

## BEFORE THE ILLINOIS POLLUTION CONTROL BOARD STATE OF ILLINOIS

Pollution Control Board NOVEON, INC. f/k/a BF GOODRICH CORPORATION, (Henry Facility), PCB 91-17 (NPDES Permit Appeal) Petitioner, VS. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.

#### **NOTICE OF FILING**

TO: Dorothy Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph, Suite 11-500 Chicago, Illinois 60601

Mark Latham Richard Kissel Gardner, Carton, & Douglas 191 North Wacker Drive, Suite 3700 Chicago, Illinois 60606

Bradley P. Halloran, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph, Suite 11-500 Chicago, Illinois 60601

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board the attached Respondent's Prehearing Memorandum of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

> ENVIRONMENTAL PROTECTION AGENCY OF THE STATE OF ILLINOIS

> > Deborah J. Williams **Assistant Counsel**

Division of Legal Counsel

DATED: February 2, 2004 Illinois Environmental Protection Agency 1021 N. Grand Ave. East P.O. Box 19276 Springfield, Illinois 62794-9276

THIS FILING IS SUBMITTED ON RECYCLED PAPER

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### BEFORE THE ILLINOIS POLLUTION CONTROL BOASTATE OF ILLINOIS POLIUTION CONTROL BOASTATE OF ILLINOIS BOARD

NOVEON, INC. f/k/a BF GOODRICH	)
CORPORATION, (Henry Facility),	) PCB 91-17
· Secretaria	) (NPDES Permit Appeal)
Petitioner,	)
VS.	) ) )
ILLINOIS ENVIRONMENTAL	, )
PROTECTION AGENCY,	)
	)
Respondent.	)

#### RESPONDENT'S PREHEARING MEMORANDUM

NOW COMES the Respondent, ILLINOIS ENVIRONMENTAL PROTECTION

AGENCY ("Illinois EPA" or "Agency"), by one of its attorneys, Deborah J. Williams, and

pursuant to the Hearing Officer's orders of November 6, 2003 and January 15, 2004, submits its

Pre-Hearing Memorandum in the above-captioned permit appeal and states as follows:

#### PROCEDURAL HISTORY

On December 28, 1990, the Illinois EPA issued a renewal of the National Pollutant Discharge Elimination System ("NPDES") permit number IL0001392 to Petitioner's Henry, Illinois manufacturing facility. At that time, the facility was owned and operated by BF Goodrich. Currently, the permitted facility is owned and operated by Noveon, Inc. and hereinafter Petitioner will be referred to as Noveon.

On January 24, 1991, Petitioner filed an appeal with the Pollution Control Board ("Board") pursuant to Section 40(a) of the Environmental Protection Act ("Act") of the issuance of Noveon's renewal permit. 415 ILCS 5/40(a). An amended Petition adding one additional

basis for appeal was submitted on January 28, 1991 and received by the Board on February 4, 1991. The Agency submitted its Answer and Record in this matter on September 19, 1991. Discovery was conducted consisting of Petitioner deposing two Illinois EPA witnesses (Richard Pinneo and Tim Kluge) and propounding written interrogatories on the Illinois EPA which were answered on October 29, 1991.

A hearing was scheduled by Hearing Officer Richard T. Sikes and held on November 19, 1991 in the Marshall County Courthouse. Due to the unavailability of a witness for Noveon, Dr. James Patterson, the hearing was continued to December 16, 1991. Petitioner claimed Mr. Patterson was to testify as an expert in ammonia treatment technology. Hearing Transcript ("Trans.") at p. 10. Counsel for both parties appeared at the December 16, 1991 hearing and indicated to the Hearing Officer Elizabeth Handzel that they believed they had reached a tentative settlement in this matter and requested that the hearing be suspended. December 16, 1991 Hearing Transcript at p. 165. The parties indicated that documents outlining the settlement and requesting further action from the Board would be filed.

In the intervening decade, a Petition for Variance was filed by Petitioner in 1992 and a motion to voluntarily withdraw that Petition was granted by the Board on June 20, 2002. *See*, PCB Docket 92-167. An adjusted standard petition was filed just prior to Petitioner's motion to withdraw its Variance Petition on May 22, 2002. As the parties have been unable to reach settlement since that time, this Permit Appeal proceeding has been rescheduled for hearing to begin on February 17, 2004 to be followed by a hearing on Noveon's Adjusted Standard Petition in docket AS 02-05.

At the November 19, 1991 hearing, the Petitioner gave an opening statement and

Respondent reserved opening. Trans. at p. 11. Petitioner called three witnesses: Ken Willings of Noveon and two Illinois EPA employees - Richard Pinneo and Tim Kluge. The Agency began its case by a direct examination of Tim Kluge. Petitioner will be calling Houston Flippin rather than Dr. Patterson at the February 17, 2004 hearing. The Hearing Officer ruled that the Illinois EPA would be given the opportunity to reopen its case in chief following presentation of the remainder of Petitioner's case in chief at the continued hearing. Trans. at p. 149. The Illinois EPA expects to pick up its case by calling Richard Pinneo and possibly Robert Mosher on direct examination. As in the initial hearings, Richard Pinneo will assist counsel for the Illinois EPA as the Agency's primary technical advisor at the permit appeal hearing.

#### **BACKGROUND ON PETITIONER'S FACILITY**

Noveon's Henry, Illinois Plant is located on 1550 County Road, 850 N. in northwestern Marshall County. This facility was owned and operated by BFGoodrich until 1993. At that time, part of the facility was divested to form The Geon Company and is now known as PolyOne. The PolyOne portion of the former BF Goodrich facility manufactures poly-vinyl chloride resins and compounds. Trans. at p. 28. The resins are used primarily by the medical industry for blood bags and other medical equipment while the compounds are used in the construction industry for house siding and vertical blinds. Trans. at 29. In 2001, the remainder of the Henry facility was sold by BFGoodrich and is now known as Noveon. Noveon's portion of the former BF Goodrich facility produces specialty polymers and chemicals used either as rubber accelerators in the tire curing process or production of anti-oxidant additives to prevent degradation of polyethelene for the rubber, lubricant, and plastic industries. Trans. at 30. Noveon operates the wastewater treatment facilities for both PolyOne's and Noveon's productions processes. Recommendation

of the Illinois EPA in AS 02-05 ("Rec.") at p. 2.

Noveon treats 360, 000 gallons per day from PolyOne and 180,000 gallons per day from Noveon's operations. Process and non-process water discharged per day is approximately 800,000 gallons. Rec. at p. 3. Effluent monitoring is currently conducted after all wastestreams from both plants are combined. The wastewater treatment system treats process wastewater from both plants, as well as stormwater and non-contact cooling water. Treatment begins with pretreatment (separate for Noveon and PolyOne), process water then goes to separate equalization tanks while stormwater and utility waters go to holding ponds. This is followed by primary treatment and a primary clarifier. Solids are then sent to a collection tank and are dewatered in a filter press and sent to a landfill. Primary clarification is followed by activated sludge treatment in four biotreators to degrade the organic matter. Finally, the wastewater is sent to a secondary clarifier followed by tertiary treatment that consists of polishing by a traveling bridge sand filter. The discharge from the City of Henry's publicly owned treatment works ("POTW") combines with Noveon's effluent and is discharged through Noveon's outfall to the Illinois River. Noveon's Outfall 001 is located on the Illinois River between river mile 198 and 199. According to Noveon, the 7-day, 10-year low flow for the Illinois River at Henry, Illinois is 3,400 cubic feet per second. Rec. at pp. 3-4. According to Petitioner, the major source of ammonia in its wastewater is generated from the destruction of amine compounds in the secondary treatment activated sludge portion of the wastewater treatment process. Trans. at 33. There is no dispute in the Record that Noveon's discharge of ammonia nitrogen to the Illinois River clearly exceeds 100 pounds per day ("lbs/day"). Trans. at p. 68.

#### **ISSUES ON APPEAL**

Noveon's initial filings in this matters appealed several Special Conditions in the 1990 NPDES permit which will be explained in more detail below. As explained by Petitioners at hearing, essentially, the Petition challenges four distinct aspects of the permit: applicability of ammonia nitrogen effluent limits, biomonitoring requirements, separation of outfalls for sampling purposes and interpretation of the federal Organic Chemicals, Plastics, and Synthetic Fiber ("OCPSF") regulations. An issue was raised in the initial pleadings regarding establishment of a mixing zone for copper that has thus far not been addressed further in the pleadings or at hearing and the Respondent assumes that matter has been resolved.

#### Applicability of 35 Ill. Adm. Code 304.122(b)

At the core of this dispute for both parties is the applicability to the Petitioner of the Board's effluent limitations for ammonia nitrogen dischargers contained in 35 Ill. Adm. Code 304.122. Noveon has specifically appealed Special Condition 4 of its NPDES permit which requires monitoring and reporting of Petitioner's ammonia discharge. Special Condition 4 provides that if monitoring demonstrates a 30-day average ammonia loading in Noveon's effluent greater than 100 lbs/day, Petitioner is required to comply with a 30-day average ammonia concentration of 3 milligrams per liter ("mg/l"). If the daily maximum loading of ammonia exceeds 200 lbs/day, Petitioner is limited to a daily maximum concentration of 6 mg/l. This Special Condition is based on the effluent limitations contained in 35 Ill. Adm. Code 304.122 which provides:

a) No effluent from any source which discharges to the Illinois River, the Des Plaines River downstream of its confluence with the Chicago River System or the Calumet River System, and whose untreated waste load is 50,000 or more population equivalents shall contain more than 2.5 mg/L of total ammonia

- nitrogen as N during the months of April through October, or 4 mg/L at other times.
- b) Sources discharging to any of the above waters and whose untreated waste load cannot be computed on a population equivalent basis comparable to that used for municipal waste treatment plants and whose total ammonia nitrogen as N discharge exceeds 45.4 kg/day (100 pounds per day) shall not discharge an effluent of more than 3.0 mg/L of total ammonia nitrogen as N.
- c) In addition to the effluent standards set forth in subsections (a) and (b) of this Section, all sources are subject to Section 304.105.

The Illinois EPA placed the particular Special Condition in Noveon's permit based on subsection (b) of 304.122 which applies to dischargers whose "untreated waste load cannot be computed on a population equivalent basis comparable to that used for municipal waste treatment plants."

Petitioner supported the appeal of this condition with two alternative arguments. First, the Illinois EPA had not imposed this condition on the Petitioner's facility previously and should somehow be estopped by law from doing so because the language of the regulation has remained unchanged. As part of this argument they also appear to assert that the rule itself is based on a dissolved oxygen requirement or standard and that the Henry Plant discharge has no impact on the dissolved oxygen levels in the Illinois River.

Second, Petitioner argues that this section is not applicable because its wasteload "can be computed on a population equivalent basis" and therefore subsection (a) should apply. Under subsection (a), Petitioner claims no effluent limit would attach based on the allegation that Noveon's influent has a P.E. of less than 50,000.

In response, the Illinois EPA has made no finding as to whether Noveon's P.E. value is greater than or less than 50,000, because it argues that the Petitioner's wasteload is clearly not "comparable" to that of municipal waste treatment plants and a P.E. calculation for Noveon's

discharge would not result in a meaningful value.

Petitioner correctly states the Agency's consistent position on this issue in its initial filing when it states "However, the Agency contends that because BF Goodrich's effluent is dissimilar to domestic waste, even though a P.E. can be calculated for the discharge, P.E. calculations are meaningless and Section 304.122(b) should apply." Petition for Permit Appeal at 3-4. Petitioner offers no support in fact, law or history for its contention that since a P.E. value can be calculated for the waste, then 304.122(a) must apply. Illinois EPA maintains that Noveon's wastestream is exactly the type of discharge the Board had in mind when it adopted a separate section for wastestreams not comparable to municipal waste treatment plants. Trans. at 152.

#### Separation of Outfalls and Best Degree of Treatment

Petitioner has also appealed Special Conditions 5 and 7 of its 1990 NPDES permit.

These conditions outline the separation of Outfall 001 from Outfall 001a and require the separate wastestreams to be monitored prior to mixing them together and discharging them to the Illinois River. Under the 1990 permit, the Illinois EPA required separate sampling of the process wastewater from the non-contact cooling water, limesoftening and demineralization waste. The basis for Petitioner's appeal of this condition appears to be that Noveon has always been allowed to sample its waste after mixing and since the regulations have not changed, this practice should be allowed to continue. Petition at 5-6. In addition, Noveon seems to claim that its Outfalls can be combined and tested as one Outfall because the best degree of treatment is already being employed. The Illinois EPA has held that this separation of Outfalls is necessary based on changes in the Petitioner's treatment processes and the need to determine whether Petitioner is in compliance with the best degree of treatment requirements of 35 Ill. Adm. Code 304.102. That

provision prohibits the use of dilution to achieve compliance with numerical effluent limitations or water quality standards and leaves discretion to the Illinois EPA to determine whether segregation of wastestreams is appropriate and whether best degree of treatment is being met.

#### **Toxicity Testing and Biomonitoring**

Noveon has appealed Special Condition 6 in its NPDES permit which requires acute toxicity tests and other biomonitoring. The provision also contains a toxicity reduction and evaluation ("TRE") provision. Petitioner claims "BF Goodrich has conducted numerous toxicity tests at the Agency's request in response to this and previous permits. BF Goodrich has no knowledge or documentation that, to date, the Agency has established any effluent limits based upon the results of these tests. To require additional testing would be duplicative, costly and would impose an undue burden on BF Goodrich." Pet at p. 9. The Illinois EPA has explained that these conditions are placed in Noveon's permit as a response to and result of the establishment of ammonia effluent limits to reduce the ammonia levels in Noveon's discharge. Prior biomonitoring tests were required to determine the toxicity of ammonia levels while subsequent tests would be necessary to determine whether extremely high levels of ammonia have been masking the toxicity of other compounds in Noveon's discharge.

Petitioners objection to this Special Condition and the Illinois EPA's basis for its inclusion are linked closely to the parties arguments regarding the applicability of the ammonia effluent limits. The basis for this requirement in the renewal permit pursuant to 35 Ill. Adm. Code 309.103(a) is essentially that once ammonia levels are reduced, it will be necessary to test the resulting effluent to determine whether ammonia toxicity was masking additional compounds in the discharge that were also toxic. However, if the Board determines that Noveon is not

required to reduce the ammonia levels in its discharge, Petitioner is correct that requiring additional biomonitoring would be unnecessary. Additional biomonitoring of Noveon's current discharge would only reconfirm the undisputed results of the testing performed under previous permits that demonstrated the lethality of Noveon's discharge to aquatic life.

#### Applicability and Interpretation of OCPSF regulations

Finally, Noveon has appealed the limitations in its NPDES permit derived from the Organic Chemicals, Plastics, and Synthetic Fiber guidelines promulgated by U.S. EPA. 40 CFR Section 414.90 *et seq*. Petitioner admits these requirements apply to its facility but alleges two mistakes by the Illinois EPA in the application of these requirements. First, they claim the Illinois EPA is in error for using monthly average flow data rather than daily maximum flow values to calculate the daily maximum mass limitation. Second, Noveon alleges the Agency improperly imposed concentration limits when the basis for the OCPSF guidelines is a mass limitation. The Illinois EPA has argued that its implementation of OCPSF regulations is based on guidelines published by U.S. EPA found in "Development Document for Effluent Limitations Guidelines and Standards for the Organic Chemicals, Plastics and Synthetic Fibers Point Source Category," U.S. Environmental Protection Agency Industrial Technology Division, Office of Water Regulations and Standards, EPA 440/1-87/009 (October 1987).

With regard to using monthly average flow data, the Illinois EPA argues that page IX-10 of that guidance document instructs the permit writer to utilize the "annual average process water flow to convert the concentration-based limitations into mass-based limitations." The Illinois EPA determined that monthly values were much more representative of the long-term values recommended by U.S. EPA than daily values.

With regard to the imposition of concentration limits, the Illinois EPA will argue that the Development Document for the OCPSF regulations identifies on page IX-10 that "the Agency promulgated concentration-based limitations for seven subcategories." Although U.S. EPA further explains that the concentration limits are to be utilized to determine mass-based load limits utilizing the annual average flow, the guidance does not specifically exclude the inclusion of the concentration-based limits. Additionally, the Illinois EPA will argue that concentration-based limits can be included in the permit as a best professional judgment limit as allowed under 40 C.F.R. 125.3(a)(2) and 35 Ill.Adm.Code 309.143.

#### Water Quality Based Effluent Limits for Copper

Noveon's initial permit appeal raised the issue of the Agency's alleged failure to establish a mixing zone and zone of initial dilution ("ZID") for Noveon's discharge prior to placing acute or chronic water quality based effluent limits for copper in Noveon's final permit. In a memorandum dated November 28, 1990, Bob Mosher of the Illinois EPA did establish a ZID and a water quality based effluent limit for copper. Agency Record at 22-23. As a result of this change, the final permit contained an effluent limit of 0.215 mg/l rather than the 0.040 mg/l that would have been applied without the ZID. As Noveon has not raised this issue again or at the 1991 hearing, the Illinois EPA believes this initial basis for appeal has been resolved.

#### CONCLUSION AND STANDARD OF REVIEW

Based on the background and procedural history outlined above, hearings in this matter will continue the presentation initiated in November of 1991 and complete the record for the appeal of Noveon's 1990 NPDES permit. The completion of the Record will allow the Board to make a determination whether the Petitioner has met its burden of proof to demonstrate that based on the

information provided in Noveon's permit application and available to the Illinois EPA at the time the determination was made, the requested permit would not have resulted in a violation of the Environmental Protection Act or Pollution Control Board regulations. *Browning-Ferris*Industries of Illinois, Inc. v. Pollution Control Board, 179 Ill.App.3d 598, 601, 128 Ill.Dec. 434, 534 N.E.2d 616, 619 (1989); Joliet Sand & Gravel Company v. IEPA & IPCB, 163 Ill.App.3d 830, 516 N.E.2d 955 (3d Dist.1987); IEPA v. IPCB, 118 Ill.App.3d 772, 455 N.E.2d 189 (1984); Oscar Mayer & Co. v. IEPA, PCB 78-14 (June 8, 1978); IEPA v. Allaert Rendering, Inc., PCB 76-80 (September 6, 1979); and City of East Moline v. IEPA, PCB 86-218 (September 8, 1988).

Deborah J. William

Assistant Counsel

Division of Legal Counsel

DATED: February 2, 2004

Illinois Environmental Protection Agency 1021 N. Grand Ave. East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

# STATE OF ILLINOIS ) COUNTY OF SANGAMON )

#### PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached, Respondent's Prehearing Memorandum, of the Illinois Environmental Protection Agency upon the person to whom it is directed, by FACSIMILE and by placing a copy in an envelope addressed to:

Dorothy M. Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, Illinois 60601

Mark Latham Richard Kissel Gardner, Carton and Douglas 191 North Wacker Drive, Suite 3700 Chicago, Illinois 60606

Bradley P. Halloran, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, Illinois 60601

and mailing it by First Class Mail from Springfield, Illinois on February 2, 2004 with sufficient postage affixed.

Cynthia Sims

SUBSCRIBED AND SWORN TO BEFORE ME

this 2nd day of February 2004

Notary Public

OFFICIAL SEAL
BRENDA BOEHNER
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 11-14-2005