

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
BEFORE THE ADMINISTRATOR

In the Matter of  
Agrico Chemical Company

NPDES Permit No. OK-0029149

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Initial Decision

This is a proceeding under Sec. 402 of the Clean Water Act (33 U.S.C. 1342 (1976 Ed., Supp I, 1977)). Agrico Chemical Company operates a plant for the production of nitrogen fertilizer at Catoosa, Oklahoma and on September 25, 1975, was issued NPDES Permit No. OK-0029149, dated August 13, 1975, authorizing discharges to the Verdigris River at that location. Agrico objected to certain provisions of the permit and under date of October 6, 1975, filed a request pursuant to 40 CFR 125.36 for an adjudicatory hearing and legal decisions. Agrico's request for an adjudicatory hearing was granted by the Regional Administrator by letter, dated January 9, 1976. Negotiations between the parties resulted in the settlement of all contested issues with the exception of the appropriate pH range, which the permit requires to be in the range of 6.0 to 9.0 at all times.

The matter was forwarded to this office by the Enforcement Division of Region VI on April 25, 1979, the undersigned was designated as presiding officer on May 1, 1979, and a hearing was held in Dallas, Texas on October 16 and 17, 1979. By letter, dated November 15, 1979, the Regional Administrator designated the undersigned to prepare and issue an initial decision in this proceeding.

Findings of Fact

Based on the entire record<sup>1/</sup> including the posthearing submissions of the parties, I find that the following facts are established:

1. NPDES Permit No. OK-0029149, dated August 13, 1975, was issued to Agrico Chemical Company on September 25, 1975 (EPA Exh. 3). The permit (pp. 2 & 3) provides that the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice a week by grab sample. However, because other pollutant parameters, e.g., ammonia (as N), require 24-hour composite or continuous sampling and pH is concerned with the complete discharge, the conclusion is that continuous monitoring for pH is required (Tr. 38, 106-07; EPA Position Statement submitted under date of June 15, 1979).
2. On October 22, 1975, the Oklahoma Water Resources Board certified that a pH range of 6.0 to 9.0 complied with Oklahoma Water Quality Standards (Oklahoma Water Resources Board Waste Disposal Permit, Exh. B to Agrico Request for Adjudicatory Hearing; EPA Position Statement, June 15, 1979). The record does not reflect whether the pH range sought by Agrico would comply with Oklahoma Water Quality Standards.
3. Agrico's plant here involved has facilities for the production of ammonia, urea, ammonium nitrate and nitric acid (Tr. 131). The fertilizer complex consists of two ammonium manufacturing plants and a combined UAN (urea, ammonium nitrate and nitric acid) plant while a second UAN plant was under construction at the time of the hearing. Ammonium is used as a feedstock in the production of urea, ammonium nitrate and nitric

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<sup>1/</sup> The parties have stipulated that in addition to the transcript of testimony and exhibits introduced or stipulated into evidence at the hearing, the record consists of all correspondence and prehearing submittals exchanged since May 1, 1979, the date of my assignment to the case.

acid and it is common to have these components of the nitrogen fertilizer industry produced in closely integrated complexes as is Agrico's in this instance.

4. Discharges from Agrico's complex to the Verdigris River are made from a single outfall. Sources of wastewater comprising the discharges, which approximate one million gallons a day (Tr. 143, 201), include process sewers from No. 1 and 2 ammonium plants; cooling tower blowdown--a portion of which is pumped to an injection surge tank for deepwell disposal, ammonia plant process condensate--a small percentage of which (20 to 30 gpm for each plant) after stripping for removal of most ammonia is utilized as jacket water in secondary reformers of ammonia plants, is discharged into ammonia process sewer and to the river, package boiler (steam unit) blowdown; drainage beneath sulphuric acid caustic soda bullet tanks; sanitary sewage; demineralizer regenerate rinse; loading area drainage; spills and leaks outside of process areas and general drainage (Agrico Composite Exh. A).
5. Process condensate which is steam stripped and used as jacket water in the two ammonia plants constitutes between seven and eight percent of total daily discharges to the river (Tr. 144). Demineralizer regenerate rinse water attributable to the ammonia plant constitutes approximately two percent of the total daily wastewater flow to the river (Tr. 145, 202).
6. Effluent limitation guidelines for the Fertilizer Manufacturing Point Source Category appear in 40 CFR 418. Subpart B applies to discharges resulting from the manufacture of ammonia, Subpart C applies to discharges resulting from the manufacture of urea, Subpart D applies to

discharges resulting from the manufacture of ammonium nitrate and Subpart E applies to discharges resulting from the manufacture of nitric acid. Only the guidelines relating to discharges from the manufacture of ammonia (40 CFR 418.22) have a pH limitation (6.0 to 9.0), pH limitations for the other listed subcategories having been suspended or withdrawn. No excursions having been provided for, the ammonia guideline requires that the pH limitation be met 100% of the time.

7. The ammonia guidelines (40 CFR 418.20 to 418.25) are not applicable to cooling tower blowdown which is not contaminated by process wastewater (Tr. 16, 89; 39 FR No. 68, April 8, 1974, at 12834-35; 44 FR No. 216, November 6, 1979, at 64080-82). Also excluded from the guidelines are precipitation or storm runoff from outside the battery or process area of the plant, shipping and handling losses and demineralizer regenerate wastewater attributable to ammonia production for pollutants other than ammonia (Tr. 20, 200; Development Document, Agrico Exh. 5 at 76). Similar exclusions from the applicability of the guidelines were made for discharges attributable to the production of urea, ammonium nitrate and nitric acid.
8. Dr. John Dehn, the EPA chemical engineer responsible for drafting the permit, recognized that cooling tower blowdown and surface or storm runoff from outside the battery or process areas were excluded from the guidelines. Nevertheless, he testified that the commingling of these wastes in the discharge would not interfere with the applicability of the ammonia guideline including pH and would enhance Agrico's ability to comply therewith (Tr. 17, 20, 50, 70, 72). He explained this conclusion by alluding to the necessity of adding chromate inhibitors to cooling tower waters and rigidly controlling the pH in such waters to inhibit corrosion (Tr. 18). Before such waters are discharged they

are pumped to a chromate destruction unit, followed by precipitation of zinc and chromium in sedimentation ponds with the overflow being discharged to the river. Dr. Dehn testified that it was necessary to lower the pH in order to have the chemical destruction unit operate at a favorable rate and to raise the pH back to the neutral point to facilitate settling of chromium. Accord, Dennis Murphy (Tr. 137-38). He asserted that if the facility was operated efficiently, it should not interfere with maintaining a satisfactory pH at the outfall (Tr. 18). He discounted the effects of surface runoff by the assertion that most uncontaminated storm runoff was well within the pH guideline range (Tr. 18-19).

9. Dr. Dehn appeared to recognize that demineralizer regenerate wastewater attributable to production of ammonia for pollutants other than ammonia was excluded from the guidelines (Tr. 20). Under cross-examination, he asserted that pH was not a specific pollutant component and thus the language of the Development Document Concerning Water Treatment Plant Effluent (Agrico Exh. 5 at 76) that "Effluent limitations for specific components (other than ammonia - N) for treatment plant effluent are not covered by this report" did not exclude pH (Tr. 91-95). He also asserted that because Agrico steam stripped their condensate and sent it to the boiler water treatment works, the entire stream was process water (Tr. 90-91). Respecting shipping and handling losses, he asserted that ammonia was a gas and that he did not know how there could be shipping and handling losses applicable thereto that could get into the water (Tr. 116). See, however, 44 FR 64082, November 6, 1979, where shipping losses are indeed recognized for ammonia and are defined as including not only discharges resulting from loading tank cars or tank trucks but also

from cleaning tank cars or tank trucks and discharges from air pollution control scrubbers designed to control emissions from loading or cleaning tank cars or tank trucks.

10. The substance of Dr. Dehn's testimony was that a reasoned judgment considering the effect of excluded discharges on the applicability of the guidelines to Agrico and Agrico's ability to comply therewith was made in determining that the guideline pH requirement of 6.0 to 9.0 was applicable. However, EPA's position statement submitted under date of June 15, 1979, states that process condensate makes up the major portion of the ammonia plant process water, that this water was steam stripped and sent to the cooling tower as make up water, that it become commingled with process wastewater and under the regulation was by definition process water. These facts were alleged to make the pH requirements for ammonia applicable to cooling tower blowdown. In EPA's position paper of August 9, 1979 it was asserted that the plant discharge consisted mainly of process wastewater from the ammonia plant. There is no evidence that any significant portion of cooling tower blowdown becomes contaminated with process water so as to be process water at discharge and ammonia plant process water constitutes between seven and eight percent of the total daily discharge to the river (finding 5). This is the only portion of the discharge covered by the pH guideline. In its posthearing submission, EPA asserts that discharges from the UAN plant are to a deepwell. This assertion reflects a failure to distinguish between process discharges from the UAN plant which are to a deepwell and other discharges which are to the river and is erroneous. Wastewaters excluded from the ammonia guidelines combined with the wastewaters from the facilities for which no pH requirement is applicable have a major effect on pH control at

the Agrico facility (Tr. 209). The bulk of Agrico's pH control problems are from sources other than the ammonia plants (Tr. 210).

11. The Development Document (Agrico Exh. 5 at 66) recognized that nitrogen fertilizer complexes were not designed to keep individual process discharges separate. It also recognized that inadequate treatment of pollutants at nitrogen fertilizer complexes will frequently result if process wastewaters from each component chemical were not dealt with separately. PH, however, was not a pollutant for which separate treatment was regarded as necessary and in fact, beneficial effects in pH control result from the commingling of wastes (Tr. 196). Accordingly, it is consistent with the guidelines development and the regulatory implementation thereof to consider pH on a combined stream basis for nitrogen fertilizer plants such as Agrico's (Tr. 196-97).
12. Agrico's pH control system is illustrated on a sketch (Agrico Exh. 3). As indicated (finding 8), cooling tower blowdown is discharged to a chromate destruction unit where chemical reduction of chromate takes place at a pH of approximately three. The blowdown then passes to a neutralization tank where sodium hydroxide is added to raise the pH to 8.5 which is required for adequate precipitation of chrome and zinc which occurs in sedimentation ponds. Overflow from the sedimentation ponds flows to the plant outfall and then to the river (Tr. 150). Neutralization of demineralized rinse and regenerate water from the ammonia plants is accomplished in separate neutralization tanks by the addition of carbon dioxide. Flow from the neutralization tanks is to the surface drainage system and then to the storm pond and to a neutralization basin for any additional pH adjustment that may be necessary prior to discharge to the plant outfall (Tr. 150-51). Flow from the No. 2 ammonia plant process sewer is also to the plant surface drainage system to the storm pond and

- to the neutralization basin for additional pH adjustment. Package boiler blowdown is discharged to the No. 1 ammonia process sewer to a holding (anion) pond and to the mentioned neutralization basin for additional pH adjustment. The neutralization basin is so equipped that acid or caustic may be added so as to maintain pH between six and nine (Tr. 139). The basin is equipped with continuing pH monitors and an automatic closing valve so that if the pH is below 6.2 or above 8.8, the flow is diverted to a recycle pond and then back to the neutralization basin (Tr. 139-40).
13. In addition to the pH monitor at the neutralization basin referred to in the preceding finding, Agrico utilizes pH monitors at the chromate destruction unit, at the storm pond and at the plant outfall (Tr. 15, Agrico Exh. 3). Attenuation or holding of cooling tower blowdown in sedimentation ponds for approximately 17 days, equalization of process waste flows in the storm and anion ponds, continuous pH monitoring and diversion or recycle capability are indicative of exemplary pH control (Tr. 202-04; pp 14-18, Agrico Composite Exh. B) Agrico's pH control system, which cost approximately \$300,000 (Tr. 173), is comparable to other well performing plants (p. 3, Agrico Composite Exh. B) and represents at least best conventional control technology (Tr. 204).
14. Based on 12 months of experience (December 1977 through November 1978), Agrico has been in compliance with permit requirements for pH 99.8% of the time (Table 2, Agrico Composite Exh. B). Of 33 excursions recorded since January 1978, 45% were at flow rates of less than 100% or at zero flow. Excursions during this period ranged from a high of 120 minutes to one minute and average approximately 15 minutes. The 120 minute excursion was not significant because no flow was reported at



the discharge during that period. The next longest excursion was 50 minutes due to equipment failure. Data for January through April 1979 indicate no excursions greater than 9.9 or less than 5.7 (p. 15, Agrico Composite Exh. B). This compliance performance by Agrico places it among the nation's best performing plants in the matter of pH control. Apart from pH control, Agrico's facility is not unusual or unique in comparison to other nitrogen fertilizer plants (Tr. 227).

15. It is not possible for plants with strong acids or bases in their inorganic wastewaters to control pH within a range of 6 to 9 at all times (pp. 1, 6, and 7, Agrico Composite Exh. B). Although EPA presented a list of nitrogen fertilizer plants allegedly meeting the pH requirement of 6 to 9 at all times (EPA Position Statement, August 9, 1979), these plants were selected because their permits require such compliance and not because they were in fact in compliance (Tr. 61, 64, 65, 69). The plants are not in compliance with pH requirements 100% of the time (Tr. 206).
16. Major reasons for inability of nitrogen fertilizer plants to meet the pH requirement of 6.0 to 9.0 one hundred percent of the time are strikes or surges in changes of pH which may exceed the ability of the control system to attenuate and inability to keep the complex machinery operating properly one hundred percent of the time (Tr. 207-08). PH control involves sensors, automatic valves and controls which can and do have mechanical failures. In addition, failures in the process control system may overload the design of the pH control system (Tr. 208). Another reason for inability to meet the pH requirement one hundred percent of the time is or may be surface runoff.

17. An appropriate best conventional technology pH control guideline requirement would be 6.0 to 9.0 98.5% of the time for a 30-day average, 85.4% of the time on a daily average with any single excursion outside the range of 3.5 to 11 limited to less than 15 minutes (Tr. 191-92; pp 9 & 10, Agrico Composite Exh. B). The dilution ratio between the Verdigris River flow at historic low flow and the Agrico discharge is approximately 30 to 1 and a discharge limited as indicated would not significantly effect or change the pH of the river (Tr. 218; pp. 19-24, Agrico Composite Exh. B).
18. PH is defined as the negative logarithm or exponent of hydrogen ion activity or concentration (p. 1, Appendix B, Agrico Composite Exh. B). Because of its logarithmic nature, a pH range of 6.0 to 9.0 is extremely sensitive to small amounts of acid or base (Tr. 184).
19. By a memorandum, dated April 23, 1979 (EPA Exh. 2), the reporting requirement for daily violations (reporting each violation within five days after becoming aware thereof) for permits requiring continuous monitoring of pH was omitted provided the continuously recorded pH did not exceed the range of 6.0 to 9.0 for more than 15 minutes for any single excursion and not more than 60 minutes in any one day and was not more than 11.0 or less than 4.0 at any time (Tr. 23-24, 101-104). While the stated reason for the relaxation was a reduction in paper work, it constitutes by implication recognition that compliance with a pH range of 6.0 to 9.0 100% of the time is not expected.
20. EPA has purported to make a best engineering judgment based solely on the performance of the Agrico plant (EPA Exh. 1). This involved examination of reported reasons for excursions, with the elimination of those due to unknown reasons and for which fail safe systems allegedly should have been designed. The conclusion was that ten minutes of pH

outage on a daily basis and 30 minutes on a monthly basis would be permissible provided the pH did not exceed the range of 4.0 to 10.0 standard units at any time.

#### Conclusions

1. The ammonia guideline (40 CFR 418.20-23) is applicable to the discharge in question.
2. In applying the guideline, EPA was obligated but failed to fully consider components of the discharge attributable to the manufacture of ammonia which are excluded from the guideline.
3. It being consistent with guidelines development and the regulatory implementation thereof to consider pH on a combined stream basis for a fertilizer complex such as Agrico's and no pH guideline having been established for components of the discharge attributable to the manufacture of urea ammonium nitrate and nitric acid, EPA was obligated but failed to consider the effect of these excluded components of the discharge on pH control.
4. In determining appropriate allowances for the excluded components of the discharge referred to in conclusions 2 and 3 above, EPA was obligated to make a best engineering judgment. The purported best engineering judgment made was based solely on the performance of Agrico's plant for which the permit was issued and did not conform with Sec. 402 of the Act.
5. An appropriate (best engineering judgment) pH requirement considering the guideline, the excluded components of the ammonia discharge, the components of the discharge for which pH requirements have not been established, best practicable technology currently available (performance

by exemplary plants in the industry) and the factors listed in Sec. 304 of the Act is 6.0 to 9.0 standard units 98.5% of the time for a 30-day average, 85.4% of the time on a daily average with any single excursion outside the range of 3.5 to 11 not to exceed 15 minutes.

6. The permit will be modified to reflect the pH range and conditions specified in conclusion 5 provided it is determined or the State of Oklahoma certifies that such a range and such conditions do not violate Oklahoma Water Quality Standards.

#### Discussion

Agrico contends that the ammonia pH guideline (40 CFR 418.23) is not applicable because the components of the discharge attributable to the production of ammonia which are covered by the guideline are a relatively small portion of the total discharge, which in addition to the excluded portions of the ammonia discharge includes components attributable to the production of urea, ammonium nitrate and nitric acid for which no pH guidelines have been established. The fact is, however, that apart from its exemplary performance in pH control there is nothing unusual or unique about Agrico's facility in comparison to other nitrogen fertilizer complexes. Moreover, while the record indicates that the pH guideline for ammonia was established and accepted because neither EPA nor industry understood the difficulties in maintaining pH within the relatively narrow range of 6.0 to 9.0 (Tr. 182), the Development Document (Agrico Exh. 5) establishes that nitrogen fertilizer complexes such as Agrico's were considered in developing the guideline. Accordingly, there is no reason to expect that the portion of the discharge attributable to ammonia production

which is covered by the guideline at the instant facility is significantly different in comparison to the total discharge than such portion in comparison to total discharge at other nitrogen fertilizer complexes and no valid basis for determining that the ammonia guideline is inapplicable has been presented.

Having concluded that the ammonia guideline for pH is applicable to Agrico's discharge, it must be stated that this conclusion does not effect the outcome of this proceeding. This is because as to the components of the discharge attributable to the production of ammonia which were excluded from the guideline and the components of the discharge attributable to the production of urea, ammonium nitrate and nitric acid for which no pH guidelines have been established, EPA was obligated to make a best engineering judgment pursuant to Sec. 402(a)(1) of the Act as if no guideline was in effect. In making any such best engineering judgment, it is clear that the factors in Sec. 304(b)(1) of the Act must be considered. Evansville Materials, Inc., G. C. Decision No. 38, January 29, 1976; United States Steel v. Train, 556 F. 2d 822 (7th Cir., 1977). Although the extent of such consideration depends upon the information available including that furnished by the applicant (G. C. Decision No. 38, supra, and Bristol County Water Company, G. C. Decision No. 40, April 2, 1976), sight must not be lost of the fact that the determination being made is the effluent limitation or reduction achievable by the best practical technology currently

available<sup>2/</sup> and that the level of technology required to achieve the particular effluent limitation sought to be imposed may not be ignored.<sup>3/</sup>

In the instant case, the level of technology required to achieve continuously a pH range of 6.0 to 9.0 was not considered, not because the information was not available, but because it was erroneously assumed that such consideration was rendered unnecessary or precluded by the guideline (Tr. 30, 85, 86, 97, 98, 110, 119). It is concluded that making its best engineering judgment pursuant to Sec. 402(a)(1) of the Act, EPA was obligated, as a matter of law, to consider the effluent limitation or reduction attainable by application of the best practical control technology currently

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<sup>2/</sup> The 1977 amendments to the Clean Water Act established a new category of conventional pollutants and designated pH as a conventional pollutant. Best conventional control technology (BCT) is to be achieved not later than July 1, 1984. BCT may not be less stringent than best practical control technology currently available (BPT) and is intended to replace best available technology economically achievable. See 44 FR No. 169 at 50732 et seq., August 29, 1979. Accordingly, it makes little difference herein whether the technology is referred to as BPT or BCT.

<sup>3/</sup> While there is some indication that the Act's requirements were intended to be technology forcing (Weyerhaeuser Company v. Costle, 590 F. 2d 1011 (D.C. Cir., 1978)), to hold that EPA in the guise of requiring BPT could impose effluent limitations beyond the present state of the art would seem to deprive the language "best practicable technology currently available" of its plain meaning. Cf. United States Steel v. Train, supra, (the Act left the States free to force technology, but federal effluent limitations must be technology based). See also 44 FR No. 216, November 6, 1979 which provides at 64081: "EPA agrees with comments received that if the guidelines in 418.23 [BAT guideline] are applied to the occasional small leaks in cooling water, to absorption of ammonia from the air by cooling water, or to shipping losses, the guidelines are not achievable by any known technology."

available. The record, herein establishes that BPT for a nitrogen fertilizer complex such as Agrico's is as set forth in conclusion 5 above.<sup>4/</sup>

EPA argues that any allowance in addition to the guideline should be available only if Agrico is able to demonstrate precisely that inability to comply with the pH requirement 100% of the time is attributable to components of the discharge excluded from the guideline. This argument ignores EPA's obligation to make a best engineering judgment pursuant to Sec. 402(a)(1) as to the pH control attainable for the components of the discharge excluded from the guideline by application of the best practical control technology currently available. Moreover, in this instance components of the discharge covered by the guideline comprise a small portion of the total discharge and in nitrogen fertilizer complexes pH control on a combined discharge basis is consistent with the guideline (findings 4, 5, 10 and 11).

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<sup>4/</sup> The so-called "no backsliding" rule enunciated in U. S. Steel v. Train, supra, is considered not to preclude adoption of a pH requirement some what less stringent than Agrico has apparently achieved (finding 14), because there is an indication in the record (Tr. 155) that the limited data available may not be adequate to accurately predict future performance. It is noted that performance data from an exemplary plant covering a period of 35 months were used in considering amendments to the urea subcategory (40 FR No. 162 at 36337, August 20, 1975).

Cooling tower blowdown was excluded from the guidelines because cooling waters absorbed ammonia from the air and because a standard raw waste load was impossible to calculate because of variability of air leaks in the process and atmospheric factors such as wind direction and temperature (39 FR No. 68 at 12834, April 8, 1974). Although the Development Document (Agrico Exh 5 at 77-78) states that effluent limitations for noncontact cooling water are not covered by this report, this exclusion was arguably not applicable to ammonia production.<sup>5/</sup> However, any doubts in that respect have been laid to rest by an amendment to the regulation (44 FR at 64080, note 3, supra) which provides in pertinent part at 44 FR 64081:

Section 418.20 is revised to exclude discharges attributable to shipping losses and cooling tower blowdown. These discharges cannot be related to a unit of production. It is not feasible to establish an ammonia limitation for cooling tower discharge based on a unit of production because contamination in cooling tower water is due primarily to airborne pickup. The permitting authority will determine on a case-by-case basis the amount of any additional allowance for shipping losses and/or cooling tower blowdown, if such an allowance is considered appropriate. Losses occurring in the manufacturing area (i.e., losses not excluded from coverage by the definition of "shipping losses") such as leaks, spills and washdown water are covered by the guidelines even if carried to the plant outfall by rainwater.

The quoted explanatory statement establishes that shipping and handling losses and storm runoff from outside the battery or manufacturing area are

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<sup>5/</sup> This is because the opening sentence of paragraph (17) at 39 FR 12834 states: "It was argued that manufacturing operations other than ammonia will absorb airborne ammonia in cooling towers in a nitrogen complex."



excluded from the guidelines. The reason given for the exclusion, i.e., that such discharges cannot be related to a unit of production, were as applicable prior to the date of the amendment (November 6, 1979) as they were thereafter and Agrico's expert witness, Mr. Paul Minor of Centec Corporation, testified that such discharges were excluded from the guidelines (Tr. 199-200). Dr. Dehn's testimony was to the same effect (Tr. 89). Accordingly, the amendment of November 6, 1979, merely confirmed existing exclusions from the guidelines.

The language of the amendment to the guideline of November 6, 1979 and the explanation thereof would lead to the conclusion that no exclusions from the guidelines other than those specifically listed or implied, i.e., storm runoff from outside the battery limits, were permissible. Such a conclusion does not appear to give any effect to the language of the Development Document which provides under the heading "Water Treatment Plant Effluent" in pertinent part at 76: " \* \* \* The contaminants in this effluent are mainly due to the initial contaminants in the raw water and therefore would be specific to the area and geographic conditions rather than the process plants involved. If the water treatment plant effluent contains ammonia due to the use of stripped, process condensate as process or boiler water makeup (replacing raw water makeup), then the ammonia - N discharge allowance is applicable. Effluent limitations for specific components (other than ammonia - N) for treatment plant effluent are not covered by this report. They will be studied at a later time."

In finding 8 reference was made to Dr. Dehn's contention that pH was not a specific component within the meaning of the quoted language from the

Development Document and that in any event, demineralizer regenerate wastewater was process wastewater by virtue of being mixed with steam stripped condensate. PH is a pollutant under the Act and regulations, the only pollutant specifically addressed is ammonia - N, and reading the cited paragraph as whole, it appears to be clear that "component" as used in the penultimate sentence is used in the same sense as "contaminants" in the second sentence (first of the quoted sentences). "Contaminants" in that context is sufficiently broad to include pH. Moreover, there is no indication that pH was considered on a separate basis for any of the five types of wastewater discharges identified with a nitrogen fertilizer complex in the Development Document: water treatment plant effluent, closed loop cooling tower blowdown, boiler blowdown, compressor blowdown, process condensate, spills and leaks which are collected in pits or trenches and non-point source discharges collected due to rain or snow. See finding 11. Accordingly, the contention that "specific components" as used in the quoted paragraph of the Development Document did not include pH is rejected.

Although Dr. Dehn's assertion that demineralizer regenerate wastewater (wastewater resulting from the treatment or purification of raw water for steam boiler use) is process wastewater by virtue of being mixed with steam stripped condensate which is also treated and used as boiler makeup water appears to be accurate (Agrico Composite Exh B at 11), the above quoted portion of the Development Document states that in such an event the ammonia - N allowance is applicable and for the reasons given the specific components not covered by the guideline which were to be studied at a later date included pH.

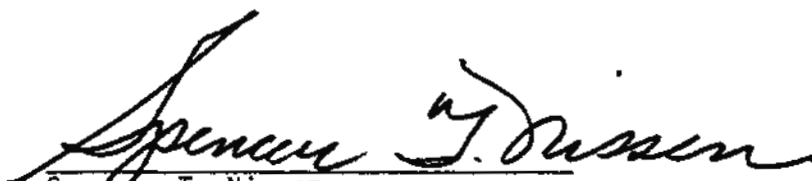
Sec. 401(d) of the Act provides in effect that a state certification that a particular limitation or standard is necessary to meet state water

quality standards shall become a condition of the permit. The problem here is that the record does not reflect whether the pH range which has been found appropriate would comply with Oklahoma Water Quality Standards (finding 2). See the discussion on this point in the preamble to the revised NPDES regulations, 44 FR No. 111, at 32880, June 7, 1979. The permit should not be modified as found appropriate herein until the State of Oklahoma certifies or it is determined that the modified pH range complies with Oklahoma Water Quality Standards.

Conclusion

The permit will be modified to reflect a pH range of 6.0 to 9.0 standard units 98.5% of the time for a 30-day average, 85.4% of the time on a daily average with any single excursion outside of the range of 3.5 to 11.0 not to exceed 15 minutes provided the State of Oklahoma certifies or it is determined that such a pH range will not violate Oklahoma Water Quality Standards.


Dated this 25th day of February 1980.

  
Spencer T. Nissen  
Administrative Law Judge

CERTIFICATION

This is to certify that the original of the Initial Decision plus two copies were mailed to the Regional Hearing Clerk, Reg. VI, and a copy was mailed to the parties in the proceeding at the following addresses. A copy was hand delivered to Ronald L. McCallum, Judicial Officer on this same date.

Date: February 25, 1980

  
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