ILLINOIS POLLUTION CONTROL BOARD
March 14, 1986

WARNER ELECTRIC BRAKE & CLUTCH COMPANY,	)	
Petitioner,	)	
v.	)	PCB 85-35
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, NICK MIGLIORE, AUDRY MIGLIORE, JAMES SCHUMAKER, DONALD HOARD, RONALD VELMERS, HENRY ATWOOD, STANLEY CAMPBELL, JEANNETTE USSERY, CAROLYN O'KEEFE, ROBERT WEZYK and BRYAN DISHNER,	)	
Respondents.	)	

MR. MICHAEL F. DOLAN, SEYFARTH, SHAW, FAIRWEATHER AND GERALDSON, APPEARED FOR PETITIONER.

MR. THOMAS E. DAVIS, ATTORNEY-AT-LAW, APPEARED FOR RESPONDENT THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

MR. STANLEY E. CAMPBELL, APPEARED FOR SINNISSIPPI ALLIANCE FOR THE ENVIRONMENT AND FOR HIMSELF.

MR. JAMES SCHUMAKER APPEARED FOR HIMSELF.

MR. HENRY ATWOOD APPEARED FOR HIMSELF.

OPINION AND ORDER OF THE BOARD (by B. Forcade):

This matter comes to the Board on a March 22, 1985, Petition for Review of NPDES Permit filed by Warner Electric Brake & Clutch Company ("Warner"). The Petition named as Respondents the Illinois Environmental Protection Agency ("Agency") and eleven named individuals who requested and participated in a hearing before the Agency prior to permit issuance. The Board's public hearing in this matter was held July 9, 1985 in Rockford. No witnesses were presented by Warner or the Agency, no exhibits were introduced. Several Citizen Respondents made brief statements urging stringent pollution control. Warner and the Agency filed briefs outlining their arguments.

Warner owns and operates a facility located in Roscoe, Illinois. The facility manufactures electric brakes and clutches for automobiles and industrial and agricultural equipment. As a result of the manufacturing operations, Warner discharges sanitary wastewater, plant processing wastewater, and storm water

runoff. Each of these three discharges is treated separately and after appropriate sampling and testing is discharged through a common outfall into North Kinnikinnick Creek which flows into the Rock River.

The permit process under review here began in August 1983 when Warner submitted a renewal application (Agency Record, Exhibit 8); additional information was submitted on February 9, 1984 (Agency Record, Exhibit 9). On May 25, 1984, the Agency, issued a proposed NPDES permit for Warner. From March 26 through June 25, 1984, the Agency received six public responses commenting on the proposed permit or requesting a public hearing. In June 1984, the Agency received comments from Warner on the proposed permit including a Contingency Plan for spill prevention control and an "Agreement" between Warner and the People of the State of Illinois represented by the Attorney General and relating to environmental contamination by trichloroethylene in the ground water (Agency Record, Exhibits 12, 13).

On August 15, 1984, a four member Agency hearing Board conducted a public hearing in Rockford. Six persons testified in the 100 page transcript. The record remained open for any comment with a post mark on or before September 15, 1984. Over 40 exhibits, comments or notices comprise the docket sheet. On February 7, 1985, the Hearing Board Report and Recommendation was entered. On February 22, 1985, the Final NPDES permit for Warner was issued. On March 22, 1985, Warner appealed to this Board.

Warner's petition for review places three matters at issue:

1. Whether the Agency's 27 part per billion ("ppb") effluent limitation on Trichloroethylene ("TCE") is valid.

2. Whether certain organic chemical monitoring requirements imposed by the Agency are valid.

3. Whether conditions allowing the Agency to subsequently modify the permit to include additional monitoring or effluent limitations are valid.

The burden is on Warner to prove that the challenged conditions "are not necessary to accomplish the purposes of the Act and, therefore, were imposed unreasonably," IEPA v. PCB and Alburn Inc., 455 N.E.2d 188 at 194 (1983). Each of these issues must be addressed separately.

TCE Limitation

The May 25, 1984 proposed NPDES permit did not contain a TCE effluent limitation. The final NPDES permit contained a limitation of 27 ppb applicable to the process wastewater discharged through Outfall 001B (Process Wastewater) and to that

portion of Outfall 001A Alternate (Combined Process and Sanitary Wastewater) which derives from process wastewater. The Agency asserts there is adequate factual and legal support for the 27 ppb limitation. Warner does not dispute any of the factual information contained in the Agency Record.* Nor does Warner dispute the technical feasibility or economic reasonableness of compliance with 27 ppb for TCE. However, Warner asserts that the Agency's legal theory is unfounded and that when the correct legal theory is applied to the relevant facts an effluent limitation of 4,070 ppb for TCE is appropriate.

The documentary information in the record pertaining to TCE falls into two categories: environmental effects and discharge information. Regarding environmental effects the record contains two documents of special relevance: Ambient Water Quality Criteria for Trichloroethylene (USEPA, 1980) ("the Criteria Document"), and An Analysis of Contaminated Well Water and Health Effects in Woburn, Massachusetts (Harvard School of Public Health, November, 1984) ("the Woburn Study").

The Criteria Document provides a rationale for its recommendations:

> "Trichloroethylene is suspected of being a human carcinogen. Because there is no recognized safe concentration for a human carcinogen, the recommended concentration of trichloroethylene in water for maximum protection of human health is zero. Because attaining a zero concentration level may be infeasible in some cases, and in order to assist the Agency and the states in the possible future development of water quality regulations, the concentrations of trichloroethylene corresponding to several incremental lifetime cancer risk levels have been estimated. A cancer risk level provides an estimate of the additional [sic] incidence of cancer that may be expected in an exposed population. A risk of 10^{-5}, for example, indicates a probability of one additional case of cancer for every 100,000 people exposed, a risk of 10^{-6} indicates one additional case of

* Warner has not challenged the accuracy of the Agency factual basis with evidence available from the record. However, Warner has attempted to provide the Board with new information. Warner's Reply Brief contains a 42-page scientific document that was not before the Agency, nor produced at hearing. The issue in a Section 40 permit appeal is whether the Agency made a correct decision based on facts before the Agency at decision time IEPA v IPCB 86 Ill.2d 390 (1981), Oscar Mayer v IEPA 30 PCB 397 (1978). The 42 page document is stricken.

> cancer for every million people exposed, and so forth."

The Criteria Document provides a water quality criterion of 27 ppb for TCE at a lifetime cancer risk level of 10^{-5}. This value is predicated on a life-time exposure to 2 liters of drinking water per day and consumption of 6.5 grams of fish and shellfish per day.

The Woburn Study evaluated the potential connection between access to drinking water from two contaminated wells and adverse health effects in eastern Woburn Mass. The only analytical results on the drinking water are:

Trichloroethylene	267 ppb
Tetrachloroethylene	21 ppb
Chloroform	12 ppb
Trichlorotrifluoroethane	22 ppb
Dichloroethylene	28 ppb

The Woburn Study found a statistically significant positive association between access to this water and the incidence of:

> childhood leukemia
> perinatal deaths
> certain congenital anomalies, and
> certain childhood disorders

The Woburn Study also found that after closure of the contaminated wells the elevated incidence of perinatal deaths and certain congenital disorders declined to levels comparable to the rest of Woburn.

Warner's discharge information data shows effluent TCE concentrations from 405 ppb (Ex. 8, Permit Application, Form 2-C, Outfall 001, page V-5) to 550 ppb (Ex. 8, Permit Application, Form 2-C, Outfall 001-B, page V-5) in early 1983. Analyses on November 16, 1983 showed levels of 54 ppb, 24 ppb, and 49 ppb from Outfall 001, domestic sewage effluent, and industrial wastewater/cooling water discharge, respectively (Ex. 29, attached IEPA labsheets).

At the hearing before the Hearing Board, it was established that fishing and swimming occur in North Kinnikinnick Creek river (Tr. 49), and that water skiing occurs downstream in the Rock River (Tr. 46).

After reviewing the record, the Hearing Board recommended inclusion of a 27 ppb limitation for TCE:

> The draft NPDES Permit will be changed to include an effluent limit for trichloroethylene designed to protect aquatic life and human health in the receiving stream. The proposed

> standard is based on the USEPA Water Quality Criteria document for trichloroethylene, and is 27 micrograms/liter (ppb). This value corresponds to a cancer risk level of 10^{-5} and assumes a lifetime exposure of 2 liters of drinking water per day and consumption of 6.5 grams of fish and shellfish per day. As the stream is not a public water supply and is not considered to be significant fishery even for area residents, the actual risk level is far lower. Additionally, a standard at this value is technologically feasible. (Exhibit 1, p. 25).

In final briefs, Warner argues that 35 Ill. Adm. code 302.210 is controlling. In relevant part, it establishes water quality standards as follows:

> Any substance toxic to aquatic life shall not exceed one-tenth of the 96-hour median tolerance limit (96-hr TL_m) for native fish or essential fish food organisms...

Warner claims that this regulation is the exclusive method for setting limitations, and that, when applied to aquatic toxicity information in the Criteria Document, leads to a valid effluent limitation of 4.07 mg/l for TCE (4,070 ppb).

The Agency argues that the 27 ppb TCE limitation is supported by three legal theories. First, Section 39(b) of the Act which authorizes the Agency to issue NPDES permits containing those conditions which may be required to accomplish the purposes and provisions of the Act. Second, the Agency argues that Section 302.105 "nondegradation" justifies the limitation. That section provides:

> Waters whose existing quality is better than the established standards at the date of their adoption will be maintained in their present high quality. Such waters will not be lowered in quality unless and until it is affirmatively demonstrated that such change will not interfere with or become injurious to any appropriate beneficial uses made of, or presently possible in, such waters and that such change is justifiable as a result of necessary economic or social development.

Third, the Agency argues the limitation is supported by Section 302.203 which provides:

> Waters of the State shall be free from unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algal

> growth, unnatural color or turbidity, or matter of other than natural origin in concentration or combinations toxic or harmful to human, animal, plant or aquatic life.

Both parties to the proceeding concede that lowflow conditions in the receiving stream require an effluent limitation equivalent to the water quality limitation. Also, the Agency agrees that Section 302.210 provides one mechanism for establishing limitations. Thus, the questions for Board review are whether provisions other than Section 302.210 may be used to set limitations and, if so, whether the Agency limitation of 27 ppb TCE is factually supported.

First, the Board rejects the theory that Section 302.210 provides the exclusive basis for setting toxic chemical limitations. Such an interpretation would render Sections 302.105 and 302.203 a nullity. The Board need not address what authority the Agency possesses under Section 39(b) of the Act as the existing regulatory framework provides ample structure for resolving the existing controversy. The Board holds that where sufficient factual bases exist the provisions of Sections 302.203 and 302.105 allow the Agency to establish numerical limitations for chemicals in general use waters so as to protect present and possible beneficial uses and ensure no concentration of toxic material harmful to human, animal or aquatic life, even where those numerical limitations are not directly supported by the calculation in Section 302.210. This leaves the validity of the 27 ppb TCE limitation resting exclusively on its factual underpinings.

The Board finds the Agency's conclusions regarding carcinogenic potential of TCE to be amply supported by the record below. Additionally, the Board finds that the actual numerical limit of 27 ppb is derived from the Criteria Document alone, and premised on a lifetime exposure to two liters of water consumption and 6.5 grams of fish and shellfish per day. If the record contained information demonstrating actual or potential drinking water usage of the receiving stream by even one individual, the 27 ppb limitation would be supportable. However, the only relevant statements are that the stream is not a public water supply nor a significant fishery, but occasional swimming and fishing does occur. Consequently, the Board must reject the 27 ppb limitation as too stringent for facts contained in the record. No information is provided in the record regarding the potential of downstream locations for public or individual drinking water supply, significant fisheries or the impact of such concentrations on fish and wildlife, so the Board cannot speculate on what multiple of the 27 ppb limitation might protect potential downstream uses.

The Agency also asserts that the 27 ppb TCE limitation is supported by the language of Section 302.105 "nondegradation." The focus of this regulation is impairment of an actual or

potential beneficial use downstream of the discharge. The record before the Board does support a value of 27 ppb TCE for a lifetime drinking water supply. However, the record does not support the conclusion that North Kinnikinnick Creek is an actual or potential lifetime drinking water supply for anyone. Consequently, the 27 ppb effluent limitation cannot be factually supported under this theory.

As the Board rejects the legal theory argued by Warner and the factual support for 27 ppb presented by the Agency, the Board must remand the TCE numerical limitation to the Agency for further proceedings consistent with this Opinion.

Monitoring

The second permit condition challenged by Warner pertains to monitoring. Warner asserts this condition imposes an unnecessary expense for Warner and gives the Agency carte blanche to require endless data submissions. Warner does not reference any evidence in the record regarding the expense of monitoring nor does it point to any specific language in the permit as requiring endless data submissions.

First, the Board notes that the Agency needs sufficient discretion to impose monitoring conditions where such information is essential to an environmental control program that is both protective of the environment and not unduly burdensome to the regulated community. Second, the Board notes that Warner's application for a permit, including broad organic monitoring under form 2-C, was submitted in August, 1983 (Rec. Ex. 8). Subsequently, Warner ceased using Trichloroethylene and began using 1,1,1-Trichloroethane as a vapor degreaser around April, 1984. Also, the "Agreement" between the State of Illinois and Warner requires Warner to make certain structural modifications in its plant and to the lagoons (Rec. Ex. 13, p. 10). Consequently, the Agency may have legitimately concluded that the information on file may not accurately reflect Warner's present and future potential discharges. In such circumstances comprehensive monitoring is quite appropriate. The Board notes that Warner has no objection to the toxic organic management plan or certain routine compliance monitoring (Reply Brief, p. 9). The Board finds that the monitoring conditions imposed in the permit are appropriate and adequately supported by the record.

Modification

The last issue raised by Warner for review is permit modification. Warner asserts that the permit allows unilateral Agency modification in violation of Illinois Power v. IPCB, 100 Ill.App.3d 528, 426 N.E.2d 1258, 1262 (3rd Dist., 1981). The Board must review each modification provision of Special Condition No. 4 in evaluating this issue.

The first modification provision is Condition No. 4(A) "total Organic Pollutant Management Plan" which provides:

> Within 90 days after the effective date of this permit, the permittee shall submit to the Illinois Environmental Protection Agency a toxic organic pollutant management plan. the plan shall specify the toxic organic chemicals used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organic pollutants do not spill or routinely leak into process wastewaters, non-contact cooling water, groundwater, storm waters, or other surface waters. Upon review and approval of the plan, the IEPA will modify this permit to include the plan as a provision of the permit.

The Board notes that Warner has no objection to the plan (Reply Brief, p. 9) and such plans appear to be a federally required part of any state issued NPDES permit for toxic chemical control. See 40 CFR Part 125, Subpart K. Consequently, the Board will not strike this provision.

Two provisions of Condition No. 4 (Permit, p. 8) allow the Agency to modify monitoring requirements. One allows the Agency to add monitoring requirements based on the Total Organic Monitoring Plan. The other allows the Agency to delete monitoring requirements if monitoring data shows that parameter is no longer of concern. Warner's arguments appear focused on permit modifications that "demand more stringent effluent limitations." Consequently, the Board will not strike these requirements.

Warner's primary objection appears to focus on the last paragraph of page 8, which states:

> In the event that the sampling indicates that these pollutants are discharged at a level greater than the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under 125.3(c); this permit shall be promptly modified to include a compliance schedule and effluent limitations on these parameters.

This portion of Special Condition No. 4 is virtually a verbatim incorporation of 40 C.F.R. 122.62(a)(11)[1984] which requires permit modification:

> (11) Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which

> can be achieved by the technology-based treatment requirements appropriate to the permittee under Section 125.3(c).

Under 40 C.F.R. 123.25, "all states programs" must have the authority to impose these permit modifications.

The Board finds no conflict between this provision and Illinois Power, which is quoted, in pertinent part, below:

> Next, petitioner challenges the Board's refusal to allow it to add a clause to Condition 27 of the NPDES permit. Petitioner attacked Condition 27, among others, since it claimed they gave the Agency a license to adopt and demand more stringent effluent limitations, thereby modifying the permit, without allowing it to seek review of such new restraints. With respect to Condition 27, petitioner argues, the Agency's imposition of new requirements it deems applicable is, in effect, a substantive regulation, which is an invasion of the rule making authority of the Board. The Board denied petitioner's proposal.
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> The question petitioner conceives as requiring resolution has been inconsistently answered by Illinois Appellate Courts (cf. Peabody Coal Company v. Pollution Control Board (1976), 36 Ill.App.3d 5, 20, 344 N.E.2d 279, with United States Steel v. Pollution Control Board (1977), 52 Ill.App.3d 1, 11, 9 Ill.Dec. 893, 367 N.E.2d 327). Since the record does not reflect the issue as Illinois Power presents it, we will not attempt to reconcile these two precedents on the facts in this case.
>
> Condition 27 only becomes operable where the Board has failed to promulgate certain standards, or no federal regulations exist concerning particular effluent limitations. Then, Rule 910(a)(6) of the Board allows the Agency to impose a restriction if it deems it necessary. Such could be a more stringent control than those existing on the permit already issued. In such an instance, setting the standard of the condition is left to the Agency's selection. However, as the Board noted:
>
> * * * * * * * *
>
> The permit conditions (including Standard Condition No. 27) relate to

> exercise (sic) of the Agency's authority to impose effluent limitations pursuant to Rule 910(a)(6) of Chapter 3. If this authority is exercised, it will be by way of permit modification. Illinois Power may challenge that authority by way of appeal of the modified permit.
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> * * * * * * * *
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> The Board has clearly stated that petitioner can attack the exercise of the Agency's authority to impose limitations under Rule 910(a)(6), if the Agency invokes such authority. This also includes the manner in which such power is exercised. But the Agency has not invoked such power or indicated it intent to do so in the immediate future. Therefore, to allow a challenge to the Board Rule, at this time, would be premature. The Board has acknowledged the petitioner's right to review any such modification in the permit. This preserves all Illinois Power's right to review such conditions and therefore its proposal to Condition 27 is extraneous. (Id. 1262-63)

The Board again finds that such a change could only be effectuated by a permit modification which would be appealable to this Board. Consequently, the Board will affirm the contested language.

In summary, the Board remands the TCE effluent limitation to the Agency for further consideration consistent with this Opinion and affirms the Agency permit on the monitoring and modification issues. This Opinion constitutes the Board's findings of fact and conclusions of law on this matter.

ORDER

1. The Agency permit effluent limitation of 27 ppb is reversed and remanded to the Agency for further consideration consistent with this Opinion.

2. The Agency permit monitoring requirements in Special Conditions 3 and 4 are affirmed.

3. The Agency permit modification requirements in Special Condition No. 4 are affirmed.

IT IS SO ORDERED.

Board Member J. Theodore Meyer dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certifies that the above Opinion and Order was adopted on the 14th day of March, 1986, by a vote of 6-1.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board