Attachments are on file in the Division of Water Quality with the Official Minutes.

Lois C. Thomas, Recording Clerk

By Commission Members
By Directors
By Counsel
By Chairman

Adjournment AG05-13-10