

ILLINOIS POLLUTION CONTROL BOARD  
May 24, 1990

IN THE MATTER OF: )  
 )  
THE PETITION OF BORDEN CHEMICALS )  
AND PLASTICS OPERATING LIMITED )  
PARTNERSHIP (FORMERLY BORDEN )  
CHEMICAL COMPANY) FOR A SITE- ) R86-14  
SPECIFIC RULE CHANGE REGARDING ) (Rulemaking)  
WASTEWATER DISCHARGES INTO AN )  
UNNAMED TRIBUTARY OF LONG )  
POINT SLOUGH )

PROPOSED RULE                      SECOND FIRST NOTICE

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

This matter comes before the Board on a petition for site-specific rulemaking filed March 31, 1986 by Borden Chemicals Company, now before the Board as Borden Chemicals and Plastics Operating Limited Partnership ("Borden"). (See Order of August 4, 1988.) This petition is for relief from the Board's effluent limitations for total dissolved solids ("TDS") and for chloride and from the requirement that no effluent shall cause a violation of applicable water quality standards. 35 Ill. Adm. Code 302.208 and 304.105. The excess effluents originate at Borden's Illiopolis, Illinois plant and are primarily attributable to wastewater from the air pollution control equipment which Borden began operating in 1978. The Board previously issued its First Notice Opinion and Order in this matter on February 8, 1990, granting the relief essentially agreed upon by Borden and the Illinois Environmental Protection Agency ("Agency"). A Second First Notice Opinion and Order is now appropriate due to comments primarily of a procedural nature received as a result of First Notice.

Procedural History

The merit hearing was held on December 10, 1986 in Springfield, Illinois. The Economic Impact Study ("EcIS") was filed by the Department of Energy and Natural Resources ("DENR") on October 17, 1988. The economic hearing was then held on January 10, 1989. On February 22, 1989, the Agency filed its comments and Borden filed its Response to Hearing Officer's Request for Information. The Board's First Notice Opinion and Order was issued on February 8, 1990. On April 12, 1990, the Agency submitted comments to the Board's First Notice Opinion and Order. On April 18, 1990, Borden filed its Response to the Agency Comments to First Notice.

Discussion

As more fully described in the Board's First Notice Opinion and Order of February 8, 1990, Borden's compliance with existing standards may be technically feasible, but compliance would not be economically reasonable in this case. The EcIS reports compliance costs ranging from \$877,483 to \$1,486,568. Borden's estimation of the cost to comply was much greater, ranging from \$17,733,000 to \$80,838,000 for the same compliance alternatives evaluated by DENR. The Board found that Borden's cost estimates more accurately depicted the costs to comply. The Agency's comments also concluded that Borden's figure appeared more realistic.

The environmental benefit would be minimal according to reliable information from both Borden and the Agency. The Board concluded in its First Notice Opinion and Order that under these circumstances, the costs of compliance outweigh any environmental benefit presented in the record. This same conclusion was also reached by Borden, the Agency, and DENR.

In its First Notice Opinion and Order, the Board proposed site-specific relief in the form of an amendment to 35 Ill. Adm. Code, Subtitle C: Water Pollution, Chapter I, Pollution Control Board, Part 304, Effluent Standards. At First Notice, the Board proposed to add a new section to Subpart B: Site-Specific Rules and Exceptions Not of General Applicability. The proposed new section, 35 Ill. Adm. Code 304.211, would be entitled: Discharges from Borden Chemicals and Plastics Operating Limited Partnership Into An Unnamed Tributary of Long Point Slough. The language of the new section limited relief to Borden's Illiopolis Plant and provided relief from Section 304.105 as it applies to water quality standards for total dissolved solids and chlorides limitations of Section 302.208. The relief would be effective so long as total dissolved solids and chloride concentrations are not in excess of 2,500 mg/l and 800 mg/l, respectively.

The new section as initially proposed stated:

Section 304.211      Discharges From Borden Chemicals and Plastics  
                                         Operating Limited Partnership Into an Unnamed  
                                         Tributary of Long Point Slough

- a)      This Section applies to effluent from Borden Chemicals and Plastics Operating Limited Partnership's Illiopolis Plant which is discharged to an unnamed tributary of Long Point Slough in Sangamon County, Illinois.
- b)      Such discharges shall not be subject to Section 304.105 as it applies to the water quality standards for total dissolved solids and chlorides of Section 302.208 in the unnamed tributary and Long Point Slough to the con-



Section 304.211 Discharges From Borden  
Chemicals and Plastics  
Operating Limited  
Partnership Into an  
Unnamed Tributary of Long  
Point Slough

The effluent standards for total dissolved solids and chloride discharged from the Illiopolis, Illinois facility of Borden Chemicals and Plastics Operating Limited Partnership into an unnamed tributary of Long Point Slough shall comply with the following effluent limitations as measured at the point of discharge to the unnamed tributary:

Total Dissolved Solids	2,500 mg/l daily maximum
	2,200 mg/l monthly average
Chloride	800 mg/l daily maximum
	700 mg/l monthly average

The Board notes that the newly proposed language in Section 304.221 is substantially different than that proposed at First Notice, in that monthly average limitations are now proposed in response to the Agency's comments of April 12, 1990. The Board agrees that some level of monthly average limitations are ordinarily appropriate in conjunction with daily maximum limitations to regulate the total effluents received into waters of the State. Similar limitations may be found in the Board's decision in R87-36, Site-Specific Limitation for the Modine Manufacturing Company Facility, Ringwood, Illinois, Opinion and Order, May 24, 1990. In that rulemaking, BOD<sub>5</sub> daily maximum limitations were set at 1.17 to 1.4 times the monthly average limitations and TSS daily maximum limitations were set at 2.5 times the monthly average limitations.

In the case of Borden's discharges, the Agency and Borden agreed to daily maximum limitations for total dissolved solids and chloride concentrations of 2,500 mg/l and 800 mg/l. As suggested by the Agency and now proposed by the Board, the monthly averages would be set at 2,200 mg/l and 700 mg/l respectively. This represents maximum concentrations which are 1.14 times greater than the monthly averages for total dissolved solids and chloride. These limitations appear to the Board to be very close to the daily maximum limitations which Borden must never exceed. Under these circumstances, the Board finds that the monthly averages suggested by the Agency appear reasonable and the Board requests that Borden respond in comments to Second First Notice if Borden has reason to believe that the monthly averages should be set closer to the maximum levels already agreed upon.

On April 18, 1990, Borden filed comments in opposition to effluent limitations. The Board notes that Borden's comments misperceive the nature of the proposed action. Borden discharges into a stream with a low flow of zero (7Q10 = 0). (Agency Comments, April. 12, 1990, p. 2.) Therefore, to assure that Borden's effluent does not cause a violation of water quality standards, the Agency must place those water quality standards in the NPDES permit as effluent limitations. Today's action adopts the exact same effluent limitation numbers that Borden requested as water quality standards. Therefore, today's action by the Board places the exact same burden on Borden as was requested in their original proposal.

ORDER

The Board hereby proposes for Second First Notice the following amendments to 35 Ill. Adm. Code 303 and 304 and directs the Clerk to file these with the Secretary of State.

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE C: WATER POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD

PART 303  
WATER USE DESIGNATIONS AND SITE SPECIFIC  
WATER QUALITY STANDARDS

SUBPART A: GENERAL PROVISIONS

Section  
303.100 Scope and Applicability  
303.101 Multiple Designations  
303.102 Rulemaking Required

SUBPART B: NONSPECIFIC WATER USE DESIGNATIONS

Section  
303.200 Scope and Applicability  
303.201 General Use Waters  
303.202 Public and Food Processing Water Supplies  
303.203 Underground Waters  
303.204 Secondary Contact and Indigenous Aquatic Life  
Waters

SUBPART C: SPECIFIC USE DESIGNATIONS AND SITE SPECIFIC  
WATER QUALITY STANDARDS

Section  
303.300 Scope and Applicability  
303.301 Organization  
303.311 Ohio River Temperature

- 303.312 Waters Receiving Fluorspar Mine Drainage
- 303.321 Wabash River Temperature
- 303.322 Unnamed Tributary of the Vermilion River
- 303.323 Sugar Creek and Its Unnamed Tributary
- 303.331 Mississippi River North Temperature
- 303.341 Mississippi River North Central Temperature
- 303.351 Mississippi River South Central Temperature
- 303.352 Unnamed Tributary of Wood River Creek
- 303.353 Shoenberger Creek; Unnamed Tributary of Cahokia Canal
- 303.361 Mississippi River South Temperature
- 303.430 Unnamed Tributary to Dutch Creek
- 303.431 Long Point Slough and Its Unnamed Tributary
- 303.441 Secondary Contact Waters
- 303.442 Waters Not Designated for Public Water Supply
- 303.443 Lake Michigan

SUBPART D: THERMAL DISCHARGES

- Section
- 303.500 Scope and Applicability
- 303.502 Lake Sangchris Thermal Discharges
- Appendix A References to Previous Rules
- Appendix B Sources of Codified Sections

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1013 and 1027).

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 27, p. 221, effective July 5, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 5 Ill. Reg. 11592, effective October 19, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended in R87-27 at 12 Ill. Reg. 9917, effective May 27, 1988; amended in R87-2 at 13 Ill. Reg. 15649, effective September 22, 1989; as amended in R87-36 at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_; as amended in R86-14 at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

Section 303.431 Long Point Slough and Its Unnamed Tributary

The general use water quality standards for total dissolved solids and for chloride contained in Section 302.208 shall not apply to Long Point Slough and its unnamed tributary, which receive discharges from the Illiopolis, Illinois facility of Borden Chemicals and Plastics Operating Limited Partnership, from the outfall of that facility to the point of the confluence of

the unnamed tributary downstream with the Sangamon River. Instead this water shall comply with a total dissolved solids standard of 2,500 mg/l and a chloride standard of 800 mg/l.

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE C: WATER POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD

PART 304  
EFFLUENT STANDARDS

SUBPART A: GENERAL EFFLUENT STANDARDS

Section	
304.101	Preamble
304.102	Dilution
304.103	Background Concentrations
304.104	Averaging
304.105	Violation of Water Quality Standards
304.106	Offensive Discharges
304.120	Deoxygenating Wastes
304.121	Bacteria
304.122	Nitrogen (STORET number 00610)
304.123	Phosphorus (STORET number 00665)
304.124	Additional Contaminants
304.125	pH
304.126	Mercury
304.140	Delays in Upgrading (Repealed)
304.141	NPDES Effluent Standards
304.142	New Source Performance Standards (Repealed)

SUBPART B: SITE SPECIFIC RULES AND EXCEPTIONS  
NOT OF GENERAL APPLICABILITY

Section	
304.201	Wastewater Treatment Plant Discharges of the Metropolitan Sanitary District of Greater Chicago
304.202	Chlor-alkali Mercury Discharges in St. Clair County
304.203	Copper Discharges by Olin Corporation
304.204	Schoenberger Creek: Groundwater Discharges
304.205	John Deere Foundry Discharges
304.206	Alton Water Company Treatment Plant Discharges
304.207	Galesburg Sanitary District Deoxygenating Wastes Discharges
304.208	City of Lockport Treatment Plant Discharges
304.209	Good River Station Total Suspended Solids Discharges
304.210	Alton Wastewater Treatment Plant Discharges
<u>304.211</u>	<u>Discharges From Borden Chemicals and Plastics Operating Limited Partnership Into An Unnamed Tributary of Long Point Slough</u>
304.212	Sanitary District of Decatur Discharges
304.213	Union Oil Refinery Ammonia Discharge
304.214	Mobil Oil Refinery Ammonia Discharge

- 304.215 City of Tuscola Wastewater Treatment Facility Discharges
- 304.216 Newton Station Suspended Solids Discharges
- 304.219 North Shore Sanitary District Phosphorus Discharges
- 304.220 East St. Louis Treatment Facility, Illinois-American Water Company
- 304.221 Ringwood Drive Manufacturing Facility in McHenry County

SUBPART C: TEMPORARY EFFLUENT STANDARDS

- Section
- 304.301 Exception for Ammonia Nitrogen Water Quality Violations
- 304.302 City of Joliet East Side Wastewater Treatment Plant

APPENDIX A References to Previous Rules

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 1/2 pars. 1013 and 1027).

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 30, p. 343, effective July 27, 1978; amended at 2 Ill. Reg. 44, p. 151, effective November 2, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 3 Ill. Reg. 25, p. 190, effective June 21, 1979; amended at 4 Ill. Reg. 20, p. 53, effective May 7, 1980; amended at 6 Ill. Reg. 563, effective December 24, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 6 Ill. Reg. 13750, effective October 26, 1982; amended at 7 Ill. Reg. 3020, effective March 4, 1983; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended at 7 Ill. Reg. 14515, effective October 14, 1983; amended at 7 Ill. Reg. 14910, effective November 14, 1983; amended at 8 Ill. Reg. 1600, effective January 18, 1984; amended at 8 Ill. Reg. 3687, effective March 14, 1984; amended at 8 Ill. Reg. 8237, effective June 8, 1984; amended at 9 Ill. Reg. 1379, effective January 21, 1985; amended at 9 Ill. Reg. 4510, effective March 22, 1985; peremptory amendment at 10 Ill. Reg. 456, effective December 23, 1985; amended at 11 Ill. Reg. 3117, effective January 28, 1987; amended in R84-13 at 11 Ill. Reg. 7291, effective April 3, 1987; amended in R86-17(A) at 11 Ill. Reg. 14748, effective August 24, 1987; amended in R84-16 at 12 Ill. Reg. 2445, effective January 15, 1988; amended in R83-23 at 12 Ill. Reg. 8658, effective May 10, 1988; amended in R87-27 at 12 Ill. Reg. 9905, effective May 27, 1988; amended in R82-7 at 12 Ill. Reg. 10712, effective June 9, 1988; amended in R85-29 at 12 Ill. Reg. 12064, effective July 12, 1988; amended in R87-22 at 12 Ill. Reg. 13966, effective August 23, 1988; amended in R86-3 at 12 Ill. Reg. 20126, effective November 16, 1988; amended in R84-20 at 13 Ill. Reg. 851, effective January 9, 1989; amended in R85-11 at 13 Ill. Reg. 2060, effective February 6, 1989, amended in R88-1 at 13 Ill.

Reg. 5976, effective April 18, 1989; amended in R86-17B at 13  
Ill. Reg. 7754, effective May 4, 1989; amended in R88-22 at 13  
Ill. Reg. 8880, effective May 26, 1989; amended in R87-6 at 14  
Ill. Reg. 6777, effective April 24, 1990; as amended in R87-36  
at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_; as  
amended in R86-14 at \_\_\_ Ill. Reg. \_\_\_\_\_,  
effective \_\_\_\_\_.

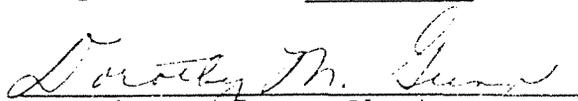
Section 304.211 Discharges From Borden Chemicals and Plastics  
Operating Limited Partnership Into an Unnamed  
Tributary of Long Point Slough

The effluent standards for total dissolved solids and chloride  
discharged from the Illiopolis, Illinois facility of Borden  
Chemicals and Plastics Operating Limited Partnership into an  
unnamed tributary of Long Point Slough shall comply with the  
following effluent limitations as measured at the point of  
discharge to the unnamed tributary:

Total Dissolved Solids	2,500 mg/l daily maximum
	2,200 mg/l monthly average
Chloride	800 mg/l daily maximum
	700 mg/l monthly average

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control  
Board, hereby certify that the above Proposed Rule, Second First  
Notice Opinion and Order was adopted on the 24<sup>th</sup> day  
of May, 1990, by a vote of 7-0.

  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board