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INDEPENDENT REGULATORY
REVIEW COMMISSION

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2806

February 11, 2010

VIA ELECTRONIC MAIL

Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477

Email: RegComments@state.pa.us

Re: Public Comment on Proposed Rulemaking 39 Pa.B. 6467 - Amendments to

Wastewater Treatment Requirements (25 PA. Code Ch. 95)

Dear Sir/Madam:

BASF Corporation ("BASF") provides the following comments to the Environmental Quality Board's ("Board") proposed amendments to the Wastewater Treatment Requirements found at 25 PA. Code Ch. 95 ("Proposed Rules"). The Proposed Rules are contained in proposal 39 Pa.B. 6467 adopted by the Board at its meeting of August 18, 2009. The public comment period, initially scheduled to close February 5, 2010, has been extended to February 12, 2010.

The Proposed Rules seek to eliminate new sources of high total Dissolved Solids ("TDS") wastewaters from the waters of Pennsylvania. BASF's Monaca and Erie facilities, and potentially its Evans City facility, may be affected by the Proposed Rules. Together, these three facilities employ over 350 people and in 2009 alone, had a combined annual payroll of \$29,919,000, and paid a combined total of \$588,143 in taxes, \$7,031,000 in utilities and \$5,451,000 in outside contractor fees. As you can see, BASF's economic contribution to the Commonwealth of Pennsylvania is substantial. Of great concern to BASF is the overly broad and costly manner in which the Pennsylvania Department of Environmental Protection ("Department") has sought to address the presence of TDS in certain waters of the Commonwealth. BASF believes that any regulation must be tailored to address the concern of high TDS in those bodies of water in Pennsylvania that actually contain high TDS and be based on sound science in its approach and methodology. As discussed more fully below, in these areas, the Proposed Rules are deficient.

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1. <u>Proposed Rules Will Result in Substantial and Widespread Social and Economic Impact</u>

The TDS limitations that the Proposed Rules would impose upon industrial dischargers would clearly result in substantial and widespread social and economic impact. Though BASF might not be considered a "new discharge" under the Proposed Rules today, if there were "an additional discharge, an expanded discharge or an increased discharge" from any of its Pennsylvania facilities at some point in the future, it would be required to comply with the Proposed Rules. To do so, BASF believes that based upon its knowledge of current operations and the concentration of TDS in its effluent, ultrafiltration followed by reverse osmosis and evaporation would be the treatment methodology necessary to address TDS in its facilities' current wastewater effluent. This method also requires additional piping and tankage. This method generates two effluent streams: one with TDS removed and one with TDS concentrated. To better manage the concentrated TDS stream, BASF would need to install evaporators which will reduce the volume of the TDS concentrate to a manageable level. Ultimately, this TDS concentrate must be disposed as a sludge at a landfill or as a slurry to a POTW that can accept such waste. The total costs to BASF of pollutant removal at a level capable of meeting the limits in the Proposed Rules is estimated at approximately \$4.9 million in capital costs per site and approximately \$570,000 - \$1,000,000 per year per site in operational and maintenance ("O&M") costs (this includes costs for the ultimate disposal of the salts composing the TDS, which amount will depend upon the volume per year generated). Further, BASF's experience with these types of estimates is that they can increase by anywhere from 50% to 100%, especially where, as here, the analysis has yet to be done to determine whether this method of treatment can even work at its facilities and to what degree. Further, the estimated O&M costs (including waste disposal) will increase greatly as the quantity and/or concentration of TDS that needs to be removed is increased.

While it is difficult to predict the overall impact that the Proposed Rules will have on the viability and employment levels of BASF's Pennsylvania facilities, there is no question that increased costs could impact production at the facilities and have a cascading effect on the viability of the sites. Indeed, the estimated capital costs to comply with the Proposed Rules alone exceed the total amount of capital investment authorized for the BASF facilities in 2009. It is undeniable that BASF's estimated capital costs and estimated O&M costs is money that would be better spent on other more productive uses such as increased research and development to improve BASF's competitive position. The importance of family sustaining jobs with benefits and a strong industrial base in Pennsylvania cannot be overstated at time like this. Simply put, the significant cost of

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compliance to industries warrants greater scrutiny by the Board of the strategy taken in the Proposed Rules to control high TDS wastewater discharges.

2. No Scientific Basis for Such Broad Rules

At best, the data developed to date concerning the ecological impact of high TDS in Pennsylvania's waters is inconclusive. Even assuming there is a supportable basis to regulate high TDS, high TDS has not been found in all water bodies of the Commonwealth. Rather, only certain waters have been found to contain high TDS. There is no scientific basis to adopt regulations, such as the Proposed Rules, that blindly impose strict TDS limitations on all water bodies in Pennsylvania without any demonstration of an adverse impact to human health or the environment. Rather, the regulations should be tailored to immediately address only those spots where high TDS is proven to be an issue and to require sampling in order to monitor the TDS content of other water bodies so that if TDS levels are trending upwards over time, the regulations can be triggered for those other water bodies. The one-size fits all approach currently proposed by the Proposed Rules completely ignores the quality of the water body receiving the wastewater discharge. Requiring industries, such as BASF, to then spend millions of dollars to address high TDS when the beneficial effect on a particular water body is little to none is unjustifiable.

3. Any Proposed Limitation on TDS Must Take into Account Total Mass, Concentration and Dilution

Similarly, the definition of a "high TDS discharge" is deficient. Pursuant to the Proposed Rules, a high TDS discharge is anything that exceeds a TDS concentration of 2,000 mg/l or exceeds 100,000 pounds per day. When addressing high TDS, the actual concentration of the effluent outfall is irrelevant. Rather, it is the total mass per day that is the critical factor impacting the receiving water. As currently drafted, however, the Proposed Rules unfairly place far greater importance on concentration than mass loading. For example, assume a 2,000 mg/l wastewater stream takes 5.6 million gallons to equal 100,000 lbs/day. This means that a facility that contributes 70,000 gallons/day of wastewater at a concentration of 2,500 mg/l would fall within the proposed regulation, but a facility that discharges 6 million gallons/day at a concentration of 1900 mg/l would not because the concentration and total mass are slightly below the regulatory cutoff even though the second facility would be discharging more total pounds to the receiving water body and therefore contributing more substantially to the TDS level of the water.

Thus, there is a complete disconnect between total mass and concentration as contained in the Proposed Rules. In order to properly calculate a high TDS discharge, total

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mass, concentration and the size of the water body into which the wastewater is discharging must be taken into account. To do otherwise results in a TDS limitation that is misleading and unfairly targets certain discharges. Consequently, at a minimum, the definition of "high TDS discharge" should be a "TDS concentration of 2,000 mg/l and 100,000 lbs/day" and should factor in the size of the receiving water body.

4. <u>Definition of "New Discharge" in Proposed Rule is Vague</u>

The definition provided for the term "new discharge" in the Proposed Rules lacks specificity. The definition provides no explanation as to what is meant by "additional discharge", "expanded discharge" or "increased discharge" such that an existing discharger reasonably would know how it might be impacted by the Proposed Rules. BASF is concerned that the vagueness of these terms could result in the misinterpretation or misapplication of the proposed TDS limits in the future during permit renewals, or changes or expansions to an existing discharger's manufacturing processes. To avoid any ambiguity, the Department is urged to clarify the definition of "new discharge" to explain clearly what constitutes an "additional", "expanded" or "increased" discharge (and provide examples as necessary) and further, to expressly state that during a permit renewal process, in the absence of any changes to the existing discharge, the Proposed Rules do not apply.

BASF is committed to the pursuit of a solution to address high TDS in the Commonwealth's waters based on sound science that protects the environment while ensuring the economic viability of the existing industry and allowing for future economic growth.

BASF appreciates the Board's consideration of these comments.

Very truly yours,

Jeffrey Roberts EHS Team Leader

Jeffrey Roberto

Central Hub