

DEPARTMENT ENVIRONMENTAL PROTECTION
OFFICE OF LAND AND WATER PLANNING

AMENDMENT TO THE NORTHEAST WATER QUALITY MANAGEMENT PLAN

Public Notice

Take notice that on AUG 18 1994, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15-3.4), an amendment to the Northeast Water Quality Management Plan (WQMP) was adopted by the Department. This amendment, originally submitted by Maraziti, Falcon & Gregory on behalf of the Passaic River Basin Alliance, a coalition of wastewater dischargers in the Passaic River Basin, amends the treatment level requirements specified in Table V-15 of the Northeast Water Quality Management Plan (WQMP). This amended table is applicable not only to the dischargers specified in the narrative of Section V.B.5 and/or Table V-17 of the Northeast WQMP, but also to the dischargers which are not specifically identified in the narrative of the WQMP but that have limits based on the Northeast WQMP included in their New Jersey Pollutant Discharge Elimination System (NJPDDES) permits. The requirements in the amended Table V-15 shall apply but shall not prohibit the application of other limits where determined to be acceptable based on a water quality study approved by the Department.

Table V-15 of the WQMP is amended as follows:

1) Seasonal Ammonia (NH3) - Dischargers whose permits currently do not have seasonal water quality based effluent limitations for ammonia may request seasonal ammonia effluent limitations. Where there is an approved ammonia toxicity study and sufficient data exists to calculate final water quality based effluent limitations, the final limits will be determined directly. If there is no ammonia toxicity study and if final water quality based effluent limitations can not be determined directly, the permittee may request "temporary winter ammonia" effluent limitations. "Temporary winter ammonia" effluent limitations will be calculated considering: (1) the lower winter temperatures, (2) winter MA7CD10 flow, and (3) historical effluent data. "Temporary winter ammonia" effluent limitations will only be allowed where the permittee agrees to do the ammonia toxicity study needed to determine the final seasonal effluent limitations and where that study and the final report will be completed and submitted by March 15, 1996.

Dischargers to the Passaic River Basin (i.e. the Passaic River and any tributary to the Passaic River) above Little Falls (see list) that have temporary or final seasonal ammonia effluent limitations are required to continue to operate all phases of their treatment process (existing facility and equipment), necessary to treat anticipated flows, year round (unless specific

units are explicitly exempted by the Department) in order to minimize the amount of ammonia being discharged to the greatest extent practicable, even if less stringent winter season ammonia effluent limitations are incorporated through a final permit action. In addition, any discharger above Little Falls whose discharge affects or may affect a downstream water purveyor's intake, will be required to have an ammonia action level reporting requirement included in their NJPDES/DSW permit. The action level, if exceeded during winter months, will trigger an explanation/analysis of the exceedence in terms of degree of exceedence, reason for exceedence, actions taken to remedy exceedence, and actions needed to prevent similar exceedences in the future. The explanation/analysis report addressing the previously described items is required to be prepared and submitted for each month during the winter season when a discharger's monthly average effluent ammonia concentration exceeds the specified numerical action level. The list of dischargers above Little Falls includes, but is not limited to, the following dischargers:

1. Wayne Twp., Mt. View - NJ0028002
2. Caldwell Borough - NJ0020427
3. Livingston Twp. - NJ0024511
4. Florham Park - NJ0025518
5. Madison Chatham J.M. - NJ0024937
6. Chatham Twp. - NJ0020290
7. New Providence - NJ0021636 (applies while a continuous discharge facility only)
8. Berkley Heights - NJ0027961
9. Morris Twp., Woodland - NJ0024929
10. Bernards Twp. - NJ0022845
11. Lyons Vet. Hosp. - NJ0021083
12. Parsippany-Troy Hills - NJ0024970
13. Hanover Twp. - NJ0024902
14. Morristown - NJ0025496
15. Morris Twp., Butterworth - NJ0024911
16. NJDHS, Graystone Hosp. - NJ0026689
17. Rockaway Valley - NJ0022349
18. Two Bridges SA - NJ0029386
19. Wanaque Valley - NJ0053759
20. Pompton Lakes - NJ0023698
21. Warren Stage I/II - NJ0022489
22. Warren Stage IV - NJ0022497
23. Warren Stage V - NJ0050369
24. Long Hill (Stirling) - NJ0024465

The numerical trigger for action level requirements will be calculated as discussed in the Department's response to comment #3 below.

2) CBOD5 - A 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD5) requirement is substituted for the 5 Day Biochemical Oxygen Demand (BOD5) requirement at the same concentrations in Table V-15.

3) CBODu and NBODu - Ultimate Carbonaceous Biochemical Oxygen Demand (CBODu) and Ultimate Nitrogenous Biochemical Oxygen Demand (NBODu) are deleted as treatment level requirements from Table V-15.

4) TSS - The Total Suspended Solids (TSS) requirement in Table V-15 is amended to indicate that the water quality based effluent limit or secondary treatment (30 mg/L monthly average and 45 mg/L weekly average), whichever is more stringent, will apply.

The amendment proposal was noticed in the New Jersey Register on February 7, 1994. Comments on the amendment were received during the public comment period. The adopted amendment, as represented above and in the amended Table V-15, includes changes that were made to the amendment proposal as noticed in the New Jersey Register based on the comments received during the public comment period.

Comments on this amendment were received from the Passaic River Basin Alliance (PRBA), North Jersey District Water Supply Commission (NJDWSC), Hackensack Water Company (HWC), Passaic Valley Water Commission (PVWC), the Passaic River Coalition (PRC), and the Hanover Sewerage Authority (HSA). The comments are summarized below with the Department's responses.

TKN

- The amendment proposal noticed in the February 7, 1994 New Jersey Register specified substitution of TKN for NH3-N as a treatment level requirement in Table V-15, with an exception for direct dischargers to the mainstem Dead River and the mainstem Passaic River to the end of the freshwater portion at Dundee Dam which were addressed by the Department's Passaic River Water Quality Management Study (Passaic River Study).

1. COMMENT: TKN Limitations - The PRBA contests the Department's establishment of TKN limitations which have not been based upon a specific water quality study or model expressly employing TKN. Instead, a TKN limitation could be inserted in only those permits where the limitation is justified by water quality studies or models based upon TKN, and the permit references that model or study.

The NJDWSC, HWC and PRC also objected to the specification of TKN instead of NH3-N. The HWC stated that NH3-N is easier to measure and is usually measured by water suppliers, so comparable data are available. The PRC commented that TKN is a less reliable measure of reduced nitrogen compounds and their toxicity than NH3-N.

The NJDWSC commented that TKN is less specific than NH3-N and, therefore, not an adequate method for determining ammonia

concentrations. On a given day, wastewater treatment plant nitrification could be incomplete and TKN would not identify what portion of the discharge was ammonia nitrogen. When this ammonia left the wastewater plant, it could become oxidized instream creating nitrites which could be toxic to fish and other aquatic species. From a water treatment perspective, unreacted ammonia could also result in higher nitrate levels, greater oxidant demands (which equate to higher treatment costs), taste and odor problems and higher disinfection by-products.

RESPONSE: The Department has decided that the TKN/NH3-N issue will not be addressed by substitution of TKN for NH3-N in Table V-15 of the Northeast WQMP. Table V-15 will continue to specify NH3-N as a treatment level requirement. However, the TKN/NH3-N issue is not being eliminated from the Department's agenda of items that need additional scrutiny. The TKN/NH3-N issue will be required to be addressed in the future in water quality studies done by individual facilities (when such studies are performed) and/or as part of the Department's ongoing watershed initiative. A footnote has been added to Table V-15 which states the following: "In cases where a discharger has both TKN and NH3-N effluent limitations, and the Department determines that they are duplicative, the effluent limitations for one of the two parameters will be removed from the permit. If it is determined that both are necessary, then both will be retained. In cases where a discharger has no TKN effluent limitation and the Department determines that one is necessary, an effluent limitation for TKN will be included in the permit."

2. COMMENT: According to "Standard Methods for the Examination of Water and Wastewater", nitrates can cause negative interferences in TKN analyses and organic matter can result in positive interferences.

RESPONSE: Standard Methods states that the conditions under which significant interferences occur are not well defined, and there is no proven way to eliminate the interference in conjunction with the Standards Method organic nitrogen procedure. Recognizing the imperfections of the Kjeldahl test, the Department has determined that the issue of the requirement of a TKN limitation in cases where hydrolysis of organic nitrogen is occurring instream will need to be addressed in the future, in water quality studies done by individual facilities and/or as part of the Department's ongoing watershed initiative.

Seasonal NH3-N

- The amendment proposal noticed in the New Jersey Register proposed allowing seasonal NH3-N limits based on the outcome of an ammonia toxicity study for each discharger to determine the required wintertime limitations, and the requirement that the summer ammonia requirements in Table V-15 protect against the toxic effects of ammonia.

3. COMMENT: Seasonal NH3-N Limitations - The PRBA opposes the Department's reluctance to modify the winter ammonia limitations until an ammonia toxicity effluent limitation has been determined. The PRBA argues that the winter NH3-N limitation of 2 mg/L (30 day average) is inappropriate and without a legal or technical basis, and that the Department is ignoring the conclusions in the Passaic River Study which the PRBA states established final point source effluent limitations for NH3-N based on both the D.O. projection and ammonia toxicity analysis (Pg. VIII-3 and Table VIII-1 of the Study). The PRBA therefore requests immediate relief of this limitation to one which is legally and technically justifiable, such as 10 mg/L (level 2 treatment), at least on an interim basis, until site specific studies are conducted where needed.

The NJDWSC and the PVWC commented that seasonal NH3-N limitations are unacceptable to the water purveyors and could cost the water utility a good deal of money for remedial treatment because NH3-N is an indication of compounds which will require more treatment and can lead to taste and odor problems. In addition, any increase in NH3-N effluent limits (i.e., reduced stringency) for winter limits should be based on temperature values and not on the calendar as an indicator of temperature.

The HWC commented that the PRBA did not present any research on the effects of ammonia on the water supplies downstream of the Publicly Owned Treatment Works (POTW) discharges. Their concerns were only related to the aquatic life impact. The NH3-N limits should not be modified until the impact on the downstream water supplies are evaluated.

RESPONSE: The Department recognizes the unique situation that exists regarding the use of Passaic Basin waters as both a critical water supply source and an effluent dominated receiving waterbody. It is therefore the goal of the Department not only to ensure that water quality standards for aquatic life are achieved in surface waters within the basin, but also, in order to protect the potable water designated use, to reduce if possible, or at a minimum maintain, existing instream ammonia and nitrate levels. This requires that special conditions be placed on dischargers whose effluent affects the water source of potable water purveyors.

The Department will propose as NJPDES permit requirements "site specific seasonal ammonia toxicity study based" or "temporary seasonal ammonia" effluent limitations for facilities with existing year-round, single value, non-water quality based winter season ammonia effluent limits provided that:

1. The "temporary winter ammonia" effluent limitations may not be less stringent than 10 mg/L as a 30-day average.
2. The permittee provides the information needed to develop the "site specific seasonal ammonia toxicity study based" or

"temporary site specific" seasonal ammonia effluent limitations. For "temporary seasonal ammonia" effluent limitations, the required information includes, but is not limited to:

a. Effluent pH and temperature data.
b. USGS certified summer and winter MA7CD10 flows for the receiving stream just upstream of the outfall.

c. Other information as needed to do a mixing analysis. This includes, but may not be limited to, the following physical conditions at the outfall under the applicable MA7CD10 flow conditions.

- (1) receiving stream width
- (2) receiving stream depth
- (3) receiving stream velocity
- (4) receiving stream slope

3. Where "temporary seasonal ammonia" effluent limitations are requested, the permittee must agree to do a complete and acceptable ammonia toxicity study during calendar year 1995, including a work plan, which addresses both summer and winter season ammonia toxicity concerns. The final report shall be submitted on or before March 15, 1996.

4. If the permittee has been identified as a discharger that affects, or has the potential to affect, an existing or planned downstream water purveyor (see footnote * in Table V-15 of the amended plan), said permittee will comply with any requirements that address potable water use issues, including any operational standard and/or action level notification requirements that are contained in the NJPDES/DSW permit.

5. The permittees included under item 4. above will be required to continue to operate all phases of their treatment process (existing facility and equipment), necessary to treat anticipated flows, year round (unless specific units are explicitly exempted by the Department) in order to minimize the amount of ammonia being discharged to the greatest extent practicable, even if less stringent winter season ammonia effluent limitations are incorporated through a final permit action.

6. The permits of dischargers included under item 4. above will contain action level reporting requirements. The numerical trigger for action level requirements will be calculated using item a., b., or c. below, whichever is applicable. The baseline ammonia concentration effluent limitations are those that were in effect in a final permit before the adoption date of this plan amendment. The action level, if exceeded during winter months, will trigger an explanation/analysis of the exceedence in terms of degree of exceedence, reason for exceedence, actions taken to remedy exceedence, and actions needed to prevent similar exceedences in the future. The explanation/analysis report addressing the previously described items is required to be prepared and submitted for each month during the winter season when a discharger's monthly average effluent ammonia concentration exceeds the specified numerical action level.

a. For dischargers whose effluent is normally in compliance with the existing non-water quality based winter period ammonia effluent limitation that is in effect at the time this plan amendment is adopted, the action level will be

calculated as 1.5 times the existing monthly average winter period baseline ammonia effluent limitation.

b. For dischargers whose effluent has consistently been in non-compliance with the existing non-water quality based winter period ammonia effluent limitation that is in effect at the time this plan amendment is adopted, the action level will be calculated as 1.5 times the existing effluent quality monthly average winter period ammonia effluent data as reported on the discharger's applicable previous winter period DMRs. For purposes of defining the numerical action level only, monthly average existing effluent quality will be the highest winter season monthly average effluent value for ammonia concentration reported on the discharger's applicable DMR's during a normal operating month. A normal operating month would not include periods of excessive storm flows, periods of equipment or treatment unit breakdown, etc. which result in monthly average values much greater than those that would otherwise have been expected.

c. For dischargers that have final water quality based (includes only those cases where ammonia toxicity has been adequately addressed) seasonal ammonia effluent limitations in effect at the time this plan amendment is adopted will remain unchanged and an action level will not be required as the regulations that address violations of permit limitations are sufficient.

If, at a future date, an acceptable demonstration is made to the Department which justifies recalculating a facility's numerical trigger value, then the Department may propose such a recalculated value subject to the following conditions.

a. The recalculated value should be endorsed by both the facility owner/operator and all affected or potentially affected water purveyors.

b. The recalculated value must not cause a significant impact to any downstream water purveyor.

c. Water quality issues must be addressed by the facility owner/operator where appropriate.

All operational and action level requirements that are incorporated into permits based on the requirements of this plan amendment, will be retained in those permits (and subsequent permits) until such time as the water quality issues relating to potable water supply have been addressed either through new water quality criteria and new effluent limitations, a subsequent plan amendment, or other applicable Department rule making.

The request that the time period during which winter season ammonia effluent limitations are effective be based solely on temperature as opposed to being based on the calendar as an indicator of temperature, while it has its merit, is not practical from either a permitting or enforcement perspective. Limitations based on other than set design conditions, e.g., infinitely variable effluent limitations, have been requested by permittees for ammonia, as well as other parameters, but are always denied as they would not be in compliance with existing

regulations and the monitoring requirements and costs associated with such limitations would be prohibitive. The calendar approach has been found to be conservative enough to ensure that water quality standards are not violated. The default summer period (season) is from May 1 through October 31 and the default winter period is from November 1 through April 30. Upon request, the Department will consider regrouping the months in the two seasons whereby a single contiguous month is moved from one season to another, but the Department will not consider establishing any more than two distinct seasons.

4. COMMENT: The HWC does not believe an aquatic toxicity test is required of each POTW discharge, particularly since there is no aquatic problem in the cold weather. The ammonia that affects a water supplier can be done by gathering the ammonia data from both the water supplies and the POTWs and calculating the stream loadings.

RESPONSE: Assuming that there is no toxicity problem in winter without sufficient data is flawed which is why wintertime, site-specific ammonia toxicity studies will be required. It would not be possible to determine stream ammonia loadings just from water supply and POTW data if nitrification were occurring in the stream. This would be a dynamic situation requiring the use of a model.

5. COMMENT: In regard to the Department's requirements that the summer NH₃-N limits protect against the toxic effects of ammonia, the NJDWSC commented that even if this were practical, it would not account for the additional costs incurred by the water utility for additional oxidants (chlorine, KMnO₄) and for taste and odor control (PAC, GAC); because the toxic effects are only part of the picture.

In addition, the PRC commented that it is inappropriate to place the burden of proving that the summer NH₃-N limits protect against the toxic effects of NH₃-N on any discharger. Instead, the PRC supports having the Department undertake an "ammonia toxicity study". In addition, the PRC believes that there is sufficient available information for reasonable judgements to be made regarding ammonia limitations based on temperature. Such judgements should be made as soon as possible.

RESPONSE: As indicated above, ammonia toxicity studies must be conducted on a site-specific versus regional basis and are best done by the dischargers themselves. While the Department is in the process of converting to a watershed scale approach to monitoring, site specific studies will still be needed. It is the Department's intention to work towards more closely linking water supply issues with the NJPDES permitting process and to more adequately address these issues through quality based effluent limitations, water quality criteria, and water quality modeling.

6. COMMENT: The HSA commented that Table V-16 from the Northeast WQMP contains a note which indicates that the NH3-N limitations in the WQMP are not necessary during winter months. Accordingly, the limitations contained in the WQMP should not have been used in setting year round permit conditions. The Department should eliminate winter NH3-N limits until such time as studies indicating a more stringent limitation is needed are completed.

RESPONSE: The note to Table V-16 also states that "The NH3-N...criteria will not be required from November 1 to April 30 unless their removal is necessary to meet water quality standards." Whether or not removal of NH3-N is necessary during the winter months is required to be determined by means of site-specific ammonia toxicity studies. As discussed above, the Department will not eliminate winter ammonia limits, but will propose appropriate temporary winter limits where justified until the required studies are completed.

CBOD5

- The following are comments regarding the proposal noticed in the New Jersey Register to substitute CBOD5 for BOD5 at the same concentrations in Table V-15.

7. COMMENT: CBOD5 - The NJDWSC commented that while the CBOD5 test is an accurate tool in apprising the efficiency of BOD removal in an STP process, it has serious drawbacks when assessing the impact of nitrogenous BOD on its receiving water. The BOD5 test is more suitable to assess changes in water quality in the receiving stream below the point of discharge. Therefore, it should be included in the permit as a regulatory requirement without a level-related penalty provision.

RESPONSE: The requirement of the BOD5 test in addition to the CBOD5 test is not necessary since the CBOD5 test will address the carbonaceous BOD while the ammonia analysis addresses the nitrogenous BOD.

CBODu & NBODu

- The following are comments regarding the proposal noticed in the New Jersey Register to delete CBODu and NBODu as treatment level requirements in Table V-15.

8. COMMENT: CBODu and NBODu - The NJDWSC commented that CBODu and NBODu are critical indicators of the ultimate impact of wastewater effluents on water quality in the receiving waters downstream of discharge points. Therefore, these parameters should continue to be permit requirements. What should be changed are the penalty provisions which result in multiple violations.

RESPONSE: CBODu and NBODu are not necessary as long as there are limits for CBOD5 and ammonia. An internal conversion is performed in water quality modeling so that the ultimate impact of the nitrogenous and carbonaceous waste is accounted for.

Seasonal CBOD5

9. COMMENT: Seasonal CBOD5 - The PRBA's original proposal requested that the Department amend the revised Table V-15 to specify water quality based seasonal limitations for CBOD5 equal to 16 mg/L, which the PRBA indicates is specified in the Passaic River Study as a limit which would not cause water quality violations under winter conditions. If the Department, in the future, finds it necessary to collect more site specific data concerning CBOD5, future NJPDES permits can reflect such needs. It is possible, however, that the Department already possesses sufficient data regarding CBOD5 to model every point source discharger on the Passaic River.

RESPONSE: The Department is not prepared to propose seasonal CBOD5 as part of this amendment. Winter conditions with regard to CBOD5 were evaluated to some extent in the Passaic River Study, however, this was considered as a sensitivity analysis as these limits were not recommended in the Study. The Passaic River Water Quality Model would have to be used to simulate these conditions to determine suitable levels. Such an analysis would have to include antidegradation and reserve capacity analyses. This type of analysis could appropriately be done as part of the Department's efforts towards watershed based planning and permitting.

TSS

- The following are comments regarding the proposal noticed in the New Jersey Register to change TSS requirements in Table V-15 to indicate that the water quality based limit or secondary treatment (30 mg/L monthly average and 45 mg/L weekly average), whichever is more stringent, would apply.

10. COMMENT: TSS - The NJDWSC commented that there is no substantiation for lowering the stringency of TSS limits, therefore, any change would fundamentally degrade water quality and this is not in accordance with a policy of antibacksliding and antidegradation as mandated. Without a technical basis for lowering the TSS limitations, the matter cannot be fully assessed and requires further discussion and input from both sides.

RESPONSE: The basis for allowing a lowering of TSS limits is that the treatment level requirements for TSS originally specified in the Northeast WQMP were not water quality based, they were instead set consistent with the BOD5 limits with the basis that if the BOD5 requirement was met, the TSS requirement would also

be addressed. This amendment updates and corrects the Northeast WQMP to specify that the TSS limits will be set based on the minimum Federal treatment standards (40 C.F.R. Part 133.102) unless water quality modeling demonstrates the need for more stringent requirements. Since the determination of TSS limits will be based upon meeting water quality criteria, this proposal is not inconsistent with the policies of antidegradation and antibacksliding.

The proposed change to the existing TSS requirements will still ensure compliance with the surface water quality standards. In addition, while the TSS effluent limitations may be made less stringent, the Department does not anticipate that there will be any significant increase in the concentration of TSS in the receiving waters due to the fact that the limitations for other parameters that directly affect the concentration of TSS that can be discharged (e.g., CBOD5) are not being made less stringent.

11. COMMENT: The PRC commented that the wording of the proposal in regard to TSS is not clear and suggested the following wording: "For all treatment levels in Table V-15, the criteria for suspended solids be 30 mg/L as a 30 day average and 45 mg/L as a 7 day average".

RESPONSE: The above wording is not appropriate because it does not specify that limits for suspended solids will be based on water quality criteria or secondary treatment (30 mg/L as a monthly average and 45 mg/L as a 7 day average) whichever is more stringent. The minimum treatment standards for TSS (secondary treatment) and the surface water quality standards for TSS (N.J.A.C. 7:9B-1 et seq.) are not the same and are not numerically equivalent, therefore, both must be considered and complied with when determining the appropriate effluent limitations to be included in a permit.

D.O.

- The following are comments regarding PRBA's July 2, 1993 proposal for D.O. limitations consistent with applicable water quality standards, and the revised proposal as noticed in the New Jersey Register.

12. COMMENT: D.O. Limitations - The PRBA contests the Department's decision to impose a D.O. requirement of 6.0 mg/L due to the fact that this limitation is not supported by either the WQMP or the Passaic River Study. Consequently, there exists no technical or legal basis to require limits which are more stringent than applicable water quality standards. Water quality standards provide for a daily average of 5 mg/L (4 mg/L at any time) for non-trout waters, and 6 mg/L (5 mg/L at any time) for trout maintenance waters. Imposing a D.O. effluent limit of 5.0 mg/L rather than 6.0 mg/L for discharges in the Passaic River

Basin will have an inconsequential effect on the total D.O. deficit calculated by the Department.

The HWC agrees with the PRBA that D.O. limitations should be consistent with applicable water quality standards based on D.O. data for the Passaic River.

The NJDWSC comments that D.O. is of primary concern because the NJWSC's water allocation permit for Two Bridges pumping requires that the D.O. levels be maintained at a 24-hour average of no less than 5.0 mg/L. From a practical standpoint, there must be some margin between the wastewater discharger's requirements and the water supply diverter's requirements. One mg/L seems to be a reasonable margin.

RESPONSE: The technical basis of the imposition of a D.O. requirement of 6.0 mg/L is based on the water quality modeling background data which was used in the Passaic River Study. The requirement is necessary to maintain the proper D.O., meeting the water quality criteria in the critical sag area (not at the discharge point), in the Passaic system. Therefore, there is an indirect rather than a direct relationship to the applicable water quality standard. Table V-15 has not been revised to reflect this requested change to the D.O. limitation.

Seasonal D.O.

- The following are comments regarding the PRBC's July 2, 1993 proposal for seasonal D.O. limitations, and the revised proposal as noticed in the New Jersey Register.

13. COMMENT: Seasonal D.O. Limitations - The PRBA contends that at a minimum, the effluent limitations for D.O. should be relaxed during the winter period in accordance with the conclusion of the Passaic River Study.

The NJDWSC commented that consideration might be given to raising the D.O. levels solely during the cold weather but only in relationship to actual occurring temperatures, not the time of the year. The water supply diverter's limits must be raised correspondingly to maintain the one mg/L margin. Whether or not these levels can be raised without adversely affecting the quality of dependent water supplies in the basin can only be addressed through a comprehensive study based on prevailing conditions. It would be up to the study to prove to the water suppliers that permitting a relaxation in the D.O. levels during certain low temperature periods would not cause any significant reduction in water quality.

RESPONSE: Although an effluent D.O. of 5 mg/L was used in a winter simulation as reported in the Passaic River Study, this was done as a sensitivity analysis, and the results were not part of the conclusions and recommendations of the report. Also, this

analysis did not include a reserve capacity or antidegradation evaluation. Since an effluent D.O. concentration of 6 mg/L is not an unreasonable level for wastewater treatment plants to achieve, especially in the winter, and to relax this limit may have negative water supply impacts, the Department is not considering any changes.

Additional Comments

14. COMMENT: The PVWC is concerned that the amendment will adversely impact delivered water quality. The NJDWSC commented that the amendment will hold dischargers less accountable for their effluent contaminants, which is in direct opposition to the Federal policy of antibacksliding and antidegradation.

RESPONSE: The Department is also concerned with maintaining the quality of the water for water supplies, and has included specific provisions and requirements in the adopted plan amendment to maintain water quality as currently allowed for by NJPDES permits. Any specific antibacksliding or antidegradation issues which arise from this plan amendment will need to be addressed through the permitting process.

15. COMMENT: The HWC commented that the Northeast WQMP should be coordinated with the "New Jersey Statewide Water Supply Master Plan" in order to begin the planning process for watershed based planning. River monitoring data should be collected for long term planning purposes, instead of just doing "sensitivity" studies every 5 or 10 years. Water suppliers have been collecting raw water data for years yet the Department has no adequate depository for this valuable information.

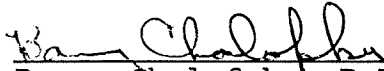
RESPONSE: As part of the WQMP process, the Department has begun to address various water supply concerns which arise based on wastewater treatment and disposal proposals. The Department intends to continue this effort, including coordination with the "New Jersey Statewide Water Supply Master Plan", as part of the watershed based planning process.


In regard to river monitoring data, the data collected from short term, intensive surveys is needed by the Department for modeling and will continue to be needed as part of the watershed based planning process. Although the Department does not have an adequate depository for raw water data collected by the water suppliers, the STORET system, a nationwide water quality data bank for the storage and retrieval of data, may be an appropriate depository for this information. STORET is used on a regular basis by those interested in water quality analysis.

16. COMMENT: The PRBA commented that it is the Department's contention that the limitations established in the Northeast WQMP and this amendment will only apply to those dischargers listed in Table V-17 and/or Section V.B.5. of the WQMP, however, these

limits have been applied to many permits which are not expressly listed in the aforementioned table. The Department must either delete the reference to the WQMP in those permits which are not specifically listed in the aforementioned table, or apply the limitations and conditions expressed in the WQMP to all permits which reference the Northeast WQMP.

RESPONSE: Based on the above comment, this amendment has been modified to specify that Table V-15 is applicable not only to the dischargers that are specified in the narrative of Section V.B.5 and/or Table V-17 of the Northeast WQMP, but also to the dischargers which are not specifically identified in the narrative of the WQMP but that have limits based on the Northeast WQMP included in their NJPDES permits.


Barry Chalofsky, P.P.
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Date