

ILLINOIS POLLUTION CONTROL BOARD
September 23, 1983

IN THE MATTER OF:)
)
PETITION OF THE VILLAGE OF SAUGET) R81-12
AND CITY OF EAST ST. LOUIS RE:)
SITE-SPECIFIC COMBINED SEWER)
OVERFLOW TREATMENT)

Proposed Rule. First Notice.

PROPOSED OPINION AND ORDER OF THE BOARD (by J. Anderson):

PROCEDURAL HISTORY

This matter comes before the Board on the petition for site specific rulemaking by the Village of Sauget (Village), and the City of East St. Louis (City), filed September 30, 1980 as amended January 29, 1981, December 15, 1980 and August 2, 1982. The petition as amended seeks an exemption for discharges from the Village's proposed regional treatment plant from the requirements of 35 Ill. Adm. Code 306.302, 306.305 and 306.306 relating to treatment of combined sewer overflow (CSO) [formerly Rules 602 (a, c, d) of Chapter 3: Water Pollution, and from the effluent standards for BOD and TSS of Section 304.120(b) [formerly Rule 404(b)]. One merit hearing was held in this matter on June 23, 1981. An economic hearing was held June 2, 1982, at which the Department of Energy and Natural Resources (DENR) presented testimony of Linda Huff concerning the "Economic Impact Analysis of Combined Sewer Overflow Regulations On East St. Louis, R81-12", Doc. No. 82/08 (Ex. 14). The Illinois Environmental Protection Agency (Agency) participated in each hearing, and by way of public comment filed July 15, 1982 (PC 3) recommended that the Board grant site-specific relief from the CSO treatment requirements but deny relief from the effluent standards as unnecessary.

A brief overview of this action is given below, followed by a more detailed presentation of the issues raised in the proceeding.

Petitioners are units of local government situated in St. Clair County, Illinois, on the east bank of the Mississippi River. All wastewater within the East St. Louis sewer system is currently transported to the East St. Louis wastewater treatment plant. During periods of increased flow due to rainfall, wastewater is discharged directly to the Mississippi River.

In September, 1977, the Village of Sauget was designated as lead agency for the design, construction and operation of a Regional Wastewater Treatment Facility to provide primary and secondary treatment of the wastewater from the Cities of East St. Louis and Centreville, and the Villages of Sauget, Cahokia, Brooklyn, Allorton and National City (see Ex. 40).

Part of Sauget's responsibilities under the Step I Facilities Plan were to conduct a first flush analysis of the East St. Louis combined sewer system. According to Agency determinations any rainfall-related flows in a combined sewer system with levels of contaminants in excess of those concentrations expected on an average daily basis are deemed to be first flush flow. These flows normally have high concentrations of pollutants, (BOD₅, suspended solids, metals, etc.) which have accumulated in the system at times of dry weather. When resuspended from increased flow to the sewer system, the first flush is required under Section 306.305(a) to receive the same degree of treatment as dry weather flow. Compliance with Section 306.305(b) requires a minimum of primary treatment for not less than ten times the average dry weather flow. These flows are alleged to consist of approximately 20.9 million gallons, and 87 million gallons, respectively (see Ex. 14, "East St. Louis' First Flush Analysis for the American Bottoms Regional Treatment Wastewater Facility" conducted by Russell and Axon, Inc., July, 1980).

The Russell study concluded that the most cost-effective means of treating first flush flows would be to construct a 21 million gallon equalization basin to store the first flush and to provide subsequent transportation to the treatment facility. Total capital cost is estimated at \$9.2 million and annual operating costs at \$249,000.

The study further determined that primary treatment and disinfection of "10 times" average dry weather flow would require a facility with the capability of treating 87 million gallons. The most cost-effective approach was found to be the construction of a settling basin with a 21.8 million gallon capacity to provide one hour detention time for peak flow rates. Total capital cost is estimated at \$6.6 million and annual operating costs at \$312,000.

It is alleged that compliance with the combined sewer overflow treatment regulations is unreasonable in light of the minimal environmental damage expected. Due to the large dilution capacity of the Mississippi River, even at low river flow the concentration of BOD₅ is estimated to increase to 10.0 mg/l from 9.9 mg/l while total suspended solids (TSS) should actually decrease from 359.0 mg/l to 358.7 mg/l. Petitioners, therefore, allege that for all practical purposes no detectable environmental impact would result.

As an alternative to full CSO compliance, petitioners seek permission to continue to discharge as "overflows" the first flush of storm flows which would cause the treatment plant to operate beyond capacity. Such overflows would be passed through a bar screen facility.

The further Step 2 and 3 funding of the American Bottoms facility is dependent on resolution of the question of what level of CSO capture and treatment is to be required (see Ex. 7 and 10).*

THE TREATMENT PLANT

Plant Loadings and Operations

The present system at East St. Louis is a primary treatment plant, which has had serious malfunctions since 1980. The facilities consist of bar screens and primary clarifiers with no disinfection as of April, 1982. There are no facilities for treatment of combined sewer overflows.

The average wastewater flow of 18.5 MGD from East St. Louis has influent BOD₅ values of 225 mg/l and suspended solids of 658 mg/l according to the 1979 sampling by Russell and Axon. In March through December of 1980 the average effluent BOD₅ concentration was 180 mg/l and suspended solids concentration was reported as 260 mg/l. (However, during this six month period only a portion of the wastewater flow was treated, and the remainder bypassed the plant due to equipment breakdowns. Although Russell and Axon utilized an average flow of 18.5 MGD, the "treated" flow from March through December of 1980 was 10.4 MGD.) In 1981 there were serious equipment malfunctions which resulted in complete bypass of the primary plant for February, March, June, and the remainder of 1981.

The East St. Louis pollutant loading to the river was calculated based on primary treatment of the entire daily flow, 60% of the daily flow, and complete bypass. The daily and annual loadings for these three treatment conditions are estimated as the following:

*The Village's own discharges were the subject of variances granted in PCB 79-88, June 22, 1979 and PCB 77-136, June 22, 1978 (which records were herein incorporated as Ex. 2). The proposed American Bottoms facility has been the subject of petitions by the Village and City. In PCB 80-176, April 16, 1981, the variance petition was dismissed as insufficient for lack of information concerning environmental impact in three specified areas, and questions concerning economic hardship data evaluation. A petition for variance pending the outcome of this site-specific rulemaking, docketed at PCB 81-147, has been pending since September 24, 1981. As petitioners have not proceeded to the hearing they requested in that matter, no action has been taken on the petition.

	Daily Loading, lbs/day		Annual Loading, million lbs/year	
	BOD ₅	SS	BOD ₅	SS
Complete Flow Receiving Primary Treatment	27,800	40,100	10.1	14.6
60% Flow Receiving Primary Treatment	32,400	64,700	11.8	23.6
Complete Bypass	39,300	101,500	14.3	37.0

The Sauget treatment facility consists of primary treatment and a physical/chemical treatment process for industrial waste. The average flow at this plant is 9.7 MGD, and the effluent quality was estimated by Russell and Axon as a BOD₅ concentration of 210 mg/l with suspended solids of 35 mg/l.

The third wastewater source which will be incorporated into the regional plant is the Metropolitan East Sanitary District's Cahokia primary treatment facility. The Cahokia flow is approximately 2.9 MGD with an average effluent quality of 99 mg/l BOD₅ and 99 mg/l of suspended solids.

Once completed, the American Bottoms Regional Wastewater Treatment Facility will contain secondary treatment facilities. Only screens will be utilized at the Cahokia and East St. Louis pump stations, and the effluents will be pumped to Sauget where they will receive primary treatment, be combined with Sauget's wastewater, and then treated with an air activated sludge/powdered activated carbon process. The resulting effluent quality is anticipated to be in compliance with the applicable standards of 20 mg/l for BOD₅ and 25 mg/l for suspended solids.

Table 2-1 of the EcIS (Ex. 14, 0. 12), reproduced below, summarizes existing discharges to the Mississippi River and expected performance of the American Bottoms facility:

Facility	Average Wastewater Volume, MGD	BOD ₅ Effluent Loading, lb/day	TSS Effluent Loading, lb/day
East St. Louis	18.5	27,800 ^a	40,100 ^a
MESD-Cahokia	2.9	2,400 ^b	2,400 ^b
Sauget	9.7	17,000 ^c	2,800 ^c
Total	31.1	47,200	45,300
American Bottoms Regional Plant	27	4,500	5,600
Reduction in Loading to River		90%	80%

- Note:
- a) Calculated using BOD₅ concentrations of 180 mg/l and TSS of 260 mg/l from DMR data.
 - b) Loading with 99 mg/l effluent level of BOD₅ and SS and 2.9 MGD flow.
 - c) Loading based on flow of 9.7 MGD and BOD₅ of 210 mg/l and SS of 35 mg/l in effluent.

The "Industrial Sampling Program" summarized in February, 1980 by Russell and Axon (Ex. 12) estimates the total average daily industrial flow to the facility to be about 16 MGD, or 59% of the average daily design flow. These flows result primarily from major facilities located in East St. Louis. Based on data from Russell and Axon as well as the IEPA, Ms. Huff concluded that metals such as copper, nickel, lead and chromium were present at concentration below applicable effluent limits. The parameters which might violate effluent standards were thought to be fluoride and total iron, depending upon various characteristics of the CSO.

New Design and CSO Treatment Alternatives

The Russell and Axon determination of the level of CSO capture and treatment required to achieve compliance was primarily based upon two storm events, one occurring February 22, 1982 with a peak intensity of 0.35 inches/hour, and the other October 22, 1979 with a peak intensity of 0.34 inches/hour. First flush volume was calculated to be 20.9 million gallons. Peak flow rate was calculated at 274,000 gallons per minute.

Of four first flush compliance alternatives studied, the cheapest would involve installation of larger influent pumps to handle the peak rate, and installing a 21 million gallon concrete lined earthen basin with 840 hp. (sic) surface area. The total capital cost for first flush capture and retention would be \$12,120,000, with an operating and maintenance (o and m) cost of \$249,000 per year. Treatment of first flush flows in the plant at a design average rate of 1 mgd was calculated to result in a \$2.2 million capital cost in the treatment plant attributable to first flush treatment.

Lesser degrees of CSO capture and treatment were studied. The alternatives, their costs, and pollutant removal capabilities were well summarized by Tables 3-1 and 3-4 in the EcIS:

Table 3-1. Alternatives for Controlling Combined Sewer Overflows

Alternative Description	Estimated Capital Cost, \$	Estimated O&M Cost, \$/Yr	Total Annualized Cost ^a \$/Yr
I. First flush - Store and treat and provide 10 x DWF	20,870,000	561,000	3,190,000
II. First flush - Store and treat	14,320,000	249,000	2,050,000
III. Treat as much of combined sewage in New Treatment Plant as possible. Bar screen and chlorination on overflow.	4,670,000	266,000	854,000
IV. Treat as much of combined sewage in New Treatment Plant as possible. Bar screen only on overflow.	2,970,000	8,000	382,000

^aBased on a 20 year life and an interest rate of 11%, January 1980 dollars.

Table 3-4. Pollutants Removed and Discharged from the Four Stormwater Management Alternatives, Taking into Account Loss of Three Industrial Dischargers in E. St. Louis^a

Alternative Description	Annual Pollutants Removed, lbs		Annual Pollutants Discharged, lbs	
	BOD ₅	TSS	BOD ₅	TSS
Existing	0	0	811,000	2,990,000
Ia - First flush - store & treat and provide 10x DWF	614,000	2,500,000	197,000	490,000
IIa - First flush - store & treat	521,000	2,310,000	290,000	680,000
IIIa - Treat as much of combined sewage in new treatment plant as possible, bar screen and chlorinate overflows	113,000	360,000	698,000	2,292,000
IVa - Treat as much of combined sewage in new treatment plant as possible. Bar screen only on overflow	113,000	360,000	698,000	2,292,000

Notes: a) Hunter-Packing, Certainteed, and cooling water discharge from Pfizer eliminated.

The fourth, "bar screen only" alternative is that which the petitioner's wish to incorporate into the American Bottoms facility design, and is the subject of this petition for site-specific rule.

In detail, the new bar screen facility would be designed and constructed in conjunction with the new East St. Louis Pump Station and force main, and would become part of the total regional treatment system. The bar screen facility would be located on the existing 12.5' x 12.5' box sewer.

All dry weather flows plus stormwater flows from the City's system up to a maximum of 30 MGD (expected pumping capacity) would be pumped by the new East St. Louis Pump Station through a force main to the American Bottoms Regional Facility.

The present average dry weather flow used to compute the first flush from the City is approximately 18.5 MGD. The future average dry weather flow is projected as 12 MGD after completion of the Sewer System Evaluation Study (SSES) and subsequent sewer rehabilitation for the City. Thus, the Regional Treatment Plant would be designed to handle these flows plus a maximum stormwater flow up to 18 MGD after rehabilitation.

Flows in excess of 30 MGD would be bypassed to the new bar screen facility for the removal of floating debris and then discharged to the East St. Louis Pump Station. Material removed from the bypassed wastewater would be disposed of with the screenings from the new East St. Louis Pump Station.

ENVIRONMENTAL IMPACTS

Mississippi River Stream Use and Water Quality

The present discharges to the Mississippi River occur at River Mile 178.7 below the confluence of the Illinois River and Mississippi River, as well as below the confluence of the Illinois Missouri River and Mississippi River. The downstream, shoreline uses of the River on the Illinois side are limited by the extensive levee system. Residential development does not occur on the river side of the levee and road access is limited. No state or local recreational sites or boating facilities exist on the Illinois side between river miles 179 and 149, although several boating clubs are located on the Missouri side. Public water supply intakes are located at Chester, which is approximately river mile 110, and at the Menard Prison, located near Chester (Ex. 14, p. 17, and R. 24).

Water quality data are available continuously since 1975 from the Alton station (river mile 200) and since 1973 from Thebes station (river mile 35). Data is available between 1968 and 1976 from the East St. Louis water intake (river mile 180) and station J82 on the St. Louis side of the river (a few miles away from river mile 180) between 1968 and 1977 from the Chester water intake (river mile 110). This data, in summary,

indicates that the parameters consistently exceeding water quality standards are fecal coliform and iron. Dissolved oxygen (DO) data is only available from the East St. Louis and Chester stations. Five of thirty-five DO samples taken between 1972 and 1974 at the Chester station (70 miles downstream from East St. Louis) were below the 5.0 mg/l standard, but samples have remained above the standard since 1975.

Anticipated Effects of Requested Rule Change

In summary, the petitioners, Mrs. Huff, and the Agency agree that the environmental effects of granting petitioners the relief requested will not be great. Three specific pollutant categories were specifically addressed: deoxygenating material, bacteria, and heavy metals.

The DO issue was the focus of much of the presentation both by James Suddarth, a project manager for Russell and Axon, and by Mrs. Huff. In her analysis of the DO situation, Mrs. Huff proceeded from several assumptions.

The cited existing DO violation rate was assumed to be 7% based on the afore-cited 1972 to 1977 data. (The 1975, 1976, and 1977 samples did not indicate any DO violation.) Any water quality improvements since 1977 will not have been incorporated in a lower violation rate.

The expected effect of a reduction in East St. Louis' wastewater loading is based solely on point sources with no consideration of the contribution of non-point sources, as well as the contribution of the Missouri River. Eight neighboring communities, six of which have CSO problems, were listed as being in the East St. Louis area (Ex. 15, Attach. 2). Thus, any reduction in dissolved oxygen violations attributable to East St. Louis CSO controls would be overstated.

Finally, wet weather contributions of neighboring communities were assumed to be of the same relative proportion as dry weather discharges.

The deoxygenating wastes attributable to East St. Louis are estimated to be 6.1 million lbs./yr. for discharges from the treatment plant, and 0.81 million lbs./yr. for discharges resulting from CSO. Based on data concerning loadings from other point sources, Mrs. Huff calculates that under existing conditions, the East St. Louis discharge contributes to DO water quality violations 1.1 days per year. Completion of the American Bottoms plant should decrease that rate to 0.9 days per year, and first flush treatment to a rate of 0.33 days per year.

Mr. Suddarth spoke to the effect of the discharge on the "mixing zone". Based on a mixing zone of 25% of the mean daily flow of the Mississippi River (which equals 32,860 mgd), the incremental increase in deoxygenating wastes in the mixing zone would be 0.01 mg/l for BOD and 0.7 mg/l for TSS.

As to heavy metals, iron and fluorides were the pollutants which could potentially be problems. Iron concentrations in East St. Louis' effluent range from 18 to 230 mg/l, which is that expected to be present in the CSO discharge. At the 1400 to 1 dilution ratio available in a "mixing zone"* of 25% of the River's flow, iron concentrations would be expected to be increased less than 0.16 mg/l.

The present total iron standard of 1.0 mg/l is frequently violated, as the Mississippi already averages 2.0 mg/l in iron. This is in part due to high background concentrations due to geologic conditions and non-point sources. Mrs. Huff notes that various studies have shown that total iron is not a toxic metal until concentrations of 32 mg/l to 10,000 mg/l are reached, depending upon pH and other factors.

No analyses have been made of River water for fluoride concentrations. Fluoride concentrations of 33 mg/l, and thus also CSO discharges, are calculated for treatment plant effluent, but these levels may not be present if precipitation occurs prior to discharge.

Fecal coliform levels in the Mississippi River have been consistently higher than the water quality standard formerly contained in Section 302.209 (repealed in R77-12, Docket D, August 18, 1982, of which action appeal is pending). The violation rate may be largely attributable to a combination of non-point sources and discharges by the City of St. Louis of 250 mgd of primary, unchlorinated effluents. It is therefore believed that any CSO discharges by East St. Louis will not measurably alter fecal coliform counts. (Also see previous discussion of downstream water uses.)

ADDITIONAL ECONOMIC CONSIDERATIONS

In addition to the arguments made about costs of CSO compliance in relation to environmental benefits, the argument has been made that the petitioners' financial situation is "uniquely" poor, with East St. Louis' condition being depressed far beyond that of most of the communities in the state.

* The Board notes that what is called a "mixing zone" is actually a "zone of passage" for fish, etc. The Board defines the term mixing zone as a circle with a 600 ft. radius.

To finance the "local share" of the American Bottoms plant, the Village of Sauget recently sold \$20 million of revenue bonds at 13.5% interest over 20 years. East St. Louis will be expected to pay an allocated share of the capital investment of the plant, bond interest, and operating and maintenance costs. In addition, since the CSO points are located in East St. Louis, it would be required to bear the entire costs of CSO treatment.

Capital costs for CSO treatment, as aforementioned, would be \$21 million to achieve full compliance, or \$14 million to treat the "first flush". Assuming availability of 75% federal funding, its "local share" would thus be, respectively \$5.25 million or \$3.5 million. This \$3-5 million capital cost would be in addition to the following annual costs:

Interest charges on existing debt	\$	87,000
Annual costs of regional plant	\$3,000,000 -	\$4,200,000
Annual costs of CSO treatment		\$1,300,000
TOTAL	\$4,400,000 -	\$5,600,000

The cost of CSO control plus regionalization will increase 4½ to 6 times the cost of sewage treatment for this city. The 1981 budget goal of \$7.5 million represents the cost of general city services. Future sewage treatment costs represent 59% to 75% of the budget if CSO control is included, and 41% to 57% without CSO control. The increase in sewer rates is estimated between a threefold and fivefold increase.

The City asserts that compliance with the CSO rules may be virtually impossible to achieve without severe hardship to an already badly crippled City economy.

Recent financial statements submitted by the City (Ex. 9 and 17) generally indicate the City's poor financial condition. The economic condition of East St. Louis has been one of deteriorating finances and increasing unemployment since 1970. The population of East St. Louis has decreased approximately 20% to 55,000 since 1970 because of industrial plant closings and loss of business establishments. The unemployment rate in 1981 was between 20 and 25% for the City's population. The City tax rate, which is the highest in the state, has doubled in the last ten years to offset the decline in property values.

If required to comply with CSO treatment requirements, the City could theoretically look to one of two sources to generate necessary revenue: higher sewerage rates, or bond issuance. Imposition of higher sewerage rates would seem infeasible, particularly given already existing deficits in the municipal operating budget.

The City's capacity to issue bonds is highly doubtful. Recently, the City did sell \$2 million of general obligation

bonds, however the extraordinary guarantee of obligation of specific city revenue sources was necessary to support the bond issue. Use of various state pollution bond funds is not an option, because of state funding freezes and federal construction grant program limitations.

AGENCY CONCERNS

The Agency believes that the City has adequately demonstrated the uniqueness of its financial plight. It also believes that the petitioner's presentation, as supplemented by the data contained in the Huff EcIS, sufficiently indicate lack of significant environmental harm from discharge of the parameters discussed.

However, the Agency notes that petitioners have not provided any testimony on whether bottom sludge deposits were or could in the future be occurring, and whether or not it would be an environmental problem. Mr. Toby Frevert testified for the Agency and stated that conditions in the Mississippi River immediately below the East St. Louis overflow probably would not be conducive to deposition of solid deposits flushed from East St. Louis' sewers during overflow periods (EcIS Hearing R. 64). This statement was based on information related to a nearby water treatment facility with discharge rates and waste characteristics notably different from that expected from the East St. Louis combined sewer system. Although solids particles discharged in the overflow may indeed disperse rather than redeposit on the river bottom, the Agency believes that certainty about this matter is an important element of the environmental considerations of this proceeding. It urges that the question should be specifically addressed with actual sediment analysis to verify the presence or absence of unnatural sludge or bottom deposits.

The Agency would like to request that the Board condition the grant of this regulatory relief on a brief testing program to determine the extent of the sludge deposition. It suggests that the Board has precedent for requiring testing as part of a regulation in Rule 203(i)(5) which requires that certain facilities with thermal discharges show after a certain amount of time that no significant ecological damage can be reasonably expected. The Agency does not ask that this broad showing be required but only that petitioner show that sludge deposits will not accumulate beneath the overflow points. If this testing shows that such deposits are occurring, the Agency believes the matter should be reopened.

Finally, the Agency suggests that the relief requested from Section 304.120(a) relating to BOD and TSS be denied as unnecessary, since that Section by its terms excepts discharges governed by Section 306.305 [as renumbered from Section 306.103(c)].

THE RESOLUTION

The Board finds that petitioners have adequately proven need for the site-specific relief requested. In so finding, the Board does not place primary weight on the admittedly extreme nature of the financial "hardship" asserted by the City, as this type of "arbitrary or unreasonable hardship" allegation is a consideration more appropriate to a variance proceeding than a site-specific rulemaking. Rather, the Board is persuaded that, based on the American Bottoms plant design capacity and its capacity to accept and treat most of the first flush flows, the City's suggested alternative to the treatment requirements of Section 306.305 will result in discharges which will contribute little, if at all, to water quality violations in the Mississippi River.

The Board notes that, in granting this relief, it has granted CSO relief on a "first come, first served basis", rather than in the integrated manner established in the CSO Exception Procedure of Sections 306.350-306.374. This proceeding was instituted long prior to the Board's creation of that procedure. With all due benefit of hindsight, the Board believes that some of the data collection and presentation difficulties observed in this proceeding would have been obviated had it been commenced using the exception procedure mechanism.

The Board shares the Agency's concern about sludge deposits, and agrees that testing should be done. Were this a variance, the Board would include a condition of the sort recommended by the Agency. However, the Board prefers to include a prohibition of sludge deposits in the rule itself. A testing program would then appropriately be included the City's NPDES permit as a monitoring condition.

Finally, the Board is also making changes in the draft rule submitted by petitioners May 2, 1982, adding agreed to conditions, deleting the reference to Section 304.120(a), updating rule references, and inserting the rule in a more appropriate location.

As this is a proposed first notice Opinion and Order subject to revision both at the second notice and final adoption stages, it will not appear in the Board's published opinion volumes. Copies will, however, be placed in the files made available to the public.

ORDER

The Board proposes to adopt the following rule, first notice of which shall be sent to the Secretary of State:

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

PART 306
 PERFORMANCE CRITERIA

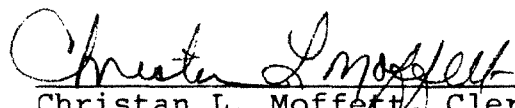
SUBPART F: SITE SPECIFIC RULES AND EXCEPTIONS

Section 306.501 East St. Louis-Sauget Site-Specific Discharges

- a) The discharge from the sewer system of the City of East St. Louis, as described below, shall not be subject to the treatment requirements and timetables of Sections 306.305(b), and 306.306. The discharge is located in Lots 305 and/or 306 of Sixth Subdivision of Cahokia Commons and also in the Northwest Quarter Section 23, Township Two North, Range Ten West, of the Third Principal Meridian, and can be defined as being at Mississippi River Mile Number 178.7 and further can be defined as being located at North 90°, 10 minutes, 40 seconds latitude and west 38°, 36 minutes, 40 seconds longitude.
- b) The first flush of storm flows shall meet the applicable effluent standards, except when such flows would cause the treatment plant to operate beyond design capacity.
- c) Overflows in excess of plant treatment capacity shall be passed through a 1/2 inch bar screen prior to discharge.
- d) Overflows shall not cause accumulation of unnatural sludge deposits in the receiving stream.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 23rd day of September, 1983 by a vote of 5-0.


 Christan L. Moffett, Clerk
 Illinois Pollution Control Board