than 2.5 mg/L of total ammonia nitrogen as N during the months of April through October, or 4 mg/L at other times.

b) Sources discharging to any of the above waters and whose untreated waste load cannot be computed on a population equivalent basis comparable to that used for municipal waste treatment plants and whose total ammonia nitrogen as N discharge exceeds 45.4 kg/day(100 pounds per day) shall not discharge an effluent of more than 3.0 mg/L of total ammonia nitrogen as N.

c) In addition to the effluent standards set forth in subsections (a) and (b) of this Section, all sources are subject to Section 304.105."

Section 304.105 states "In addition to the other requirements of this Part, no effluent shall, alone or in combination with other sources, cause a violation of any applicable water quality standard."

In my professional opinion, Sections 304.122a and 304.122b do not apply to the Noveon-Henry Plant discharge for several reasons.

- The Noveon-Henry Plant untreated waste load can be "computed on a population equivalent basis comparable to that used for municipal wastewater treatment plants". Consequently, 304.122b does not apply. In my opinion, the word "comparable" merely questions whether the data exist to express an untreated waste load in population equivalents like one does when either designing or evaluating a municipal wastewater treatment plant. The data for the Noveon-Henry Plant do exist and such calculations can be and have been made. The results from such calculations allow one to put the Noveon-Henry Plant's untreated waste load in a perspective others can readily understand (population equivalents). The term "population equivalent basis" is intended to put the relative size of an untreated waste load in perspective. The term was never intended to describe how the waste load was to be treated but only the magnitude of the waste load.

- An untreated waste load can be and has been calculated by me for the Noveon-Henry Plant discharge on "a population equivalent basis comparable to that used for municipal waste

treatment plants". The correct results from these calculations are stated below and clearly define the Noveon-Henry Plant discharge as having less than 50,000 population equivalents. Consequently, 304.122a does not apply.

- Since Sections 304.122a and 304.122b do not apply, the Noveon-Henry Plant is not required to provide additional effluent ammonia-nitrogen removal.

As stated above, correct calculations clearly define the Noveon-Henry Plant discharge as having less than 50,000 population equivalents. IEPA has calculated the population equivalents of the Noveon-Henry Plant for flow and BOD (based on data provided in the Baxter and Woodman-Wastewater Treatment Plant Report dated June 1994. This report did not present any data on the combined untreated wasteload. The report discussed the wasteload fed from the equalization tanks to the primary clarifier. However, this wasteload contains wastestreams that are internal to the WWTF that add flow, BOD, and TSS including primary clarifier sludge when sludge dewatering is not occurring, filtrate from sludge dewatering, and backwash water from the tertiary (secondary clarifier effluent) filter. These wastewaters and internal recirculation streams are illustrated in Figure 1 above. Even with this addition of flow and BOD from recircuclating streams,, IEPA calculated flow and BOD population equivalents of 916 and 19,412, respectively. I corrected the population equivalent calculation for TSS based on data collected by Noveon during the period of July 2002 through June 2003. The corrected value was 24,955 as illustrated below and in Figure 1. This calculation depends upon calculating the untreated waste load TSS coming to (not recycling within) the WWTF from all sources and then adding them together which is done below. The waststreams which contribute TSS to the WWTF are the PVC Lift Station Discharge which represents the waste load discharged from the PolyOne production areas, the 213 wastestream waste load before pretreatment, the PC Tank discharge, and the C-18 Tank discharge. It should be noted that the C-18 wastewater pretreatment process does not change the flow or TSS of this discharge but does increase its BOD. The TSS discharged by the combined Well No. 3 and Storm/Utility Pond discharges are less than 25 percent of the total influent wasteload as reported in the Baxter and Woodman report referenced above..

- PVC Lift Station Discharge Averages(not the PVC Tank Discharge Averages presented in Baxter and Woodman Report): 133 gpm, 1957 mg/TSS, and 3123 lbs/day TSS