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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ENVIR. APPETANTALOABORGIA 30303-8960

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EASLEY COMBINED UTILITIES

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Joel D. Ledbetter, P.E., General Manager Easley Combined Utilities P.O. Box 619 Easley, South Carolina 29641-0619

SUBJ: Final Issuance of NPDES Permit No. SC0039853 Easley, SC - Middle Branch WWTP

Dear Mr. Ledbetter:

Enclosed is the National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. Pursuant to the Clean Water Act, the State has provided Section 401 certification, the requirements of which are attached to and become an enforceable part of the permit. The permit shall become effective as indicated on the cover page, unless, within 30 days following the date you receive the permit, you petition the Environmental Appeals Board (EAB) to review any conditions of the permit in accordance with the provisions of Title 40, Code of Federal Regulations Section 124.19, which is enclosed.

All pleadings filed by mail must be addressed to the U. S. Environmental Protection Agency, Clerk of the Board, Environmental Appeals Board (MC 1103B), Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460. Documents that are hand-delivered must be delivered to the EAB offices at Colorado Building, 1341 G Street N.W., Suite 600, Washington, DC 20005. Documents may be filed with the Clerk of the Board only between the hours of 8:30 a.m. and 4:30 p.m. Eastern Time, Monday through Friday (excluding Federal holidays). The website for the EAB is: http://www.epa.gov/eab. The web page's Frequently Asked Questions deal with filing issues, which you may want to refer to regarding the permit appeal process.

The preprinted Discharge Monitoring Report (DMR) Forms for the enclosed permit are being processed and will be mailed to you before the due date of the first DMR. These forms should be used to report all discharge data at the frequency required in your permit. If you have not received these preprinted forms prior to the end of the first monitoring period, please contact Mike Donehoo at (404) 562-9745.

If you have any questions regarding the permit, please direct them to Virginia Buff, Permit Writer, at (404) 562-9262, or for questions on procedures pertaining to legal matters relative to this permit issuance, contact Mr. Philip Mancusi-Ungaro, Attorney-Advisor, at (404) 562-9519.

Sincerely,

James D. Giattina, Director Water Management Division

Enclosures (3)

- 1. Permit Appeal Procedures
- 2. Final NPDES Permit
- 3. Amendment to Fact Sheet

cc: SCDHEC (with all enclosures, except Permit Appeal Procedures)
U.S. Fish & Wildlife Service (with all enclosures, except Permit Appeal Procedures)

PARTI

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - FINAL LIMITS

1. During the period beginning on the effective date of this permit and lasting until permit expiration, the permittee is authorized to discharge sanitary wastewater from Outfall 001.

PARAMETERS	DISCHAR	DISCHARGE LIMITATIONS	ATIONS	MONI	MONITORING REQUIREMENTS	REMENTS
	MONTELY	WEEKLY	DAILY MAXIMUM	SAMPLING POINT(s)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow, MGD	3.5	3.75		Effluent	. Daily	Continuous
Biochemical Oxygen Demand 5-day (BOD ₅), mg/l	Report			Influent	1 day/week	24-hour Composite
Biochemical Oxygen Demand 5-Day (BOD ₅), mg/l (Ibs/day)	21.0 (613)	30.0 (876)	-	Effluent	1 day/week	24-hour Composite
BOD ₅ , percent removal ¹	. 85.				1/month	Calculated
Total Suspended Solids, mg/1	Report		-	Influent	1 day/week	24-hour Composite
Total Suspended Solids (TSS), mg/l (lbs/day)	21.0 (613)	30.0	٠ .	Effluent	1 day/week	24-hour Composite
TSS, percent removal¹	85				I/month	Calculated
For March through October: Amnonia Nitrogen, (NH ₃ -N), mg/l (lbs/day)	1.43	2.0		Effluent	1 day/week	24-hour Composite
For November through February: Armonia Nitrogen, (NH ₂ -N), mg/l (lbs/day)	1.86 (54)	2.6 (76)		Effluent	1 day/week	24-hour Composite
Dissolved Oxygen (DO)	shall not	shall not be less than 5.0 mg/l	0 mg/l	Effluent	Daily	Grab
pH, standard units (SU)		6.0 - 8.5	!	Effluent	Daily	Grab
Fecal Coliform Bacteria, #/100 ml	. 500	· 1	400	Effluent	4 days/week	Grab

- In addition to the specified limits, the monthly average effluent BOD₅ and TSS concentrations shall not exceed 15% of their respective influent values (minimum of 85% removal). The percent removal shall also be reported on the Discharge Monitoring Report (DMR) Form (EPA No. 3320-1).
- 5. All correspondence (including any report, notice, request for determination, etc.) that is required to be submitted to the Environmental Protection Agency (EPA) shall also be copied and submitted to the South Carolina Department of Health and Environmental Control at the address specified in Part III, Section A. of this permit.
- 6. The geometric mean of the fecal coliform values collected during any monthly period shall not exceed 200 colonies per 100 ml of effluent sample and shall be reported as the monthly average value on the Discharge Monitoring Report Form (EPA Form No. 3320-1) (DMR). The daily maximum fecal coliform value shall not exceed 400 colonies per 100 ml of effluent sample and shall be reported as the daily maximum value on the DMR Form.
- Samples taken in compliance with the monitoring requirements specified in this permit shall be
 taken at the nearest accessible point after final treatment but prior to the actual discharge or
 mixing with the receiving waters (unless otherwise specified).
- 8. Any bypass of the treatment facility, which is not included in the effluent monitored above, is to be monitored for flow and all other parameters, except chronic whole effluent toxicity. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on a DMR Form.
- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 10. The effluent shall not cause a visible sheen on the receiving water.
- 11. If the results for a given sample analysis are such that any parameter (other than fecal coliform) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in <u>calculating</u> an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall <u>report</u> "NODI=B" on the DMR Form. For fecal coliform, a value of 1.0 shall be used in <u>calculating</u> the geometric mean. If the resulting fecal coliform mean value is 1.0, the permittee shall <u>report</u> "NODI=B" on the DMR Form. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR Form. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement.

C. Macroinvertebrate Assessment

- The permittee shall perform a macroinvertebrate assessment downstream from the
 discharge location during July, August or September of the calendar year. An assessment
 of an upstream reference site may also be required. A second assessment, if required,
 should be conducted during January, February or March of the calendar year. At least one
 macroinvertebrate assessment is required per calendar year.
- The permittee shall submit a study plan for EPA review based on the following documents:
 - (a) EPA publication entitled, "Revision to Rapid Bioassessment Protocols for Use in Streams and Rivers: Periphyton, Benthic Macroinvertebrates, and Fish," by M.T. Barbour, J. Gerritsen, B.D. Snyder, and J.B. Stribling (EPA 841-B-99-002).
 - (b) "South Carolina Department of Health and Environmental/Control Standard Operating and Quality Control Procedures for Macroinvertebrate Sampling," Water Monitoring, Assessment and Protection Division, Aquatic Biology Section, Columbia, SC, SCDHEC Document #004-98.
- 3. The study plan shall be submitted to EPA and SCDHEC for review within 30 days of the effective date of the permit: EPA and SCDHEC comments must be considered prior to commencement of actual sampling efforts. An explanation of any deviation from EPA comments must be submitted with the sampling results.
- Results of a given in-stream assessment must be submitted to the EPA and SCDHEC within 90 days of completion of the sampling.

D. POTW Pretreatment Program

The Permittee's Pretreatment Program to regulate flow from non-domestic discharge sources (hereafter called "industrial users") which was originally approved on December 6, 1984, must be conducted in accordance with 40 CFR Part 403, and is an enforceable condition of this permit.

- Program Requirements and Reporting
 - a. In addition to the DMRs required in Part III.A, the Permittee shall include copies of the following with the DMR submitted on or before the 28th of January, April, July and October:
 - Any Permits to Discharge issued to, or Contracts entered into, industrial users during the previous quarter if they must be regulated.
 - ii. The names of any industrial users that are in violation of their permit, or

Page IV-1 Permit No: SC0039853

Part IV

Chronic Whole Efficient Toxicity Testing Program

As required by Part J. of this permit, the permitter shall initiate the series of tests described below beginning in Sepsember 2006 to evaluate chronic whole efficient toxicity of the discharge from outfall 001. All test species, procedures, and quality assurance criteria used shall be in accordance with Short-term Methods for Estimation the Chronic Toxicity of Efficients and Receiving Waters to Freshware Organisms. EPA-821-R-02-D13 (October 2002), or the most current edition. The control and dilution water will be moderately hard water as described in EPA-821-R-02-013, Section 7, or the most current edition. A standard reference toxicant quality assurance chronic toxicity test shall be conducted concurrently with each species used in the toxicity tests and the results submitted with the Discharge Monitoring Report (DMR) Form. Alternatively, if monthly QA/QC reference toxicant tests are conducted, these results must be submitted with the DMR. Any deviation from the bioassay procedures outlined or cited herein shall be submitted in writing to the EPA for review and approval prior to use to the address in Part III.A.

- 1. a. The permittee shall conduct a daphnid, <u>Cerindaphnia dijbia</u>, Survival and Reproduction test and a fathcad minnow, <u>Pimephales prometas</u>. Larval Survival and Orowth test. All tests shall be conducted using a control (0% efficient) and the following dilution concentrations: 100%, 75%, 50%, 25%, and 12%. The measured chronic endpoint will be the inhibition concentration causing 25% seduction in survival, reproduction, and/or growth (K₂₁) of the test organisms. The IC₂₃ shall be determined based on a 25% reduction as compared to the controls, and as derived from linear interpolation. The average reproduction and growth responses will be determined based on the number of <u>Octiodaphnia shalia</u> and <u>Pimephales prometas</u> have, as appropriate, used to initiate the test.
 - For each set of tests conducted, a 24 hr. composite sample of final effluent shall be collected and used per the sampling schedule discussed in EPA-S21-R-02-013, Section 8.3, or the most current edition.
 - c. For either species, if control mortality exceeds 10% by 48 hours or 20% mortality thereafter, the test(s) for that species (including the control) shall be repeated. A test will be considered valid only if control mortality does not exceed 10% by 48 hours or 20% thereafter for either species. If, in any separate test, 100% mortality occurs prior to the end of the test, and control mortality is 10% or less if that time is prior to 48 hours or 20% or less thereafter, that test (including the control) shall be terminated with the conclusion that the sample demonstrates unacceptable acute und/or chronic toucity. Each test must meet the test acceptability criteria for each species as defined in EPA-821-R-02-013, Section 13-12 and Section 11-12, respectively, or the most current edition. Additionally, all test results must be evaluated and reported for concentration-response relationship based on "Method Guidance and Recommendations for Whole Effects Toxicity (WET) Testing (40 CFR Part 196)", EPA/821/B-08/004 (2000), or the most current.

edition. If the required concentration-response review fails to yield a valid relationship per BPA/821/B-00/004 (or the most current edition), that test shall be repeated. Any test initiated but terminated prior to completion must be repeated with a complete explanation for the termination.

- 2. a. The toxicity tests specified above are referred to as "routine" tests. Monisoring shall be conducted once every two months. If the results from any six consecutive "routine" tests for a test species show no violations of any limit capreased in Dom 3.a below, then the monitoring frequency can be reduced to once every six months thereafter for the duration of the permit for that species. Otherwise, the sampling frequency shall continue once every two months for that species.
 - b. Results from "routine" or additional tests shall be reported according to EPA-821-R-02-013. Section 10, or the most current edition. All retuits shall also be recorded and submitted on the DMR in the following manner: If the mosthly average K²₂₅ of a test species is less than or equal to 100% effluent, "\$100%" shall be entered on the DMR for that species. If the monthly average K²₂₅ of a test species is greater than 100% effluent, ">100%" shall be entered. All individual test results for a given month shall be submitted as an attachment to the DMR.
- a. A monthly average IC₂₂ of less than or equal to 100% effluent will be a violation of this permit.
 - b. If an W₂₀ of less than or equal to 100% effluent is found in a "routine" test, the permittee shall conduct two valid additional tests on each species indicating the violation and report each W₂₀ obtained.
 - c. The first valid additional test shall be conducted using a control (0% effluent) and a manimum of five dilutions: 100%, 75%, 50%, 25%, and 12%. The dilution ander may be modified in the second valid test to more accurately identify the toxicity, such that at least two dilutions above (not to exceed 100% effluent) and two dilutions below the RWC and a control (0% effluent) are run.
 - d. For each additional test, the sample collection requirements and the test acceptability criteria and concentration-response relationships specified in sections 1 is and c. shows, respectively, must be met for it to be considered valid. The first additional test shall begin within two weeks of the end of the "rostons" test, and shall be conducted very two weeks thereafter until two additional valid tests are completed.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

May 1, 2006

<u>CERTIFIED MAIL</u>
RETURN RECEIPT REQUESTED

Mr. Joel D. Ledbetter, P.E., General Manager Easley Combined Utilities P.O. Box 619 Easley, South Carolina 29641-0619

Re: Public Notice of NPDES No. SC0039853 Easley, SC - Middle Branch WWTP

Dear Mr. Ledbetter:

In accordance with Title 40, Code of Federal Regulations (C.F.R.) Section 124.10(c)(1)(i), enclosed is the Public Notice which the Environmental Protection Agency (EPA) has distributed pertaining to the EPA's tentative decision on your National Pollutant Discharge Elimination System (NPDES) permit application. All comments and objections to the draft permit must be submitted to EPA by June 5, 2006. Only issues raised during this time period will be considered during any appeal procedures.

The draft permit and supporting materials were previously sent to you by letter dated September 20, 2005. The draft permit referred to in the Public Notice has changed from the previous draft and the following modifications are detailed below:

- 1. Page numbers in the cover sheet have been changed to reflect the proper number of pages incorporating these modifications and the omission of one previously unnumbered page.
- 2. Removal of the Ultimate Oxygen Demand (UOD) limit and the special condition in the permit which provided the equation to calculate UOD. It has been determined that a specific UOD limit is unnecessary since the BOD₅ and ammonia limits will indirectly result in the UOD limit needed to protect in-stream dissolved oxygen (DO).
- 3. Reduction of Total Nitrogen and Total Phosphorus monitoring from 1/month to 1/quarter.
 - 4. Reduction of fecal coliform monitoring from 5 days/week to 4 days/week.
 - 5. An 85% removal requirement has been included for BOD₅ and TSS. This is a

EXHIBIT B

requirement for secondary treatment plants under 40 CFR 133.102(a)(3) and (b)(3), and there is no provision in the regulations to not include this requirement. The regulations (40 CFR Section 133.105) only allow reduced treatment percentages in certain circumstances. Easley has not provided any information or data for our consideration in regard to the reduced treatment percentages.

- 6. The compliance schedule for copper has been increased from 18 months to 27 months.
- 7. Influent BOD₅ and TSS reporting has been added in order to calculate the % removal rate attained monthly for each of these parameters.
- 8. Flow measurement requirement has been changed to "not greater than 10%" under Part II of the permit.
 - 9. The date to commence WET testing has been changed to September 2006.

State certification has been requested for this permit and any more stringent requirements received from the State will be incorporated into the final permit without prior review by the applicant.

In addition, an attachment has been included which responds to each of your comments in the April 6, 2006 letter submitted to EPA

If you have any questions concerning this matter, please contact me at the above address or by calling (404) 562-9262.

Sincerely, Virginia Duff

Virginia Buff, Environmental Engineer NPDES and Biosolids Permits Section

Permits, Grants and Technical Assistance Branch

Water Management Division

Enclosures (1) Public Notice

- (2) Draft Permit
- (3) Fact Sheet

EPA response to Easley Letter of April 6, 2006. (Easley comments are paraphrased)

Comment #1 (UOD Limit). Why are the BOD₅ and ammonia limits held to less than 700 pounds total and the UOD limit is 1110 lbs? Is UOD not equal to the sum of BOD₅ and ammonia loadings? The inclusion of UOD limits is a duplication and not needed in the permit as the BOD₅ and ammonia loadings will indirectly result in the UOD limit.

Response: The sum of BOD₅ and ammonia loadings is not equal to UOD. The equation is:

$$UOD = [(BOD_5 \times 1.50) + (NH_3 - N \times 4.57)] \times Q \times 8.34$$

Where UOD is in lb/day $BOD_5 = 22 \text{ mg/l}$ $NH_2-N = 1.43 \text{ mg/l}$ Q = 3.50 MGD8.34 is the conversion factor

Thus, substituting and solving the above equation would result in 1153 lbs/day for UOD.

After consideration of your request to delete the UOD limit loading, we concur with this request and the UOD limit will be removed from the permit. We agree that UOD is a duplication. The UOD limit will be indirectly attained by keeping BOD₅ and ammonia mass limits in the permit.

Comment #2 (TSS Limit): We believe the "holding the line" strategy is not applicable for TSS discharge to biologically impaired water bodies. What is the EPA rule or strategy for "holding the line" for discharge to impaired water bodies? The TSS limit is in error and should be corrected, since in this circumstance an anti-backsliding exception would apply. Furthermore, the Clean Water Act applies the anti-backsliding prohibition in only one instance relating to technology-based limits, which is not the case for Easley.

Response: TSS is a pollutant and, as such, it is the best professional judgement of the permit writer that all pollutants be kept at existing loads and concentrations until a TMDL is prepared for the biological impairment, or the stream is delisted from the 303(d) list. This strategy is in keeping with 40 CFR Section 122.44(d) (1)(i) which states that a discharge cannot cause or contribute to a water quality violation. Since the exact cause of the biological impairment is unknown, all pollutants will be held to their existing loads and concentrations. This strategy is further outlined in the state's "Antidegradation Implementation for Water Quality Protection in South Carolina Waters."

Comment #3 (Fecal Coliform Daily Maximum limit). The daily max fecal coliform effluent limit should include a 10% exceedance allowance as stated in state water quality standard regulations. Antibacksliding does not apply as there was prior permit error. The fecal coliform

limit in the permit is a technology-based limit and there is no subsequent promulgated effluent guideline for fecal coliform, which means that anti-backsliding could be allowed. Other states have less stringent fecal coliform requirements.

Response: SC regulations for the application of criteria for the derivation of permit effluent limitations state under Section 61-68 E.14.c.(9):

"In order to protect recreational uses for all waters of the State, the stated value of 200/100 ml for fecal coliform shall be used as a monthly average number for calculating permit effluent limitations and the stated value of 400/100 ml for fecal coliform shall be used as daily maximum number for calculating permit effluent limitations."

This requirement is specifically written for deriving permit limits.

The 10% allowance is found under water quality standards for Freshwaters Section 61-68 G.10.e., which states for fecal coliform:

"Not to exceed a geometric mean of 200/100 ml, based on five consecutive samples during any 30 day period; nor shall more than 10% of the total samples during any 30 day period exceed 400/100 ml."

This is an ambient water quality standard which protects the water bodies from all fecal coliform sources. It is the best professional judgment of the permit writer that the fecal coliform permit limits as written in the draft permit will protect the stream and also meet the requirements for deriving permit limits.

Thus, there has been no error in the previous permit issuance in regard to fecal coliform. Since there has been no error and there are no other reasons presented to seek backsliding, further discussions of backsliding is not relevant.

For your information, fecal coliform limits are human health based limits. Additionally, other states may have less stringent limits, but all permits must be written according to state standards.

Comment #4 (Compliance Schedule for Nickel). A compliance schedule for nickel is again requested. An exceedance above the proposed nickel maximum limit previously occurred.

Response: Only one exceedance has occurred in December 2003, which is not adequate justification to allow a compliance schedule. Compliance schedules are discretionary actions. No change made to the permit.

Comment #5 (Copper Compliance schedule). A compliance schedule for 36 months is proposed.

Response: The Water Effects Ratio (WER) Study could be performed concurrently with the evaluation of potential sources of copper and investigation of potential mitigation options. There are no other approved site specific testing options. Three months for questions and approval of

the WER has also been included in the schedule. For design and construction for copper removal the requested 18 months will be included in the schedule. Thus the total compliance schedule will be 27 months. It is strongly urged that a plan of study for performing the WER be submitted to EPA as soon as possible.

Comment #6 (WET Schedule of Compliance). A compliance schedule for WET is requested again.

Response: A compliance schedule for WET must be clearly justified. Since the last compliance action was completed, there have been no WET compliance issues based on the previous permit's WET testing. Again, a compliance schedule is a discretionary action and since there have been no recent WET issues, there is no justification for a compliance schedule.

Comment #7 (Macroinvertebrate Testing). It is requested that macroinvertebrate testing be reduced to the first and last years of the permit.

Response: The receiving water body is impaired for not meeting biological criteria. The testing will be required as stipulated in the draft permit. For you information, the permit will expire on 08/31/2009 in order to place the permit in a rotating basin cycle. Thus, the number of tests required by the permit will be limited by the length of the permit.

Comment #8 (Prohibited Discharges). We are concerned about the prohibited discharge language. Is having prohibited discharge language in the sewer use ordinance sufficient to meet this pretreatment requirement?

Response: 40 CFR Section 403.8 has numerous requirements for development and implementation of an industrial pretreatment program. A copy of the regulation is attached. Expectation for the prohibited discharges section are outlined in the permit, in the last paragraph of that section. As long as Easley develops and enforces specific prohibitions or limits per 40 CFR 403.5(c) necessary to implement the prohibitions, then they will not be deemed in violation. Ordinances are the most common way to meet the requirements of 403.5(c), but it is not the only means. Some permittees put the prohibitions in individual permits.

Permit No. SC0039853 Major POTW

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IV

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), the

Easley Combined Utilities P.O. Box 619 Easley, South Carolina 29641

is authorized to discharge from a facility located at

Intersection of Middle Branch and Country Road S-4-94
2321 Old Pendleton Road
Anderson County

to receiving waters named

Outfall 001: Middle Branch to Brushy Creek to Little River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein. The permit consists of this cover sheet, Part I <u>6</u> pages, Part II <u>17</u> pages, Part III <u>5</u> pages, and Part IV <u>2</u> pages.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight

Date Issued

James D. Giattina, Director Water Management Division

ARTI

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - FINAL LIMITS

1. During the period beginning on the effective date of this permit and lasting until permit expiration, the permittee is authorized to discharge sanitary wastewater from Outfall 001.

PARAMETERS	DISCHAR	DISCHARGE LIMITATIONS	ATIONS	MONI	MONITORING REQUIREMENTS	REMENTS
	MONTHLY AVG	WEEKLY AVG	DAILY MAXIMUM	SAMPLING POINT(s)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow, MGD	Report	Report		Effluent	Daily	Continuous
Biochemical Oxygen Demand 5-day (BOD ₅), mg/l	Report			Influent	l day/week	24-hour Composite
Biochemical Oxygen Demand 5-Day (BOD ₅), mg/l (lbs/day)	21.0 (613)	30.0 (876)		Effluent	1 day/week	24-hour Composite
BOD ₅ , percent removal ¹	85				1/month	Calculated
Total Suspended Solids, mg/l	Report			Influent	1 day/week	24-hour Composite
Total Suspended Solids (TSS), mg/l (lbs/day)	21.0 (613)	30.0 (876)	1	Effluent	1 day/week	24-hour Composite
TSS, percent removal 1	85				1/month	Calculated
For March through October: Ammonia Nitrogen, (NH ₂ -N), mg/l (lbs/day)	1.43	2.0 (58)		Effluent	1 day/week	24-hour Composite
For November through February: Ammonia Nitrogen, (NH,-N), mg/l (lbs/day)	1.86 (54)	2.6 (76)	1	Effluent	1 day/week	24-hour Composite
Dissolved Oxygen (DO)	shall not	shall not be less than 5.0 mg/l	0 mg/l	Effluent	Daily	Grab
nH standard mits (SU)		60-85		Effluent	Daily	Grab

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - FINAL LIMITS (CONTINUED)

1. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge sanitary wastewater from Outfall 001.

PARAMETERS	DISCHARGE LIMITATIONS	GE LIMIT	CATIONS	MONE	MONITORING REQUIREMENTS	REMENTS
	MONTHLY AVG	WEEKLY AVG	DAILY MAXIMUM	SAMPLING POINT(s)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Chronic Whole Effluent Toxicity, IC ₂₅	> 100%			Effluent	See F	See Part IV
Total Phosphorus as P, mg/l (lbs/day)	Report (Report)			Effluent	1/quarter	24-hour Composite
Total Nitrogen as N, mg/l (lbs/day)	Report (Report)		1:	Effluent	1/quarter	24-hour Composite
Total Recoverable Nickel, mg/l	0.056	0.112	1	Effluent	1/month	24-hour Composite
Fecal Coliform Bacteria, #/100 ml	200		400	Effluent	4 days/week	Grab

1 - See item 4 on page I-4.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - INTERIM LIMITS

2. During the period beginning on the effective date of this permit and lasting until March 31, 2008, the permittee is authorized to discharge sanitary wastewater from Outfall 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHAR	DISCHARGE LIMITATIONS	FATIONS	MONI	MONITORING REQUIREMENTS	REMENTS
	MONTHLY AVG	WEEKLY AVG	DAILY	SAMPLING POINT(s)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Total Recoverable Copper, mg/l	0.019		0.027	Effluent	1/month	24-hour Composite

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - FINAL LIMITS

During the period beginning on April 1, 2008, and lasting until permit expiration, the permittee is authorized to discharge sanitary wastewater from Outfall 001.

PARAMETER	DISCHARGE LIMITATIONS	E LIMIT	YTIONS	MONE	MONITORING REQUIREMENTS	REMENTS
	MONTHLY AVG	WEEKLY AVG	DAILY MAXIMUM	SAMPLING POINT(s)	MEASUREMENT FREQUENCY	SAMPLE TYPE
Total Recoverable Copper, mg/l	0.014		0.018	Effluent	1/month	24-hour Composite

- 4. In addition to the specified limits, the monthly average effluent BOD₅ and TSS concentrations shall not exceed 15% of their respective influent values (minimum of 85% removal). The percent removal shall also be reported on the Discharge Monitoring Report (DMR) Form (EPA No. 3320-1).
- 5. All correspondence (including any report, notice, request for determination, etc.) that is required to be submitted to the Environmental Protection Agency (EPA) shall also be copied and submitted to the South Carolina Department of Health and Environmental Control at the address specified in Part III, Section A. of this permit.
- 6. The geometric mean of the fecal coliform values collected during any monthly period shall not exceed 200 colonies per 100 ml of effluent sample and shall be reported as the monthly average value on the Discharge Monitoring Report Form (EPA Form No. 3320-1) (DMR). The daily maximum fecal coliform value shall not exceed 400 colonies per 100 ml of effluent sample and shall be reported as the daily maximum value on the DMR Form.
- 7. Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to the actual discharge or mixing with the receiving waters (unless otherwise specified).
- 8. Any bypass of the treatment facility, which is not included in the effluent monitored above, is to be monitored for flow and all other parameters, except chronic whole effluent toxicity. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on a DMR Form.
- 9. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 10. The effluent shall not cause a visible sheen on the receiving water.
- 11. If the results for a given sample analysis are such that any parameter (other than fecal coliform) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI=B" on the DMR Form. For fecal coliform, a value of 1.0 shall be used in calculating the geometric mean. If the resulting fecal coliform mean value is 1.0, the permittee shall report "NODI=B" on the DMR Form. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR Form. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement.

C. Macroinvertebrate Assessment

- 1. The permittee shall perform a Macroinvertebrate Assessment downstream from the discharge location during July, August or September of the calendar year. A second assessment, if required, should be conducted during January, February or March of the calendar year, and any other required, as proposed in the assessment plan and reviewed by EPA.
- 2. The permittee shall submit a study plan for EPA review based on the following document:
 - EPA publication entitled, "Revision to Rapid Bioassessment Protocols for Use in Streams and Rivers: Periphyton, Benthic Macroinvertebrates, and Fish," by M.T. Barbour, J. Gerritsen, B.D. Snyder, and J.B. Stribling (EPA 841-B-99-002).
- 3. The study plan shall be submitted to EPA for review within 60 days of the effective date of the permit. Any EPA comments must be considered prior to commencement of actual sampling efforts. An explanation of any deviation from EPA comments must be submitted with the sampling results.
- 4. Results of a given in-stream assessment must be submitted to the EPA within 90 days of completion of the sampling.

D. POTW Pretreatment Program

The Permittee's Pretreatment Program to regulate flow from non-domestic discharge sources (hereafter called "industrial users") which was originally approved on December 6, 1984, must be conducted in accordance with 40 CFR Part 403, and is an enforceable condition of this permit.

- 1. Program Requirements and Reporting
 - a. In addition to the DMRs required in Part III.A, the Permittee shall include copies of the following with the DMR submitted on or before the 28th of January, April, July and October:
 - i. Any Permits to Discharge issued to, or Contracts entered into, industrial users during the previous quarter if they must be regulated.
 - ii. The names of any industrial users that are in violation of their permit, or the prohibitions described in Part III.D.2, with explanation of the action(s) being carried out to bring them into compliance.
 - iii. Schedules of compliance agreed to or imposed on an industrial user for the

Part IV

Chronic Whole Effluent Toxicity Testing Program

As required by Part I of this permit, the permittee shall initiate the series of tests described below beginning in September 2006 to evaluate chronic whole effluent toxicity of the discharge from outfall 001. All test species, procedures, and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA-821-R-02-013 (October 2002), or the most current edition. The control and dilution water will be moderately hard water as described in EPA-821-R-02-013, Section 7, or the most current edition. A standard reference toxicant quality assurance chronic toxicity test shall be conducted concurrently with each species used in the toxicity tests and the results submitted with the Discharge Monitoring Report (DMR) Form. Alternatively, if monthly QA/QC reference toxicant tests are conducted, these results must be submitted with the DMR. Any deviation from the bioassay procedures outlined or cited herein shall be submitted in writing to the EPA for review and approval prior to use to the address in Part III.A.

- 1. a. The permittee shall conduct a daphnid, <u>Ceriodaphnia dubia</u>, Survival and Reproduction test and a fathead minnow, <u>Pimephales promelas</u>, Larval Survival and Growth test. All tests shall be conducted using a control (0% effluent) and the following dilution concentrations: 100%, 75%, 50%, 25%, and 12%. The measured chronic endpoint will be the inhibition concentration causing 25% reduction in survival, reproduction, and/or growth (IC₂₅) of the test organisms. The IC₂₅ shall be determined based on a 25% reduction as compared to the controls, and as derived from linear interpolation. The average reproduction and growth responses will be determined based on the number of <u>Ceriodaphnia dubia</u> and <u>Pimephales promelas larvae</u>, as appropriate, used to initiate the test.
 - b. For each set of tests conducted, a 24 hr. composite sample of final effluent shall be collected and used per the sampling schedule discussed in EPA-821-R-02-013, Section 8.3, or the most current edition.
 - c. For either species, if control mortality exceeds 10% by 48 hours or 20% mortality thereafter, the test(s) for that species (including the control) shall be repeated. A test will be considered valid only if control mortality does not exceed 10% by 48 hours or 20% thereafter for either species. If, in any separate test, 100% mortality occurs prior to the end of the test, and control mortality is 10% or less if that time is prior to 48 hours or 20% or less thereafter, that test (including the control) shall be terminated with the conclusion that the sample demonstrates unacceptable acute and/or chronic toxicity. Each test must meet the test acceptability criteria for each species as defined in EPA-821-R-02-013, Section 13.12 and Section 11.12, respectively, or the most current edition. Additionally, all test results must be evaluated and reported for concentration-response relationship based on "Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)", EPA/821/B-00/004 (2000), or the most current

edition. If the required concentration-response review fails to yield a valid relationship per EPA/821/B-00/004 (or the most current edition), that test shall be repeated. Any test initiated but terminated prior to completion must be reported with a complete explanation for the termination.

- 2. a. The toxicity tests specified above are referred to as "routine" tests. Monitoring shall be conducted once every two months. If the results from any six consecutive "routine" tests for a test species show no violations of any limit expressed in Item 3.a below, then the monitoring frequency can be reduced to once every six months thereafter for the duration of the permit for that species. Otherwise, the sampling frequency shall continue once every two months for that species.
 - b. Results from "routine" or additional tests shall be reported according to EPA-821-R-02-013, Section 10, or the most current edition. All results shall also be recorded and submitted on the DMR in the following manner: If the monthly average IC_{25} of a test species is less than or equal to 100% effluent, " \leq 100%" shall be entered on the DMR for that species. If the monthly average IC_{25} of a test species is greater than 100% effluent, ">100%" shall be entered. All individual test results for a given month shall be submitted as an attachment to the DMR.
- 3. a. A monthly average IC_{25} of less than or equal to 100% effluent will be a violation of this permit.
 - b. If an IC_{25} of less than or equal to 100% effluent is found in a "routine" test, the permittee shall conduct two valid additional tests on each species indicating the violation and report each IC_{25} obtained.
 - c. The first valid additional test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12%. The dilution series may be modified in the second valid test to more accurately identify the toxicity, such that at least two dilutions above (not to exceed 100% effluent) and two dilutions below the RWC and a control (0% effluent) are run.
 - d. For each additional test, the sample collection requirements and the test acceptability criteria and concentration-response relationships specified in sections 1.b and c. above, respectively, must be met for it to be considered valid. The first additional test shall begin within two weeks of the end of the "routine" test, and shall be conducted very two weeks thereafter until two additional valid tests are completed.

SC Department of Health and Environmental Control Bureau of Water, 2600 Bull Street Columbia, S. C. 29201

June 12, 2006 (web notice-401-NPDES-SC0039853)



NOTICE OF PROPOSED DECISION - WATER QUALITY CERTIFICATION

The Department, acting on an application for Water Quality Certification pursuant to Section 401 of the Federal Clean Water Act and applicable regulations, has reached a proposed decision for the project described below.

Name: Easley/ Middle Branch WWTF SC0039853

Project: Discharge of treated wastewater to Middle Branch to Brushy Creek

County: Anderson

After reviewing the EPA's draft NPDES permit, Department Staff determined that there is a reasonable assurance that the proposed project will be conducted in a manner consistent with the applicable certification requirements. Accordingly, the Department proposes to certify the project with conditions as noted on the following pages.

The evaluation of the proposed work was conducted by the Bureau of Water, including the NPDES application and a copy of the staff assessment supporting the proposed decision is available upon request. The point of contact for information is Michael Montebello at 803-898-4228.

The final 401 Water Quality Certification will be issued if a request for an adjudicatory hearing is not made. The issuance of this certification represents a final staff decision that may be appealed to the Administrative Law Court (ALC). Such appeal must be made pursuant to the amended Rules of Procedure for the Administrative Law Court that became effective on May 1, 2005. Pursuant to Rule 11 of the amended ALC Rules of Procedure, such appeal must be made by filing a request for a contested case hearing with the Clerk of the ALC within thirty (30) days after notice of this decision at the following address:

Clerk, Administrative Law Court 1205 Pendleton Street, Suite 224

Columbia, SC 29211

Pursuant to Rule 11(D), the following elements must, at a minimum, be included within the request:

- 1. The name of the party requesting the hearing and the issue(s) for which the hearing is requested;
- 2. The caption or other information sufficient to identify the decision, order, letter, determination, action, or inaction which is subject to the hearing;;
- 3. A copy of the written agency decision, order, letter or determination, if any, which gave rise to the request;
- 4. The relief requested.

Furthermore, pursuant to ALC Rule 71, the Administrative Law Court requires that a party requesting a contested case hearing must submit a filing fee in the amount of \$250 with the Administrative Law Court.

Finally, a copy of a request for the contested case hearing must also be served on each party, including but not limited to DHEC. Copies of a request for a contested case hearing should be mailed to the Clerk of the Board, DHEC, 2600 Bull Street, Columbia, SC 29201, (803) 898-3300.

STANDARD CONDITIONS FOR ALL DOMESTIC NPDES PERMITS

- > **DEFINITIONS:** In addition to the definitions in Part II Section E, the "Department" or "DHEC" shall refer to the South Carolina Department of Health and Environmental Control.
- > INSPECTION AND ENTRY In addition to Part II Section C.7, allow inspections and entry by DHEC staff. Also, replace Part II Section C.7.d as follows to include the SC Pollution Control Act:
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and Pollution Control Act, any substances or parameters at any location.

> PROPER OPERATION AND MAINTENANCE - In addition to Part II Section B.1

- a. The permittee shall provide for the performance of daily treatment plant inspections by a certified operator of the appropriate grade. The inspection shall include, but is not limited to, areas which require a visual observation to determine efficient operations and for which immediate corrective measures can be taken using the O&M manual as a guide. All inspections shall be recorded and shall include the date, time and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by this permit. Records shall be made available for on-site review during normal working hours.
- b. The name and grade of the operator of record shall be submitted to DHEC/Bureau of Water/Water Enforcement Division prior to placing the facility into operation. A roster of operators associated with the facility's operation and their certification grades shall also be submitted with the name of the "operator-in-charge". Any changes in operator or operators shall be submitted to the Department as they occur.

> TWENTY-FOUR HOUR REPORTING – In addition to Part II Section D.8:

Any information shall be provided orally to local DHEC office within 24 hours from the time the permittee becomes aware of the circumstances. During normal working hours call:

County	EQC Region	Phone No.
Anderson, Oconee	Region 1- Anderson EQC Office	864-260-5569
Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda	Region 1 – Greenwood EQC Office	864-223-0333
Greenville, Pickens	Region 2 – Greenville EQC Office	864-241-1090
Cherokee, Spartanburg, Union	Region 2 – Spartanburg EQC Office	864-596-3800
Fairfield, Lexington, Newberry, Richland	Region 3 –Columbia EQC Office	803-896-0620
Chester, Lancaster, York	Region 3 – Lancaster EQC Office	803-285-7461
Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro	Region 4 – Florence EQC Office	843-661-4825
Clarendon, Kershaw, Lee, Sumter	Region 4 – Sumter EQC Office	803-778-6548
Aiken, Allendale, Bamberg, Barnwell,	Region 5 – Aiken EQC Office	803-641-7670

Calhoun, Orangeburg		
Georgetown, Horry, Williamsburg	Region 6 – Myrtle Beach EQC Office	843-238-4378
Berkeley, Charleston, Dorchester	Region 7 – Charleston EQC Office	843-740-1590
Beaufort, Colleton, Hampton, Jasper	Region 8 – Beaufort EQC Office	843-846-1030

After-hour reporting should be made to the 24-Hour Emergency Response telephone number 803-253-6488 or 1-888-481-0125 outside of the Columbia area. A written submission shall also be provided to the Department within 5 days of the time the permittee becomes aware of the circumstances. This notification should be addressed to:

S.C. Department of Health and Environmental Control Bureau of Water/Water Enforcement Division Water Pollution Enforcement Section 2600 Bull Street Columbia, South Carolina 29201

> ODOR CONTROL REQUIREMENTS – In addition to Part III of the permit:

The permittee shall use best management practices normally associated with the proper operation and maintenance of a sludge wastewater treatment site, any sludge storage or lagoon areas, transportation of sludges, and all other related activities to ensure that an undesirable level of odor does not exist.

- a. The permittee shall prepare an odor abatement plan for the industrial sludge treatment sites, any sludge storage or lagoon areas, and land application or land disposal sites. The permittee shall prepare the plan in accordance with R.61-9.503.50 (Odor Control Requirements). Permittees that land apply sludge must complete the plan by June 26, 2004. For permittees with other sludge related activities, the plan must be completed by December 26, 2004. The plan must include the following:
 - (1) Operation and maintenance practices which are used to eliminate or minimize undesirable odor levels in the form of best management practices for odor control;
 - (2) Use of treatment processes for reduction of undesirable odors;
 - (3) Use of setbacks;
 - (4) Contingency plans and methods to address odor problems for the different type of disposal/application methods used.
- b. The Department may review the odor abatement plan for compliance with R.61-9.503.50. The Department may require changes to the plan as appropriate.
- c. The permittee shall not cause, allow, or permit emission into the ambient air of any substance or combinations of substances in quantities that an undesirable level of odor is determined to result unless preventative measures of the type set out below are taken to abate or control the emission to the satisfaction of the Department. Should an odor problem come to the attention of the Department through field surveillance or specific complaints, the Department may determine, in accordance with section 48-1-120 of the Pollution Control Act, if the odor is at an undesirable level by considering the character and degree of injury or interference to:
 - (1) The health or welfare of the people;
 - (2) Plant, animal, freshwater aquatic, or marine life;
 - (3) Property; or
 - (4) Enjoyment of life or use of affected property.
- d. Should the Department determine that an undesirable level of odor exists, the Department may

require:

- (1) The permittee to submit a corrective action plan to address the odor problem,
- (2) Remediation of the undesirable level of odor within a reasonable timeframe, and
- (3) In an order, specific methods to address the problem.
- e. If the permittee fails to control or abate the odor problems addressed in this section within the specified timeframe, the Department may revoke disposal/application activities associated with the site or the specific aspect of the sludge management program.
- f. The odor abatement plan shall be updated and maintained as necessary throughout the life of the permit.
- > SLUDGE DISPOSAL REQUIREMENTS In addition to Part III of the permit:

See the specific permit pages listed below for the permit conditions.

> SCHEDULE OF COMPLIANCE - As it relates to Part I.B of the permit:

If the permittee opts to construct wastewater treatment facilities or modification to existing facilities to meet the schedule of compliance in the permit, a construction permit and operational approval from the Department may be needed before the facilities are built and placed into operation. SC Regulation 61-67 governs the construction of wastewater treatment facilities. If a permit is needed, application for a construction permit must be made in a timely manner to assure that the Department has adequate review time prior to the implementation of any final permit limits that the construction relates to.

CONDITIONS SPECIFIC TO EASLEY COMBINED UTIL./MIDDLE BRANCH WWTP – NPDES PERMIT SC0039853

Flow Limits to be added to all discharge Monitoring Pages Monthly Average 3.5 MGD, Weekly Average 3.75 MGD

Sludge Disposal Requirements

- 1. Sludge solids will be removed from this facility and transported to <u>Palmetto Landfill #422401-1101</u> under the following conditions:
 - a. All containers for sludge collection and transportation shall be structurally sound in every respect and shall be so constructed as to prevent leakage or spillage of any kind while in the process of pumping, storage, or transit.
 - b The total volume of waste transported shall not exceed the available capacity of the landfill.
 - c. The hauling of sludge may be revoked or suspended after notice and opportunity for a hearing when, in the opinion of the South Carolina Department of Health and Environmental Control, the Permittee has failed to comply with the permitting, hauling, transportation, or disposal requirements
 - d To the extent provided by law, the Permittee is responsible for the handling, transportation, and disposal of all sludge from the various source(s) transported to the approved disposal site. This responsibility includes, but is not limited to spills, accidents, unauthorized leaks, or other hazards which may occur.
- 2. The revised Land Application of Sludge Program Approval issued by SCDHEC Water Facilities Permitting Division dated <u>December 2, 2003</u>, shall be incorporated into and become an enforceable part of this permit. All conditions included in the approval shall be a requirement of this NPDES permit.

Reporting requirements:

Monitoring reports

Copies of the Monitoring results for items below must be reported forms provided or specified by the Department for reporting results of monitoring of groundwater monitoring, sludge use or disposal practices including the following:

Sludge, Biosolids and/or Soil Monitoring:

Copies of Sludge, biosolids and/or soil monitoring results obtained at the required frequency shall be reported in a laboratory format postmarked no later than the 28th day of the month following the end of the monitoring period. Two copies of these results shall be submitted to:

S.C. Department of Health and Environmental Control

Bureau of Water/Water Enforcement Division

Water Pollution Enforcement Section

2600 Bull Street

Columbia, South Carolina 29201

Copies of the pretreatment program reports shall be submitted (with the discharge monitoring reports) on or before the 28th of January to:

S.C. Department of Health and Environmental Control Bureau of Water/Water Enforcement Division Water Pollution Enforcement Section 2600 Bull Street Columbia, South Carolina 29201

Schedule of Compliance

- 1. a. Within 120 days from the effective date of this permit, the permittee shall submit the following to the Department as an update to the pretreatment program previously approved:
 - Recalculation of the headworks analysis to incorporate any changes in stream limits, removal rates, POTW design capacity, 7Q10 flows, etc. This includes evaluation of the need for local limits as defined under R.61-9.403.5(c) and (d). The headworks analysis must take into consideration the Water Classifications and Standards for the permittee's receiving waters to the satisfaction of the Department.
 - 2. Reevaluation of the industrial allocation of pollutants, and submittal of the limits page(s) for each regulated industrial discharger.
 - 3. The latest version of the sewer use ordinance with proposed revisions, if any.
 - 4. Updated pretreatment questionnaires for each regulated industrial discharger.
 - 5. A comprehensive list showing what industries discharge to this treatment facility and the industrial category each falls under, if any.
 - 6. The Department may require the permittee to provide additional testing, information, calculations and/or reports prior to approval of any proposed revisions to the approved pretreatment program.
 - 7. The Department will review the pretreatment program update and revised headworks analysis to determine if this permit requires modification or revocation and reissuance to include specific effluent metals/toxics monitoring and/or metals/toxics limitations.
 - b. Within 60 days after final approval by the Department, the permittee shall implement the approved changes and/or revisions to the pretreatment program.

Pretreatment Regulations and Program Requirements

- 1. Pretreatment Regulations and Program Requirements
 - a. The permittee's Pretreatment Program was originally approved on <u>December 6, 1984</u> with an update approved on <u>March 5, 1996</u>. The Permittee shall provide a subsequent update to the approved pretreatment program as specified in the Schedule of Compliance of this permit.

- b. In addition to the discharge monitoring reports submitted in accordance with Part II.L.4., the Permittee shall also submit copies of the following with the discharge monitoring report on or before the 28th of January.
 - Any Permits to Discharge issued to, or Contracts entered into with, non-domestic dischargers during the previous quarter if said dischargers must be regulated.
 - The names of any non-domestic dischargers that are in violation of any limits, either specific or general, imposed as part of the Pretreatment Program and an explanation of the action(s) being carried out to bring them into compliance.
 - Any schedules of compliance agreed to by or imposed on a non-domestic discharger for the purpose of bringing said discharger into compliance with the established discharge limits.
 - A report showing the number of regulated non-domestic dischargers; the number monitored and/or inspected during the calendar year; the cumulative number monitored and/or inspected during the year to date; the number in compliance and non-compliance during the calendar year and the number in compliance or non-compliance during the calendar year.
- c. Permittee shall require all non-domestic dischargers into Permittee's system to comply with pretreatment provisions of the Clean Water Act (Public Law 95-217), as set forth in the General Pretreatment Regulations, 40 CFR Part 403, promulgated there under, and with the Permittee's State Approved Pretreatment Program (R.61-9.403).

Additional Operational Requirements

- 1. The wastewater treatment plant is assigned a classification of <u>Group III-B (Biological)</u> in the Permit to Construct which is issued by the Department. This classification corresponds to an operator with a <u>grade</u> of B.
- 2. The Staffing Plan Approval dated <u>June 12, 2006</u>, shall be incorporated into and become an enforceable part of this permit. All conditions included in the approval shall be a requirement of this NPDES permit.
- 3. The wastewater treatment plant is assigned a Reliability Classification of <u>Class II</u>, in accordance with Section 67.400 "Reliability Classifications" of the Standards for Wastewater Facility Construction: R.61-67.
- 4. For parameters with a sample frequency of **once per month or greater**, the Permittee shall monitor (at least one sample) consistent with conditions established by this Permit on the <u>first (1st) Wednesday</u> of every calendar month, unless otherwise approved by the Department. (For example; with a once per week (01/07) sampling frequency, the permittee shall monitor one weekly sample on the day of the week noted during the monthly DMR reporting period.)

5. Macroinvertebrate Assessment Requirements

EFFLUENT CHARACTERISTICS	DISCH LIMITA		MONITO	RING REQ	UIREMENTS
	Other	Units			
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point
Instream Macroinvertebrate Assessment		MR*	1/Year		Downstream **

* See Part V.B for additional macroinvertebrate assessment requirements.

MR = Monitor and Report.

- ** The term downstream is used herein to mean the locations from which the instream macroinvertebrate assessment shall be conducted as identified in the Department approved study plan.
 - a. Conduct an instream macroinvertebrate survey.
 - (1) Instream macroinvertebrate assessments are used to detect biological impacts due to point source discharges or to determine ambient instream conditions, including non-point source impacts. The permittee shall use the following documents as guidance for writing proposed biological studies:
 - (a) EPA publication entitled, "Revision to Rapid Bioassessment Protocols for Use in Streams and Rivers: Periphyton, Benthic Macroinvertebrates, and Fish," by Barbour M.T., J. Gerritsen, B.D. Snyder, and J.B. Stribling (EPA 841-B-99-002) and
 - (b) "South Carolina Department of Health and Environmental/Control Standard Operating and Quality Control Procedures for Macroinvertebrate Sampling," Water Monitoring, Assessment, and Protection Division, Aquatic Biology Section, Columbia, SC, SCDHEC Document #004-98.
 - (2) The assessment should be conducted during July, August or September of the calendar year, as proposed in the assessment plan and approved by the Department.
 - b. A study plan shall be prepared and submitted to the Department for review within 30 days of the effective date of the permit. The Department must issue approval of the plan prior to commencement of actual sampling efforts.
 - c. The results of the instream assessments must be submitted to the Department within 90 days after completion of the sampling.

STATE OF SOUTH CAROLINA COUNTY OF BERKELEY) COURT OF COMMON PLEAS) NINTH JUDICIAL CIRCUIT) CASE NO. 2005-CP-08-250
The Commissioners of Public Works, City of Charleston; North Charleston Sewer District,)))
Plaintiffs,) ORDER GRANTING PETITION) FOR JUDICIAL REVIEW AND) REVERSING BOARD'S ORDER)
VS.)
South Carolina Department of Health and Environmental Control,)
Defendant.)

APPEARANCES

Presiding Judge:

The Honorable Thomas L. Hughston, Jr.

Date of Hearing:

June 20, 2005

Plaintiffs' Attorneys:

F. Paul Calamita, Lucas C. Padgett, Jr.,

Mary D. Shahid, and David G. Jennings

Defendant's Attorney: Evander Whitehead

Introduction

This matter was before me for hearing on June 20, 2005, in Berkeley County. All parties were present before me with counsel, as is noted above. This is an action seeking Judicial Review of a final decision of the S. C. Board of Health and Environmental Control ("the Board"). This action is authorized by the S. C. Administrative Procedures Act, S. C. Code Section 1-23-380.

Factual and Procedural Background

Plaintiff Charleston Commissioner of Public Works ("CPW") operates the Plum Island wastewater treatment plant and Plaintiff North Charleston Sewer District ("NCSD") operates the Felix L. Davis wastewater treatment plant. Plaintiffs collect and treat wastewater for the majority of the populations of Charleston and Berkeley Counties. Plaintiffs' publicly owned treatment works ("POTWs") operate adjacent to either the Cooper River or the Charleston Harbor, and Plaintiffs discharge treated effluent into these waters subject to a National Pollutant Discharge Elimination System ("NPDES") permit issued by Defendant.

Plaintiffs seek judicial review of an Order of the Board of Health and Environmental Control. This Order, issued January 7, 2005, affirmed in part and reversed in part a Final Order and Decision of the Administrative Law Judge ("ALJ"), the Honorable C. Dukes Scott. Judge Scott's Order, issued September 23, 2003, was the result of an appeal filed by Plaintiffs of their NPDES permits, which were re-issued by Defendant with new conditions and requirements.

Plaintiffs' re-issued permits contain new weekly and monthly permit limits for flow from Plaintiffs' facilities. These permits also contain new permit limits for ultimate oxygen demand "UOD." These UOD limits vary. For the months of November, December, January, and February these limits are approximately three times higher than for the months of March, April, May, June, July, August, September, and October. Higher UOD limits are easier limits for these facilities to meet. Lower UOD limits are more restrictive limits, and are more difficult limits for Plaintiffs to meet. The permit

limits for the months of March through October were derived, in part, in reliance on a total maximum daily load ("TMDL") developed by Defendant for dissolved oxygen ("DO") in the Cooper River and Charleston Harbor.

Plaintiffs filed contested case appeals of their NPDES permits, and their appeals were consolidated by the ALJ. Plaintiffs appealed the flow limits on their permits based on the fact that Defendant lacks the authority in statute and regulation to impose permit limits for flow. Plaintiffs' challenge to the UOD limits is based on the Department's reliance on the TMDL as a regulation, and on the Department's interpretation of R.61-68.D.4 wherein it asserts that if a water is found to be a naturally low dissolved oxygen waterbody for "some period during the year" then the 0.1 rule applies for the entire year. (Board Order at 3-4.)

Notably, Plaintiffs only appealed the UOD limits for the months of March, April, May and October.

The ALJ agreed with Plaintiffs,² and issued a Final Order and Decision that directed DHEC to remove any effluent limitations in Plaintiffs' permits that were based upon the TMDL, and to remove the monthly and weekly flow limits. The ALJ further found that "the UOD limits established for the months of November, December, January

¹ Initially four permits were under appeal – Charleston CPW's Plum Island permit, Charleston CPW's Daniel Island permit, NCSD's permit, and Berkeley County Water and Sanitation Authority's permit. According to Plaintiffs' counsel at the Hearing before me, Charleston CPW (Daniel Island) and Berkeley County have since withdrawn their appeals because they needed changes to their permits to accommodate community growth and development that could not wait for the resolution of this appeal. The Department would not modify a permit while an appeal was pending, thus forcing the two permits to be dropped from the appeal.

² Plaintiffs raised an additional issue before the ALJ regarding whether the Department properly included requirements for whole effluent toxicity ("WET") testing in Plaintiffs' permits. The ALJ found and concluded that the WET testing requirements in Plaintiffs' NPDES permits were proper. Plaintiffs did not challenge these findings on appeal.

and February are also the appropriate limits for the months of March, April, May and October." (Final Order and Decision at 8, Finding 40.)

The Board rejected the ALJ's conclusions regarding the UOD limits for March, April, May and October, and remanded the matter back to its staff to determine the appropriate limits for those months. The Board also reversed the ALJ's interpretation and application of the 0.1 Rule, and reversed the ALJ's conclusions that the Department did not have the legal authority to impose flow limits.

Plaintiffs timely filed their Petition for Judicial Review on February 4, 2005, alleging that they are entitled to an Order reversing the Board's Order, in accordance with S. C. Code Sec. 1-23-380. Defendant filed an Answer to the Petition, and filed a certified copy of the administrative record with the Court.

Discussion

I. The Board Erred In Concluding That DHEC Has Authority to Impose Flow Limits in Permits.

The issue of whether the Department can include limits for flow in NPDES permits, absent statutory or regulatory authority, is identical in nature to the issue of whether the Department properly relied on the TMDL for DO in deriving UOD limits. And, importantly, the Department did not challenge the ALJ's findings that "DHEC is required to promulgate regulations to implement the SCPCA, including regulations establishing the State's water quality standards, water quality criteria, and the substantive and procedural requirements applicable to the NPDES permitting program. S. C. Code Ann. Sec. 48-1-30 (1987)" (Final Order and Decision of the ALJ, page 12, Finding 7.) Moreover, the Department did not challenge the ALJ's conclusion that the

Department's use of the TMDL constituted unlawful regulation. (Final Order and Decision of the ALJ, page 17, Conclusion 1.)

The Department's regulations are not entirely silent as to flow. S. C. Code Reg. 61-9 505.42(D)(1)(v) addresses flow limits for a small group of "overland spray facilities" which are not at issue in this appeal. (Final Order and Decision at 9, Finding 45.) Accordingly, the ALJ held that the Department lacks the authority to impose flow limits in Plaintiffs' – or other – permits until such time as the Department promulgates such authority, as was done for overland spray facilities. (<u>Id.</u> At 15; Conclusion of Law 23.)

The flow limits at issue are binding norms. The Department has acknowledged the need to impose such limits by regulation (as to overland spray facilities). Yet, the Department offers no argument or explanation as to why it has imposed flow limits on Plaintiffs' facilities without first providing the rulemaking safeguards that were afforded owners of overland spray facilities through the adoption of R. 61-9 505.42(D)(1)(v). ³

To the extent the Board's decision would allow the Department to impose flow limits in Plaintiffs' and others' permits without first promulgating such authority, the Board's decision is in error.⁴

³Given the principle of "expression unius est exclusion alterius," (expression of one thing is exclusion of another), <u>Wiedemann v. Town of Hilton Head Island</u>, 330 S.C. 532, 500 S.E.Zd 783 (May 18, 1998), the fact that the Department has promulgated authority to impose flow limits only on overland spray facilities compels a finding that it lacks authority to impose flow limits on any other facilities.

⁴ While the Board concluded that the Department had the authority to impose flow limits, it also ordered that Plaintiffs' permits be modified to eliminate weekly and monthly flow limits. Plaintiffs maintain, and this Court agrees, that the issue of the Department's authority to impose flow limits is appropriate for judicial review. Plaintiffs' permits are up for renewal every five years, and the Department will have numerous opportunities to restore flow limits to Plaintiffs' permits. Therefore, this issue is "capable of

II. The Board Erred as a Matter of Law in its Interpretation of the 0.1 Rule

- S. C. Code Regs. 61-68 provides in relevant part that:
- 4. Certain natural conditions may cause a depression of dissolved oxygen in surface waters while existing and classified uses are still maintained. The Department shall allow a dissolved oxygen depression in these naturally low dissolved oxygen waterbodies as prescribed below pursuant to the Act, Section 48-1-83, et seq., 1976 Code of Laws:
- a. <u>Under these conditions</u> the quality of the surface waters shall not be cumulatively lowered more than 0.1 mg/l for dissolved oxygen from point sources and other activities, or

R.61-68.D.4 (<u>emphasis added</u>).

The Department contends that "if a waterbody is deemed naturally low in dissolved oxygen at any time of the year" then the 0.1 rule applies "for all months and seasons." (Answer at 4.) The Board ruled that if a water is found to be a naturally low dissolved oxygen waterbody for "some period during the year" then the 0.1 rule applies for the entire year. (Board Order at 3-4.) Plaintiffs argue that this interpretation reads the phrase "under these conditions" and "certain natural conditions may cause a depression of dissolved oxygen" right out of the Regulation.

DHEC and the Plaintiffs agree that the 0.1 rule applies during the four "summer" months of the year (June, July, August, and September) when water quality data reflects evidence of depressions in DO. DHEC and the Plaintiffs also agree that the

repetition but evading review." <u>See</u>, <u>Sloan v. Greenville Co.</u>, 356 S. C. 531, 590 S.E.2d 338, 2003 S.C.App. LEXIS 193.

⁵ Notably, the DHEC staff only began asserting the interpretation that the 0.1 Rule applied year round in their appeal of Judge Scott's decision. To the contrary, the permits in question do not impose 0.1 Rule loadings during the Winter months. Moreover, the Department's own expert testified before the ALJ that "We do not have a formal definition of when this [0.1 Rule] applies." Hearing Transcript, Day One, at 207, lines 9-10.

limits developed for the summer months do not apply in the "winter" months (November, December, January, and February) when there is no dispute that there is no low dissolved oxygen, naturally or otherwise. The issue before me is whether the 0.1 rule applies in the four remaining months (March, April, May, and October), when there is no dispute that there is no low dissolved oxygen, naturally or otherwise. (Final Order and Decision at 7, Finding 33.)

I agree with Plaintiffs that the regulation is unambiguous, and therefore it is not subject to interpretation. The plain meaning of the regulation is to apply the rule when a waterbody actually experiences naturally low dissolved oxygen levels. See, Brown v. S.C. Department of Health and Environmental Control, 348 S.C. 507, 515 (2002), "neither agency interpretation nor long-standing policy can overcome the plain meaning of regulatory language." Moreover, there was extensive and undisputed evidence in the record below that the Cooper River and the Charleston Harbor do not display low dissolved oxygen levels during March, April, May and October. (Final Order and Decision at 7, Finding 33.)

Therefore, the .1 Rule only applies in this case during the months of June through September where there is evidence of naturally low DO conditions.

III. Remand of the UOD Limits for the Months of March, April, May and October Constituted Legal Error.

The ALI presides over all hearings of contested DHEC permitting cases. See, S. C. Code Ann. Sec. 1-23-600(B) (Supp. 2002). In such cases, the ALI serves as the finder of fact. Brown v. S. C. Dep't of Health & Envtl. Control, 348 S. C. 507, 512, 560 S. E. 2d 410, 413 (2002). On appeal of a contested case, a reviewing tribunal "must

affirm the ALI if the findings are supported by substantial evidence, not based on the [Board's] own view of the evidence." <u>Dorman v. Dep't of Health & Envtl. Control</u>, 350 S. C. 159, 166, 565 S. E. 2d 119, 123 (Ct. App. 2002). <u>See also, Marlboro Park Hospital and Chesterfield General Hospital v. S. C. DHEC</u>, 358 S. C. 573, 577, 595, S. E. 2d 851, 853, (2004).

The Board's remand of the UOD limits for March, April, May and October constitutes legal error because the ALJ's factual finding Number 40 regarding the appropriate limits for those months was supported by substantial evidence. ⁶

The substantial evidence that the limits were appropriate in the record included:

- Over 70,000 data points that demonstrate that the river is not impaired –
 naturally or otherwise during March, April, May, and October. Thus, there is
 no need for limits different from those in the Winter months when the river is not
 impaired either. (Final Order and Decision, Findings of Fact 32 and 33.)
- The Cooper River has never been on the impaired waters list for dissolved oxygen. (Final Order and Decision, Findings of Fact 27 and 39.)
- Approximately 15 other major dischargers to the system had accepted 60-70
 percent reductions in their authorized NPDES UOD loadings, from the levels
 authorized during the years when the 70,000 samples were taken. These
 additional regulatory restrictions bolster the undisputed conclusion that there is

⁶ "Substantial evidence is evidence that, in light of the whole record, allows reasonable minds to reach the reviewing tribunal's conclusion." <u>Malboro Park Hospital and Chesterfield General Hospital v. S.C. Dep't of Health & Envtl. Control.</u>, S.C. Ct. of App. Opinlon No. 3774 (April 12, 2004) <u>citing</u>, <u>Leventis v. S.C. Dep't of Health & Envtl. Control.</u>, 340 S.C. 118, 130, 530 S.E.2d 643, 650 (2000).

no low DO – naturally or otherwise – during the months in question. (Final Order and Decision, Finding of Fact 41.)

- That there was no in-stream oxygen impairment even when Plaintiff North
 Charleston Sewer District discharged an additional 100,000 pounds UOD from an
 industrial discharger Rhodia which has since been eliminated. (Hearing
 Transcript, Day One at 102-103.) The 100,000 pounds from Rhodia is larger than
 the loadings for both Plaintiffs' facilities.
- The Department's own expert testified that Plaintiffs' facilities are "insignificant" in terms of loadings and flow to the Cooper River. (Hearing Transcript, Day One at 221, lines 10-19.)

These facts, individually and collectively, constitute substantial evidence to support the ALJ's decision that the winter limits are appropriate during March, April, May, and October. By ordering a remand, the Board impermissibly overturned a factual finding that was amply supported by substantial evidence in the trial record.

Findings of Fact

Based on the record before me, including the pleadings, the certified administrative record, the briefs filed by the parties, and the arguments of counsel, I find as follows:⁷

1) Plaintiffs CPW and NCSD own publicly owned treatment works and operate wastewater treatment plants, which discharge treated effluent into the Cooper River/Charleston Harbor system.

⁷ In addition to the factual findings set forth specifically herein, this Court adopts, *In toto*, the Findings of Fact contained in the Final Order and Decision of the ALJ that are relevant to Plaintiffs' CPW and NCSD Petition for Judicial Review.

- Plaintiffs' current operations are authorized pursuant to NPDES permits.
 CPW's permit for its Plum Island discharge was effective September 1,
 1995 and expired on September 30, 2000. NCSD's permit was effective
 August 1, 1995 and expired on July 31, 2000.
- Plaintiffs submitted timely requests for renewal of these permits and, in accordance with 24 S. C. Code Ann Regs. 61-9 122.6(a) (Supp. 2002), the conditions of an expired permit continue in force until the effective date of a new permit.
- 4) DHEC renewed permits to NCSD and CPW effective April 1, 2003.
 Plaintiffs appealed these renewed permits before the ALC.
- 5) NCSD's renewed permit⁸ includes monthly and weekly average limits for flow.
- CPW's renewed permit includes monthly and weekly average limits for flow.
- 7) NCSD's renewed permit establishes UOD limits for March through October that are approximately three times smaller than the UOD limits for November, December, January, and February.
- 8) CPW's renewed permit establishes UOD limits for March through October that are approximately three times smaller than the UOD limits for November, December, January, and February.

⁸ The term "renewed permit" refers to the permit that was the subject of the underlying contested case and is the subject of this action for Judicial Review.

- The Department set UOD limits in Plaintiffs' permits based on its interpretation of S. C. Code Sec. 48-1-83(A) and S. C. Code Ann. Regs. 61-68.D.4, referred to collectively as the ".1 Rule." In order to implement the .1 Rule, the Department developed a Total Maximum Daily Load "TMDL" for dissolved oxygen "DO" in the Cooper River and Charleston Harbor.
- 10) Plaintiffs demonstrated before the ALJ, through the collection and analysis of 232,664 water quality samples collected between 1996 and 2000, that the Cooper River and Charleston Harbor are not impaired for dissolved oxygen during the months of October through March.⁹
- DHEC applied the 0.1 Rule to Plaintiffs for purposes of calculating UOD limits for the months of March, April, May, June, July, August, September, and October. Based on the substantial evidence contained in the administrative record, the Cooper River and Charleston Harbor are not naturally low dissolved oxygen waterbodies in March, April, May and October.
- 12) S. C. Code Sec. 48-1-83(A) and S. C. Code Regs. 61-68(D)(4), which are referred to collectively as "the 0.1 Rule," only apply when a waterbody experiences naturally low dissolved oxygen levels.

⁹ The Cooper River/Charleston Harbor is classified as an SB stream in accordance with 25 S. C. Code Ann. Regs. 61-69. SB waters are tidal saltwaters suitable for primary and secondary contact recreation, crabbing, and fishing, except for harvesting shellfish. DHEC has established a standard for DO levels in SB waters of 4 mg/l in 25 S. C. Code Ann. Regs. 61-68. A water body is impaired for DO if the level of DO measured in a sample is less than 4 mg/l.

¹⁰ Plaintiffs are not challenging the UOD limits imposed for June, July, August, and September.

- 13) There is substantial evidence in the administrative record that the UOD limits applicable in November, December, January and February are appropriate limits for March, April, May and October.
- The amount of flow from a facility is subject to variability, completely out of Plaintiffs' control. The main source of variability is weather related events.
- 15) Flow limits are punitive to local government facilities because of the potential for Plaintiffs to exceed their flow limits without exceeding any substantive pollutant limits. (Final Order and Decision at 10-11, Finding 56.) Moreover, flow limits are not necessary to protect water quality. (Id. at 9, Finding 47.) Exceedances of flow limits constitute a violation of an NPDES permit and subjects the permittee to the penalty provisions of the Federal Water Pollution Control Act and SC Pollution Control Act.
- There is no express authority, either in the S. C. Pollution Control Act or the Department's NPDES regulations, which identifies flow as a pollutant and/or authorizes the Department to impose flow limits in Plaintiffs' permits.
- The Defendant lacks authority to impose flow limits in permits for facilities other than overland spray facilities. See R.61-9 505.42(D)(1)(v). To the extent the Department wishes to impose effluent limitations for flow for non-overland spray facilities, it may only do so after an appropriate change to its surface water discharge permitting regulation (R.61-9).

Conclusions of Law

Based on the Findings of Fact and legal discussion set forth above, I conclude as follows:

- Plaintiffs' Petition for Judicial Review satisfies the requirements of S. C.
 Code Sec. 1-23-380 and Plaintiffs have properly preserved each issue raised at the hearing before me for review.
- 2. The Board erred in remanding Plaintiffs' permits back to the Department's staff for purposes of calculating UOD loads for the months of March, April, May, and October. There was substantial evidence to support the findings and conclusions of the ALJ regarding the appropriate UOD limits for the months in question, and there was no basis under S. C. Code Sec. 1-23-610(D) for remand.
- 3. The Board erred in its interpretation of the 0.1 Rule. A plain reading of S. C. Code Sec. 48-1-83(A) and S. C. Code Ann. Regs. 61-68.D.4 demonstrates that the 0.1 Rule should only be applied when dissolved oxygen levels in a waterbody fall below the standard. Such error is grounds for reversal of the Board's Order in accordance with S. C. Code Sec. 1-23-380(A)(6)(a), (b), and (d).
- 4. The Board erred in determining that the 0.1 Rule should be applied to Plaintiffs' permits during the months of March, April, May, and October, when the administrative record provides no evidence of impairment for

- DO during those months. Such error is grounds for reversal of the Board's Order in accordance with S. C. Code Sec. 1-23-380(A)(6)(e).
- 5. The Board erred in concluding that the Department has authority to impose flow limits in NPDES permits. At present, the Department lacks any express authority, either in statute or regulation, to impose flow limits. The Department is required by statute, however, to adopt regulations to implement its authority under the S. C. Pollution Control Act. (See, S. C. Code Sec. 48-1-30.) The Board's conclusion that the Department has authority to impose flow limits in NPDES permits without first resorting to promulgating such authority is grounds for reversal in accordance with S. C. Code Sec. 1-23-380(6)(a), (b), and (d).
- 6. While the Board ordered the removal flow limits from the Plaintiffs' permits, those limits have not been removed and the issue of the Board's authority to impose flow limits is justiciable nevertheless because it is capable of repetition.

It is, therefore, ORDERED:

That the Order of the Board of Health and Environmental Control, dated January 7, 2005, be, and it is hereby, REVERSED. The Final Order and Decision of the Administrative Law Judge, dated September 23, 2003, is hereby reinstated.

[SIGNATURE BLOCK APPEARS ON FOLLOWING PAGE]

Thomas L. Hughston, Jr.
Circuit Court Judge

#15

Charleston South Carolina
Dated: _Tuly 31, 2005.

STATE OF SOUTH CAROLINA COUNTY OF BERKELEY) COURT OF COMMON PLEAS) NINTH JUDICIAL CIRCUIT) CASE NO. 2005-CP-08-250
The Commissioners of Public Works, City of Charleston; North Charleston Sewer District,))))
Plaintiffs,) CERTIFICATE OF SERVICE
VS.)
South Carolina Department of Health and Environmental Control,) }
Defendant.))

The undersigned, an employee of McNair Law Firm, P.A., hereby certifies that I have this 22nd day of July, 2005, served the foregoing Order Granting Petition for Judicial Review and Reversing Board's Order upon all parties and counsel of record by hand-delivery a copy of the same at the address indicated below:

Evander Whitehead, Esquire Office of General Counsel SCDHEC-OCRM 1362 McMillan Ave., Suite 400 North Charleston, SC 29405

Ramfoldeley

July 22, 2005

AMENDMENT TO THE FACT SHEET AT THE TIME OF FINAL PERMIT ISSUANCE

DATE: July 31, 2006

FACILITY: Easley - Middle Branch WWIP

NPDES NUMBER: SC0019851

PERMIT WRITER: Virginia Buff

| Chapter to the permit from Draft to Final Permit Stage.

The compliance schedule for copper has been increased from 18 months to 27 months to allow for adequate time to review all documents, complete concurrent studies, and construct any necessary faculaties for copper removal. The date of compliance to meet the final copper limits is December 1, 2008.

The Cover Page has been revised to reflect the attachment of State Clean Water Act (CWA). Section 401 Certification requirements.

Monthly average and duity maximum flow limitations have been added based on the State CWA Section 401 Certification requirements.

The requirements for the in-stream mactoinvertebrate study have been charged to reflect the State CWA. Section 401 Certification. Specifically, a minimum requirement of one study per year has been added, along with a 30 day period to submit the study plan. An additional reference source is included for drafting the study plan. All documentation and reporting must be submitted to both EPA and SCOTIEC.

2 Diological Evaluation:

On August 29, 2005, the EPA prepared a Biological Evaluation on the receiving water of the point source discharge and the waters immediately downstream of the discharge. This evaluation reviewed the Federally listed endangured, threatened, and proposed species and critical habitat that may be found within this area that might be affected by this point source.

discharge. For this point source discharge, the evaluation determined that there would be "no effect" on animal or plant species fisted in this area. The Biological Evaluation for this facility has been placed in the administrative record held by EFA Region 4.

3. Public Comments.

The permittee provided timely comments in a letter dated May 26, 2006, and a response to each summarized comment is provided below.

Comment #1 (Total Suspended Solids): TSS permit limits should be set at secondary treatment. In the last permit issuance SCDHEC erred in requiring limits more stringent than secondary treatment. There is no rule that provides that discharges to biologically impaired receiving waters be limited to existing loadings for all pollutants. Where is this "holding the line" strategy? Additionally, there is no water quality standard for TSS and antibacksliding does not apply as SCDHEC erred in imposing a limit more stringent than secondary treatment.

Response: TSS is a pollutant and, as such, it is the best professional judgement of the permit writer that all pollutants be kept at existing loads and concentrations until a TMDL is prepared for the biological impairment, or the stream is delisted from the 303(d) list. This strategy is in keeping with 40 CFR Section 122,44(d)(1)(i) which states that a discharge cannot cause or contribute to a water quality violation. Since the exact cause of the biological impairment is unknown, all pollutants will be held to their existing loads and concentrations. This strategy is further outlined in the state's "Amidegradation Implementation for Water Quality Protection in South Carolina Waters."

Comment #2 (Fecal Coliform Daily Maximum Limit): The daily max fecal coliform effluent limit should include a 10% exceedance allowance as stated in state water quality standard regulations. Furthermore, antibacksliding does not apply as there was prior permit error. Other states have less stringent fecal coliform requirements.

Response: SC regulations for the application of criteria for the derivation of permit effluent Eminations state under Section 61-68 B.14.c.(9).

"In order to protect recreational uses for all waters of the State, the stated value of 200/100 ml for fecal coliform shall be used as a mornibly average number for calculating permit efficient limitations and the stated value of 400/100 ml for fecal coliform shall be used as a daily maximum number for calculating permit efficient limitations."

This requirement is specifically written for deriving permit limits.

The 10% allowance is found under water quality standards for Freshwaters Section 61-68. G. 10.e., which states for fecal coliform:

"Not to exceed a geometric mean of 200/100 ml, based on five consecutive samples during any 30 day period; nor shall more than 10% of the total samples during any 30-day period exceed 400/100 ml."

That is an ambient water quality standard which protects the water bodies from all fecal schiform sources. It is the best professional judgment of the permit writer that the fecal coliform permits hearts as written in the draft permit will protect the stream end also most the requirements for deriving permit limits.

Thus, there has been no error in the previous permit issuance in regard to feeal colliform. Since there has been no error and there are no other reasons presented to seek backshiding, further discussions of backshiding is not relevant.

In regard to other state requirements, other states may have less stringers itents, but all permits must be written according to their respective state standards.

Comment #3 (Macroinvertebrate Testing): It is requested that macroinverebrate testing be reduced to the first and last years of the permit.

Response. The receiving water body is impaired for not meeting biological criteria. The macroinvertebrate testing will be required as stipulated in the final permit. Furthermore, the state certification luxtur specifically requires yearly macroinvertebrate testing.

4. State Certification

State Certification was requested on May 4, 2006. A State Certification dated July 13, 2006, was received by EPA and has been incorporated into the permit via attachment.

5. Permit Expiration:

At the request of the South Carolina Department of Health and Environmental Control, pennit duration has been abortened to sequence permit expiration with the State's basin cycle.

MUNICIPAL FACILITY FACT SHEET

APPLICATION FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TO DISCHARGE TREATED WASTEWATER TO WATERS OF THE UNITED STATES

Application No.: SC0039853 Application Date: March 17, 2004

Permit Writer: Virginia Buff

I. Synopsis of Application

(1) Name and Address of Applicant

Easley Combined Utilities P.O. Box 619 Easley, SC 29641

For:

Middle Branch WWTP
Intersection of Middle Branch and Country Road S-4-94
2321 Old Pendleton Rd.
Anderson County

(2) Type of Facility

Municipal wastewater treatment plant Publicly-owned treatment works (POTW) Standard Industrial Classification Code: 4952

(3) Design Capacity of Facility

3.50 MGD

(4) Applicant's Receiving Water

Middle Branch to Brush Creek, which is listed on the CWA Section 303(d) list for fecal coliform and macroinvertebrate community data.

Latitude: 34° 46′ 53″N Longitude: 82° 32′ 04″W See Attachment A for a sketch showing the location of the discharge.

(5) Description of Wastewater Treatment Facilities

This is a municipal wastewater treatment plant designed to treat domestic and industrial wastewater. Influent passes through coarse bars, a comminutor and then static screens. Final settling follows the biological treatment trains before ultraviolet disinfection and discharge to Middle Branch. Sludge is dewatered by belt presses and then land applied.

(6) Description of Discharge (as reported in application)
Outfall Serial No. 001 - Sanitary Wastewater, located more than 50 miles above a drinking water intake.

Annual Average Daily Flow, MGD - 1.84 Maximum Daily Flow, MGD - 6.05

As reported in Easley's NPDES application, pollutants which are monitored or which are subject to effluent limitations are as follows:

Effluent	Reported	Data
Characteristic	Maximum Daily	Average Daily
Biochemical Oxygen Demand, 5-day, mg/l	36	7.3
Total Suspended Solids, mg/l	108	8.1
Fecal Coliform, #/100 ml	> 600	7.
pH, Standard Units	5.8	8.0
Total Ammonia Nitrogen (as N), mg/l	11.0	1.0
Total Nitrogen, mg/l	10.6	10.0
Total Phosphorus, mg/l	2.5	2.3
Copper, mg/l	0.0094	0.0068
Nickel, mg/l	.036	.027

Proposed Effluent limitations 2. Serial 001 - Treated Sanitary Wastewater

PROPOSED FINAL LIMITATIONS

Parameter	Monthly Average	Weekly Average	Daily Max
Flow (MGD)	Report	Report	· .
Biochemical Oxygen Demand (BOD ₅), mg/l (lbs/day)	21.0 (613)	30.0 (876)	, ,
Total Suspended Solids (TSS), mg/l (lbs/day)	21.0 (613)	30.0 (876)	
Ammonia Nitrogen (NH ₃ -N), Mar-Oct mg/l (lbs/day)	1.43 (42)	2.0 (58)	
Ammonia Nitrogen (NH ₃ -N), Nov-Feb mg/l (lbs/day)	1.86 (54)	2.6 (76)	
Dissolved Oxygen, mg/l	shall not be less than 5.0		
pH, standard units (s.u.)	6.0 - 8.5 (range)		
Fecal Coliform Bacteria, #/100 ml	200		no more than 10% > 400
Total Recoverable Copper, mg/l	.014		.018
Total Recoverable Nickel, mg/l	.056	0.112	
Chronic Whole Effluent Toxicity, IC ₂₅	> 100%		_
Total Phosphorus, mg/l (lbs/day)	Report(Report)		
Total Nitrogen, mg/l (lbs/day)	Report(Report)		

Basis for Final Effluent Limits and Permit Conditions

Parameter:

Flow, MGD

Proposed Condition:

Monitor only

Justification:

The requirement to monitor flow is consistent with the Clean Water Act

(CWA) § 308(a).

Parameter:

Dissolved Oxygen, mg/l

Proposed Condition: Minimum of 5.0

Justification:

The effluent limitation for dissolved oxygen (DO) is based on a waste load

allocation prepared by South Carolina Department of Health and Environmental Control (SCDHEC) dated July 30, 2004, identifying the minimum concentration allowable while protecting water quality.

The effluent limitations and monitoring requirements are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR Section 122.44(1).

Parameter:

BOD₅, mg/l (lbs/day) Proposed Condition: Influent: Monitor

Effluent: 21.0 (613) monthly avg., 30.0 (876) weekly avg

85% removal

Justification:

The requirement to monitor the influent for BOD₅ consistent with the CWA § 308(a) and necessary to calculate the percent removal in the effluent.

The effluent limitations for BOD, are based on a waste load allocation dated July 30, 2004, identifying the maximum concentration allowable while protecting water quality

The effluent limitations and monitoring requirements are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR § 122.44(1).

The minimum monthly average percent removal is based on 40 CFR Section 133.102(a)(3) for secondary treatment. There is no provision in the regulations to not include the 85% secondary treatment removal requirement for POTWs. The regulations (40 CFR Section 133.105) only allow reduced treatment percentages in certain circumstances. Easley has not provided any information or data for our consideration in regard to the reduced treatment percentages.

Parameter:

Ultimate Oxygen Demand (UOD), lb/day

Proposed Condition: No Limit

Justification:

It has been determined that the UOD limit is unnecessary as the mass limits for BOD₅ and ammonia will indirectly result in attainment of the UOD limit needed to protect the in-stream DO standard.

Parameter:

TSS, mg/l (lbs/day)

Proposed Condition: Influent: Monitor

Effluent: 21.0 (613) monthly avg., 30.0 (876) weekly avg.

85% removal

Justification:

The requirement to monitor the influent for TSS is consistent with the CWA § 308(a) and necessary to calculate the percent removal in the effluent.

The effluent limitations and monitoring requirements are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR Section 122.44(1).

The minimum monthly average percent removal is based on 40 CFR. Section 133.102(b)(3) for secondary treatment. There is no provision in the regulation to not include the 85% secondary treatment removal requirement required for POTWs. The regulations (40 CFR Section 133.105) only allow reduced treatment percentages in certain circumstances. Easley has not provided any information or data for our consideration in regard to the reduced treatment percentages.

Parameter:

pH, standard units (SU)

Proposed Condition:

6.0 - 8.5

Justification:

The effluent limitation range for pH was based on the state water quality criteria found in Reg. 61-68 and is in accordance with 40 CFR Section 122.44(d).

The effluent limitations and monitoring requirements are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR Section 122.44(1).

Parameter:

Ammonia - Nitrogen, mg/l (lbs/day)

Proposed Condition:

March through October: 1.43 (42) monthly avg., 2.0 (58) weekly avg. November through February: 1.86 (54) monthly avg., 2.6 (76) weekly

avg.

Justification:

The effluent limitations for ammonia as nitrogen are based on a waste load allocation dated July 30, 2004, identifying the maximum concentration allowable while protecting water quality.

The effluent limitations and monitoring requirements are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR Section 122.44(1).

Parameter:

Fecal Coliform Bacteria, #/100 ml

Proposed Condition:

200 (monthly average); no more than 10% of samples exceeding 400

(daily max)

Justification:

The effluent limitations for fecal coliform are based on a waste load allocation dated July 30, 2004, identifying the maximum count allowable while protecting water quality.

The effluent limitations and monitoring requirements are necessary to ensure that the effluent does not cause, or has the reasonable potential to cause or contribute to, an exceedance of a Recreational Use Criteria, based on Reg. 61-68, specifically Section E.14.c.(9), and are consistent with the previous NPDES permit and the anti-backsliding provisions of 40 CFR Section 122.44(1).

Parameter:

Total Residual Chlorine, mg/l

Proposed Condition: No requirement

Justification:

Ultra-violet disinfection is now the method of disinfection. There is no

chlorine associated with this process.

Parameter:

Total Phosphorus, mg/l (lbs/day)

Proposed Condition:

Report (Report) quarterly

Justification:

The monitoring for Total Phosphorus is included based on best professional judgement as allowed under 40 CFR § 122.43 and is consistent with CWA § 308(a) in order to assess nutrient loading to water bodies downstream of this discharge.

Parameter:

Total Nitrogen, mg/l (lbs/day)

Proposed Condition:

Report (Report) quarterly

Justification:

The monitoring for Total Nitrogen is included based on best professional judgement as allowed under 40 CFR § 122.43 and is consistent with CWA § 308(a) in order to assess nutrient loading to water bodies downstream of this discharge.

Parameter:

Chronic Whole Effluent Toxicity (WET)

Proposed Condition:

 $IC_{25} > 100 \%$

Justification:

The CWA states in Section 101(a)(3) that it is the national policy that the discharge of toxic pollutant in toxic amounts be prohibited. The September 30, 1999, current NPDES permit for this facility contains chronic WET limits using a reproductive sublethal endpoint. Based on available data from January 2002 to April 2005, this facility has failed the chronic whole effluent toxicity test 15 times out of a total of 40 tests using a Ceriodaphnia dubia (water flea) reproductive sublethal endpoint at the in-stream waste concentration (IWC) of 100%. These failures are adequate justification to require chronic WET limits in the permit.

Based on the above toxicity testing information, EPA has determined that this facility continues to have reasonable potential (RP) to cause, or contribute to, excursions of South Carolina's narrative water quality criterion cited below (Rule 61-68.E.5.d):

> "All ground waters and surface waters of the State shall at all times, regardless of flow, be free from high temperature, toxic, corrosive, or deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere with classified water uses (except classified uses within mixing zones as described in this regulation), existing water uses, or which are harmful to human, animal, plant, or aquatic life."

Thus, chronic WET permit limits are authorized and required by CWA §§ 301(b)(1)(C) and 402(a)(1), as well as 40 C.F.R. Sections 122.44(d)(1)(i), (v), and (vii)(A), and 122.44(d)(5). Authority is also provided by SC Rules 61.68.E.1, E.4.a, E.5.c, E.5.d, and E.12.c.10. Because the current permit contains chronic WET limits with a sublethal reproductive endpoint and because RP is determined to still exist, CWA § 402(o) and 40 C.F.R. Section 122.44(l) also provide authority for chronic WET limits with a sublethal reproductive endpoint in the permit.

In assessing RP for the facility's discharge to cause, or contribute to, excursions of SC's narrative criteria cited above, EPA also accounted for:

- 1) existing controls on point sources by treatment of domestic and industrial wastewater sewage through biological treatment, physical treatment and ultraviolet disinfection. Use of multiple toxicity tests is representative of the monitored activity. There are no other point source dischargers on Brushy Creek.
- 2) variability of the effluent through the 39 <u>Ceriodaphnia</u> tests cited above and 15 chronic test failures demonstrating sublethal toxicity;
- 3) species sensitivity because <u>Ceriodaphnia</u> is sensitive to many pollutants and the 15 chronic tests cited above that showed sublethal toxicity at the IWC using this single test species exists.

Because use of multiple test species with different sensitivities can more effectively characterize exposure to different pollutants and effluent variability, EPA believes the combined use of two test species to assess impacts on both reproduction and growth will better maintain and protect South Carolina's surface waters at all times from substances harmful to aquatic life, as specified in Rule 61-68.E.5.d. EPA is thus requiring use of Ceriodaphnia dubia and Pimephales promelas (fathead minnow) as chronic WET test species through 40 CFR Section 136 test methods to assess sublethal endpoints of reproduction and growth, respectively. Use of these two chronic WET test species is consistent with past Regional practice. Authority to require two test species to assess chronic WET sublethal endpoints is provided by CWA §§ 301(b)(1)(C), 308(a), and 402(a)(2), as well as 40 C.F.R. Sections 122.44(j)(1), (j)(4), and 122.48(a) and (b). Use of two WET test species is also consistent with the definitions of "aquatic toxicity test", "biological monitoring", "chronic", "propagation", and "whole effluent toxicity" at SC Rule 61-68.B.9, B.19, B.21, B.48, and B.61, respectively, and with Rule 61-68.E.12.c.10. Authority to use 40 C.F.R. Part 136 chronic whole effluent toxicity testing methods with sublethal endpoints to assess compliance with NPDES permit limits is provided by 40 C.F.R. Section 122.41(j)(4) and SC Rule 61-68.E.15. Use of these methods was upheld by a December 10, 2004

decision of the D.C. Circuit U.S. Court of Appeals (case No. 96-1062).

Parameter:

Acute Whole Effluent Toxicity (WET)

Proposed Condition: No requirement

Justification:

Because the chronic WET monthly average limit at 100% is the most stringent condition possible, daily maximum acute limits would be redundant.

Parameter:

Total Recoverable Copper, mg/l

Proposed Condition: Justification:

.014 mg/l (monthly average); .018 mg/l (daily maximum) - Final The previous permit contained a limit of .019 mg/l (monthly average) and of .027 mg/l (daily max). For the draft permit, the proposed daily effluent limitations and monitoring requirements for Total Recoverable Copper are based on an RP analysis of the PCS data identifying the maximum concentration allowable while protecting water quality. Additionally, a water effects ratio study was performed in May 13, 2002, by the City's consultant which resulted in establishment of an adjusted criteria maximum concentration (CMC) of 5.9 ug/l and an adjusted criteria chronic concentration (CCC) of 4.4 ug/l.

Potential effluent limits were determined based on the adjusted CMC and CCC values. Utilizing "Technical Guidance on Interpretation and Implementation of Aquatic life Metals Criteria," October 1, 1993 and a subsequent revision published in the Federal Register (60 FR 22229) on May 4, 1995, along with South Carolina Regulation 61-68 Attachment 1 "Conversion Factors for Dissolved Metals" and Attachment 2 "Parameters for Calculating Freshwater Dissolved Metals Criteria that are Hardness-Dependent" produced the following step by step results.

Step 1:

The following equations and constants were used to calculate aquatic life metals limits based on the Federal Register data. The water quality standards for copper were adjusted using this approach in accordance with Regulation 61-68.E.12.d(3) for evaluation of ambient water quality. No allowance for mixing was calculated as a mixing zone study concluded that mixing was not appropriate considering the hydraulics of the stream and the actual pipe discharge location.

TSS = Effluent total Suspended Solids (TSS) concentration in mg/l as determined from proposed monthly average permit limits = 21 mg/l.

CF = Conversion factor = .96 for both CCC and CMC

 $H = Hardness in mg/l of CaCO_3$. The effluent hardness is assumed to be 25 mg/l in the absence of actual effluent

average limit is needed for this discharge.

Parameter:

Hexavalent Chromium, Total Cadmium, Total Lead; mg/l

Proposed Condition: No Limit; No Monitoring

Justification:

The previous permit required monitoring and effluent limits for these parameters. Evaluation of these test results showed no RP to cause or contribute to water quality violations of these parameters. Thus, there is no justification to include a limit or reporting for these parameters. This evaluation is contained in the RP analysis EXCEL spreadsheet prepared by SCDHEC on May 16, 2005.

The permit conditions and limitations were taken from the following sources:

-The previous NPDES permit dated May 30, 2001

- -Desktop modeling performed by SCDHEC on July 30, 2004
- -The Clean Water Act (CWA).
- -Title 40 CFR § 133.102.
- -Mixing zone modeling information and data provided by the City through its consultant transmitted by cover letter dated July 22, 2005
- -Chronic reasonable potential spreadsheet dated May 16, 2005, as prepared by SCDHEC
- -Acute reasonable potential spreadsheet dated May 16, 2005, as prepared by SCDHEC
- -Draft permit and fact sheet prepared by SCDHEC
- -SC Reg. 61-68 (June 25, 2004)
- -Recalculation Procedure prepared for Copper and toxicity identification evaluation as transmitted to EPA from Easley by cover letter dated 7/22/05

Except where otherwise stated, the monitoring requirements required in Part I of the permit were based on the Best Professional Judgement (BPJ) of the permit writer.

The permit conditions prohibiting floating solids and visible foam in other than trace amounts and prohibiting a visible sheen are consistent with the previous NPDES permit and the antibacksliding provisions of 40 CFR § 122.44(l).

The sludge monitoring and reporting provisions in this permit conform with the requirements of Section 405 of the Water Quality Act Amendments of 1987. The permittee shall ensure that the sludge generated at this facility will be managed in accordance with use and disposal practices consistent with the requirements of 40 CFR Part 503 and Part 258. The monitoring and reporting requirements in these regulations have been incorporated into this permit by reference.

The pretreatment program requirements are in compliance with 40 CFR Part 403.

The permit requires a macroinvertebrate study to assess the biological health of the receiving stream under the authority of CWA § 308(a). This study is required to assure that there are no adverse impacts on the biological community of the receiving water attributable to this discharge. This study is also needed as the receiving stream is on the 303(d) list for biological impacts.

Consideration was given to the location of drinking water intakes. There was no downstream

intake located upstream or within 50 miles downstream. Therefore, notification to a water supply authority of spills, upsets or bypasses of the wastewater facility is not required by the permit.

- 4. <u>Requested Variances or Alternatives to Required Standards</u>
 None.
- 5. <u>Effective Date of Proposed Effluent Limits and Compliance Schedule</u>
 The permittee shall achieve compliance with all effluent limitations other than total recoverable copper at the time of permit effective date.

The permittee shall achieve compliance with the final copper effluent limitations specified for this discharge in accordance with the following schedule:.

First Report of Progress	January 31, 2007
Second Report of Progress	July 31, 2007
Third Report of Progress	January 31, 2008
Attain Compliance with Final Permit Limits	March 1, 2008

6. <u>State Certification Requirements</u>

State Certification of the proposed permit will be deemed waived if not provided within 60 days of EPA's request, per 40 C.F.R Section 124.53(c)(3).

7. <u>Discussion of Previous NPDES Permit Conditions</u>

The NPDES permit (issued May 30, 2001, effective July 1, 2001 and expired on September 30, 2004) contained the following permit conditions:

Parameters	Discharge l	Limitations
	Monthly Avg.	Weekly Avg.
Flow, MGD	3.50	3.75
Biochemical Oxygen Demand 5-day (BOD ₅), mg/l (lbs/day)	21.0 (613.0)	30.0 (875.7)
Total Suspended Solids (TSS), mg/l (lbs/day)	21.0 (613.0)	30.0 (875.7)
% Removal, TSS	8	35
Dissolved Oxygen, mg/l	5.0 as a 1	ninimum
Ammonia Nitrogen (NH ₃ -N), mg/l (lbs/day) Summer: March-October	1.43 (41.7)	2.00 (58.4)
Ammonia Nitrogen (NH ₃ -N), mg/l (lbs/day) Winter: November - February	1.86 (54.3)	2.60 (75.9)
Total Phosphorus, mg/l (lb/day)	Report (Report)	Report (Report)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

RECEIVED BY

MAR 2 0 2006

March 16, 2006

Mr. Joel D. Ledbetter, P.E., General Manager Easley Combined Utilities P.O. Box 619 Easley, South Carolina 29641-0619 EASLEY COMBINED UTILITIES

Re: Easley, SC - Middle Branch WWTP, NPDES Permit #SC0039853

Dear Mr. Ledbetter:

We have received your comments in regard to the draft permit for the above-referenced permit. The following responds to each of your paraphrased comments or questions:

1. COMMENT: Why is an Ultimate Oxygen Demand (UOD) limit necessary? If the UOD limit cannot be removed, then Easley Combined Utilities (ECU) requests that the 5-day Biochemical Oxygen Demand (BOD₅) and ammonia limits be raised for flows less than 3.5 MGD.

RESPONSE: Since the UOD limit was in the previous permit, antibacksliding provisions found under 40 CFR Section 122.44(1) do not allow for this limit to be eliminated. BOD₅ and ammonia limits were also in the last permit at the same concentrations as stipulated in the draft permit. Thus, again, antibacksliding would prevent a relaxation of these concentrations. Furthermore, since the model run is concentration-based and the stream is effluent-dominated, any change in input values of the model would change the output. For instance, if the discharge flow is decreased, then the velocity of the stream is decreased possibly resulting in more stringent effluent values for BOD₅ and ammonia. Additionally, since the stream is on the 303(d) list of impaired water bodies for biology and the exact cause of the biological impairment is unknown, all pollutants were held to current loads and concentrations for both the previous permit issuance and this reissuance. Furthermore, BOD₅ and ammonia concentrations cannot be increased as the discharge cannot cause or contribute to violations of water quality standards as per 40 CFR Section 122.44(d)(1)(i). No change made to the permit.

COMMENT: Why are Total Suspended Solids (TSS) limits more stringent than secondary?

RESPONSE: The TSS concentration limits of 21 mg/l (monthly) and 30 mg/l (weekly) were placed in the last permit issuance because pollutants were held to current loadings as the discharge flow was increased to a 303(d) listed stream. NPDES regulation found under 40 CFR Section 122.44(d)(1)(i) requires limits that will not cause or contribute to water quality violations. "Holding the line" was accomplished by limiting the concentration of TSS to 21 mg/l and not increasing the mass loading. Since the water body is still on the 303(d) list, the "no increase" strategy still applies. Furthermore, since the facility has been achieving the 21 mg/l

TSS limit, antibacksliding would apply, and no increase in mass or concentration of the pollutant is allowed. No change made to the permit.

3. COMMENT: South Carolina regulations state the following:

In order to protect recreational uses for all waters of the State, the stated value of 200/100 ml for fecal coliform shall be used as a monthly average number for calculating permit effluent limitations and the stated value of 400/100 ml for fecal coliform shall be issued as a daily maximum number for calculating permit effluent limitations.

Two years ago DHEC proposed to remove the word "calculating" from the implementation provision. However, DHEC decided to retain the provision and explained that in so doing they could apply the 10% provision in the fecal standard (no more than 10% of the monthly samples can exceed 400). EPA should either (1) add a footnote to the 400 limits specifying that "no more than 10% of the monthly samples may exceed 400" or (2) calculate an appropriate daily maximum limit that reflects that the standard allows 10% of the sample to exceed 400.

It is requested that monitoring frequency for this parameter be reduced from 5 times per week to 4 times per week, as is currently permitted. This would be a significant cost savings.

RESPONSE: A footnote will be added to the 400 limit stating "no more than 10% of all of the samples taken during a month may exceed 400 counts/100ml." Monitoring frequency will be reduced to 4 times per week.

4. COMMENT: Can phosphorus and nitrogen monitoring be reduced to quarterly sampling?

RESPONSE: Phosphorus and nitrogen monitoring will be reduced to quarterly sampling.

5. COMMENT: Could a reopener clause be added to allow further study of copper limits based on a Water Effects Ratio (WER) study or hardness recalculation study?

RESPONSE: 40 CFR Section 122.62 allows an applicant to request a modification based on additional information which might allow a different effluent limit. A reopener clause for the permit applicant is unnecessary as the citation above indicates that a modification request is always available. No change made to the permit.

COMMENT: It is requested that a compliance schedule for nickel be included in the permit.

RESPONSE: Permit Compliance System (PCS) data indicated that there was only one exceedance of the proposed limit which occurred two years ago. That is not adequate justification for a compliance schedule. With proper operation and maintenance of the plant, the nickel limit should be met. Additionally, inclusion of a compliance schedule is a discretionary

action under 40 CFR Section 122.47(a) as the citation reads ". . . . the permit may (emphasis added), when appropriate, specify a schedule of compliance." No change made to the permit.

7. COMMENT: Footnote correction is needed.

RESPONSE: Correction will be made.

8. COMMENT: It is requested that overflow identification and reporting be removed from the permit, especially in regard to overflows that do not reach the waters of the U.S.

RESPONSE: Proper operation and maintenance of the permitted facility is required under 40 CFR Section 122.41(e). This citation requires that "the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit." An overflow of sewage is an indicator that proper operation and maintenance of the collection system (appurtenances) is not being achieved. Also, discharging to a water body without an NPDES permit is not allowable. Since the NPDES program is based on a self-monitoring approach, the applicant is responsible for monitoring of these overflows and reporting those that reach waters of the U.S. directly or those that reach a storm sewer. Records of overflows that do not reach surface waters or a storm sewer must be kept; however, reporting of these events is not necessary. No change made to the permit.

9. COMMENT: In order to assess all of the options available to meet the copper limits, a schedule of compliance equal to the permit term is requested.

RESPONSE: If ECU wishes to pursue a longer schedule of compliance for copper, then a detailed timeline of activities with dates needs to be provided to EPA. Furthermore, this schedule should provide for concurrent activities such as a mixed stream hardness recalculation study, a WER, and reevaluation of the pretreatment program as compliance with effluent limits is required as expeditiously as possible according to 40 CFR Section 122.47(1).

10. COMMENT: ECU requests a 36-month schedule of compliance for WET limits since an additional species is required for testing and the calculation methodology is changed:

RESPONSE: All compliance schedules are discretionary actions under 40 CFR Section 122.47(a). A compliance schedule has not been justified for the WET testing requirements. No change made to the permit.

11. COMMENT: ECU requests a variance for reporting of bypasses of the static screens and anoxic basins during periods of heavy rainfall and resulting I/I. The bypass has no effect on the plant's ability to meet the effluent limits.

RESPONSE: Regulations found under 40 CFR Section 122.41(m)(4) prohibit bypasses. Violations of this requirement must be reported to the permitting authority as per 40 CFR Section 122.41(l)(7). There is no exception allowed for this requirement. No change made to the permit.

12. COMMENT: Please change the flow measurement requirement from "within an accuracy of less than +/- 10 percent" to "not greater than 10 percent" to be in accordance with State regulations.

RESPONSE. The change will be made to reflect "not greater than 10 percent,"

13. COMMENT: It is requested that monitoring results be sent only to EPA and not also to SCDHEC. This is requested since EPA is the permitting authority.

RESPONSE: SCDHEC will be the permitting authority after the permit expires. The monitoring data will be useful when it is time to reissue the permit. No change made to the permit.

14. COMMENT: Language favorable to the permittee is requested for a reopener clause.

RESPONSE: The language provided on page III-1 is included in the permit to acknowledge that EPA could reopen the permit and modify it, as necessary, should changes occur or more information becomes available. As stated previously in the response to comment #5, 40 CFR Section 122.62 allows the permittee an opportunity at any time to request a permit modification based on new data or for other reasons. No change made to the permit.

15. COMMENT: What is EPA's legal authority to require a macroinvertebrate assessment? Is this an annual requirement and what would trigger a second assessment in the January-March time frame? Please remove this requirement from the permit.

RESPONSE: Results from these assessments will aid in determining whether this discharge is complying with: a) South Carolina's narrative criterion at Rule 61-68.E.5.c:

"All ground waters and surface waters of the State shall at all times, regardless of flow, be free from sewage, industrial, or other waste which produces taste or odor or change the existing color or physical, chemical, or biological conditions in the receiving waters or aquifers to such a degree as to create a nuisance, or interfere with classified water uses (except classified uses within mixing zones as described in this regulation) or existing water uses.":

b) SC Rules 61-68.C.3 and 7, regarding protection of all uses and existing and classified uses of downstream waters; and

c) SC Rule 61-68.F.1.c., "the objective of maintaining and improving all surface waters to a level that provides for the survival and propagation of a balanced indigenous aquatic community." The required assessment is consistent with the definitions of "biological assessment" and "biological monitoring" at SC Rules 61-68.B.17 and 19, respectively.

Results from the assessments will indicate compliance with water quality standards and document water quality trends. Authority for such monitoring is also provided by CWA §§ 308(a) and 402(a)(2), 40 C.F.R. Sections 122.43 and 122.48(a), as well as SC Rules 61-68.E.1, 4.a, 17.b, and F.1.d. It is the best professional judgment (BPJ) of the permit writer that conducting one assessment/year during critical low flow conditions may be sufficient to assess compliance with the SC Rules cited above. However, that low flow study will be reviewed to determine if additional biological studies are warranted, such as during the January-March time frame.

16. COMMENT: The permit requires the permittee to not allow the discharge of "prohibited discharges." 40 CFR Section 403.5 imposes this requirement on the user. Please share the citation requiring this or change the permit. Additionally, if a midnight dumper discharges into the sewer system then we would be in violation of our permit according to the permit, as written. This is not appropriate and offensive.

RESPONSE: The permit language goes further to specify that it is an industrial user who the permittee is supposed to disallow such activity from, which is commensurate with 40 CFR Section 403.5. The permittee is obligated, by receipt of this permit and obtaining an approved pretreatment program, to control its users and not allow those items prohibited by this section. Furthermore, 40 CFR Section 403.5 stipulates that the permittee with an approved pretreatment has jurisdiction over its users and not allowing prohibited discharges is one of its jurisdictional responsibilities. Additionally, through 40 CFR Sections 403.5(c) and 403.8(f) a Publicly Owned Treatment Works (POTW) with an approved program is required to establish procedures disallowing such activity, ensuring compliance with all pretreatment requirements including the general and specific pretreatment standards in 40 CFR Section 403.5.

In regard to the midnight dumper scenario, midnight dumpers are legally considered users because they discharge indirectly to the POTW, but they are unregulated parties conducting criminal activity. Expectation in that case would be that the POTW would take enforcement under its procedures pursuant to 40 CFR Section 403.8(f)(5). By taking action, they would not be "allowing such discharge." No change made to the permit.

17. COMMENT: POTW program requirements and reporting is undue and over burdensome and ask that this section be removed from the permit.

RESPONSE: This information is necessary to monitor program compliance, and it is information that the POTW should be monitoring for its own day-to-day operation of the

program. No change made to the permit.

18. COMMENT: The permit requires in its pretreatment program a headworks analysis. An existing pretreatment program is already in effect and well documented and items iii and iv on page III-4, item 3 are an unnecessary duplication of effort.

RESPONSE: 40 CFR Section 122.44(j)(2)(ii) requires a local limits evaluation with each permit cycle. A headworks analysis and industrial user survey are necessary elements for that evaluation. No change made to the permit.

19. COMMENT: Additional time is needed to run a follow-up WET test after a routine test has failed. We request 14 days from the time we receive the failure results of the routine test to commence the follow-up test.

RESPONSE: The additional 14 days will be incorporated into the permit.

20. COMMENT: The copper limits are being challenged due to the use of a TSS concentration of 21 mg/l which is an error. The appropriate concentration is 30 mg/l. Additionally, a WER was not performed for this parameter, but rather a recalculation at a hardness concentration of 25 mg/l was performed. A reopener is requested so that a WER and a recalculation with actual hardness data can be performed and the results applied to the permit.

RESPONSE: As discussed in the response to comment #2, the TSS limit of 21 mg/l is appropriate and will not be changed. Furthermore, the actual discharge concentration of approximately 3 - 5 mg/l TSS could very well be used in the copper limits calculation rather than the permitted TSS concentration of 21 mg/l. The lower TSS value would give a much more stringent copper effluent limit.

The language in the fact sheet will be changed to reflect a recalculation study rather than a WER.

A reopener is not necessary as discussed in the response to comment #5.

21. COMMENT: The nickel limits are being challenged due to the use of a TSS concentration of 21 mg/l which is in error. The appropriate concentration is 30 mg/l. In addition, ECU requests a reopener in the permit to incorporate results of a WER, reexamination of past testing data, and recalculation with actual hardness data.

RESPONSE: As discussed in the response to comment #2, the TSS limit of 21 mg/l is appropriate and will not be changed. Furthermore, the actual discharge concentration of approximately 3 - 5 mg/l TSS could very well be used in the nickel limits calculation rather than the permitted TSS concentration of 21 mg/l. The lower TSS value would give a much more stringent nickel effluent limit. No change made to the permit.

In summary, the only feedback needed from ECU is in regard to comment #9. If you wish to provide a justified compliance schedule, please do so by April 7, 2006. If we do not receive a justified compliance schedule, we will include an 18-month compliance schedule for copper and continue with the issuance of this permit. The next step is to proceed with a public notice of the draft permit and receive comments during the 30-day period.

If you have any questions concerning this letter, please contact me at the above address, or by calling (404) 562-9262 or through e-mail at buff.virginia@epa.gov.

Sincerely, Virginia Buff Virginia Buff, Environmental Engineer NPDES & Biosolids Permits Section Permits, Grants, and Technical Assistance Branch.

Water Management Division

cc: SCDHEC



EASLEY COMBINED UTILITIES

A Community Tradition

April 6, 2006

By Fax

Ms. Virginia Buff
Environmental Engineer
Water Management Division
US Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Re: Easley, SC - Middle Branch WWTP

NPDES Permit Number SC0039853

Dear Ms. Buff:

I am writing in response to your March 16 and March 30 letters responding to our initial comments on EPA's draft permit for our Middle Branch facility.

We offer the following responses to your comments for your consideration as you prepare a final draft for public comment. We are available to participate in a conference call if you think that would help to facilitate a resolution of our concerns.

UOD Limit

We are concerned that EPA has not fully considered the basis for the proposed UOD limits. Moreover, we are disappointed with EPA's preliminary assertion of the concept of antibacksliding.

The UOD limit is prescribed as a monthly loading limit of 1110 pounds per month. See page I-1. Page I-3, paragraph 5 explains that this limit is the sum of the loadings for BOD and ammonia nitrogen. The BOD and ammonia nitrogen monthly loadings are 613 pounds (BOD) and either 42 (summer) or 54 (winter) for ammonia nitrogen. These loads total less than 700 pounds. Thus, if the UOD limit is correct, we fail to see why the underlying BOD and ammonia loadings are not increased to equal the same 1110 pounds.

Because UOD is simply the sum of BOD and ammonia nitrogen loadings, we ask that EPA remove the separate load limits for BOD and ammonia nitrogen. They are duplicative of the UOD limit.

Ms. Buff April 6, 2006 Page 2 of 6

If EPA decides to keep the BOD and ammonia nitrogen mass limits over our objection, EPA should do two things: First, increase them to the allowable mass loadings for BOD/NH3 to the full 1110 pounds of UOD. Second, remove the UOD limit because it is simply duplicative. There is no basis for EPA to impose duplicative liability. UOD is not a pollutant parameter that is regulated under the State or federal secondary treatment or water quality standards regulations.

EPA has preliminarily asserted that antibacksliding prevents the removal of the UOD limits. Because the BOD/NH3 and UOD limits are duplicative, antibacksliding is not implicated if we remove either the BOD/NH3 limits or the UOD limit. We don't see how antibacksliding can be implicated as long as EPA does not authorize more than 1110 pounds of UOD in this permit. We are not asking for any more than 1110. We are simply arguing over not imposing the 1110 on us twice (via BOD/NH3 AND UOD limits). Even if antibacksliding did apply, we believe several exceptions to the rule are available to allow the removal of the UOD limit. The most obvious is error by the prior permit writer because there is neither a need nor basis for the UOD limits. If we are correct and EPA's initial response was based on a preliminary assertion of antibacksliding, we ask that you reconsider our argument in light of the fact that the UOD limit is duplicative and given the available exceptions within the antibacksliding rule.

Total Suspended Solids

During our last permit renewal, DHEC capped our loadings because our receiving water is impaired for benthics. We believe that was in error. We are not aware of any rule that provides that discharges to impaired waters are capped for all pollutants until the impairment is resolved by a TMDL.

Where is the "holding the line" and "no increase strategy" written? Is this an EPA rule? Is EPA applying this rule across all of Region IV?

In this case, there is no water quality standard for TSS. TSS is clearly not related to any stream impairment. There is simply no basis to impose a TSS limit more stringent than secondary treatment requirements. Antibacksliding does not apply. DHEC made an error in imposing, without authority to do so, a limit more stringent than secondary treatment levels — based upon the so called ad hoc "holding the line" rule. Antibacksliding should never be implicated for TSS because there is no basis in South Carolina or federal law to impose effluent limits more stringent than secondary treatment levels. Any limits such as ours are a mistake and even if antibacksliding were implicated, there are available exceptions such as prior permit writer mistakes.

We understand that the Clean Water Act only applies the antibacksliding prohibition in one circumstance relating to technology-based limits. That section provides that a technology-based limit may not be relaxed based upon a subsequently promulgated effluent limitation guideline. That is the only antibacksliding prohibition relevant to technology-based limits. That prohibition (and thereby, the antibacksliding rule) is clearly not applicable here. If EPA disagrees with this, please tell us specifically (1) why the antibacksliding rule applies and (2) why none of the exceptions apply.

Ms. Buff April 6, 2006 Page 3 of 6

Fecal Coliform Daily Maximum Limit

We were very disappointed to get EPA's March 28 letter reversing the earlier decision to apply the 10% provision to our daily maximum fecal coliform limit.

Again, this letter constitutes the most superficial of analyses of a very complex antibackshiding rule. The letter completely and unfairly ignores the proper application of the rule and the many available exceptions.

The fecal coliform limit in the permit is a technology-based limit (it is the same in every permit in South Carolina discharging to SA/SB waters). As explained above for TSS, we understand that the Clean Water Act only prohibits relaxing technology-based limits in one circumstance – where the relaxation is based upon a subsequently promulgated effluent limit guideline. Because that is not the case here, the rule simply does not apply.

Even if the rule applies, there are several available exceptions that allow the addition of the 10% footnote. First, prior permit writer error. There was no basis in law for the prior permit writer to impose a more stringent limit than provided in the law (which expressly allows the 10% provision). The fact that we have done better than the law requires for years is no reason to punish us. We intend to continue to operate our facility to the best of our ability but see no reason why we should suffer violations — even infrequently — because a permit writer at some point imposed an inappropriately stringent limit in a prior permit.

Also, we are told that there is an exception where a permittee has been unable to meet the limit in question. EPA has asserted that our one exceedance of the fecal limit does not qualify for this exception. We are unaware of any such limitation on the applicability of this exception. What is the basis for EPA's assertion that one violation is not enough? We do not see in EPA's rule any minimum number of exceedances that must accrue before this exception would apply. If one violation is not enough, then how many does it take and where is this written down?

Moreover, while we have had one exceedance, EPA's reasonable potential calculations show that our effluent is expected to exceed the 400 from time-to-time. This is an additional basis for the application of this exception.

The bottom line is that antibacksliding does not apply because EPA is implementing the very same State Water Quality Standard by simply expressing it more accurately in accordance with the State's water quality standards regulation. Even if the rule applies, we believe there are clear exceptions that apply to allow the addition of the 10% provision to our daily maximum limit. Moreover, antidegradation is no obstacle because with the addition of the footnote, we will continue to fully comply with water quality standards at the end-of-pipe.

Significantly, we are told that EPA Region IV has approved much less stringent applications of the fecal coliform standard in all other Region IV states as compared to South Carolina. In most states,

Ms. Buff April 6, 2006 Page 4 of 6

needed.

we hear there is only a monthly average requirement (others have monthly weekly, such as Kentucky). You can imagine our frustration in being held to a much more stringent limit than EPA has routinely approved for hundreds of other local governments throughout the region.

Finally, if EPA won't add the footnote for the 10% provisions, we ask that EPA actually apply the South Carolina fecal implementation standard, which specifies that the value of 400 should be used for "calculating" the daily maximum number. Clearly, under this approach, the daily maximum should be a number higher than 400 as an indirect way of applying the benefit of the 10 percent provision.

Compliance Schedule for Nickel

We were very disappointed that EPA rejected our request for a compliance schedule for Nickel. We are told that compliance schedules are routinely granted to other communities when new or more stringent limits are applied. Otherwise, we risk non-compliance before we have had a fair chance to adjust our operation and/or facilities to meet new or more stringent limits.

Notably, EPA has concluded that we have reasonable potential to exceed the limit and we have had at least one result in the last two years that exceeds the proposed limit. Because we sample one per month, a single exceedance would equal 30 days of noncompliance with potential statutory penalties of over \$1 million.

We believe a compliance schedule in these circumstances is both necessary and warranted. The following outlines the major milestones for our proposed 36 month compliance schedule:

6 months	Water Effects Ratio to determine site specific limits. This will include splitting samples with separate labs to insure accuracy of lab tests.
6 months	Investigate sources of nickel on our system and evaluation of possible mitigation efforts.
6 months	Depending on the results of the above, perform further site specific testing, per EPA technical guidelines, to increase site specific limits.
18 months	Design and construction of additional treatment process for nickel removal if

Finally, we were mystified at the Agencies statement that "With proper operation and maintenance of the plant, the nickel limit should be met." The necessary implication here is that the high value in our existing data set was attributable to improper operation and maintenance, rather than expected effluent variability. We would like to see EPA's specific written basis for attributing the nickel result in question to improper operation.

Ms. Buff April 6, 2006 Page 5 of 6

There are two sides to this coin. If EPA intends to discount this high value as being due to operational error, then it should be excluded from the reasonable potential analysis. EPA can't have it both ways: rely on the data to trigger reasonable potential and a limit but then ignore it when we request a compliance schedule. We feel strongly that we need a compliance schedule to avoid the risk of immediate noncompliance due to effluent variability predicted by EPA's reasonable potential analysis (not operator error).

We ask that EPA reconsider our request for a compliance schedule.

Copper Compliance Schedule

The following is our proposed compliance schedule for copper. We believe 36 months is necessary for us to implement several potential solutions to allow us to comply with the proposed copper limits. Our schedule assumes timely regulatory reviews and approvals for the proposed activities:

6 months	Perform Water Effects Ratio for site specific limits.
6 months	Evaluate potential sources of copper in the system, including drinking water, and investigate potential mitigation options.
6 months	Depending on the results of the above, perform further site specific testing, per EPA technical guidelines, to increase site specific limits.
18 months	Design and construction of additional treatment process for copper removal if needed.

WET Schedule of Compliance

We ask that EPA reconsider our request for a compliance schedule before the new WET limit kicks in. WET compliance has been a major problem across South Carolina due to (1) variability in WET test methods, (2) certain characteristics of South Carolina ambient waters and (3) the use of non-native test species.

Ironically, issues over WET triggered EPA's involvement is issuing this permit.

We think a modest one year compliance schedule is necessary and appropriate to allow us time to understand the new method and how the new species will react to our effluent. Again, EPA must believe we have the reasonable potential to demonstrate toxicity or the new species/method would not have been imposed. We think it is then fair that we get at least a modest compliance schedule.

Ms. Buff April 6, 2006 Page 6 of 6

Macroinvertebrate Testing

We fail to understand why we must conduct macroinverebrate testing when we have both pollutant specific and WET limits in our permit. We would like the macroinvertebrate testing removed or at least reduced in frequency to one time during the first and fourth years of the permit. This will provide EPA with an initial assessment in year one of the permit as well as in year four that can be considered during permit renewal.

We think this is a reasonable approach, especially given the lack of any impact shown by our historical macroinvertebrate testing and the fact that this testing costs approximately \$1800 per event.

Prohibited Discharges

We remain concerned about the prohibited discharge language. We are willing to ensure that our sewer use ordinance prohibits such discharges. If this is what EPA means by the requirement that we are "required to establish procedures disallowing such activity", that is fine. However, to the extent the permit requires us to do more, we think it is inconsistent with EPA's regulations and ask that the language be removed. Alternatively, the language should be changed to make clear all we have to do is to prohibit such discharges in our sewer use ordinance.

Thank you for considering these comments. Please let me know if you have any questions or should you require additional information.

Sincerely,

Joel D. Ledbetter General Manager



EASLEY COMBINED UTILITIES

A Community Tradition

May 26, 2006

By Fax

Ms. Virginia Buff
Environmental Engineer
Water Management Division
US Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Re·

Easley, SC - Middle Branch WWTP

NPDES Permit Number SC0039853

Dear Ms. Buff:

I am writing in response to your May 1 notice providing a formal draft of our Middle Branch facility permit for public comment.

At the outset, we appreciate EPA's consideration of our issues and concerns. We offer the following responses to your comments for your consideration as you prepare a final draft for public comment. We are available to participate in a conference call if you think that would help to facilitate a resolution of our concerns.

Total Suspended Solids

Easley Combined Utilities is requesting TSS permit limits to be set at secondary treatment levels of 30 mg/l monthly average and 45 mg/l daily maximum. During our last permit renewal, DHEC capped our loadings because our receiving water is impaired for benthics. We believe that was in error. We are not aware of any rule that provides that discharges to impaired waters are capped for all pollutants until the impairment is resolved by a TMDL.

Where is the "holding the line" and "no increase strategy" written? Is this an EPA rule? Is EPA applying this rule across all of Region IV?

In this case, there is no water quality standard for TSS. TSS is clearly not related to any stream impairment. There is simply no basis to impose a TSS limit more stringent than secondary

Ms. Buff May 26, 2006 Page 2 of 3

treatment requirements. Antibacksliding does not apply. DHEC made an error in imposing, without authority to do so, a limit more stringent than secondary treatment levels – based upon the so called ad hoc "holding the line" rule. Antibacksliding should never be implicated for TSS because there is no basis in South Carolina or federal law to impose effluent limits more stringent than secondary treatment levels. Any limits such as ours are a mistake and even if antibacksliding were implicated, there are available exceptions such as prior permit writer mistakes.

We understand that the Clean Water Act only applies the antibacksliding prohibition in one circumstance relating to technology-based limits. That section provides that a technology-based limit may not be relaxed based upon a subsequently promulgated effluent limitation guideline. That is the only antibacksliding prohibition relevant to technology-based limits. That prohibition (and thereby, the antibacksliding rule) is clearly not applicable here. If EPA disagrees with this, please tell us specifically (1) why the antibacksliding rule applies and (2) why none of the exceptions apply.

Fecal Coliform Daily Maximum Limit

Easley Combined Utilities was disappointed to receive EPA's March 28th letter reversing the earlier decision to apply the 10 percent provision to our daily maximum fecal coliform limit and requests that the 10percent provision be applied to our daily maximum fecal coliform limit.

The fecal coliform limit in the permit is a technology-based limit (it is the same in every permit in South Carolina discharging to SA/SB waters). As explained above for TSS, we understand that the Clean Water Act only prohibits relaxing technology-based limits in one circumstance – where the relaxation is based upon a subsequently promulgated effluent limit guideline. Because that is not the case here, the rule simply does not apply.

Even if the rule applies, there are several available exceptions that allow the addition of the 10% footnote. First, prior permit writer error. There was no basis in law for the prior permit writer to impose a more stringent limit than provided in the law (which expressly allows the 10% provision). The fact that we have done better than the law requires for years is no reason to punish us. We intend to continue to operate our facility to the best of our ability but see no reason why we should suffer violations — even infrequently — because a permit writer at some point imposed an inappropriately stringent limit in a prior permit.

Also, we are told that there is an exception where a permittee has been unable to meet the limit in question. EPA has asserted that our one exceedance of the fecal limit does not qualify for this exception. We are unaware of any such limitation on the applicability of this exception. What is the basis for EPA's assertion that one violation is not enough? We do not see in EPA's rule any minimum number of exceedances that must accrue before this exception would apply. If one violation is not enough, then how many does it take and where is this written down?

Moreover, while we have had one exceedance, EPA's reasonable potential calculations show that our effluent is expected to exceed the 400 from time-to-time. This is an additional basis for the application of this exception.

Ms. Buff May 26, 2006 Page 3 of 3

The bottom line is that antibacksliding does not apply because EPA is implementing the very same State Water Quality Standard by simply expressing it more accurately in accordance with the State's water quality standards regulation. Even if the rule applies, we believe there are clear exceptions that apply to allow the addition of the 10% provision to our daily maximum limit. Moreover, antidegradation is no obstacle because with the addition of the footnote, we will continue to fully comply with water quality standards at the end-of-pipe.

Significantly, we are told that EPA Region IV has approved much less stringent applications of the fecal coliform standard in all other Region IV states as compared to South Carolina. In most states, we hear there is only a monthly average requirement (others have monthly weekly, such as Kentucky). You can imagine our frustration in being held to a much more stringent limit than EPA has routinely approved for hundreds of other local governments throughout the region.

Finally, if EPA won't add the footnote for the 10% provisions, we ask that EPA actually apply the South Carolina fecal implementation standard, which specifies that the value of 400 should be used for "calculating" the daily maximum number. Clearly, under this approach, the daily maximum should be a number higher than 400 as an indirect way of applying the benefit of the 10 percent provision.

Macroinvertebrate Testing

Easley Combined Utilities fails to understand why we must conduct macroinverebrate testing when we have both pollutant specific and WET limits in our permit. We would like the macroinvertebrate testing reduced in frequency to one test during the first and fourth years of the permit. This will provide EPA with an initial assessment in year one of the permit as well as in year four that can be considered during permit renewal.

We think this is a reasonable approach, especially given the lack of any impact shown by our historical macroinvertebrate testing and the fact that this testing costs approximately \$1800 per event.

Thank you for considering these comments. Please let me know if you have any questions or should you require additional information.

Sincerely.

Joel D. Ledbetter General Manager

Joel & fedball

EASLEY COMBINED UTILITIES MIDDLE BRANCH WWTP

INSTREAM MACROINVERTEBRATE ASSESSMENT SUMMARY

Upstream - Station 1	Downstream - Station 2	Downstream - Station 3	Comments
	Nutrient enrichment compared to upstream station	Nutrient enrichment compared to upstream station	
	Nutrient enrichment compared to upstream station	Nutrient enrichment compared to upstream station	
Water quality fair	Water quality fair	Water quality poor *	*Attributed to habitat differences
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to drought or urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to drought or urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to drought or urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
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Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
Macroinvertebrate community stressed	Macroinvertebrate community stressed	Macroinvertebrate community stressed	Due to urbanization of watershed
	Water quality fair Macroinvertebrate community stressed Macroinvertebrate community stressed		Nutrient enrichment compared to upstream station Water quality fair Macroinvertebrate community stressed



EASLEY COMBINED UTILITIES

A Community Tradition

October 21, 2005

Ms. Virginia Buff
US Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street
Atlanta GA 30303-8960

Re.

Easley SC - Middle Branch WWTP NPDES Permit

SC0039853

Dear Ms. Buff:

Easley Combined Utilities (ECU) has received and reviewed the above referenced permit and offers the following comments. Prior to placing the draft permit on public notice, Easley Combined Utilities requests the opportunity to meet to discuss the permit and our comments. ECU comments are as follows:

Pages I-1 and I-2:

<u>UOD</u>: Why is a UOD limit necessary? We already have specific limits for BOD and ammonia nitrogen. Thus, it appears the UOD limit is unnecessary/redundant and we request that it be removed. If the UOD limit is not removed ECU request that the BOD₅ and ammonia limits be raised to provide flexibility for flows less than 3.5 MGD.

TSS: We question why TSS limits tighter than secondary treatment are being imposed. We are not aware of any basis for imposing more stringent TSS limits and, accordingly request secondary treatment limits. Antibacksliding should not prevent such a change because the limits proposed were based upon a technical/legal error as there is no basis for limits more stringent than secondary treatment.

<u>Fecal Coliform</u>: The proposed daily maximum value of 400 is not consistent with South Carolina's Water Quality Standards Regulation for fecal coliform. That regulation states in relevant part:

In order to protect recreational uses for all waters of the State, the stated value of 200/100 ml for fecal coliform shall be used as a monthly average number for calculating permit effluent limitations and the stated value of 400/100 ml for fecal coliform shall be used as daily maximum number for calculating permit effluent limitations. (emphasis added).

Ms. Virginia Buff October 21, 2005 Page 2 of 6

Two years ago, DHEC proposed to remove the word "calculating" from this implementation provision. However, DHEC agreed to retain this provision and explained that in so doing they could apply the 10% provision in the fecal standard (no more than 10% of the monthly samples can exceed 400). Thus, EPA should either (1) add a footnote to the 400 limit specifying that "no more than 10% of the monthly samples may exceed 400" or (2) calculate an appropriate daily maximum limit that reflects that the standard allows 10% of the samples to exceed 400.

The Middle Branch facility has had an exceedance of the 400 daily maximum number. If our permit were properly written to include the 10% provision, this would not have been an exceedance.

In addition, the Middle Branch facility currently monitors Fecal Coliform 4 times per week. The proposed permit monitoring frequency of 5 times per week is excessive and would cause undue financial and operations hardship on Easley Combined Utilities without any increase in plant performance or efficiency. Currently the personnel that collect fecal coliform samples and perform the test work Monday through Friday. Since the collection of samples and testing for fecal coliform is meticulous work and must be done in a manner so as to not contaminate the sample, weekend personnel are not trained, and don not, perform this work.

Easley Combined Utilities contacted several commercial labs in its geographical area when SCDHEC attempted to place this limits on its current permit. No commercial lab was found that would collect and perform this sampling and testing on the weekend, and there is not reason to believe that this situation has changed. For this reason Easley Combined Utilities is requesting that fecal coliform sampling and testing be performed 4 times per week.

<u>Phosphorus and nitrogen:</u> ECU requests quarterly sampling for phosphorus and nitrogen since these values are monitor and report only.

<u>Copper:</u> Easley Combined Utilities requests a re-opener clause in the permit to allow the proposed copper limits to be increased if further study proves higher limits are warranted. This recalculation was performed with an assumed hardness of 25 mg/l. Easley Combined Utilities is requesting a re-opener to allow for a mixed stream hardness recalculation study, and if needed a water effects ratio study. See below for the schedule of compliance for copper.

<u>Schedule of Compliance for Nickel</u>: Page I-2 proposes a significantly more stringent nickel limit without a compliance schedule. ECU proposes that EPA continue our current nickel limits as interim limits for 36 months from the permit effective date and then the final nickel limits would become effective. ECU had a December 2003 value above the monthly average and that EPA has projected a maximum monthly average of

Ms. Virginia Buff October 21, 2005 Page 3 of 6

more than twice the limit. It is clear based upon these facts that a compliance schedule is both necessary and appropriate and will allow ECU time to conduct site specific studies, prepare and implement a treatment plan upgrade or other alternative means to address this limit.

Footnotes: Page I-2, footnote 1 should refer to Item "5" on page I-3.

Overflow Identification: Page I-4, paragraph 12 requires overflow identification/reporting for "all wastewater discharges, at location not authorized as permitted outfalls, that occur prior to the headworks...." We believe this requirement is a broad and burdensome requirement and should be removed. If removal is not acceptable, ECU believes the requirement to report such discharges should be limited only to those discharges that reach the waters of the United States.

Schedule of Compliance for Copper: Page I-5 proposes approximately 2.5 years to comply with the copper limits. Because we will need to investigate a number of options to ensure our compliance with the proposed copper limits, we request the full permit term before the final copper limits will become effective. This additional time is necessary and appropriate given that we have two separate agencies that will need to review and approve our compliance approach. Our approach may need to address pretreatment controls, changes in the aggressiveness of the drinking water in our system, chemical translators, moving our outfall, etc. The permit term is an aggressive time period to make these evaluations and to implement the necessary safeguards, all while dealing directly with both EPA and DHEC for the necessary approvals and permit changes that will be necessary.

<u>Schedule of Compliance for WET Limits</u>: The WET limits that are proposed for ECU are a change from current requirements and include testing with an additional species, and change in the calculation methodology from the current permit. Accordingly, ECU requests 36 months to evaluate whether it can meet this limit, to perform additional tests, and to prepare and implement a treatment plant upgrade, if needed, or to implement alternative means to meet this limit.

Bypass of Treatment Facilities: Page II-4, Section 3, prohibits a bypass of any portion of the treatment facility. During heavy rains resulting in large I&I, Easley Combined Utilities bypasses a portion of its flow around the stationary screens and anoxic basin to prevent an overflow of untreated waste water from the static screen catch basin. This temporary bypass has no effect on the ability of the plant to treatment of the waste and has not causes the plant to exceed any of its effluent limits. As such, Easley Combined Utilities is requesting a variance of this requirement to allow a portion of the flow to be bypassed around the static screens and anoxic basing during periods of heavy I&I.

Ms. Virginia Buff October 21, 2005 Page 4 of 6

Flow Measurements: Page II-6, Section C.2: This section requires flow measurement within an accuracy of "less" than +/- 10 percent. State law (R. 61-9 Section 122.41.j.1.ii) (a) specifies "not greater" than +/- 10 percent. Unless EPA has promulgated the "less than" +/- 10% requirement, we ask that EPA change this to be consistent with the State regulation of "not greater than 10 percent."

Reporting Requirements: Page III-1, A, requires reporting of monitoring results to be sent to both EPA and SCDHEC. Since this permit is issued by EPA and SCDHEC does not have NPDES permitting authority over Easley Combined Utilities, ECU requests that the requirement to send reports to both EPA and SCDHEC be eliminated. ECU should be required to send the permit only to the agency that issues the permit, in this case EPA.

Re-opener clause: Page III-1, B, addresses a re-opener clause. ECU needs more favorable language under this heading. The proposed language seems one sided. ECU requests language that would allow for the permit to be re-opened should new technologies, science, or data becomes available that would allow for more favorable permit limits.

Macroinvertebrate Assessment: Page III-2, Section C requires a macroinvertebrate assessment. We question the need for such an assessment as well as EPA's legal authority to impose such a requirement. It seems to us that this is monitoring that should be done by the State to fulfill its Section 303(d) responsibilities. Moreover, the requirement is very unclear in terms of whether EPA is seeking to impose an annual requirement or just a one-time obligation. Furthermore, it is unclear what would trigger a second assessment in the January-March timeframe. We believe this requirement should be removed from the permit.

<u>Prohibited Discharges:</u> Page III-3, Section 2, seeks to require the permittee to prohibit the discharge to its system of a number of pollutants. However, the prohibition in both EPA and DHEC's regulations (40 CFR Part 403.5) is imposed on a <u>user</u> of the sewer system and not the owner. Accordingly, we object to the proposed requirement that "the permittee shall not allow...." the discharge of various pollutants into its POTW. This is like telling the police they cannot allow crime. It is impossible to comply with and offensive to the POTW community. Consider a case where a POTW is dumped on by an industry or midnight dumper. In addition to the harm to our facility and, possibly employees, we would be in violation of our permit. That is inappropriate and offensive. If Federal law imposes this requirement on the pemittee, rather than the "user" of the POTW, please share the citation with us. Otherwise, we expect EPA to implement the regulation as written. See the following:

403.5 National pretreatment standards: Prohibited discharges.

(a)(1) General prohibitions. A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph (b) of this section apply to each User introducing pollutants into a POTW whether or not the User is subject to other National Pretreatment Standards or any national, State, or local Pretreatment Requirements.

<u>POTW program requirements and reporting:</u> Page III-2, D. 1. a. iv, requires reporting that undue and over burdensome and ask that this section be removed from permit.

<u>POTW program headwork and local limits evaluation:</u> Page III-4, 3 requires a headworks analysis. An existing pretreatment program is already in effect and well documented and items iii and iv are an unnecessary duplication of effort.

<u>WET Testing</u>: Page IV-2, paragraph 3.d: We need more than one week's time to run a follow-up test after a "routine" test that experiences a failure. Often, we don't receive WET lab test results back for several weeks. Moreover, we need time to arrange for follow-up WET samples to be taken. Accordingly, we request that this requirement be to commence follow-up testing within 14 days of receipt of the results of a routine test which show a toxicity failure.

Copper limits: In the Fact Sheet on Page 8, ECU would like to challenge the reasonable potential limits for copper. The permit writer assumed a TSS of 21 mg/l. As stated earlier ECU believes 21 mg/l was placed as a limit is an error and the proper TSS limit should be 30/45 mg/l. In addition, the permit writer states that "...a water effects ratio study was performed in May 13, 2002...". This is incorrect. A water effects ratio study has not been perform for this facility. The May 13, 2002 study was a recalculation. The recalculation also assumed a hardness of 25 mg/l of CaCO₃. ECU request a reopener in the permit to allow for a reassessment of reasonable potential for copper based on the proper TSS limit in combination with a recalculation for copper with actual hardness data, or a water effects ratio study for copper.

Nickel limits: In the Fact Sheet on Page 10, ECU would like to challenge the reasonable potential limits for nickel. The permit writer assumed a TSS of 21 mg/l. As stated earlier ECU believes 21 mg/l was placed as a limit is an error and the proper TSS limit should be 30/45 mg/l. In addition, ECU requests a reopener in the permit to allow for a reassessment of reasonable potential for nickel based on reexamination of past testing data, an RP analysis with the proper TSS limit in combination with a recalculation for nickel with actual hardness data, or a water effects ratio study for nickel.

Ms. Virginia Buff October 21, 2005 Page 6 of 6

The above conclude the comments that Easley Combined Utilities has at this time. After you have had a chance to review, please contact me so that we can arrange our meeting. I look forward to hearing from you soon.

Sincerely,

Joel D. Ledbetter, PE

General Manager