IN RE KETCHIKAN PULP COMPANY

CWA Appeal No. 96-7

FINAL DECISION

Decided May 15, 1998

Syllabus

Respondent Ketchikan Pulp Company ("KPC"), which operated a pulp mill in Ketchikan, Alaska, has appealed a November 22, 1995 Initial Decision assessing a $23,000 civil penalty against it for alleged violations of section 301(a) of the Clean Water Act ("CWA"), 33 U.S.C. § 1311(a). The alleged violations are based on three discharges from KPC's mill into Ward Cove, a navigable waterway adjacent to the mill. Specifically, the complaint alleges that: (1) KPC partially emptied one of its one million gallon settling tanks located at its water treatment plant by draining a two-year accumulation of flocculent into Ward Cove through a flocculent drain line; (2) KPC discharged an undetermined amount of sludge into Ward Cove from a 9.3 million gallon aeration basin located in its wastewater treatment plant; and (3) employees operating the digesters in the pulp preparation area of the mill cleaned up a spill of approximately 4,450 gallons of magnesium bisulfite ("cooking acid") by washing the cooking acid down through the floor drains in the digester area, where it went out, untreated, into Ward Cove.

The NPDES permit in effect at the time of the discharges was issued by Region X ("the Region"), and covered KPC's discharge of pollutants or "effluent" from its Ketchikan mill for the period 1985 to 1990. The permit contained no effluent limitations for flocculent or cooking acid; indeed, neither substance was mentioned in the permit. The permit also contained no provisions relating to the control or prevention of industrial spills.

In January 1990, the Region filed an administrative complaint against KPC based on the three discharges, and in October 1990, the Region amended its complaint to specifically allege in connection with the discharges that: (1) the flocculent and cooking acid discharges were not covered by the permit and therefore violated CWA § 301(a); and (2) the sludge discharge violated permit Section III.F, which prohibited the discharge of solids removed during the course of treatment. The amended complaint proposed a penalty of $10,000 for each of the three alleged discharge violations.

After an administrative hearing, the Presiding Officer determined that neither the flocculent nor cooking acid discharges were "covered" (meaning permitted or allowed) under the permit, and that the sludge discharge directly violated permit Section III.F, thereby making all three discharges violations of CWA § 301(a). The Presiding Officer assessed a penalty of $10,000 each for the flocculent and sludge discharges, but reduced the penalty for the cooking acid discharge to $3,000, based on his conclusion that it was a minor violation with a low degree of culpability. The Presiding Officer therefore assessed a total penalty of $23,000 against KPC.

KPC's appeal raises the following issues: (1) whether the flocculent or cooking acid discharges are covered under the NPDES permit, such that the permit "shields" KPC from liability for these two discharges; and (2) whether the sludge discharge violated the terms of the NPDES permit.

Held:

- An NPDES permit provides a "shield" against liability under the CWA for the discharge of pollutants not specifically listed in the permit only when the permit applicant has made adequate disclosures to permit authorities during the application process about the nature of its discharges. Here, the permit does not "shield" KPC from liability for the flocculent or cooking acid discharges because KPC did not make adequate disclosures about either discharge during the application process.

- The sludge discharge directly violated permit Section III.F, which expressly prohibited the discharge of sludge removed from wastewater during the course of wastewater treatment. In this case, as part of the treatment process which takes place in KPC's aeration basin, the sludge ultimately discharged by KPC had been removed from treated wastewater, and was returned to the aeration basin to continue the cycle of treatment. Thus, the sludge in the aeration basin at the time of discharge clearly had been "removed during the course of treatment," and its discharge fell squarely within the proscriptions of Section III.F.

- The assessed penalty of $23,000, which was not specifically challenged by either party, and is consistent with the factors set forth in CWA § 309(g), is affirmed.

Before Environmental Appeals Judges Ronald L. McCallum, Edward E. Reich and Kathie A. Stein.

Opinion of the Board by Judge Reich:

Ketchikan Pulp Company ("KPC") has appealed a November 22, 1995 Initial Decision assessing a $23,000 civil penalty against it for alleged violations of the Clean Water Act, 33 U.S.C. § 1251 *et seq*., arising from KPC's discharge of pollutants from its pulp mill in Ketchikan, Alaska, into a nearby navigable waterway. Specifically, Administrative Law Judge Daniel Head (the "Presiding Officer") found that KPC's discharge of flocculent from its water treatment plant on August 16, 1989, and its spill and subsequent discharge of "cooking acid" (magnesium bisulfite) from its production facility on September 13, 1989, were not authorized by KPC's National Pollutant Discharge Elimination System ("NPDES") permit, and were therefore in violation of section 301(a) of the Clean Water Act.[1] Additionally, the Presiding Officer determined that KPC's discharge of sludge from its secondary wastewater treatment facility on August 16, 1989, directly

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[1] The statute, formally entitled "The Federal Water Pollution Control Act," will be referred to hereafter as "the CWA." CWA citations will be in the form "CWA § ___." Parallel citations to the United States Code will be given only upon the *first* reference to a particular section of the statute, *e.g.*, CWA § 301(a), 33 U.S.C. § 1311(a).

Section 301(a) provides in pertinent part that the discharge of any pollutant into navigable waters, except in compliance with an NPDES permit issued under section 402, is unlawful. For a further explanation of the NPDES program and corresponding regulations, *see infra* Section II.A.

contravened provisions of KPC's permit, and therefore constituted a violation of CWA section 301(a).[2]

This appeal raises the following issues: (1) whether the flocculent or cooking acid discharges were covered under the NPDES permit, such that the permit shields KPC from liability for these two discharges;[3] and (2) whether the sludge discharge violated the terms of the NPDES permit. For the reasons set forth below, we affirm the Initial Decision as to liability and penalty with respect to these discharges.

I. *BACKGROUND*

Familiarity with KPC's mill operations is essential in order to comprehend fully the nature and scope of the alleged violations. We thus cover these background facts in some detail.

A. *KPC'S Manufacturing Operations*

KPC's mill is bounded on one side by Ward Cove, an approximately one mile long by one-third mile wide salt water body of water, with a depth of approximately 120 feet. Transcript at 286 ("Tr.") . Ward Cove is fed by Ward Creek, a fresh water source located upstream from the mill. Ward Cove empties into Tongass Narrows, an ocean tributary located downstream from the mill. *Id*. at 173. Annually, between the months of August and October, salmon gather at the mouth of Ward Creek where it flows into Ward Cove and wait for the rains to come which will increase the water's flow and enable them to swim upstream into Ward Creek and spawn. *Id*.

KPC uses a chemical process to manufacture pulp from wood chips. Initial Decision at ("Init. Dec.") 5.[4] At KPC's mill, wood chips

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[2] The Presiding Officer dismissed an alleged permit violation based on KPC's failure to report the sludge discharge to U.S. EPA Region X ("the Region"), as he determined that any penalty arising from that alleged violation was barred by section 3512 of the Paperwork Reduction Act, 44 U.S.C. § 3512. Although the Region originally appealed this determination and challenged the concomitant reduction in the penalty, it later withdrew its appeal. *See* Order Granting Motion to Withdraw Appeal (Mar. 6, 1998)). Consequently, the Presiding Officer's rulings regarding the PRA, as well as the $10,000 reduction in penalty due to the dismissal of the reporting violation, will not be discussed in this decision.

[3] The term "covered" as used here means permitted or allowed by the NPDES permit. *See* discussion *infra* Sections II.A and II.B.

[4] *See also* Development Document for Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Pulp, Paper, and Paperboard and the

Continued

are placed into a digester, or large pressure cooker, along with "cooking acid," or magnesium bisulfite. The mixture is then cooked at high temperature and pressure in order to remove the fiber from the wood. Once the mixture has cooked for a sufficient period of time, the digester is blown out at the bottom to separate the fiber from the liquid. Init. Dec. at 5-6; Tr. at 60, 61.[5]

In addition to the production units used in its pulp operations, the mill contains a water treatment plant which purifies the incoming water for use in the mill, and a wastewater treatment plant, where pollutants are removed from the water after the water has been used in mill operations. Wastewater from KPC's mill operations is discharged into Ward Cove through three outfalls. Outfall 001, referred to as the main sewer, discharges untreated wastewater, including water from KPC's bleach plant, cooling water from the acid plant, chlorination stage water, and other process water relatively low in pollutants compared to the other outfalls. Tr. at 25, 93. Many of the floor drains in the pulping and bleaching areas are connected to the main sewer. *Id*. at 93. Approximately 18 million gallons of water per day—nearly half of the mill's total wastewater—flows through outfall 001. Init. Dec. at 6; Tr. at 24-26; *see also* Ex. R-2 (line drawings of facility). Outfall 002 discharges water from the wastewater treatment plant at a rate of approximately 16 million gallons per day. Tr. at 26. Outfall 003 discharges wastewater from the water treatment plant at a rate of approximately 2-4 million gallons per day. *Id*. at 24- 26.[6]

Water flows through the mill in the following manner: incoming water, supplied by a nearby lake, goes into a rapid mix tank in the water treatment plant, where chemicals are added to help pollutants

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Builders' Paper and Board Mills Point Source Categories at 106 (Oct. 1982) (attached as exhibit R-4 to the hearing transcript).

The exhibits admitted at the hearing shall be referenced herein as follows: exhibits introduced by the Region shall be referred to as "Ex. C-__;" similarly, KPC's exhibits shall be referred to as "Ex. R-__."

[5] For a further description of this "sulfite" process, *see* Ex. R-3, Development Document for Interim Final and Proposed Effluent Limitations Guidelines and Proposed New Source Performance Standards for the Bleached Kraft, Groundwood, Sulfite, Soda, Deink and Non-Integrated Paper Mills at 119 (Jan. 1976) ("Draft Dev. Doc.").

[6] The estimates for the total volume of effluent discharged from each outfall are taken primarily from the Initial Decision. *See* Init. Dec. at 6, 7, 43, 45. We note that these amounts are not entirely consistent with those reported by KPC in its application. *See, e.g.,* Ex. R-2 (line drawings of facility indicating that total volume of effluent from outfall 001 was 23 million gallons per day, total for outfall 002 was 19.9 million gallons per day, and total for outfall 003 was 2.6 million gallons per day).

and other impurities settle out of the water. Tr. at 51. The material which settles out of the incoming water—referred to as "flocculent"—is collected in three one million gallon settling tanks. *Id*. Periodically, the flocculent in the settling tanks is discharged through a separate "flocculent drain line" which drains into outfall 003. Init. Dec. at 5.

The fluid devoid of flocculent then flows into a tank containing a rapid sand filter, which removes lighter, suspended solids that escaped the settling process. The water which clears the settling tanks and the sand filter tank is then available for use in the mill. Tr. at 51. Because the sand filter becomes clogged with the lighter solids, the filter is repeatedly taken out of service (another filter is put in its place), and "backwashed" with water from a separate line. In this "backwashing" process the solids are suspended on the used filter, then swept up and out of the tank and discharged through outfall 003. The particles discharged in this manner are referred to as "filter backwash." *Id*. at 52.

Wastewater from the pulp production process that is not discharged into the main sewer either goes through a "primary clarifier" (a tank containing a physical device which separates the solids from the liquid), and is then discharged through outfall 002, or is routed directly from the process area to the secondary wastewater treatment plant.[7] *Id*. at 25-26. The secondary wastewater treatment system is comprised of a 9.3 million gallon aeration basin and two settling tanks. *Id*. Wastewater coming into the aeration basin mixes with "mixed liquor" in the basin, which contains microorganisms used to consume the organic matter contained in the wastewater. *Id*. at 33-35. Pumps or "aerators" located in the bottom of the basin supply air to the microorganisms, and also keep the entire mixture agitated and well-mixed, to prevent the suspended solids in the mixture from settling out. *Id*. at 229-231, 264-265. The fluid from the aeration basin is then passed on to the settling tanks, where solids settle out of the mixture. *Id*. at 33-35. When sufficient solids have settled out, the remaining fluid is discharged through outfall 002. Most of the solids, or "sludge," which settle in the settling tanks are recirculated to the aeration basin so that the microorganisms in that mixture can be reused to consume additional organic matter. *Id*. Wastewater from the secondary treatment plant comprises approximately 6 million gallons of the 16 million gallons of water discharged through outfall 002 on a daily basis. *Id*. at 26.

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[7] Materials which have passed through the primary clarifier may also be directed to the wastewater treatment plant. Tr. at 25.

B. *The Application and Permit*

In 1989, the discharge of pollutants or "effluent" from KPC's mill was regulated by an NPDES permit issued by Region X covering the period January 1985 to January 1990 ("the permit"). KPC had submitted its completed application for this permit in April 1981.[8] In response to item II-B of the permit application, which required applicants to provide a description of "all operations contributing wastewater to the effluent,"[9] KPC listed each outfall and next to it, a description in general terms of the mill operations which contributed pollutants to that outfall. *See* Ex. R-2 at page 1 of 4. Next to outfall 003,[10] KPC listed "Water Treatment Plant Filtration Backwash," indicating that filtration backwash was discharged from the water treatment plant. *Id.;* Tr. at 56. The application made no reference to either flocculent or cooking acid (magnesium bisulfite).

Danforth Bodien, a civil engineer and national pulp and paper industry expert employed in the Region's Environmental Services Division, wrote KPC's permit. Tr. at 22. In preparing the permit, Mr. Bodien relied on, among other things, KPC's permit application, Agency development documents for the pulp and paper industry (which he had helped to draft),[11] and other information obtained from KPC. *Id*. at 30. Mr. Bodien was quite familiar with KPC's facility and operations, having visited the mill nearly twenty times since the early 1970s. *Id*. at 23.

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[8] KPC originally submitted its application for the permit on January 5, 1981. It appears that the application was to renew an earlier permit, which apparently was due to expire on June 30, 1981. In its January 5, 1981 submission, KPC indicated that its responses to Section V of the application, which required testing and analysis of over one hundred substances, would be forthcoming. On February 17, 1981, KPC submitted its responses to Section V, and then, on April 30, 1981, submitted a revised version of those responses. *See* Ex. R-2.

[9] For the text of item II-B, *see* infra note 37.

[10] This outfall was erroneously listed as outfall 004 on the application. In testimony at the hearing, Robert Higgins, KPC's environmental manager, clarified that there were only three outfalls at the mill. Tr. at 287.

[11] Mr. Bodien testified that he had been a member of the technical working group responsible for developing effluent limitations for the pulp and paper industry since the early 1970s. Tr. at 23. Consequently, he had "worked on all the development documents in the industry." *Id*.

When finally issued in December 1984, the permit established "effluent limitations"[12] for five specified "conventional pollutants,"[13] set forth monitoring and reporting requirements, prohibited the bypass of pollution treatment equipment except under certain limited conditions, and prohibited the discharge of solids removed from wastewater during the course of pollution treatment.[14] The permit contained no effluent limitations for flocculent or cooking acid; indeed, neither substance was even mentioned in the permit. The permit also contained no provisions relating to the control or prevention of industrial spills. *See* Ex. R- 1; Tr. at 131.

C. *The Discharges*

1. Flocculent

On August 16, 1989, KPC shut down its pulping operations due to water shortages caused by a drought in the Ketchikan area. Tr. at 231-232. KPC used this "down" time to, among other things, perform maintenance and repair on equipment in its water treatment and wastewater treatment plants. *Id*. at 231-233; Brief of Ketchikan Pulp Company Accompanying Notice of Appeal at 4 (Oct. 31, 1996) ("KPC Br."). As part of this maintenance, KPC partially emptied one of its one million gallon settling tanks at the water treatment facility by draining the accumulated flocculent through the flocculent drain line. Tr. at 268-270, 275-278. Thus, an undetermined amount of flocculent was discharged directly into Ward Cove through outfall 003. Ex. C-2 at 1.[15]

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[12] An "effluent limitation" is "any restriction established * * * on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources * * * including schedules of compliance." CWA § 502(11), 33 U.S.C. § 362(11).

[13] Under the CWA, pollutants are classified into three categories: "conventional pollutants," which include, but are not limited to, the five mentioned below; "toxic pollutants," which are those which may cause disease, malfunctions, abnormalities or death upon exposure, ingestion, inhalation or assimilation into any organism; and "nonconventional pollutants," which are neither toxic nor conventional. *See Natural Resources Defense Council, Inc. v. EPA*, 822 F.2d 104, 110 n.5 (D.C. Cir. 1987); *see also* CWA §§ 304(a)(4), 33 U.S.C. § 1314(a)(4) (describing conventional pollutants); and CWA § 502(13), 33 U.S.C. § 1362(13) (defining toxic pollutant).

The conventional pollutants for which effluent limitations were established in the permit were: biochemical oxygen demand (BOD), total suspended solids (TSS), pH, chlorine, and fecal coliform. Ex. R-1 at 2, 3.

[14] The specific application and permit provisions which are at issue in this appeal are identified and discussed in greater detail infra Section II.C.

[15] The settling tanks in the water treatment plant were not drained on a regular basis, but were drained only when the tanks were nearly full of accumulated solids. Tr. at 268. At the time of the August 16th drainage the tanks had not been emptied for two years. Ex. C-2 at 1.

2. *Sludge*

Also beginning on August 16, 1989, and continuing for a period of several days, KPC drained the contents of the aeration basin in the secondary wastewater treatment plant in order to repair piping located at the bottom of the basin. Tr. at 46, 231-232, 270. In so doing, KPC bypassed the settling tanks and drained an undetermined amount of sludge directly into Ward Cove through outfall 002. Init. Dec. at 11, 16. While this drainage was occurring, there was no wastewater flowing into the aeration tank since all mill operations were shut down due to the drought. Tr. at 233.

The flocculent and sludge discharges took place during low tide and caused visible foam and scum on the surface of Ward Cove. Ex. C-2 at 1; Ex. C-3 through C-13. In addition, salmon were observed to be swimming around in the foam and scum at the mouth of Ward Creek. Ex. C-2 at 1.

3. *Cooking Acid*

On September 13, 1989, approximately 4,450 gallons of cooking acid was accidentally spilled onto the floor in the mill's digester area. Tr. at 271, 278. A valve on one of the nine digesters had been left partially open for testing following electrical maintenance, and an employee, unaware that the valve was open, filled the digester with cooking acid. Tr. at 62-64; Ex. C-1. KPC cleaned up the spill by washing the cooking acid down through the floor drains, where it went, untreated, into the main sewer and out into Ward Cove. *Id*.

D. *The Enforcement Action*

1. *Pleadings and Hearing*

On January 19, 1990, the Region filed an administrative complaint against KPC alleging that the flocculent, sludge and cooking acid discharges violated specific permit provisions and were therefore violations of CWA section 301(a). Pursuant to factors set forth under CWA section 309(g), 33 U.S.C. § 1319(g),[16] the Region proposed the assessment of a $40,000 civil penalty against KPC.

[16] Under section 309(g)(3), the following factors must be taken into account in establishing an administrative penalty for a violation of the CWA: "the nature, circumstances, extent and gravity of the violation, or violations, * * * and, with respect to the violator, ability to pay, any prior history of violations, the degree of culpability, economic benefit or savings (if any) resulting from the violation, and such other matters as justice may require."

On October 26, 1990, the Region filed an amended complaint, alleging: (1) that the flocculent discharge was not covered by the permit and therefore violated CWA section 301(a); (2) that the cooking acid discharge also was not covered by the permit and also was in violation of the CWA; (3) that the sludge discharge violated permit Section III.F, which prohibited the discharge of solids removed during the course of treatment; and (4) that KPC's failure to notify the Agency of the sludge discharge was a violation of permit Section II.J, which required KPC to report any non-complying discharge to the Agency along with its monthly discharge monitoring reports. The amended complaint also proposed a $40,000 penalty under CWA section 309(g), calculated by imposing the statutory maximum administrative penalty of $10,000[17] for each of the four alleged violations.[18] The amended complaint became the operative complaint in this administrative enforcement action.

In March 1992, the Presiding Officer denied both parties' motions for accelerated decision. Commencing on October 20, 1992, a two-day hearing was held on the amended complaint in Seattle, Washington. The parties submitted post-hearing and supplemental briefs in May and June 1993. Thereafter, the Presiding Officer issued his Initial Decision on November 22, 1995.

2. *Initial Decision*

The Presiding Officer identified the following issues to be decided: (1) whether the flocculent and cooking acid discharges were covered under the terms of the permit, thereby triggering the "permit as a shield" defense of CWA section 402(k); and (2) whether the sludge discharge violated Section III.F of the permit.[19]

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[17] At the time of the alleged violations in this case, $10,000 was the maximum per day administrative penalty authorized under the statute "for each day during which the violation continues." *See* CWA § 309(g)(2)(B). However, subsequent to the violations at issue here, the Debt Collection Improvement Act of 1996 was enacted, requiring the Agency to make periodic adjustments of maximum statutory penalties to account for inflation. *See* 31 U.S.C. § 3701 note; 40 C.F.R. § § 19.1 *et seq.* (adjusted penalties for laws administered by EPA). As a result, the maximum per day penalty was increased to $11,000. 40 C.F.R. § 19.4. However, the increased penalties under the Debt Collection Improvement Act apply only to violations occurring after January 30, 1997 (*id*. § 19.2), and therefore do not apply in this case.

[18] *See* Letter from Assistant Regional Counsel Mark A. Ryan to Administrative Law Judge Daniel M. Head (Nov. 2, 1990) (enclosing explanation of how proposed penalty was calculated).

[19] In addition, as noted previously, the Presiding Officer dismissed the alleged reporting violation of permit Section II.J. *See supra* note 2.

Tackling the issues regarding the scope of the permit and the availability of the shield defense first, the Presiding Officer concluded based on an analysis of the permit and permit application that neither flocculent nor cooking acid was expressly covered under the permit, as neither had been set forth in KPC's application. Init. Dec. at 23-25. The Presiding Officer rejected KPC's argument that the reference to filter backwash in the permit application somehow included flocculent, since he determined that flocculent was a heavier substance which was drained through a separate line. *Id*. at 24. He also rejected KPC's contention that its disclosure of "maganese" [sic] and "sulfite" sufficiently disclosed the discharge of "magnesium bisulfite" (cooking acid), finding that magnesium bisulfite was a wholly different chemical compound than "maganese" [sic] or sulfite separately. *Id*.[20]

Next, reviewing the application in conjunction with the applicable Agency regulations, the Presiding Officer concluded that neither discharge was implicitly covered in the permit. This conclusion was based on the Presiding Officer's determination that KPC had not complied with the disclosure requirements of either the application or the permit application regulations. Although both the application and regulations required only a general description of the "processes, operations or production areas" contributing wastewater to an applicant's discharges, the Presiding Officer concluded that "each area adding effluent to the discharge must be disclosed to identify the applicable effluent standards and limitations." *Id*. at 27. The Presiding Officer determined that KPC's disclosure of "filtration backwash" as the only type of pollutant discharged from its water treatment plant did not satisfy the application provisions because filtration backwash is *not* the same as flocculent, a heavier substance which settled in settling tanks and was periodically discharged through a separate drain line. *Id*. The Presiding Officer, finding that flocculent discharge is not part of the filtration backwash, held that the periodic discharge of flocculent from the settlement tanks was not disclosed either specifically or implicitly in KPC's application. *Id*.

Further, in specific reference to cooking acid, the Presiding Officer found that the mere fact that the Agency was aware that spills could occur during normal plant operations did not mean, as KPC contended, that the Agency had considered the cooking acid spill in the application process. The spills anticipated by the Agency, and dis-

[20] While the Initial Decision refers to "maganese" and the application mentions both "manganese" and "magnesium" (*see* Ex. R-2 at page V-2), it is probable from the context that the Presiding Officer intended to refer to "magnesium."

cussed in Agency development documents for the industry, were those which occurred as a result of normal plant operations, not those precipitated by human error, as was the case with the cooking acid spill at issue in this case. The fact that KPC normally recycled its cooking acid for repeated use in its operations further substantiated the Presiding Officer's conclusion that the cooking acid spill could not reasonably have been taken into account by the Region in the application process. *Id*. at 29-30.

As for the sludge discharge, the Presiding Officer found that it clearly violated Section III.F of the permit, which prohibits the discharge of solids removed during the course of wastewater treatment. In doing so, he rejected KPC's contention that Section III.F was not triggered because the discharge did not occur "in the course of treatment" since the mill was shut down, pointing out that the sludge would not have been in the settling tanks in the first instance had it not been removed from wastewater in the course of pollution treatment. *Id*. at 32. The Presiding Officer also rejected KPC's contentions that the bypass provisions of the permit somehow authorized the sludge discharge. According to the Presiding Officer, Section III.G.1, permitting the bypass of treatment equipment for "essential maintenance," did not relieve KPC of liability, since the maintenance was not "essential" as that term was described in the preamble to the final rule codified at 40 C.F.R. § 122.41(m) (1984), the regulation upon which the permit provision was based. Init. Dec. at 32-33. Nor was the discharge permissible under Section III.G.3.2 of the permit, which permitted the bypass of treatment equipment in the absence of feasible alternatives. The Presiding Officer concluded that there was a feasible alternative—KPC could have used portable pumps at a minimal cost to transfer the sludge into the settling tanks and thereby avoid the discharge. *Id*. at 34.

In calculating an appropriate penalty for the discharges, the Presiding Officer, following the requirements of CWA section 309(g), considered the nature, circumstances, extent and gravity of each violation, and then analyzed whether any of five adjustment factors[21] applied to increase or reduce the gravity-based penalty. Based on this analysis, the Presiding Officer assessed the maximum penalty of $10,000[22] each for the flocculent and sludge discharges. Init Dec. at

[21] The five adjustment factors considered by the Presiding Officer were: (1) ability to pay; (2) prior history of violations; (3) degree of culpability; (4) economic benefit or savings resulting from the violation; and (5) other factors as justice may require. *See* Init. Dec. at 37 (quoting CWA § 309(g)(3)).

[22] *See supra* note 17.

39-43, 45-47. Then, based on his determination that the cooking acid discharge was a minor violation with a low degree of culpability, from which KPC derived no economic benefit, the Presiding Officer reduced the assessed penalty for this violation from $10,000 to $3,000. *Id*. at 43-45.[23] The Presiding Officer therefore assessed a total penalty of $23,000 against KPC.

Following KPC's post-trial motion to reopen the hearing, which was denied by the Presiding Officer on September 11, 1995, KPC filed the instant appeal.

II. *DISCUSSION*

We begin with a brief overview of the CWA and its implementing regulations, and an outline of the NPDES permitting program.

A. *Clean Water Act and Corresponding Regulations*

The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," by, among other things, eliminating the discharge of pollutants into those waters. CWA § 101(a); 33 U.S.C. § 1251(a). To achieve this objective, the CWA provides in pertinent part: "Except as in compliance with this section and section * * * 1342 [covering the NPDES program], * * * the discharge of any pollutant by any person shall be unlawful." CWA § 301(a); 33 U.S.C. § 1311(a).[24] The NPDES permitting program, outlined in CWA § 402, 33 U.S.C. § 1342, is the principal mechanism for control and treatment of pollution from point sources under the CWA. (*See* discussion *infra* Section II.B for a general overview of the NPDES permitting program).

The provision of the CWA which is key to the issues in KPC's appeal is section 402(k), which provides in pertinent part, "[c]ompliance with a permit issued pursuant to [section 402] shall be deemed compliance * * * with [the CWA] * * *." CWA § 402(k).[25] The purpose of

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[23] We note that the Region has not appealed this reduction in the penalty it proposed in the complaint.

[24] Section 1311(a) of the United States Codes also lists five other statutory subsections—1312, 1316, 1317, 1328 and 1344—pursuant to which discharges lawfully could be made. However, none of those subsections cover the discharges or alleged violations at issue here.

[25] Toxic pollutants, however, are excluded from the protective shield of section 402(k): "Compliance with a permit * * * shall be deemed compliance * * * with [the CWA], *except any standard imposed under section 1317 * * * for a toxic pollutant injurious to human health."* CWA § 402(k) (emphasis added). The parties have not alleged that any of the discharged substances at issue in this appeal are toxic pollutants.

section 402(k), often referred to as the "shield provision," is, in the words of the Supreme Court, "to insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict. In short, § 402(k) serves the purpose of giving permits finality." *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 138 n.28 (1977). Thus, section 402(k) shields a discharger from liability under the CWA so long as it discharges in compliance with its permit.

In 1981, when KPC applied for the permit at issue in this appeal, the regulations governing NPDES application requirements were contained in "consolidated regulations" covering five of the Agency's permitting programs.[26] Along with these consolidated regulations, the Agency published consolidated permit application forms for use in all five permitting programs. *See, e.g.*, Consolidated Permit Application Forms for EPA Programs, 45 Fed. Reg. 33,516 (May 19, 1980). The forms consisted of general information forms applicable to all applicants, accompanied by special forms specific to the individual programs. NPDES Form 2-C applied to all existing industrial dischargers (meaning applicants seeking to renew existing permits) who sought permission to discharge wastewater into navigable waters.[27]

B. *Overview of NPDES Permitting Framework*

As previously noted, the CWA "allows the discharge of pollutants from a point source only in compliance with limitations established in the Act." *Natural Resources Defense Council v. EPA*, 822 F.2d 104, 109-110 (D.C. Cir. 1987). The CWA seeks to reduce water pollution by imposing on permittees water quality-based effluent limitations (which are based on the amounts and kinds of pollutants in the water in which the permittee discharges), and technology-based effluent limitations, which reflect the extent to which technology helps to reduce water pollution. *Id*. at 109- 111.

NPDES permits play a critical role in the CWA regulatory scheme. They "transform generally applicable effluent limitations and other

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[26] *See, e.g.*, Consolidated Permit Regulations: RCRA Hazardous Waste; SWDA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration, 45 Fed. Reg. 33,290 (May 19, 1980). By the time KPC's permit took effect in 1985, these regulations had been "deconsolidated," and accordingly, renumbered. *See* 48 Fed. Reg. 14,164 (Apr. 1, 1983).

[27] From this point forward, all references to permit applications in this opinion shall refer to Form 2-C, unless otherwise indicated.

standards * * * into the obligations (including a timetable for compliance) of the individual discharger." *Id.* at 110 (quoting *EPA v. State Water Resources Control Bd.*, 426 U.S. 200, 205 (1976)). In order to accomplish this, most permits, including KPC's, are structured to generally authorize a facility to discharge pollutants from certain discrete points into designated receiving waters, subject to applicable effluent limitations, and to specific monitoring and reporting requirements, compliance schedules, and management practices. *Id.* at 111. In cases where, as here, the permit applicant belongs to an industry subcategory for which the Agency has promulgated national effluent limitations guidelines,[28] the Agency relies on those guidelines, together with the disclosures made by the permit applicant during the permit application process, to determine the pollutants that will be listed in the permit, and the appropriate discharge or other limitations which should be placed on those pollutants in order to adequately control pollution.

Although in theory the Agency could structure permits to prohibit the discharge of all pollutants except those listed in the permit, such an approach would require the Agency to include in the permit a list of every pollutant or combination of pollutants that conceivably might be contained in the applicant's wastestreams, and to determine which of those pollutants the Agency considered appropriate for discharge. Since any given wastestream may contain hundreds of pollutants, such a permit-writing approach would be unduly burdensome and costly, and ultimately, impractical. As the Agency has acknowledged: "it is impossible to identify and rationally limit every chemical or compound present in a discharge of pollutants."[29] Consequently, the Agency has determined that the goals of the CWA may be more effectively achieved by focusing on the chief pollutants and wastestreams established in effluent guidelines and disclosed by permittees in their permit applications, rather than by attempting to identify the hun-

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[28] At the time KPC submitted its permit application in 1981, the Agency had established national effluent limitations guidelines for 34 specified industry subcategories. 44 Fed. Reg. 34,393, 34,396 (June 14, 1979) (proposed rulemaking). The pulp and paper industry subcategory, to which KPC belongs, is one of the industries covered by the guidelines. *Id.* The guidelines basically set forth recommended discharge limitations for the pollutants commonly discharged by facilities in the designated industry subcategories. *Id.*

[29] *Atlantic States Legal Found., Inc. v. Eastman Kodak*, 12 F.3d 353, 357 (2d Cir. 1994) (quoting Memorandum from Jeffrey G. Miller, EPA Deputy Administrator for Water Enforcement, to Regional Enforcement Director, Region V, at 2 (Apr. 28, 1976)). The universe of pollutants explicitly regulated by the inclusion of numeric or other limitations in NPDES permits has expanded since 1976, most notably by the inclusion of toxic pollutants. *See* 40 C.F.R. § 122.21(g)(7)(ii). Nevertheless, there remain "regulatory gap[s]." 45 Fed. Reg. 33,516, 33,523 (May 19, 1980) ("EPA intends to study other pollutants, to make appropriate additions to the toxic pollutant and hazardous substances lists * * *.")

dreds or thousands of pollutants potentially present in permittees' wastestreams. The Agency specifically stated:

> EPA did not intend to require water quality-based permit limitations on all pollutants contained in a discharge * * *. The proper interpretation of the regulations is that * * *[w]ater quality-based limits are established where the permitting authority reasonably anticipates the discharge of pollutants by the permittee at levels that have the reasonable potential to cause or contribute to an excursion above any state water quality criterion * * *.

Eastman Kodak, 12 F.3d at 358 (quoting Memorandum from Director, Office of Wastewater Enforcement and Compliance to Water Management Division Directors, Regions I-X at 2-3 (Aug. 14, 1992)).

Since the scope of the permit as well as the discharge limitations contained therein are based largely on information provided by the permit applicant, the disclosures made by permit applicants about their operations and wastestreams are critical to the success of the overall permitting scheme. In recognition of this, the Agency's comprehensive permit application regulations are designed to elicit from applicants the disclosures necessary to enable the permit writer to issue permits that protect the environment. *See, e.g.*, 40 C.F.R. § 122.21(g) (previously codified at 40 C.F.R. § 122.53(d) (1980)) (permit application requirements), and Form 2-C (permit application).

The overall operation of the NPDES permitting scheme and the reliance of that scheme upon adequate disclosures by permit applicants is succinctly summarized in *Eastman Kodak*, where the Court of Appeals for the Second Circuit observed:

> Viewing the regulatory scheme as a whole * * * it is clear that the permit is intended to identify and limit the most harmful pollutants while leaving the control of the vast number of other pollutants to disclosure requirements. Once within the NPDES * * * scheme, therefore, polluters may discharge pollutants not specifically listed in their permits *so long as they comply with the appropriate reporting requirements and abide by any new limitations when imposed on such pollutants.*

Eastman Kodak, 12 F.3d at 357 (emphasis added). *See also id.* at 357 n.8; discussion *infra* Section II.C.1.

We now address KPC's contentions on appeal.

C. *Analysis of the Discharges*

1. *Flocculent and Cooking Acid*

KPC's main argument in defense of the flocculent and cooking acid discharges is that both discharges are "implicitly" covered under the permit, and that section 402(k) therefore shields KPC from liability for these alleged violations of the CWA. KPC Br. at 8-12, 22. To support its assertion of the "shield defense," KPC relies principally upon *Eastman Kodak*, and upon *McClellan Ecological Seepage Situation v. Weinberger,* 707 F. Supp. 1182, 1200-1201 (E.D. Cal. 1988). We find that neither of these decisions deals with a situation analogous to the one presented here, and thus neither decision supports the argument that the shield defense is applicable to either the flocculent or cooking acid discharges.

In *Eastman Kodak,* the plaintiff sought partial summary judgment based on allegations that Kodak's discharge of sixteen pollutants not listed in its State NPDES permit were not covered under the permit. 12 F.3d at 356.[30] Plaintiff contended that under the CWA, a discharger is prohibited from discharging any pollutant not expressly identified in the permit. *Id*. at 357. Rejecting plaintiff's overly restrictive interpretation of the CWA, the Second Circuit held that the discharges were covered under the permit. *Id.* at 357. In a footnote contained in the decision, the Second Circuit recognized that disclosure plays a key role in determining whether the shield defense is applicable: "[t]he cases [plaintiff] cites are * * * inapposite because each involves either a failure to correctly disclose accurately the discharge of pollutants and thus comply with regulation or a failure to secure the requisite NPDES or SPDES permit." *Id.* at 357 n.8 (citations omitted). *Eastman Kodak* therefore stands for the proposition that the discharge of unlisted pollutants is permissible when the pollutants have been disclosed to permit authorities during the permitting process.

McClellan is simply another illustration of the rule established in *Kodak*. Emphasizing the importance of disclosure in the overall NPDES regulatory scheme, the District Court in *McClellan* noted:

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[30] Kodak had disclosed seven of the pollutants in its permit application, and had listed the remaining nine in Form Rs, a toxic chemical inventory reporting form filed annually with both EPA and New York's Department of Environmental Control. *Eastman Kodak,* 12 F.3d at 356 n.7.

> EPA's NPDES regulations, codified at 40 C.F.R. Part 122, contemplate that discharges of volatile organics will be addressed on a case-by-case basis.
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> * * * * * * *
>
> As these provisions make clear, discharges of volatile organics are not automatically prohibited just because they are not specifically allowed under an NPDES permit. Rather, *NPDES applicants and permittees are required by regulation to keep the permit authorities fully informed of any past or potential discharges* of volatile organics, and those authorities then determine the appropriate treatment of the discharges. McClellan has fully complied with this regulatory scheme.

707 F. Supp. at 1201-1202 (emphasis added).

As can be seen from the above cases, the permit applicant's disclosures during the application process as to the wastestreams which may potentially be discharged, and the permit authority's knowledge as a result of that disclosure, are critical factors in determining whether the shield defense in applicable. As both *Eastman Kodak* and *McClellan* illustrate, when the permittee has made adequate disclosures during the application process regarding the nature of its discharges, unlisted pollutants may be considered to be within the scope of an NPDES permit, even though the permit does not expressly mention those pollutants. The converse is also true: where the discharger has not adequately disclosed the nature of its discharges to permit authorities, and as a result thereof the permit authorities are unaware that unlisted pollutants are being discharged, the discharge of unlisted pollutants has been held to be outside the scope of the permit.[31] KPC does not appear to challenge this basic proposition. KPC Br. at 9-11. Instead, KPC contends that it made all required disclosures

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[31] *See, e.g., Atlantic States Legal Found., Inc. v. Reynolds Metals Co.,* No. 88- CV-640, 1990 U.S. Dist. LEXIS 19077, at *13-*16 (N.D.N.Y. Feb. 16, 1990) (discharge of PCBs violated the CWA where permit did not restrict discharge of PCBs due to defendant's failure to disclose its presence to regulators); *United States v. Tennessee Gas Pipeline,* No. 91-1428 (W.D. La. Oct. 8, 1991) (shield defense raised in motion to dismiss rejected where there was factual dispute as to whether defendant knowingly withheld information requested in the permit application). The shield defense also was rejected in *United States v. Tom-Kat Dev. Inc.,* 614 F. Supp. 613 (D. Alaska, 1985), but the District Court's holding there was based on Tom-Kat's failure to obtain a permit and not upon its failure to adequately disclose the nature of its discharges. 614 F. Supp. at 616.

Continued

during the permit process, and therefore *Eastman Kodak* and *McClellan* demonstrate that the discharge of flocculent and cooking acid was permissible. *Id.* at 9, 10, 14.

As we have already noted, the disclosures made by permit applicants during the application process constitute the very core of the NPDES permitting scheme. This is abundantly evident in the Agency commentary accompanying the NPDES permitting regulations. For example, in the preamble accompanying the 1980 version of Form 2-C, the Agency stated:

> EPA proposed that existing industrial dischargers be required to submit in their NPDES permit applications, in addition to other information, detailed information concerning discharges of toxic (and certain other) pollutants.
>
> The requirements reflect the Agency's belief * * * that dischargers have a duty to be aware of any significant pollutant levels in their discharge. In addition, they serve two specific purposes. Most important, they provide the information which permit writers need to determine what pollutants are likely to be discharged in significant amounts and to set appropriate permit limits. Second, they will be used as a basis for application-based notification requirements * * *.

45 Fed. Reg. 33,516, 33,526 (May 19, 1980).

While the above comments refer primarily to toxic pollutants, which were and continue to be a primary target of the NPDES regulations,[32] the Agency's reliance on a discharger's accurate disclosures

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It is unclear whether the District Court's Order from Chambers in *United States v. Ketchikan Pulp Co.*, No. A92-587 (D. Alaska Oct. 5, 1993), an unrelated case dealing with the same facility as the instant action, follows the pattern mentioned in the text. There, in ruling on cross-motions for summary judgment, the District Court held that Ketchikan's accidental discharge of certain substances not listed in its permit, including "cooking acid," was not within the scope of Ketchikan's permit. However, due to the brevity of the order we are unable to determine whether Ketchikan had disclosed that these substances were present in its discharge.

[32] In additional comments to Form 2-C, the Agency remarked: "Consistent with the Clean Water Act's mandate that EPA focus upon the control of toxic pollutants and with EPA's new permitting strategy for toxic pollutants in response to that mandate, EPA proposed that existing industrial dischargers be required to submit in their * * * applications, * * *, detailed information concerning discharges of toxic (and certain other) pollutants." 45 Fed. Reg. at 33,526.

is not limited to the identification and control of toxics. In explaining the provisions of 40 C.F.R. § 122.53(d)(7)(iii), which required dischargers to submit quantitative data relating to certain conventional and nonconventional pollutants that dischargers know or have reason to believe are present in their effluent, the Agency stated: "permit writers need to know what pollutants are present in an effluent to determine appropriate limits in the absence of effluent guidelines." 45 Fed. Reg. at 33,531.[33]

Four years later, in connection with a modification to section 122.53(d)(7)(iii) and items V-B & V-C of the permit application, the Agency again emphasized the importance of accurate disclosures by permittees regarding the presence of either toxic pollutants or conventional and nonconventional pollutants in discharges to receiving waters:

> EPA[] need[s] to have sufficient data to identify the presence of pollutants which should be controlled through permit limitations. This is particularly important because in accordance with section 402(k) of the CWA, a permittee is deemed to be in compliance with the CWA if he meets the requirements and limitations of his permit.

49 Fed. Reg. 37,998, 38,002 (Sept. 26, 1984).

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[33] Section 122.53(d)(7) generally required applicants to disclose information regarding the effluent characteristics of pollutants discharged to surface waters. The wording of the regulation plainly illustrates that a permittee's identification and disclosure of the pollutants contained in its discharge is the key to the overall NPDES permitting structure: "[a]n applicant is expected to 'know or have reason to believe' that a pollutant is present in an effluent based on an evaluation of the expected use, production or storage of the pollutant or on any previous analyses for the pollutant." 40 C.F.R. § 122.53(d)(7)(1980) (now codified at 40 C.F.R. § 122.21(g)(7)).

The applicant's reporting obligations are repeated throughout the regulation, which covered identification and testing of 32 listed conventional and nonconventional pollutants (§ 122.53(d)(7)(i) & (iii)(B), corresponding to application items V-A and V-B), 129 toxics and metals (§ 122.53(d)(7)(ii), corresponding to item V-C), and asbestos and certain enumerated hazardous substances (§§ 122.53(d)(7)(iv) & (v), corresponding to item V-D). For example, section 122.53(d)(7)(i)(A), which required that applicants provide sampling results for each of 7 listed conventional and nonconventional pollutants, provided in pertinent part: "[e]very applicant must report quantitative data for every outfall for the following pollutants * * *." 40 C.F.R. § 122.53(d)(7)(i)(A) (1980) (now codified at 40 C.F.R. § 122.21(g)(7)(i)(A)). Similarly, section 122.53(d)(7)(iii), which, among other things, required testing for the presence or absence of 25 additional conventional and nonconventional pollutants, stated: "[e]ach applicant must report for each outfall quantitative data for the following pollutants, if the applicant knows or has reason to believe the pollutant is discharged from the outfall * * *." 40 C.F.R. § 122.53(d)(7)(iii) (1980) (now codified at 40 C.F.R. § 122.21(g)(7)(iii)).

Finally, the Agency plainly revealed the importance of a discharger's disclosures in a guidance memorandum explaining the intended purpose and operation of the "permit as shield" defense:

> A permit provides authorization and therefore a shield for the following pollutants resulting from facility processes, wastestreams and operations that have been clearly identified in the permit application process when discharged from specified outfalls:
>
> 1) Pollutants specifically limited in the permit or pollutants which the permit, fact sheet, or administrative record explicitly identify as controlled through indicator parameters [footnote omitted];
>
> 2) Pollutants for which the permit authority has not established limits or other permit conditions, but which are specifically identified as present in facility discharges during the permit application process; and
>
> 3) Pollutants not identified as present [in the facility discharges] but which are constituents of wastestreams, operations or processes that were clearly identified during the permit application process.
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> * * * * * * *
>
> *[A]n NPDES permit does not authorize the discharge of any pollutants associated with wastestreams, operations, or processes which existed at the time of the permit application and which were not clearly identified during the application process.*

Policy Statement on Scope of Discharge Authorization and Shield Associated with NPDES Permits at 2-3 (July 1, 1994) ("Permit Shield Policy") (emphasis added).[34]

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[34] While we note the existence of this Agency guidance document (issued well after these proceedings began) and the parties discuss it in their briefs, we do not rely on it in determining KPC's liability for the discharges at issue.

Applying the disclosure standards set forth in the above court decisions and evidenced in the Agency's regulations, we conclude for the reasons discussed below that contrary to KPC's assertions, KPC did not make adequate disclosures to the Region regarding the flocculent or cooking acid discharges. As a result, neither discharge was within the scope of the permit, and each was therefore in violation of the CWA.

a. *Flocculent Discharge*

KPC first contends that flocculent was covered under the permit as a component of TSS (total suspended solids), for which effluent limits were assigned in the permit. KPC Br. at 8. Since TSS is regulated as one substance whether its components are heavy or light in weight, or dark or light in color, KPC's argument runs, the permit regulated flocculent under the TSS effluent limitation. *Id.* at 8-12. Even accepting as true that flocculent constitutes a form of TSS, this argument provides no defense for the flocculent discharge.

The evidence of record shows that KPC periodically discharged flocculent into Ward Cove when the settling tanks in its water treatment facility were near capacity (Tr. at 268-269), but did not inform the Region of this practice. Indeed, KPC made no mention of flocculent in its entire permit application, and instead mentioned only "filtration backwash" in connection with the water treatment plant. As a result, Mr. Bodien, who wrote the 1985 permit, did not know that KPC was discharging flocculent. Tr. at 57. In addition, both Mr. Bodien and another experienced permit writer testified that KPC's reference in its application to "filtration backwash" gave no indication that KPC was seeking permission to discharge flocculent from the water treatment facility. *Id*. at 55-56; 122.

In the face of this evidence, KPC's contentions that flocculent was covered under the permit as TSS are not persuasive. The permit application clearly did not inform the Region that KPC discharged flocculent. Therefore, absent some other independent basis for knowing about the flocculent discharge (and there appears to be none), the Region could not have intended to regulate flocculent, either as TSS or as any other substance. The Presiding Officer rejected KPC's argument that flocculent was the same substance as the "filtration backwash" disclosed in the application, finding that flocculent was a heavier substance which was drained through a separate line. Init. Dec. at 24. The Presiding Officer further found that KPC's discharge of an estimated two years' worth of accumulated flocculent represented "a substantial physical intrusion into Ward Cove" and posed a potential threat to the

fish and plant life in the Cove. Init. Dec. at 39-40. Thus, it seems likely that if the Region had been aware of KPC's flocculent discharge practices, it would have prohibited those practices and required KPC to dispose of its flocculent by other means, such as by land application. *See, e.g.*, Tr. at 55 (testimony by Mr. Bodien that most other mills in KPC's geographical region land-disposed of settled solids). Therefore, neither the fact that flocculent might be a component of TSS, or KPC's contention that the September 16, 1989 flocculent discharge did not cause TSS limits to be exceeded, (see KPC Br. at 1),[35] brings the flocculent discharge within the scope of KPC's permit.

KPC next contends that penalizing it for failing to specifically mention flocculent in its application is contrary to Agency policy and regulations, which, in KPC's view, expressly relieve applicants of the burden of having to disclose every actual and/or potential wastestream in their facilities. KPC Br. at 15-22. To hold KPC to such a requirement is to undermine the permit's "operational flexibility," KPC argues, that is, the ability of the permit to cover KPC's discharges in the face of changing operations. *Id*. at 21. While it is true that the Agency has designed the NPDES regulations to provide permit flexibility,[36] it is clear from the case authorities and Agency commentary quoted above that the Agency did not thereby intend to include within a permit's sweep undisclosed discharges emanating from processes or operations which were inaccurately or incompletely described in the permit application. Inaccurate or incomplete disclosures could undermine the purpose of the CWA by denying the permit writer the information necessary to write a permit to adequately protect the environment.

Here, KPC's periodic discharge of flocculent was not disclosed in any manner. Additionally, KPC's application left the misleading impression that filter backwash was the only wastestream discharged from the water treatment plant. As a result, Region permitting authorities did not know that flocculent was being discharged, or even know about the settling process which generated the flocculent. Indeed, Mr. Bodien stated that prior to the Region's enforcement action, (filed in 1990), he did not know that KPC had settling tanks in its water treatment facility; he believed that KPC used only filters to separate solids

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[35] *See infra* Section II.C.1.b and note 50 for a discussion of the immateriality of effluent limit exceedances in determining these CWA violations.

[36] *See, e.g.*, 40 C.F.R. § 122.7(l)(1) (1980) (now codified at 40 C.F.R. § 122.41(l)(1)), which allows permittees, under certain conditions, to make changes in their operations without requiring the permit to be modified to reflect those changes.

out of its incoming water. Tr. at 86-87. It is therefore unreasonable to presume that the Region, which, given its ignorance of the existence of settling tanks, could not have known that flocculent would or might be discharged, somehow implicitly approved the discharge of flocculent from that operation.

Third, KPC contends that it submitted in its application all of the information required by the Agency. KPC Br. at 13. KPC argues that "water treatment plant-filtration backwash" was adequate in response to item II-B of the permit application (which required applicants to provide a description of "all operations contributing wastewater to the effluent"), because that application provision required only a "general" description of processes and operations.[37] KPC Br. at 13.

Although KPC is correct that the description of *processes* and *operations* may be general,[38] Agency regulations nevertheless require the applicant to provide a complete and accurate description of each area of a facility which adds effluent to the discharge, so that appropriate effluent limitations may be assigned. Specifically, the Agency noted in the preamble to the final rule pertaining to item II-B: "[t]he information in item II is useful to the permit writer because it reveals what processes use or contribute pollutants to water in the facility, and what kinds of treatment wastewater currently receives." 45 Fed. Reg. at 33,534. The Agency further noted: "the description in the permit application * * * must be representative of the facility at that time." *Id*. at 33,535. Thus, while KPC may have been entitled to describe its processes and operations in a general way, it could not do so in a way that was inaccurate or misleading.

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[37] Item II-B, provides in pertinent part:

> For each outfall, provide a description of (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater.

Ex. R-2 at page 1 of 4. This application provision is based on 40 C.F.R. § 122.53(d)(3) (1980) (now codified at 40 C.F.R. § 122.21(g)(3)), which is discussed in further detail *infra* notes 38, 52.

[38] *See, e.g.*, 40 C.F.R. § 122.53(d)(3) (1980), which provides: "[p]rocesses, operations, or production areas may be described in general terms (for example, "dye-making reactor", "distillation tower")." As the Agency noted in the preamble to that final rule (*see* 45 Fed. Reg. 33,516, 33,534 (May 19, 1980)), and as the Presiding Officer found (Init. Dec. at 39), item II-B was drafted to require only "general" descriptions of processes and operations in order to protect against the disclosure of confidential information.

Here, the phrase "water treatment plant filtration backwash" is not an accurate or complete description of the process or operations in KPC's water treatment plant, because it makes no mention of the settling process, which produces the accumulated flocculent whose discharge is here at issue. Specifically, Mr. Bodien testified that it is in the settling process, not the filtration process mentioned in KPC's application, where the majority of the solids are extracted from incoming wastewater. Tr. at 52 (noting that approximately two thirds of all solids in incoming water are removed during settling process; remaining one third is filtered through rapid sand filters, and a portion of that is discharged as filter backwash). Further, even the Region observed that "if KPC were seeking approval to drain the settling tanks, it should have identified simply 'water treatment plant' or, more specifically, 'settling tanks and filtration backwash.'" EPA's Response Brief to Respondent's Appeal of Initial Decision to the Environmental Appeals Board at 9 (Nov. 27, 1996) ("Reg. Reply Br."). By being specific about the filtration backwash, the application left the impression that filtration backwash was the sole discharge from the water treatment plant. Because KPC failed to disclose a process which results in the discharge of substantial amounts of pollutants into receiving waters, it did not comply with the application provisions.[39]

KPC's final argument in defense of the flocculent discharge is that because the Region was satisfied with KPC's very basic description of its complex pulp bleaching operations, the Region is therefore obligated to accept as adequate its inaccurate description of the water treatment plant. Specifically, KPC contends:

> When asked whether KPC had adequately described the bleach plant in its application, the permit writer answered affirmatively.
>
> * * * * * * *
>
> It is * * * arbitrary to hold that a very general description of a production area (e.g. bleach plant) contributing significant flows and pollutants is sufficient to cover all the flows from that production area yet the inadvertent description of flow from a water treatment plant as filtration backwash does not cover other flows from that operation.

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[39] In addition, KPC was required to, but did not, disclose the flocculent discharge in item II-C of the application, which calls for the disclosure of "intermittent or seasonal" discharges. See *infra* notes 51, 52 and accompanying text.

KPC Br. at 17-19.

We find no arbitrariness in the Region's stance. First, there is no evidence in the record that the bleach plant description, however basic, failed to accurately describe the nature of the overall bleaching operations. In contrast, as we have already discussed, and as the Presiding Officer found, KPC's description of its water treatment plant was incomplete because it failed to disclose the settling process from which the flocculent whose discharge is at issue was generated, thus giving the misleading impression that filtration backwash was the only substance discharged. Init. Dec. at 24-27.

Second, there is no evidence that KPC's bleach plant operations or wastestreams were atypical when compared with mills covered under the point source category to which KPC belonged. It is apparent from Agency development documents and testimony at the hearing that the Agency was quite familiar with pulp bleaching operations such as those utilized at KPC's plant. *See, e.g.*, Tr. at 93-97 (Bodien's testimony describing KPC's bleach plant operations); and Draft Dev. Doc. at 121-122 (describing bleaching process generally). Since the Agency was quite familiar with bleach plant operations, KPC's basic description of bleach plant operations was held to be sufficient to apprise the Region of the nature of KPC's discharges therefrom.

In contrast, KPC's flocculent discharge practices at its water treatment plant were a typical in the pulp and paper industry. Mr. Bodien testified that most mills which used a settling process to treat intake water disposed of settled solids by land disposal, not by discharging them into United States waters. Tr. at 54-55. Consequently, there was no reason for the Region to assume that KPC's flocculent disposal practices involved discharges to Ward Cove. Further, KPC did not disclose its flocculent discharge practices, let alone the settling process which led to the discharge. For these reasons, we find no disparity in the fact that KPC's brief, though apparently accurate, description of its bleach plant operations was held to be sufficient to satisfy Agency disclosure standards, while its incomplete description of the water treatment plant was not.

Because, as has been demonstrated, KPC did not disclose its flocculent discharge practices to the Region, the flocculent discharge was not covered under its permit, and was therefore in violation of the CWA.

b. *Cooking Acid Discharge*

KPC's overall position with respect to the cooking acid discharge is that it was "implicitly" covered under the permit, because the

Agency was generally aware that spills occur in pulp mills, and the Region did not expressly prohibit the discharge of such spills or include spill control requirements in the permit. KPC Br. at 23-35; Init. Dec. at 14, 29. However, as the court decisions and Agency regulations discussed earlier illustrate, the discharge of unlisted pollutants is in violation of the CWA unless the applicant makes adequate disclosures to permit authorities during the application process about the source and nature of its discharges. In this case, KPC's argument that the Region implicitly covered the discharge of cooking acid under the permit fails because: (1) the Region did not expect that KPC would *discharge* a spilled chemical, since most mills in KPC's point source category used other methods for disposing of such spills, and, more particularly, (2) the Region could not have anticipated, based on the disclosures made by KPC during the application process, that KPC would discharge *cooking acid* into Ward Cove.

The Agency's expectations with respect to the management of spilled chemicals negate KPC's claim that the discharge was "implicitly" covered under the permit. Although *the spill* of cooking acid in the digester area of the mill was accidental, KPC *intentionally discharged* the cooking acid in order to clean up the spill. Specifically, the evidence of record establishes that KPC used hoses to "wash" the acid down the floor drain," (Tr. at 64; Init. Dec. at 10), where it went out untreated into Ward Cove, since the floor drains in the digester area flowed into outfall 001, whose contents were untreated (Tr. at 25; Init. Dec. at 6).

The Agency expressly discouraged the practice of *intentionally discharging* spilled chemicals. In a comment to the 1979 version of a regulation which required permittees to use good management practices to control or abate pollution, the Agency stated: "Examples of best management practices * * * include: * * * the use of solid, absorbent materials for cleaning up leaks and drips *as opposed to washing these materials down a floor drain creating additional sources of pollution*." *See* 40 C.F.R. § 122.15(g)(3) (1979) (comment), 44 Fed. Reg. 32,854, 32,907 (June 7, 1979) (emphasis added).[40]

[40] The comment quoted above was published *in the text* of the 1979 version of the regulation. The 1980 version of the regulation, codified at 40 C.F.R. § 122.62(k)(3), deleted the comment but was identical in all other respects to the 1979 version. Further, the Agency expressly noted in the preamble to the 1980 version of the regulation that the examples contained in the 1979 comment were still applicable. *See* 45 Fed. Reg. at 33,341 (May 19, 1980). This best management practices regulation, which we discuss in greater detail *infra* note 56 and accompanying text, is currently codified at 40 C.F.R. § 122.44(k)(3) (1997).

Furthermore, at the time of the cooking acid incident, there were other options for cleaning up chemical spills rather than washing them into receiving waters. It was undisputed that most mills in KPC's point source category utilized existing technology to treat or control spilled chemicals. Mr. Bodien testified: "[m]ost mills * * * will provide some type of spill control, ponding or tankage, in order to divert those types of spills into [treatment] systems." Tr. at 65. Additionally, in a January 1976 development document the Agency outlined some of the methods that could be used by pulp mills in KPC's point source category to control or treat spilled chemicals:

> The spill collection system collects overflows from the * * * digester area equipment and tanks, all of the floor drains in the pulp mill, and pipe[s] them to a central collection area. Pumps at the collection tank pump the materials back into the system at a controlled rate. Spills from the digester area are returned to the suction of the first stage washer recirculation pump as shown on the flow diagram. Spills collected from the floor drains are screened and piped to a dirty water tank which has fresh water made up for low level control. The solids go to a trash tank for hauling to landfill. Should a major stock spill occur, it is pumped to a spill collection tank * * *.

Draft Dev. Doc. at 510 & 517. Further, the Agency noted in a later development document: "[a] waste management program should include control of losses which occur when the production process is not in equilibrium such as spills, overflow, and wash-up."[41]

In sum, the Region's position with respect to discharging spilled chemicals was that: "the discharge of these types of spills directly to the receiving water is not considered acceptable practice." Tr. at 65.[42]

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[41] *See* Ex. R-3A, Development Document for Effluent Limitations Guidelines (BPCTCA) for the Bleached Kraft, Groundwood, Sulfite, Soda, Deink and Non-Integrated Paper Mills Segment of the Pulp, Paper, and Paperboard Point Source Category at 282 (Dec. 1976).

[42] We are aware that in reaching his conclusion that the cooking acid discharge was not intended to be covered under the permit, the Presiding Officer largely ignored the evidence relating to spill control technology. Init. Dec. at 29-30. Specifically, the Presiding Officer found that because the spill did not result from normal plant operations and involved the discharge of a raw material which was not in KPC's interest to discharge, "[i]t is not necessary, therefore, to sort through the parties' arguments on the nuances in the NPDES Regulations and the background documents relating to spills and spill technology, because the cooking acid spill * * *

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In addition to the fact that the Region clearly did not expect KPC to discharge spilled chemicals, the Region particularly could not have anticipated that KPC would discharge *cooking acid*, a valuable and costly raw material that is usually recycled in the chemical pulping process. Tr. at 65, 67, 249. Testimony from the hearing established that KPC, like most mills, ordinarily recycled its cooking acid. *Id*. As a consequence, Mr. Bodien, who wrote KPC's permit, testified he had no reason to expect KPC to discharge cooking acid; he presumed it would be recaptured and reused as was KPC's ordinary practice. *Id*. at 65-67.

Turning now to the disclosures made during the application process, KPC's permit application contained no information to indicate that there was even a potential for the discharge of cooking acid. The application made no reference whatsoever to cooking acid, or magnesium bisulfite.[43] In addition, the Region could not reasonably have anticipated that cooking acid would be discharged as part of the operations described in the permit application. The "digester area" where the spill occurred apparently is a part of the "pulp preparation" operation. *See, e.g.*, Tr. at 60-61, 93-96; Ex. R-2 (line drawing). Nothing in the line drawing KPC constructed in response to application item II-A (which requires applicants to submit a line drawing of the water flow through the facility)[44] indicates that magnesium bisulfite was to be part of the flow of wastewater from the pulp preparation operation.

Likewise, in response to item II-B (which required a "general" description of all operations contributing wastewater to the effluent) KPC identified the "Pulp Bleaching & Formation" process area, and indicated that it contributed 18.4 million gallons of wastewater to outfall 001 on a daily basis. *See* Ex. R-2 at page 1 of 4. Again however,

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was not one which could be reasonably anticipated or defended against." *Id*. at 30. However, we believe that the evidence regarding spill control technology is relevant because it shows that the Region did not expect for pulp mills, in the event of a spill, to discharge untreated chemicals into receiving waters, and thereby substantiates the Presiding Officer's finding that the Region did not intend to cover the cooking acid discharge in the permit.

[43] Although in response to item V-B of the application KPC did acknowledge that it discharged magnesium and sulfite (s*ee* Ex. R-2 at page V-2), the Presiding Officer found, based on hearing testimony, that this response was insufficient to give notice that KPC intended to discharge magnesium bisulfite. Init. Dec. at 24. According to the hearing testimony, magnesium bisulfite is not simply the combination of magnesium and sulfite, because "bisulfite" is a separate, chemically distinct compound from "sulfite." Tr. at 106-107, 124-125.

[44] For the pertinent text of item II-A, *see infra* note 51. For the text of the regulation corresponding to item II-A, *see infra* note 52.

there is nothing in that "general" description indicating that cooking acid would be discharged under any circumstances. In short, there is nothing in the application which could have or should have put Region permitting authorities on notice that KPC would discharge cooking acid (magnesium bisulfite).[45]

Finally, the evidence of record plainly establishes that if the Region had known that cooking acid might be discharged, it likely would have prohibited such a discharge. Mr. Bodien testified as follows:

> Q: Had KPC put in their permit application that they would be discharging large quantities of cooking acid, what would you have done?
>
> A: It would have been specifically addressed, probably it would have been prohibited. There would be no reason that we would have allowed such a discharge. It wouldn't have been in the interests of the company to do that, it wouldn't have been in the interests of the environment to have that type of discharge to the receiving water.

Tr. at 67.

Carla Fisher, an experienced Region permit writer who assisted in drafting a subsequent NPDES permit for KPC, also testified that she would have prohibited the cooking acid discharge if KPC had requested permission to make it. *Id*. at 126.

In sum, the fact that the Agency clearly disapproved of the discharge of spilled chemicals, that there were alternative methods of clean-up available which were being used by other mills in KPC's point source category, that the Region could not have anticipated that KPC would discharge a valuable raw material which it ordinarily recycled, and that KPC did not indicate during the application process that it intended to discharge cooking acid, all combine to show that the Region did not implicitly intend to include the cooking acid discharge within the scope of the permit, as alleged by KPC.

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[45] We do not mean to imply that KPC's responses to these specific application provisions were inaccurate or incomplete in describing KPC's pulp preparation process. At the time the application was prepared, KPC may not have anticipated a discharge of cooking acid. Rather, we highlight these responses merely to illustrate that there was nothing in the application itself which reasonably could be interpreted as putting the Region on notice as to an intent to discharge cooking acid.

Despite this plain evidence that Region permitting authorities did not intend to include the cooking acid discharge within the scope of the permit, KPC nevertheless insists that because the Agency recognized that spills contribute to a pulp mill's effluent, Region permitting authorities should have been aware of the possibility that cooking acid might be discharged into receiving waters. KPC Br. at 25, 27.[46]

We find this argument unpersuasive. The mere fact that the Agency knew about *spills* does not mean that it intended to permit the *discharge* of spilled chemicals. As we noted earlier, Agency regulations make it clear that hosing spilled chemicals down through floor drains and out into receiving waters was generally *not* an acceptable practice. *See* comment to 40 C.F.R. § 122.15(g)(3) (1979); *see also* 44 Fed. Reg. at 32,907. This is especially so here, since KPC had other options for cleaning up the spill rather than hosing it down through the floor drains.[47]

Further, even if the cooking acid *discharge* could properly be characterized as a "spill," it is apparent from Agency development documents that the spills about which the Agency was aware were those resulting from "breakdown of equipment, * * *, power failures, and grade changes." Draft Dev. Doc. at 236. The development documents therefore support the view that the Region was on notice of spills which might occur as a result of equipment or process malfunctions.

Clearly, the spill in this case was not the result of a breakdown of equipment or process malfunction, but was instead caused by human error. There is no evidence in the development documents or elsewhere in the record that the Agency intended to include human

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[46] KPC observes: "[c]onsidering that the coauthor of the development documents was also the permit writer and testified that he had relied on the development documents in drafting the permit, the [A]gency cannot say that it did not know that spills would occur at the KPC facility." KPC Br. at 27.

[47] We do not agree with the Presiding Officer's finding that "it was not shown that other methods of clean up were feasible" (Init. Dec. at 43), since the evidence of record shows that other pulp mills had installed and were using spill control technology at the time of the cooking acid incident. *See* Tr. at 65. Certainly at the moment the spill occurred KPC did not have many other "feasible" alternatives for cleaning it up, since it had not installed the available spill control technology. However, we see nothing to indicate that KPC could not have implemented some form of spill control or containment method *before* the spill occurred, since, as KPC itself argues, there was a known potential for spills at pulp mills. *See* KPC Br. at 25-27. While adherence to spill containment procedures may not have prevented the spill itself, which was accidental and caused by human error, it may well have prevented the cooking acid from being discharged untreated into Ward Cove.

error-based spills as permissible discharges in its NPDES permits. In fact, Agency regulations suggest otherwise.[48] Since the cooking acid discharge cannot properly be characterized as a simple "spill," and further, even if it could be so characterized, it was not the type of spill which the Agency intended to cover, we reject the notion that because the Agency knew about the occurrence of spills generally in pulp and paper mills, the Region therefore intended to include the cooking acid discharge within the scope of KPC's permit.

KPC next contends, relying on Agency development documents, that the Region lacked authority to exclude the cooking acid discharge from the permit, because "the database and statistical analysis used by EPA in developing the effluent limitations guidelines accounted for discharges such as spills." KPC Br. at 27.[49] However, even if discharges from spills caused by human error were taken into account in developing effluent standards (and we find nothing in any of the development documents made a part of the underlying record confirming that they were), this is irrelevant. KPC's liability for the cooking acid discharge is based upon making a discharge not covered by its permit, not upon exceeding effluent limits derived from such standards. We therefore reject this contention.[50]

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[48] For example, under the 1980 version of 40 C.F.R. § 122.60(h) (now codified at 40 C.F.R. § 122.41(n)) an "upset" excused discharges in excess of effluent limits only under certain conditions. Equipment and/or process malfunctions caused by human error were expressly excluded from the "upset" defense: "[a]n upset does not include noncompliance [with permit effluent limitations] to the extent caused by operational error, * * *, or careless or improper operation." 40 C.F.R. § 122.60(h)(1) (1980). Since the Agency did not regard equipment malfunctions caused by human error as a viable defense to effluent limitations violations, there is no reason to believe the Agency would have permitted discharges resulting from spills simply because the spills were caused by human error.

[49] The development document pages KPC cites to support this contention do not appear to be part of the record.

[50] We also reject KPC's contention that the cooking acid discharge did not constitute a CWA violation because it did not cause the permit's pH effluent limits to be exceeded. KPC Br. at 22. Effluent limitations are only one of several elements that need to be evaluated to determine whether there has been a CWA violation. *See, e.g., Carr v. Alta Verde Industries*, 931 F.2d 1055, 1060 & n.3 (5th Cir. 1991) (permit is not "superfluous" once effluent limits are satisfied because reduction of water pollution is achieved by compliance with applicable water quality standards, treatment standards, and schedule of compliance standards, in addition to compliance with effluent limitations). Here, the focus is upon KPC's discharge of unpermitted substances, not upon effluent limitation exceedances.

Since effluent limit exceedances are not at issue, *In re Union Oil Co. of California*, EPA Decision of the General Counsel, #57 (Mar. 16, 1977), cited by KPC (*see* KPC Br. at 27), is inapposite. That case focuses upon permit provisions which prohibit exceedances of *effluent limitations* during upsets, breakdowns, and equipment malfunctions.

KPC then advances a series of contentions in which it attempts to show that it was not required by the application or by Agency regulations to identify the cooking acid discharge. KPC Br. at 23-26.

First, KPC assigns great significance to the fact that item II-C of the application expressly instructs applicants *not* to identify spills. Item II-C provides in pertinent part: "[e]xcept for storm runoff, leaks, or spills are any of the discharges described in items II-A or B intermittent or seasonal?"[51] KPC claims that "this provision only makes sense if at the time of promulgation EPA had already considered spills containing conventional pollutants to be covered by permits." KPC Br. at 24.

As we have already discussed, the cooking acid ended up in Ward Cove not as a result of the accidental *spill* but because KPC *deliberately discharged* the chemical by hosing it down through the floor drains in the digester area. *See* Tr. at 64-65. Consequently, KPC's arguments as to the interpretation of application provisions pertaining to *spills* is of questionable relevance.

Moreover, we are not persuaded that item II-C can fairly be interpreted in the manner suggested by KPC, because the discharges required to be identified under item II-C are merely a subset of those required to be identified under items II-A and II-B, which require permittees to identify all discharges from all processes and operations. Specifically, it is clear from the regulations which correspond to application items II-A and II-B[52] that *all* processes, operations and produc-

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[51] Item II-A requires applicants to provide a line drawing depicting the flow of all water through the applicant's facility, including "sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B." Ex. R-2 at page 1 of 4. Item II-B requires applicants to describe in general terms "all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff * * *." *Id.*

[52] Items II-A, II-B, and II-C in KPC's permit application correspond directly to 40 C.F.R. § 122.53(d)(2), (3) and (4) (1980), currently codified at 40 C.F.R. § 122.21(g)(2), (3) and (4). Section 122.53(d)(2), which corresponds to item II-A, provides in pertinent part:

> *Line Drawing.* [Provide a] line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under paragraph (d)(3) of this section.

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tion areas that contribute wastewater to the effluent are required to be identified under those two provisions. Item II-C relates only to a subset of the discharges required to be described in II-A and II-B. It specifically asks, "are any of the discharges *described in items II-A or II-B* intermittent or seasonal?" (emphasis added). Admittedly, spills are not required to be identified in the more narrow listing of intermittent and seasonal discharges. However, there is nothing in either item II-A or II-B which indicates that spills are *excluded* from the discharges required to be identified under those provisions.[53] Thus, even if, as KPC argues, the cooking acid discharge was not required to be disclosed under item II-C, this does not mean that it was not required to have been disclosed under either item II-A or II-B.[54]

Next, KPC observes that 40 C.F.R. § 122.21(g)(7)(iv) requires permittees to report the discharge of certain hazardous substances and asbestos, including those from spills and leaks, while not requiring the

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Section 122.53(d)(3), which corresponds to Item II-B, then provides in pertinent part:

> *Average flows and treatment.* [Provide a] narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and stormwater runoff; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge.

Finally, the regulation corresponding to item II-C, section 122.53(d)(4), provides:

> If any of the discharges described in paragraph (d)(3) of this section are intermittent or seasonal, [provide] a description of the frequency, duration and flow rate of each discharge occurrence (except for storm water runoff, spillage, or leaks).

[53] We note that elsewhere in the regulations when the Agency intended to waive permitting requirements, it did so expressly. *See, e.g.*, 40 C.F.R. § 125.4 (1975) (exempting certain categories of point sources from the permit requirements of CWA § 402); *see also* 40 C.F.R. § 122.3 (1997) (providing that certain discharges, including those incidental to the normal operation of a vessel, do not require an NPDES permit). We thus find it significant that discharges from spills of conventional pollutants are not expressly excluded from the permitting requirements of the NPDES program. Since the Agency did not expressly exempt discharges resulting from spills from the permitting requirements of the NPDES program, as it clearly could have, we decline to accept KPC's interpretation of item II-C that the Agency intended to exclude such discharges by implication.

[54] We acknowledge that there appears to be nothing in the application that *specifically* requires KPC to disclose potential spills of nonconventional pollutants, and that this fact is subject to competing interpretations. However, in our view, the Region's and Agency's *expectations* about spill management in pulp mills, coupled with the fact that KPC did not disclose during the application process the potential for the discharge of cooking acid, are sufficient to negate any implication that the Region intended to cover cooking acid in the permit.

reporting of spills of conventional pollutants, such as cooking acid. KPC Br. at 23. KPC offers this circumstance to support its claim that "spills discharged from permitted outfalls are implicitly covered by permits." *Id*. Again, however, when considered in context this regulation does not have the significance KPC assigns to it. As noted above, items II-A and II-B, in conjunction with the regulations corresponding to those provisions, require permittees to report *all discharges*. The inclusion of an additional provision requiring more specificity as to the potential discharge of hazardous substances does not negate the broader disclosure requirements set forth in sections 122.53(d)(2) and (3), as discussed in the preceding paragraphs.

Finally, KPC attempts to make something of the fact that the permit does not contain a best management practices ("BMP") provision requiring KPC to clean up industrial spills. KPC Br. at 26. Specifically, KPC implies that no BMP was included in the permit because the Region intended to permit the discharge of spills such as cooking acid.[55] However, the absence of a BMP provision lacks the significance that KPC ascribes to it.

Under the NPDES regulations in effect at the time KPC submitted its permit application in 1981, permit writers had the authority to require BMP provisions where "the [best management] practices were reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." 40 C.F.R. § 122.62(k)(3) (1980).[56] Clearly then, in order to impose a BMP, the Region would have had to have some knowledge about KPC's operations which indi-

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[55] We gather from the discussion at pages 25-27 of its brief that KPC's absence-of-BMP observation is somehow linked to its claim that the Region intended to include the cooking acid spill within the scope of the permit, although KPC does not make this argument outright.

[56] Section 122.62(k) (now codified at 40 C.F.R. § 122.44(k)), provided in pertinent part:

> Each NPDES permit shall include conditions meeting the following requirements when applicable.
>
> * * * * * * *
>
> (k) *Best management practices* to control or abate the discharge of pollutants when:
>
> > (1) Authorized under section 304(e) of CWA for the control of toxic pollutants and hazardous substances * * *,
> > (2) Numeric effluent limitations are infeasible, or
> > (3) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of CWA.

cated that effluent limitations might potentially be exceeded, or that KPC was otherwise likely to violate the CWA, absent BMP provisions.

Here, none of the violations at issue in this lawsuit have to do with violations of effluent limitations. Therefore, the portion of section 122.62(k) permitting the Region to impose a BMP to achieve effluent limitations was never at issue.

Further, as we have demonstrated, the Region had no reason to suspect that KPC, contrary to its own practices and in violation of the management practices recommended by the Agency, would deliberately discharge spilled chemicals by washing them down through floor drains. Thus, at the time it issued KPC's permit in 1984, the Region had no reason to include a BMP relating to cooking acid spills, to "carry out the purposes and intent" of the Act. In fact, Region permit writer Carla Fisher testified that if she *had* known KPC intended to discharge spilled cooking acid, she *would* have included a BMP in the permit. Tr. at 126. We therefore reject KPC's contention that the absence of such a provision somehow demonstrates that the Region intended to permit the cooking acid discharge.[57]

Thus, none of the application provisions or regulations that KPC has identified supports its claim that the cooking acid discharge was implicitly included in the permit.

KPC's final argument is that requiring it to identify the cooking acid spill as a potential discharge during the application process violates fair notice and due process, because the Agency did not issue express guidance requiring such disclosure until 1994, when the Agency issued the Permit Shield Policy. KPC Br. at 28-31 (citing Permit Shield Policy). This argument is devoid of merit.

As a preliminary matter, KPC does not appear to have squarely raised this "fair notice" contention in the proceedings before the Presiding Officer,[58] in which case, we need not consider it. *See In re*

[57] In fact, although spill control technology was not required, the Agency presumed that dischargers in KPC's point source category were utilizing this technology to control spills. *See, e.g.* Tr. at 65 (Mr. Bodien testified: "[m]ost mills * * * will provide some type of spill control, ponding or tankage, in order to divert those types of spills into [treatment] systems."); *see also* Draft Dev. Doc. at 510 (describing spill collection methods utilized in pulp and paper mills).

[58] Although KPC did make due process/fair notice arguments in its post-hearing briefs, none focused on the Permit Shield Policy. *See, e.g.*, Respondent's Post-Evidentiary Hearing Brief at 21-22 (Dec. 22, 1992).

James C. Lin & Lin Cubing, Inc., 5 E.A.D. 595, 598 (EAB 1994) (issue raised for first time on appeal will not be considered if it could have been, but was not, raised below).

Further, even if the "fair notice" argument is considered to have been raised below, KPC has not identified any appealable error, since the Presiding Officer did not rely on the Permit Shield Policy in determining KPC's liability for the cooking acid spill,[59] nor do we.

Finally, KPC's contention simply is not true. As demonstrated earlier, KPC's disclosure obligations arose from regulations and application provisions which were in effect at the time KPC filed its 1981 application. Thus, KPC was, or should have been, on notice of its obligation to disclose discharges such as the one at issue here well before 1994.

Since the Region did not expect that KPC would discharge a spilled chemical, and since KPC did not disclose the potential for the discharge of cooking acid, we hold that the cooking acid discharge was not within the scope of the permit, and was therefore in violation of the CWA.

2. *Sludge*

The Region alleged and the Presiding Officer found that KPC's discharge of sludge from the aeration basin beginning on August 16, 1989, violated Section III.F of the permit, which prohibits the discharge of pollutants removed from wastewater during the course of pollution treatment. KPC contends that Section III.F does not apply because the discharge was permissible under permit Section III.G, which allows pollution treatment equipment to be bypassed for "essential maintenance." KPC Br. at 31.[60]

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[59] The Presiding Officer's finding of liability was based on two factors: (1) his determination, from analysis of Agency regulations and pertinent judicial precedents, that KPC had not complied with the Agency's requirements for disclosure of discharges (*see* Init. Dec. at 23-24, 27); and (2) evidence in the record showing that the spill could not have been anticipated or taken into account by the Region when drafting KPC's permit (*id.* at 29-30). The Permit Shield Policy is not even mentioned in the Initial Decision.

[60] KPC's claim that the sludge discharge did not cause effluent limitations to be exceeded (*see* KPC Br. at 31) is irrelevant in the context of the violations alleged in this case. As we observed earlier in this decision, the mere fact that effluent limitations were not exceeded does not relieve KPC of liability under the CWA for an unpermitted discharge. *See supra* note 50 and accompanying text. Further, because, as demonstrated below, the sludge discharge does not fall

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Section III.F of the permit provides:

> Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

Section III.G.1 of the permit provides, in pertinent part:

> Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation.

Although the permit does not define "essential maintenance," the Agency clearly defined the term in the preamble accompanying the 1984 publication of 40 C.F.R. Section 122.41(m),[61] the regulation upon which Section III.G.1 is based:

> [F]or purposes of this section, it is necessary to distinguish between maintenance that is "essential" and that which is routine. * * * Industrial facilities usually experience periods of nonprocess operation during which the facility operator can carry out the recommended maintenance procedures contained in the operation and maintenance manual for the facility and/or maintenance advised by the design engineer. Maintenance that can be performed during periods of nonprocess operation * * * is considered to be routine maintenance, not essential maintenance. However, repairs and maintenance that cannot wait until the production process is not in operation would be deemed essential. If, for example, the seal on a valve malfunctions or a pipe bursts during production hours at an industrial facility and the facility operator bypasses that particular unit process in order to perform corrective maintenance, such maintenance would be considered essential.

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within the definition of "essential maintenance," and therefore was not a lawful bypass under permit Section III.G.1, the issue of whether the discharge also violated effluent limitations is immaterial.

[61] With respect to the subsection covering bypasses for essential maintenance, the current version of section 122.41(m) is identical to the 1984 version identified in the text.

49 Fed. Reg. 37,998, 38,037 (Sept. 26, 1984).

The evidence of record establishes that the sludge discharge occurred when the mill was shut down to conserve water during a drought, and that KPC took advantage of this "down" time to do maintenance work on some of its pollution treatment equipment, including the repair of piping in the aeration basin. Tr. at 231-233. In order to gain access to the piping, which was located in the bottom of the aeration basin, KPC drained the contents of the basin, thus discharging the sludge. *Id.* at 232. The Presiding Officer found that since the aeration basin repair which resulted in the discharge of sludge was clearly undertaken during a period of "nonprocess operation"—the mill was shut down due to the drought, not due to equipment malfunction—the maintenance at issue was routine, not "essential." Init. Dec. at 32-33. The Presiding Officer therefore found that the sludge discharge, which resulted from this non-essential maintenance, was not permitted under Section III.G.1. *Id*. We concur, and conclude that the sludge discharge was therefore subject to and prohibited under Section III.F.

KPC contends that Section III.F cannot take precedence over Section III.G of the permit, since Section III.F was not adopted pursuant to official Agency rulemaking, whereas Section III.G is a required provision mandated by Agency regulations. KPC Br. at 32. Therefore, KPC contends, "the [R]egion was without authority to limit or prohibit discharges associated with 'essential maintenance.'" *Id*.

The origins of Sections III.F and III.G. are irrelevant for present purposes. While we recognize, as does the Region (*see* EPA's Response Brief to Respondent's Appeal of Initial Decision to the Environmental Appeals Board at 16-17 (Nov. 27, 1996) ("Reg. Reply Br.")), that if the sludge discharge had been undertaken pursuant to a lawful bypass under Section III.G, then Section III.F would not be triggered, that is not the case here. As demonstrated, the piping repair which led to the sludge discharge was not "essential maintenance," and for this reason the sludge discharge is not excusable under Section III.G.1, the sole clause of the bypass provision upon which KPC relies to exclude the sludge discharge.[62] Therefore, Section III.F does apply and prohibits the bypass.

[62] KPC apparently has abandoned its contention in the proceedings below that the sludge discharge was an allowable bypass under Section III.G.3.a(2) (*see* Init. Dec. at 33), since KPC did not raise this argument on appeal.

KPC next asserts that it should not be penalized for the discharge because both Section III.F and Section III.G are so vague that KPC had no notice that the discharge was prohibited. KPC Br. at 33-36. These arguments lack merit.

Specifically, KPC contends, citing no authority whatsoever, that the Agency's definition of "essential" is "at odds with the common perception that most if not all maintenance of pollution control facilities is essential to ensure longterm efficient operation." *Id*. at 32. According to KPC, the Agency's definition of "essential maintenance" really means "emergency maintenance." *Id*. at 33. Since KPC could not have guessed from the text of Section III.G.1 that only bypasses undertaken as a result of "emergency maintenance" were permitted, KPC's argument runs, KPC should not be penalized for the sludge discharge. *Id*. at 32-34.

We are unpersuaded by this effort to create ambiguity where none exists. KPC has not argued that a discharge resulting from maintenance undertaken during weather-related "down" time fits the definition of "essential maintenance" articulated by the Agency. KPC merely argues for an alternative, all-encompassing, definition. However, given the fact that the Agency's comments clarifying the meaning of "essential maintenance" were published in the *Federal Register* five years before the discharge at issue, KPC can scarcely argue that it did not have adequate notice that its discharge would not be considered "essential" as that term was used in the underlying regulation, and thus the discharge would not be excused as a lawful bypass under permit Section III.G.1.

As its final argument in defense of the discharge of sludge, KPC claims that permit Section III.F, entitled "Removed Substances," is vague and ambiguous when applied to the process which takes place in the aeration basin. KPC Br. at 35. Specifically, although KPC acknowledges that the intent of Section III.F is to prohibit permittees from "reintroduc[ing] solids to the wastewater once they have been removed from a treatment system," (*id*. at 35-36), KPC nevertheless contends that Section III.F did not prohibit the sludge discharge in this instance because the material in the aeration basin technically was not "removed substances," but was instead "generated and recirculated solids that have not yet been removed." *Id*. at 36.

We find this argument to be devoid of merit. Permit Section III.F plainly states that "*sludges * * * removed during the course of treatment or control of wastewater*" shall not be discharged to navigable waters. (Emphasis added). The Presiding Officer specifically found

that the material discharged from the aeration basin had been *removed in the course of treatment*: "[t]he sludge in the aeration basi[n] would not have been there had the wastewater it settled from not been sent through the aeration basin as a part of the secondary wastewater treatment. It follows, therefore, that the sludge was removed from the wastewater in the course of treatment or control of the wastewater." Init. Dec. at 32. Since this finding is supported by uncontroverted hearing testimony,[63] the discharge was clearly prohibited under permit Section III.F.[64]

Clearly, the sludge discharge did not constitute "essential maintenance" as that term is defined in the NPDES regulations. It is also clear that the sludge discharge directly contravened permit Section III.F, which unambiguously prohibits the discharge of sludges removed during the course of treatment. We therefore affirm the Presiding Officer's finding that the sludge discharge was in violation of the CWA.

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[63] Specifically, in describing the process which takes place in the aeration basin, Mr. Bodien testified that microorganisms in the aeration basin consume pollutants from incoming wastewater. Tr. at 33-34. The mixture containing the microorganisms is then transferred to the settling tanks, where the solids, or sludge, settle to the bottom, and the fluid which does not settle goes out into the receiving water. *Id*. at 34. The sludge in the settling tanks is then *recirculated* to the aeration basin in order to continue the cycle of treatment. Tr. at 33-37. As Mr. Bodien explained in his testimony:

> Q: Is you[r] testimony that the majority of the solids generated in the aeration basin are settled out in the settling tank?
>
> A: The majority are settled out. Approximately three percent actually go out with the effluent. *Ninety-some percent are returned in the return sludge to the aeration basin*.

Id. at 37 (emphasis added).

At the time the sludge was discharged by KPC in August, 1989, the treatment system was shut down so there was no incoming wastewater. Tr. at 233. Clearly, then, the material remaining in the aeration basin would have been sludge which had been previously removed during the course of treatment.

[64] KPC attempts to bolster its vagueness argument with Mr. Bodien's testimony that under certain circumstances, the discharge of material resembling removed sludge would not be considered a violation of Section III.F. *See* Tr. at 72-73, 75. However, Mr. Bodien was careful to explain that the discharge of such material was excusable only if it was undertaken *after pollution treatment*, because, in that instance the discharger would have done everything in its power to ensure the removal of solids. *Id*. at 73. This testimony does not exonerate KPC's discharge here, because, in draining the sludge from the aeration basin, KPC bypassed the settling tanks. Init. Dec. at 11, 16. Thus, the sludge discharge at issue here clearly was undertaken after eliminating, rather than in the course of applying, pollution treatment equipment.

D. *Penalty for Discharges*

Except to the extent that a general objection to the penalty may be inferred from KPC's challenge to the Presiding Officer's liability findings, KPC has not appealed the $23,000 penalty assessed against it. Nor, as mentioned earlier, has the Region appealed the Presiding Officer's reduction in the penalty for the cooking acid discharge. *See supra* note 23. Since neither party has appealed the amount of penalties associated with the flocculent, cooking acid or sludge discharges, and because we determine that the assessed penalty for these discharges is consistent with the requirements of CWA section 309(g),[65] we affirm the $23,000 penalty for these three violations of the CWA.

III. *CONCLUSION*

For the foregoing reasons, we affirm the Initial Decision as to the matters raised in this appeal, and assess a penalty of $23,000 against KPC. KPC shall pay the full amount of the civil penalty within sixty (60) days of the date of receipt of this decision. Payment shall be made by forwarding a cashier's check, or certified check in the full amount payable to the Treasurer, United States of America, at the following address:

EPA-Region X
Regional Hearing Clerk
United States Environmental Protection Agency
P.O. Box 36903
Pittsburgh, PA 15251-6903

So ordered.

[65] The requirements of section 309(g) are set forth *supra* note 16.