ILLINOIS POLLUTION CONTROL BOARD
November 22, 1974

LACLEDE STEEL COMPANY	)	
v.	)	PCB 72-425 72-505
ENVIRONMENTAL PROTECTION AGENCY	)	

MR. JOSEPH H. WEYHRICH, Lewis, Rich, Tucker, Allen & Chubb appeared on behalf of LaClede Steel Company
MR. LARRY R. EATON, and MR. DELBERT HASCHEMEYER, Assistant Attorney Generals, appeared on behalf of the Environmental Protection Agency

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):

This opinion is in support of an order entered November 14, 1974 which granted variances with conditions.

LaClede Steel Company (LaClede) requests a variance from the Illinois Sanitary Water Board Regulations (SWB), the Environmental Protection Act (Act) and the Water Pollution Regulations of the Illinois Pollution Control Board (Water Regulations) in order that it may continue to discharge contaminants from its steel mill during the time that it is constructing a treatment system.

LaClede filed a variance petition, PCB 72-425, seeking a variance from the SWB Rules and Regulations on October 30, 1972. The Agency filed a Motion to Dismiss this variance petition on November 17, 1972. The Board on November 21, 1972 denied the Agency's Motion to Dismiss and ordered LaClede to amend its variance petition so as to comply with the Board's Procedural Rules. The Agency filed a Motion to Reconsider this denial on December 5, 1972. LaClede filed an Amended Variance Petition on December 8, 1972 which sought a variance from SWB-13 until July 31, 1973. The Board denied the Agency's Motion to Reconsider on December 12, 1972 because LaClede's Amended Variance Petition conformed to the Board's Procedural Rules and satisfied the Agency's original grounds for the Motion to Dismiss. On December 20, 1972, LaClede filed a new Petition for Variance, PCB 72-505, which requested a variance from Water Regulation 903(a) which required LaClede to obtain an operating permit for its lagoon and tube mill discharges after December 31, 1972; Water Regulation 921(d) which required LaClede to file an approved Project Completion Schedule prior to obtaining an operating permit; and Water Regulation 1002 which requires that a Project Completion Schedule show compliance with the applicable deadlines. LaClede, in PCB 72-505, sought a variance for

one year. The Agency filed a Recommendation on February 28, 1973 to deny the variance request because LaClede had not shown that its present inability to meet these standards was not due solely to its own inaction. LaClede filed a new Amended Consolidation Petition for a Variance, PCB 72-425 and 505, on May 1, 1973 requesting a variance from Water Regulations 921, 404(b) 404(f), 408 and 203.

The Agency filed a Recommendation to LaClede's new Variance request on September 20, 1973. The Agency recommended that LaClede's request for a variance from Water Regulation 921(d) be dismissed as moot and the request for a variance from Rules 203, 404 and 408 of the Water Regulations be denied because LaClede's variance petition sought a shield from prosecution based on past inaction and was therefore a self-inflicted hardship. The Agency further stated that LaClede's request that Shield's Branch be designated Secondary Contact and Indigenous Aquatic Life Waters (Secondary Contact) pursuant to Rule 302(k) was not a proper request. On December 7, 1973 the Agency filed an Amended Recommendation setting forth the previous objections and recommended that in the event a variance is granted, it should be limited solely to those rules from which a variance was requested in LaClede's Amended Consolidated Petition for Variance dated May 1, 1973. Three days of hearings were held in December, 1973 in Alton, Illinois. Following the hearing the parties submitted both briefs and reply briefs. LaClede filed a Motion for Oral Argument which the Board denied on February 28, 1974.

LaClede operates a steel mill located within the City of Alton, in Madison County, Illinois. LaClede has been in operation at this site since 1915 (R. 44). LaClede employs approximately 3,000 people with an annual payroll of $30 million dollars at the Alton plant (R. 31-33). LaClede produces semi-finished steel products, such as ingots and billets, and finished steel products, such as wire, pipe, tubing and reinforcing bars, for the manufacturing and construction industries (R. 20-26). In producing the 800,000 tons of steel annually, LaClede uses approximately 44 million gallons of water per day (mgd) of which approximately 38 mgd is recycled within the plant (R. 59). Approximately 3 mgd is lost through evaporation (R. 85) and about 3 mgd is discharged through the waste treatment system (R. 85, 117).

LaClede's wastes are discharged into an "M" shaped lagoon which provides some settling and an unspecified detention time (R. 79), and where caustic is added to neutralize the acid contents. (R. 79, 123). This lagoon and caustic additive process has been in operation since approximately 1965 (R. 123). Other portions of the wastewater system, such as the open-hearth pond, date back much further (R. 126). Water quality tests, conducted by LaClede

before construction of the acid reclamation system, show the following effluent characteristics (R. 178 and LaClede's Exhibit 16, p. 1);

Parameters	Milligrams Per Liter (mg/l)
Iron (total)	400
Lead	0.3
Chromium (total)	0.1
Manganese	3.6
Zinc	10
Suspended solids	195

The Agency monitored LaClede's effluent and submitted the following chemical characteristics (Agency Recommendation p. 2);

Parameters	Milligrams Per Liter (mg/l)
BOD	8-1300
Iron	40-400
Lead	-------
Chromium (total)	-------
Manganese	2.0 - 4.2
Zinc	2.3 - 3.0
Suspended Solids	40-540
Oil	0-32
pH	4.7 - 6.3
Dissolved Solids	920 - 2000
Sulfate	1300
Ammonia	1.4 - 218

Both LaClede's and the Agency's effluent sampling were conducted prior to the time that LaClede had in operation an acid recovery system which should remove approximately 20,000 gallons per day of spent sulfuric acid, pickle liquor, (R. 117) from LaClede's effluent. This should improve the quality of the wastewater discharge (R. 180, 181). LaClede estimates that with the acid recovery system in operation, its effluent would have the following characteristics (LaClede's Exhibit 16);

Parameters	Milligrams Per Liter (mg/l)
BOD	12
Suspended solids	100
Iron (total)	40
Chromium (total)	0.15
Manganese	1.4
Zinc	1.3
Lead	0.25

The Agency has recommended that LaClede's variance petition be denied because LaClede's past inactions in treating its industrial waste (Agency Amended Recommendation p. 6). LaClede's position is that the first knowledge they had of any treatment requirement was contained in a letter from Mr. C.W. Klassen of the Agency dated January 19, 1971 (LaClede Exhibit 4), which advised them of PCB Regulation R70-3 requiring secondary treatment by December 31, 1973 (R. 86). However, LaClede did construct the "M" lagoon and neutralization facilities in 1966 (R. 79, 80). Apart from the lagoon and caustic treatment installation, LaClede had not conducted any additional water pollution control activities (R. 126-128).

Subsequent to January, 1971 LaClede installed a portable oil skimmer in the fall of 1972 to remove oil from various ponds located within LaClede's plant water system (R. 108). LaClede installed a permanent oil skimmer in May, 1973 at a cost of approximately $50,000 (R. 109-110). LaClede obtained the necessary construction and operating permits in September, 1973.

In September, 1973 the waste discharges from the tube mill were diverted to the plant's sewer system. This eliminated a second discharge pipe from LaClede's plant and provided lagoon settling for the tube mill discharge (R. 84).

LaClede designed and constructed an acid recovery system to treat the pickle liquor waste at an approximate cost of $950,000 (R. 113). As of the date of the hearing, construction of the actual equipment had been completed and pickle liquor from the wire mill was being treated (p. 6 LaClede Brief). By January, 1974 all other pickle liquor streams should be tied into the system (R. 111). LaClede applied for the necessary permits but the Agency has not approved the permits for the acid recovery system (R. 107-108). Engineers for LaClede could not give a monetary value for the recovery by-products obtained in the settling portions of LaClede's treatment system or for the acid recovery system (R. 134).

The Board, although sympathetic to the Agency's position that LaClede should not be granted a variance based on past inaction, finds that sufficient information was not presented to deny a variance request on this ground only. LaClede did construct the settling lagoon and caustic neutralization facilities in 1966. When confronted with the letter from Mr. Klassen, LaClede proceeded in an appropriate fashion to develop a wastewater treatment plan including the interim installation of oil skimming devices and the acid reclamation system.

The Board finds that LaClede's use of the entire seven-day 10-year low flow of the Mississippi River for calculating dilution values is not correct (R. 179, 215). LaClede did not submit any calculated water quality values at the edge of the applicable mixing zone, but rather based its water quality values on the entire ten year low flow volume in the Mississippi River (R. 179). Any requests for an extension of this variance must contain estimated water quality values at the edge of the applicable mixing zone.

The major issue presented in this variance petition is what regulations govern LaClede's effluent. Regardless of which of the two positions is chosen LaClede's effluent is in violation of the regulation which might be applied to it, even with oil skimming and acid recovery systems on line. LaClede's treatment system is scheduled for completion by October 1975. The treatment system that LaClede is proceeding to implement should result in compliance with the water quality standards that apply to dis-discharges into the Mississippi River (R. 179). LaClede estimates that the total cost of the system will be approximately $3.4 million dollars which does not include the cost expended for the oil skimming devices and the acid reclamation system (R. 113). The Agency maintains that since LaClede discharges into Shield's Branch, the Mississippi standards are not applicable.

Therefore, the Board must decide if LaClede's effluent is to be governed by the Mississippi discharge standards found in Rule 404 or the discharge standards applicable to Shield's Branch.

Detailed information was presented by both LaClede and the Agency concerning the status of Shield's Branch. The history of Shield's Branch gives some insight as to its characterization. Aerial photographs taken in 1941 (LaClede Exhibit 20a and 20 b) show Shield's Branch as it meandered downstream of the Owens-Illinois plant to the slough of the Mississippi River. Asked to describe the contents of the stream in those days, Mr. Sheppard, an Alton consulting engineer since 1921, stated:

> "In 1941 it (Shield's Branch) was carrying waste from Owens Illinois Glass Company, a stormwater from Shield's Valley Drainage Area of about 1500 acres, it was carrying a number of sewerways, that is sanitary waste from various sewers..." (R. 310).

By 1954 a levee had been constructed along the bank of the Mississippi which had the effect of isolating the slough area from the River itself (R. 311). Aerial photographs taken in 1955 (LaClede Exhibit 22a and 22b) showed the slough to be reduced to a single channel carrying the flow of Shield's Branch. At that time the channel entered the Mississippi through twin-60's culverts in the levee. These photographs also show that Shield's Branch has been straightened and channelized for a short distance upstream of where it enters the former slough area. The result of the levee was to effectively increase the length of Shield's Branch between Owens Illinois Plant and its discharge to the Mississippi. Finally, in 1963 the diversion dam was installed under Owens Illinois that was designed to divert all dry weather flow plus additional flow up to 2-1/2 times dry weather flow, to the Alton Sewage Treatment Plant (R. 306, 316). Mr. Sheppard estimates that sufficient rainfall occurs--somewhere in excess of 0.1 inch--so that the dam overflows approximately 50 to 60 times a year (R. 320). When this happens stormflow sewage, and industrial effluent enters the channel downstream of the dam (R. 326) but upstream of LaClede's outfall.

The hydrology of the area is shown in Agency Exhibit 3 and LaClede Exhibit 21. North (upstream) of Broadway Street, Shield's Branch is a small stream (Agency Exhibit 5 thru 9) fed continuously by a spring (R. 281) and by storm runoff during periods of precipitation (R. 319). The watershed of Shield's Branch, north of Broadway Street, appears to contain between 1300 and 1400 acres (Agency Exhibit 3). The record and exhibits show that for most of its length north of Broadway, Shield's

Branch is an unaltered waterway (Agency Exhibit 5-7). Approximately 2,000 feet north of Broadway Shield's Branch becomes a concrete channel and 1,000 north of Broadway goes underground until it emerges south of Broadway on the Owens Illinois property.

At a point underneath Owens Illinois, the diversion dam is located (R. 281). Other changes to the channel at Owens Illinois include a relocation of the original channel some 26 feet east (R. 323). This new channel is a concrete channel into which LaClede discharges. Several hundred feet downstream of LaClede's discharge point the concrete stops and the channel becomes a dredged and straightened version of the original channel. Mr. Sheppard testified that this "improved channel" was created to control erosion and that it takes the place entirely of the old channel (R. 323, 326). The distance from La Clede's discharge point to the twin sixties, the discharge point into the Mississippi River, is approximately one mile (R. 259).

Downstream of the diversion dam, the flow is almost entirely LaClede's plant effluent. In addition surface runoff from an area of about 174 acres drains into the stream at approximately the same point as LaClede's effluent (R. 340, 341). In addition, overflow which occurs during wet weather comes down the altered channel.

An Agency aquatic biologist testified that when LaClede's treatment plant will be completed and in operation, the water quality in the Shield's Branch downstream of the outfall of LaClede would be sufficient to support a balanced aquatic community (R. 293). He defined a balanced community of aquatic organisms as one where the preponderance or major abundance of organisms will be in favor of more intolerant (to environmental toxicants such as industrial or municipal wastes) forms (R. 293). While this was not contested by LaClede, no evidence was presented as to the expected DO level.

The question before the Board is whether LaClede discharges to the Mississippi River through an industrial sewer which is an extension of LaClede's treatment plant or whether LaClede discharges into Shield's Branch, a water of the State for regulatory purposes?

The Board has determined that the above question must be decided by closely examining each separate factual situation in light of general guiding principles set out in previous cases. "The Board feels that this question is such a variable nature that no hard and fast rule can be set down, and so the Board shall decide the case on its facts, and such other cases in the future will be decided on the merits of each case" (Central Illinois Public Service Company v. EPA, PCB 73-384, p. 3 (March 28, 1974)) (CIPS). When the Board decides that a body of water is not a water of the state, the Board is declining to extend the Board's regulatory power over the broad statutory grant of authority found by Section 11(a) of the Act.

The Board has considered the question of what constitutes a "water of the state" in numerous recent cases. In Alton Box Board Company v. EPA, PCB 73-140, 9-15 (August 9, 1973) (Alton), the Board held that the question present was whether "the receiving stream was the Mississippi River or a tributary to the Mississippi River known as Shield's Branch"(Alton, Supra at 9-18). The Board held that the Mississippi River effluent standards apply and that "Shield's Branch as it was once known no longer exists" (Alton, Supra at 9-19).

However, this determination was held to be of no precedential value in EPA v. Alton Box Board Company and LaClede Steel Company, PCB 74-51 (August 29, 1974). Information was presented to the Board, that Shield's Branch (or the "industrial ditch") did not flow directly into the Mississippi River but in fact had been impounded and reversed in flow. The impoundment drained some 7,200 feet upstream at the Wood River Drainage Ditch Alton pumping station where it was pumped over the Mississippi level.

> Because of this information, the Board finds that its previous ruling that Alton discharged directly to the Mississippi River is of no precedential value. The original decision that Alton discharged directly to the Mississippi River was correct based upon the information presented at the original hearing in PCB 73-140. However, this new information presented regarding the closing of the twin 60's does not support a determination that Alton discharges directly to the Mississippi River (EPA v. Alton and LaClede, supra, 5, 6, and 7).

EPA v. Alton and LaClede, supra, was an enforcement action which stemmed from H_2S emissions from the impoundment, or slough area, into which both Alton and LaClede discharge. The twin-60's, which provide the drainageway under the levee, had been closed by the Army Corps of Engineers (Corps). This resulted in the impoundment being formed, which reversed in flow and drained some 7,200 feet upstream at the Wood River Drainage District Alton pumping station where it was pumped over into the Mississippi River. The enforcement action was settled when Alton agreed to directly discharge its waste to the Mississippi River via a pipe, and when Alton and LaClede agreed to a program to remove or treat the accumulation of industrial sludge loaded in the impoundment area.

In addition to industrial effluent, during periods of high water the impoundment area contains significant amounts of water which seeps through the levee. Evidence presented in EPA v. Alton and LaClede, supra at 6, projected that during the months of January through June, the new twin-60's being constructed

by the Corps, which are supposed to drain the impoundment area during periods of low-flow in the Mississippi River, will be closed 25% of the time and during the month of April will be closed approximately 50% of the time.

Because LaClede's discharges into the same impoundment area via the drainageway in question -- Shield's Branch -- the Board's determination in PCB 74-51 removes the support of a previous determination in deciding whether the Mississippi River standards of those standards applicable to Shield's Branch apply.

LaClede Steel discharges into Shield's Branch approximately 2500 feet upstream from Alton Box Board's discharge (LaClede Exhibit 22a). Therefore Alton Box Board's discharge is in much closer proximity to the Mississippi River (prior to the closing of the twin 60's). However, mere proximity to a larger receiving stream does not warrant the application of the larger receiving stream's effluent limitations to discharges into small tributaries (Stepan Chemical Company v. EPA, PCB 73-184, January 24, 1974). In Stepan the Board granted a variance in order to allow the chemical company to construct a discharge line directly into the Des Plaines River, and remove its discharge from Cedar Creek, a small tributary to the Des Plaines River.

In Allied Chemical Corporation v. EPA, (PCB 73-382, 11-379 (Feb. 28, 1974)) the Board determined that in Allied's particular case the naturally occurring depression and its effluent flow should not be considered waters of the state and that Rule 408 should apply (Allied, supra 11-381). Allied discharged industrial waste through what the Board determined to be an industrial ditch or sewer for a distance of 2,500 feet directly to the Ohio River.

Allied Chemical owned the lands surrounding the ditch and had fenced the facility from public access. "It will be an explicit part of this order that the effluent waters shall not be used for any recreational, domestic animal watering, or irrigational purposes. Furthermore, the land surrounding the ditch shall remain closed to the general public. Should Allied decide to change the use of its land, the nature of the depression shall be re-evaluated." (Allied, Supra 11-381).

In Central Illinois Public Service Company v. EPA, PCB 73-384, 11-677 (March 28, 1974)(CIPS), the Board determined that McDavid Branch of the east fork of Shoal Creek is a water of the state and that "it is a natural accumulation of water that flows through the State of Illinois. Though it does not flow for the entire year, testimony by Richard Burkeson of Sargeant & Lundy Engineers stated, "the stream is not and was not navigable when CIPS built the Lake (R. 24), before that time he did notice that there was aquatic-based

life in the stream" (CIPS Supra at 677). The Coffeen Lake which was formed by damming McDavid Branch was held to be a water of the state in that it fit the definition of waters under the Act because it is "artificial and private"; and is wholly within the State (CIPS supra at 677). Coffeen Lake was characterized as a large accumulation of McDavid Branch which contains the aquatic life present in McDavid Branch (CIPS, supra at 4).

Section 12(a) of the Environmental Protection Act states that "no person shall cause, threaten, or allow the discharge of any contaminant into the environment in any state so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matters from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under this Act." Section 3(o) of the Environmental Protection Act and Rule 104 of Chapter 3, Water Pollution Regulations of Illinois, further define "waters" as "all accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof which are wholly or partially within, flow through, or border upon this State." It is apparent that the statutory definition of "waters" encompasses all waters within the State. Any regulatory scheme therefore is an administrative determination to limit this statutory broad definition.

Agency Exhibit 5 through 9 clearly show that the portion of Shield's Branch upstream from the diversion of the Alton Sewage Treatment Plant, is a small watercourse which, in its lower regions, has been channelized. These Agency Exhibits and testimony presented at the hearing lead the Board to the conclusion that this portion of Shield's Branch is a water of the state. Examining that portion of Shield's Branch downstream from the diversion dam extending to the slough area, the Board finds that this channel is a water of the State. Conversion to a concrete channel and channelization does not destroy the protection afforded a water of the State. The discharge of a large industrial water user's effluent into an intermittent stream does not change the stream's classification as a water of the State.

In addition, because the projected closing of the new twin-60's will result in the continuation of the impoundment of LaClede's discharge in what has been the impoundment area, the Board finds that LaClede should be required to meet those standards applicable to discharges into Shield's Branch not the Mississippi River.

For the above reasons the Board finds that Shield's Branch is a water of the State from the rock outcroppings which give rise to the initial flow in Shield's Branch to and through the point of the diversion dam, to and through the point of LaClede's discharge, to and through the point where Shield's Branch discharges into the slough or impoundment area, and to and through the point where Shield's Branch empties into the Mississippi River. Having found that Shield's Branch is a water of the State, the Board further finds that Shield's Branch is currently a water of the state downstream of the diversion dam located under the Owens-Illinois property.

To hold otherwise in this case--that the waters of Shield's Branch are no longer waters of the State, the Board would be embracing the concept that withdrawal of 2-1/2 times dry weather flow destroys or removes the protection afforded a water of the State. Water Pollution Rule 602(c)(2) requires that sewage treatment plants be capable of treatment up to 10 times dry weather flow by December 31, 1975. Thus, the Alton Sewage Treatment District would not be able to allow the continued overflow of combined sewage whenever flow exceeds 2-1/2 times dry weather flow in Shield's Branch and comply with Rule 602(c)(2). Federal grant regulations that govern cost effectiveness and Rule 602(b) of the Water Pollution Regulations require that excessive infiltration and storm water flows be prohibited. The Board notes that diverting the entire flow of the stream results in what may be characterized as "an excessive infiltration".

LaClede's argument that Shield's Branch no longer exists because of the channelization and construction of a concrete channel is rejected by the Board. To hold otherwise, the Board would be accepting the argument that merely channelizing or construction of a concrete culvert, reduces a stream from a water of the State to some nebulous lower classification. Not to have held that Shield's Branch was a water of the State, the Board would have had to find that the present channel of Shield's Branch was an industrial sewer. No other applicable classification exists except waters of the State and an industrial sewer. The Board, in League of Women Voters v. NSSD, PCB 71-12, 14, 1-369 (March 31, 1971), has held that a protected water of the State cannot be used as a treatment work. The only exception is for in-stream aeration provided for in Water Pollution Rule 104.

The legislature has determined that it is in the public interest of the health, safety, and general welfare of the people of the State of Illinois to restrict discharges of contaminants into waters (Section 2, Environmental Protection Act). A body of water, that is "a water of the State" should not be reduced to something less than a water of the State without action from the legislature. Shield's Branch prior to the diversion of dry weather flow to Alton Sewage Treatment Plant, channelization, construction of a concrete culvert, and discharges of industrial waste, was clearly a water of the State. It remains a water of the State for which the Board will apply regulatory protection.

The Board finds that Shield's Branch is currently an intermittent stream. Therefore, applying Rule 302(k), Shield's Branch could possibly be reclassified a Secondary Contact and Indigenous Aquatic Life Waters (Secondary Contact), because this waterway upstream from the slough would be dry approximately 300 days per year in the absence of LaClede's effluent.

Because the Board found that Shield's Branch continues to exist and is a water of the state, LaClede Steel Company has improperly used Rule 404(b) as the design criteria for its new treatment plant (R. 230). Shield's Branch is an intermittent stream, and is a potential secondary contact water.

An Agency aquatic biologist testified that when LaClede's treatment plant was completed and in operation, the water quality in Shield's Branch downstream of the outfall of LaClede would be sufficient to support a balanced aquatic community (R. 293). If water quality, after the projected removal of contaminants by LaClede's planned treatment plant, would maintain a diversified aquatic biota, the question remains if the physical aquatic environment is such that it would or would not maintain a diversified aquatic biota. Insufficient evidence was presented which would convince the Board to apply Rule 302(k). Shield's Branch or the impoundment area is currently extremely polluted due to discharges from Alton Box, LaClede and Owens-Illinois. Whether it will maintain a diversified aquatic biota absent contaminants remains to be proven once Alton discharges via a pipe to the Mississippi and the projected treatment systems are on line.

If reclassification were to be granted, the effluent limitations found at Rule 402 and 408 would have to be met because Rule 205 Restricted Use Standards through Rule 205(e) requires "concentrations of other substances shall not exceed the applicable effluent standards prescribed in Part IV." Currently, LaClede's discharge has to meet Rule 203(f) limitations because of the application of Rule 402 which prohibits the violation of water quality standard (Rule 203(f))even if the discharge was in compliance with the effluent standard found in Rule 408(a).

Regardless of reclassification, LaClede Steel must produce an effluent which satisfies the BOD and suspended solids standards found in Rule 404(f). LaClede's effluent must be treated to 4 mg/l of BOD and 5 mg/l of suspended solids. Dr. Tomlinson, LaClede's consulting engineer, testified that the proposed treatment system would not reach 4 mg/l of BOD. He testified that to meet the 4 mg/l BOD_5 and 5 mg/l suspended solids standard of Water Regulation Rule 404(f), would cost an additional $1.5 million dollars (R. 346). He further testified that he had not examined whether the designed treatment system would meet the Pfeffer standard of 10 mg/l BOD and 12 mg/l of suspended solids (Rule 404(f)(ii)) (R. 350).

An Agency aquatic biologist testified that when LaClede's proposed treatment was on line and producing the projected effluent found in LaClede Exhibit 16, that Shield's branch would support a balanced aquatic community (R. 293). While not controverted by LaClede, the record is absent as to the expected DO levels in Shield's Branch. Assuming this to be true, LaClede could qualify under the Pfeffer exception of Rule 404(f)(ii) and would

thus be limited to a 10 mg/l BOD and 12 mg/l suspended solids effluent restriction. LaClede currently projects that their treatment system will produce an effluent of 12 mg/l BOD and 5 mg/l of suspended solids (LaClede Exhibit 16). Dr. Tomlinson testified that he had not examined whether the treatment system could produce an effluent of 10 mg/l BOD (R. 305). He further stated that the plant was not designed for the 10-12 standard and it might or might not meet the 10-12 standard (R. 351). The Board finds that LaClede's discharge to Shield's Branch must meet the 4-5 standard of Rule 405(f) unless LaClede can demonstrate that under the Pfeffer exception it should be allowed a 10-12 effluent limitation.

While basing its projected treatment system on the wrong standard, LaClede has taken steps that will significantly reduce environmental consequences of its discharge. Therefore, the Board finds that to deny LaClede a variance would be unreasonable. The Board, therefore, will grant LaClede a variance from Water Rule 404(f), 408 and 203 in order to shield LaClede from prosecution while it is building its treatment system. However, this variance is premised on the requirement that LaClede develop a treatment system to meet the requirements of Rule 404(f)--an effluent with 4 mg/l of BOD and 5 mg/l of suspended solids--unless LaClede can demonstrate that Rule 404(f)(ii) should be invoked which would allow LaClede 10 mg/l of BOD. LaClede will also be required to maintain its present BOD discharge of 12 mg/l (LaClede Exhibit 16); a maximum suspended solids concentration of 100 mg/l (LaClede Exhibit 16, after acid recovery); and the continued operation of its oil separation facilities.

This Opinion constitutes the Board's findings of fact and conclusions of law.

Mr. Henss dissents. Mr. Marder will file a concurring Opinion.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion was adopted on the 22ND day of November, 1974 by a vote of 3-1.

Christan L. Moffett, Clerk
Illinois Pollution Control Board