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By Email and U.S. Mail

Philip G. Mancusi-Ungaro, Esq.
Office of Water Legal Support – R4
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Re: Easley Combined Utilities NPDES Permit No. SC0039853

Dear Philip:

Thank you for your email of February 22 and the attached informal draft of the Easley Middle Branch WWPT permit modification, in conjunction with the pending EAB permit appeal. For the TSS and fecal coliform issues, we note that EPA has merely used the withdrawal of the limits as an opportunity to enhance its record, by throwing in the kitchen sink on both issues.

On behalf of Easley, we have the following comments on the remaining permit issues. We will be happy to discuss these issues further if you wish.

Copper Limits

EPA's proposed 25 ug/l monthly average and 34 ug/l daily maximum copper limits are not correct under EPA's regulations, they are unnecessary to protect water quality, and they unnecessarily expose Easley to the risk of permit violations. The limits appear to be predicated on (concentration based) wasteload allocations of 9 ug/l chronic and 12 ug/l acute. The Shealy Environmental Water Effects Ratio (WER) study, which EPA accepts, recommends a WER of 7.051. As Shealy indicates, this effectively gives adjusted WLAs of approximately 64 ug/l chronic and 84 ug/l acute.



EPA's Technical Support Document provides for the use of its Table 3-2 for calculation of a multiplier for "Reasonable Potential" (RP) purposes. The coefficient of variation of the copper data set included in the Fact Sheet is 0.25. From Table 3-2, we get an RP multiplier of 1.2. Again following the procedures of the Technical Support Document, the maximum effluent value (21 ug/l) is multiplied by 1.2 to obtain a maximum expected effluent concentration. Because the resulting number (25 ug/l) is less than the WER-adjusted WLAs, there is no RP. Because there is no RP for a standards exceedance, there must be no permit limit. Therefore, we ask that the copper limits be replaced with a simple monthly monitoring requirement.

While ignoring the RP concept from its own NPDES regulations and guidance, EPA instead proposes permit limits based on a lower WER ratio of 2.77, supposedly based on a guidance recommendation that WER-based corrections be "minimized." First, there does not appear to be a minimization recommendation in the guidance. Under "Implementation Considerations" the guidance presents some reasons that a permittee may not need or wish to have the maximum available WER-based correction. None of that applies here, and there appears to be no general "minimization" recommendation. We don't have a problem with EPA deciding for this permit renewal to trim the WET value of 7 as long as in trimming the value, we end up with a "no RP" determination.

Significantly, the South Carolina water quality standard specifies that the copper standard is the EPA criterion, multiplied by 1.0 if no WER has been obtained, and multiplied by the WER if there is one. The state standard controls, and EPA may not modify this regulation by asserting an interpretation of its guidance.

The lower WER of 2.77 appears to have been chosen in an effort to claim that RP exists, and to thereby maintain a regulatory basis for permit limits. 2.77 multiplied by the 9 ug/l chronic WLA is 24.93 ug/l. As noted above, the maximum projected effluent concentration is 25 ug/l, barely enough to claim that there is RP. We would be compelled to appeal such a limit, and we do not believe that the EAB would stand for this degree of artificiality.

Accordingly, the copper limits should be removed.

Total Suspended Solids

It appears that EPA believes that the identified benthic impairment downstream of the discharge is or might be contributed to by discharges at EPA's secondary treatment levels of 30/45 mg/l; that TSS is a surrogate for turbidity which may be a cause of impairment; and that an impairment for which the cause is unidentified justifies a "hold-the-line" approach for any pollutant. TSS or turbidity-impacted benthic impairment is not generally seen as being caused or contributed to by secondary treatment level TSS. We ask that EPA staff consider their TMDL files which surely contain many technical analyses of causes of benthic impairment. We do not believe they will find examples where secondary treatment TSS was implicated. Rather, secondary treatment TSS is a fairly low level, and would typically improve rather than exacerbate

water quality conditions. That is, our experience is that TSS or turbidity-based benthic impairment is typically the result of storm induced solids. We further ask that EPA staff correlate Big Brushy Creek instream flow with the reported six sample results exceeding the 50 NTU South Carolina standard. We believe this simple procedure will identify the cause of the turbidity as storm induced high flows.

It does not appear that EPA has data that relate secondary treatment level TSS to turbidity. In that situation we believe there is no basis to claim that TSS is a surrogate for turbidity for purposes of this NPDES permit.

There is no EPA regulation, and we are not aware of any guidance, that supports a hold-the-line approach as to all pollutants where the receiving water is listed as impaired for an unknown cause. Many impairment listings include preliminary or suspected causes and pollutants. While such cases might present an argument for a reasonable interim approach as to the suspected pollutants, this is not such a case. Rather than making broad assumptions, EPA should perform the TMDL as its regulations require.

As our earlier pleadings stated, Easley has tested benthic communities both above and below its discharge for years. These data reveal no impact attributable to the entire POTW discharge, much less the TSS component. These data appear to be the only site-specific, non-speculative information on whether POTW TSS impact the benthic impairment. Having required years of instream benthic testing by Easley, we believe the agencies are under an obligation to now use these data for their intended purpose.

EPA should issue the permit with the secondary treatment limits to which Easley is entitled.

Fecal Coliform

As stated in our pleadings, the South Carolina water quality standard includes the 10 % fecal coliform exceedance criterion, and it should therefore be part of the permit limit. The NPDES permit for Easley's George's Creek facility includes the 10% criterion, and there does not appear to be a distinction between the facilities justifying the different limits.

EPA predicates the fecal coliform limits on a fecal impairment listing. However, an impairment listing does not justify limiting a discharge to any more stringent level than the standard itself. We believe EPA's files will reveal many fecal TMDLs where POTW effluents are proposed to be limited to no more stringent level than the standard. In effect, if you hold the POTWs to complying with the water quality standard at the end-of-pipe, they cannot cause or contribute to a violation of the instream fecal standard. This has been EPA's and the states' approach nationwide to our knowledge.

The specific impairment data to which EPA refers is from Big Brushy Creek, approximately three miles downstream from the outfall, rather than Middle Branch.

Those data may tell us little about the effect of the effluent on Middle Branch. Also, EPA's five year monthly monitoring data set tells us little about whether the receiving waters are within the 10% allowance. We suspect that the record in South Carolina's standards process will identify, at least in part, that the reason for the 10% exceedance is to recognize unavoidable, naturally-caused exceedances such as those that the Fact Sheet discusses. Given the integral 10% exceedance criterion, simple monthly analyses [57 samples over 60 months] are not adequate to determine whether the monthly aspect of the standard is exceeded and, if so, at what frequency. Rather than speculating as to causes, EPA should perform its fecal TMDL, and properly allocate responsibility based on appropriate data.

For these reasons, Easley again asks that EPA revise the permit to properly reflect the fecal standard.

Sincerely,

Richard H. Sedgley

Cc: Joel D. Ledbetter, P.E. F. Paul Calamita, Esa.



EASLEY COMBINED UTILITIES

A Community Tradition

April 13, 2007

By Email and U.S. Mail

Attn: Ms. Virginia Buff
NPDES Permits Section
Water Management Division
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

Re: NPDES Permit No. SC0039853

Dear Ms. Buff:

Please accept the following comments on EPA's proposed modification of the NPDES permit for Easley Combined Utilities' Middle Branch wastewater treatment plant. We have comments on three issues. Some of our comments were provided earlier to Regional Office Counsel. However, we will repeat portions of the earlier comments for your convenience.

Copper

Easley recently was forced to spend approximately \$20,000 on a water effects ratio (WER) procedure because EPA's national copper standard is far too stringent for our discharge and receiving waters. The WER was conducted pursuant to EPA guidance, and resulted in a recommended water quality standards WER or multiplier of 7.051. This WER is high enough that the effluent data demonstrate no reasonable potential for instream water quality standards exceedance, and EPA has correctly deleted the earlier-proposed numeric effluent limits for copper. However, in place of the limits, EPA has now proposed a WER reevaluation procedure that is neither consistent with standard practice nor necessary for water quality purposes.

First, it is not EPA's standard practice to require WER reevaluations that could be triggered by variations in effluent data well within that acceptable under the revised water quality standard. For example, Easley's NPDES permit for its Georges Creek facility is in the process of being reissued. Based on a copper WER nearly as high as the Middle Branch WER (6.468), the Department of Health and Environmental Control, with EPA's concurrence, correctly concluded that there was no reasonable potential for a water quality standards exceedance and removed the copper limits. There is also no WER reevaluation condition.

There are no factors distinguishing the two permits adequate to justify the different treatment.

Further, the WER documents and Easley's comments demonstrated that if there had been reasonable potential for a water quality standards exceedance (which there was not), the proper permit limits under EPA's regulations would have been approximately 64 ug/l (monthly average) and 84 ug/l (daily maximum). Permit limits are designed to be, by definition, protective of water quality. Because the effluent data levels EPA now proposes as triggers for WER reevaluation are all substantially below these concentrations, they are clearly unnecessary and inappropriate.

Although the Fact Sheet correctly notes EPA guidance comments concerning possible WER reevaluations, that guidance is not properly applied here to require the proposed reevaluation procedure in EPA's draft. Under South Carolina law the WER procedure is not an exception to water quality standards applicability. Rather the standard itself is an initial value multiplied by the calculated WER. Water quality standards are a unique state responsibility under the Clean Water Act, and these standards are duly adopted and EPA-approved. There is no legal basis for EPA to now second-guess the standards through this unnecessary reevaluation procedure. Rather, permit reissuance is the permit issuing authority's opportunity to evaluate or reevaluate reasonable potential for water quality standards exceedance. EPA has done that. Easley has provided substantial data on which that evaluation was based, and there is no basis for any reevaluation during the brief (28 month) period before this permit will again be up for reissuance and EPA will again have the right to consider reasonable potential.

Finally, if there was some basis for a WER reevaluation provision, this particular provision would make little sense. The proposal would require additional biological testing and a WER recalculation if any of five water quality parameters were to fall below (apparently by any amount) the values used in the WER study. The WER study was based on a 7Q10 critical low receiving water flow mix. Non-7Q10 conditions will present an even less critical water quality condition. The combination of critical low receiving water flow mix and the already very conservative factors used for the five variables in the WER procedure make any reevaluation completely unnecessary.

Moreover, it is arbitrary and capricious for EPA to condition a WER reevaluation on any reduction in the levels present in the WER test given the known variability in municipal wastewater effluent. We are simply not aware of any other instance where EPA has imposed such draconian WER reevaluation requirements. To the extent the Region continues to include such conditions in this permit, we would like a list of all NPDES permits in Region IV in the last 10 years in which WERs have been allowed; and we also ask whether EPA has imposed these conditions as a condition of allowing those WERs.

Total Suspended Solids

It appears that EPA believes that the identified benthic impairment downstream of the discharge is or might be contributed to by discharges at EPA's secondary treatment levels of 30/45 mg/l, and that TSS is a surrogate for turbidity which may be a cause of impairment. TSS or turbidity-impacted benthic impairment is not seen as being caused or contributed to by secondary treatment level TSS. We ask that EPA staff consider their TMDL files which surely contain many technical analyses of causes of benthic impairment. We do not believe they will find examples where secondary treatment TSS was implicated. Rather, secondary treatment TSS is a low level, and would typically improve rather than exacerbate water quality conditions.

Our experience is that TSS or turbidity-based benthic impairment is typically the result of storm induced solids. Our preliminary permit comments to EPA counsel asked that EPA staff correlate Big Brushy Creek instream flow with the reported six sample results exceeding the 50 NTU South Carolina standard. Because the Fact Sheet has not included these data, they are attached as Exhibit One. You will note from those data that the six reported turbidity exceedances to which the Fact Sheet refers are all associated with storm induced high flows brought about by substantial rainfall. Rainfall on those dates was no less than 0.8 inches in the 24 hour reporting period, and was as high as 3.3 inches. Based on this, the turbidity exceedances were clearly the result of storm flows. TSS at the secondary treatment levels of 30/45 mg/l would unquestionably improve turbidity under these conditions.

Further, the Fact Sheet presents numerous generalizations concerning the environmental impact of TSS on the benthic community and on other effects. None of the discussion has anything to do with TSS at secondary treatment levels. EPA's generalizations, if accepted as valid, would support any arbitrary level of TSS including a zero concentration.

It does not appear that EPA has data that relate secondary treatment level TSS to turbidity. In that situation we believe there is no basis to claim that TSS is a surrogate for turbidity for purposes of this NPDES permit.

As our earlier pleadings stated, Easley has tested benthic communities both above and below its discharge for years. These data reveal no impact attributable to the entire POTW discharge, much less the TSS component. These data appear to be the only site-specific, non-speculative information on whether POTW TSS impact the benthic impairment. Having required years of instream benthic testing by Easley, we believe EPA is now are under an obligation to use these data for their intended purpose and restore the TSS limits to secondary treatment levels.

Rather than making broad and unsupportable claims, EPA should perform the long-anticipated TMDL for the receiving waters as its regulations require. Prior

to that EPA should issue the permit with the secondary treatment limits to which Easley is entitled.

Fecal Coliform

As Easley has noted before, the South Carolina water quality standard includes the 10 % fecal coliform exceedance criterion, and it should therefore be part of the permit limit. The NPDES permit for Easley's Georges Creek facility includes the 10% criterion, and there is no distinction between the facilities justifying the different limits.

EPA attempts to put a "spin" on its Fact Sheet justification by stating that Easley seeks permission to "exceed its discharge limits 10% of the time." This is pure artificiality – Easley merely asks that the limit itself be properly expressed with the 10% provision that is an integral part of the standard.

EPA predicates the fecal coliform limits on a fecal impairment listing. However, an impairment listing does not justify limiting a discharge to any more stringent level than the standard itself. We believe EPA's files will reveal many fecal TMDLs where POTW effluents are proposed to be limited to no more stringent level than the standard. In effect, if you hold the POTWs to complying with the water quality standard at the end-of-pipe, they cannot cause or contribute to a violation of the instream fecal standard. To our knowledge this has been EPA's and the states' approach nationwide.

EPA claims in the Fact Sheet that the 10% provision in the state standard is for exceedances from hard to control sources "such as storm events and the presence of birds." However, the standard itself makes no such distinction, and the idea that point source discharges should somehow be held to a requirement more stringent than the adopted standard to account for other sources has no basis in law or in the agencies' practice. Rather, EPA has correctly noted the real source of the fecal coliform impairment – storm events and other natural causes. Exhibit One includes the Big Brushy Creek fecal coliform data to which the Fact Sheet refers. Nine of the 12 exceedances of the 400/100 ml criterion are associated with rainfall events, clearly demonstrating that the impairment is caused by nonpoint source impacts rather than by point sources. The three exceedances that are not associated with rainfall are marginally over the 400 number, and a proper assessment involving multiple samples during a 30 day period (to assess consistency with the 10% exceedance provision) would show that those data points do not indicate a standard exceedance or use impairment.1

Accordingly, there is no basis to conclude that the Middle Branch discharge needs to be controlled to a more stringent level than the water quality standard. Rather than speculating as to causes, EPA should perform its fecal coliform TMDL, and properly allocate responsibility based on appropriate data.

Having apparently concluded that its earlier "antibacksliding," "best professional judgment" and "hold-the-line" bases for the excessive and unnecessary copper, TSS and fecal coliform permit provisions were untenable, EPA now does its best to come up with a more direct water quality basis for each of those requirements. On close examination it is apparent that none of those bases are correct. Most importantly water quality is protected with the provisions that Easley requests, and the fact that past permits have applied limits more stringent than necessary and more restrictive than called for by EPA (now the permit agency) regulations provides no justification for EPA's endless search for reasons to over regulate this facility. We again respectfully ask that EPA issue the permit with the revised copper, TSS and fecal coliform provisions that we have requested.

Sincerely,

Joei D. Ledbetter, P.E. General Manager

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C: Philip G. Mancusi-Ungaro, Esq.,
Ms. Ann Brown, EPA Region IV Public Notice Coordinator
F. Paul Calamita, Esq.

i Further, the specific impairment data to which EPA refers is from Big Brushy Creek, approximately three miles downstream from the outfall, rather than Middle Branch. Those data may tell us little about the effect of the effluent on Middle Branch. Also, EPA's five year monthly monitoring data set tells us little about whether the receiving waters are within the 10% allowance. As the Fact Sheet notes, the record in South Carolina's standards process will identify, at least in part, that the reason for the 10% exceedance is to recognize unavoidable, naturally-caused exceedances such as those that the Fact Sheet discusses. Given the integral 10% exceedance criterion, simple monthly analyses (57 samples over 60 months) are not adequate to determine whether the monthly aspect of the standard is exceeded and, if so, at what frequency.