

HEARING OFFICER REPORT
for the
Issuance of NPDES Permit NC0088846

Towns of Cary and Apex, NC
Western Wake Water Reclamation Facility

This report is presented to the Director of the North Carolina Division of Water Quality.

INTRODUCTION

On August 21, 2010, public notices were published in the News and Observer of Raleigh, NC, to request public comments on the draft NPDES Permit for the Western Wake Water Reclamation Facility (WWWRF). The first was a request for written comments, and the second announced a public hearing to accept both written and oral comments. A news release was also published on the web site of the NC Division of Water Quality (Division) on September 20, 2010, which also solicited public comments on the draft permit. The public hearing was held in Apex, NC on September 28, 2010. The Public Hearing Officer was Mr. Paul Rawls of the Division's Fayetteville Regional Office.

All written and oral comments became part of the public record. The public comment period was extended until close of business October 12, 2010.

This Hearing Officer Report summarizes the major issues raised through the public hearing process, as well as the Hearing Officer recommendations for the NPDES Permit. The Director of the Division of Water Quality will take final action on these recommendations.

BACKGROUND

The permit application from the Western Wake Partners includes the Towns of Cary, Apex, and Morrisville. The Town of Cary is the primary applicant and the signatory of the permit application. The Town of Holly Springs was originally a member of the partnership, but officially withdrew on September 23, 2010.

A final environmental impact statement (EIS) was approved by the US Army Corps of Engineers in a Record of Decision (ROD) dated June 21, 2010. It addresses the applicant's proposed project and the alternatives considered for wastewater disposal, treatment site alternatives, conveyance alternatives, and wastewater outfall options.

The issuance of this permit will address the need for wastewater treatment for a growing population. Additionally, the permit will also serve to enable the project partners to comply with the conditions of the interbasin transfer certificate issued to them in 2001. This required that water be returned to the Cape Fear River Basin.

The Clean Water Act requires that the partners obtain a certification stating that the proposed project will comply with regulations pertaining to wetlands. The Division issued a Section 401 Water Quality Certification on July 16, 2010.

The draft permit was developed for two phases. Phase 1 is for an 18 MGD discharge and Phase 2 is for a future expansion to a 30 MGD discharge. The proposed outfall for the WWRWF is to be located in the Cape Fear River just below Buckhorn Dam.

On July 30, 2010, the Western Wake Partners were issued a new speculative limit letter containing updated limits for total phosphorus and total nitrogen. The following limits for both TN and TP were provided, which are applicable from April 1 through October 31. They are both concentration and mass-based limits:

- Seasonal mass-based limits based on design flow and TN of 3.5 mg/L and TP of 0.5 mg/L
- Seasonal monthly average concentration limits of 5 mg/L for TN and 0.75 mg/L for TP

PUBLIC HEARING / PUBLIC RECORD

Approximately 75 people attended the public hearing which was held by the Division. Twenty-three (23) attendees provided oral comments. Those opposed to the issuance of the permit were largely composed of members of the New Hill Community Association.

The Hearing Officer listened to concerns raised at the public hearing, and was provided with supporting documents by the Division, including the draft NPDES permit; permit fact sheet; and other relevant documents and written comments.

The Division received notice from U.S. EPA Region IV on September 22, 2010 that they had no comments regarding the draft permit.

COMMENTS RECEIVED AND DWQ RESPONSES

Listed below are the major objections raised in written comments and the comments received at the public hearing, and the Division staff responses. Appendix A contains a list of speakers and specific comments:

I. Comments Made by the New Hill Community Association

Twelve of the speakers were associated with the New Hill Community Association. These speakers objected to the project in several areas, including:

- The option to discharge into Harris Lake (or Jordan Lake) should have been selected, rather than discharging into the Cape Fear River.
- The selected WWTP site (Site #14) is an inferior choice to others that would have had less of an environmental impact on the New Hill Community.
- Cumulative and secondary impacts of the project were not properly addressed.
- The population studies used to determine design flows were done incorrectly.
- A complete biological assessment of impacts was lacking, including impacts on mussels.
- Property values will go down in the Town of New Hill.
- Sludge incineration and land application will expose the residents to toxic compounds.
- The outfall line will have negative environmental effects to the residents of Chatham County.

Response:

The various issues raised by these comments were considered by the Division during the development of the final environmental impact statement (EIS). As part of the NEPA process, an EIS and Record of Decision/Statement of Findings (ROD) was issued by the US Army Corps of Engineers (Jefferson M. Ryscavage, Army District Commander, June 21, 2010.) This included the basic planning issues of site selection, secondary and cumulative environmental impacts, flow projections, the route of the outfall line, and disposal site alternatives. The findings of the EIS are noted in the ROD. It should be noted that the Division of Water Quality is prevented by 15A NCAC 2H .0506(i) from duplicating the alternatives analysis including site selection performed by the US Army Corps of Engineers noted above and therefore will not be addressed further in this report.

The Division specifically reviewed and approved the sections of the EIS relating to population and flow projections. Residential, commercial, and industrial demand were taken into account, as well as allowances for inflow/infiltration.

The Cape Fear River was recognized by the Division as the best alternative to receive this discharge. Jordan Lake has a TMDL for nutrients which would effectively prohibit a new discharger of this size. A Harris Lake discharge would also risk chlorophyll-a exceedances. In addition, a revised IBT certificate would be required for a discharge to Harris Lake, incurring a lengthy approval process.

Regarding biosolids disposal, the primary option is contract composting. Sludge will be trucked offsite for disposal at a permitted compost facility. The secondary option is the utilization of a biosolids dryer to produce a Class-A sludge. Methane generated at the facility would produce the heat needed for drying. The resulting biosolids may be used as a soil conditioner or other beneficial reuse options. A sludge incinerator is not planned at the time of the application.

II. Comments Made by the Town of Cary

The Town of Cary had several comments including minor technical corrections. The more significant comments include the following:

1. The permit lists the location of the proposed WWRF as New Hill, NC. This site was annexed by the Town of Apex, and the site location should be listed as Apex, NC.
2. It is inappropriate for the Partners to develop a monitoring and modeling plan (condition A (4)). It is more appropriate for DWQ or the Middle Cape Fear River Basin Association to lead this effort. Therefore, it is requested that the requirement for the submittal of the plan by December 31, 2011 be taken out of the permit.
3. The Town objects to the requirement for the effluent sampling location to be located near the end of the outfall into the Cape Fear River. The agreed-upon compliance point was on the WRF site.

Responses:

1. Since the WWRF is located on a site historically considered as New Hill, the permit will

continue to refer to the site as New Hill. Upon approval of the Division Director, the description of the facility location in the permit may be changed to "near New Hill, NC".

2. Regarding the monitoring and modeling plan, the requirement for a submission by the partners was discussed prior to draft permit development. At that time, the Division and the Partners agreed that the Partners should have a lead role in this effort, since they are bringing a large new source into this stream segment. Therefore, the requirement will remain.

3. After review, the Division accepts the Partner's request that all permit limitations be applicable near the facility. The Division's response is based upon modeling results that show a daily average DO effluent limitation of 6.0 mg/L, as contained in the permit, ensures a minimum DO concentration of 5.0 mg/L at the outfall. The requirement for sampling near the end of the outfall pipe will therefore be taken out of the permit (as shown on footnote 1 of the effluent limitation tables).

HEARING OFFICER RECOMMENDATIONS

In addition to the above the following is offered

1. Comments regarding the location of the proposed facility regarding noise, lighting and truck traffic.

It is unclear if the proposed setbacks as outlined in Figure 4-6 "Proposed Project WRF Layout (Site 14) Western Wake Regional Wastewater Management Facilities Final Engineering Report 2010 will effectively address these concerns. It is recommended that in addition to sound-attenuated enclosures a noise reducing barrier be placed between the proposed site and what has been referenced as the New Hill community. Lighting should be designed as to not direct light in the direction of the New Hill community. As for truck traffic it is suggested that all truck traffic during and after construction be directed in the most nonintrusive route as possible. (It should be noted that many if not all of these concerns will be addressed by DWQ Construction Grants and Loans Section if the project is approved)

2. Comments were made that the Town of Holly Springs was originally a member of the partnership, but officially withdrew on September 23, 2010 and that the Town's withdrawal should be considered as part of the review for the subject NPDES permit.

I have been informed by staff that the withdrawal of the Town of Holly Springs does not affect the draft permit as it did not include the Town of Holly Springs as part of the review of treatment works.

It is recommended that the cover page of the NPDES permit, if issued, provide a statement indicating that the Town of Holly Springs did withdraw from the project and did not affect the issuance of the permit.

3. It has been stated the Partners have not provided the Division with an agreement with Chatham County for the proposed effluent pipeline.

As this appears to continue to be an issue and that it is believed that such an approval may be necessary for the construction of pipeline it is recommended that prior to the issuance of the Authorization to Construct the Division should receive such documents that the line will be allowed.

4. Spills of untreated and/or partially treated wastewater were also voiced as a concern.

It is recommended that the Partners develop a comprehensive spill response plan if such a spill should ever occur. This would become a part of the system wide collection system permit as currently issued by DWQ.

5. It has been stated that the "Documentation submitted by the applicant in support of proposed effluent limits is insufficient and contains serious omissions". (Comment provided in the October 12, 2010 letter provided by the Southern Coalition for Social Justice).

It is my understanding that staff has reviewed supporting information for the subject permit to ensure that downstream resources will be protected.

Based on review of the public record including written/oral comments received during the public hearing process, I recommend to the Division Director that the 2010 Draft NPDES Permit NC0088846 for the Towns of Apex and Cary be issued with consideration of the recommendations provided.



Paul Rawls, Hearing Officer

12-8-2010

Date