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REPORT BY THE
Comptroller General
OF THE UNITED STATES

EPA Actions Against The Hopewell, Virginia, Wastewater Treatment Facility

GAO reviewed questions raised by the city of Hopewell, Virginia, concerning the Environmental Protection Agency's (1) enforcement actions against the Hopewell Regional Wastewater Treatment Facility, (2) lack of technical assistance to the city, and (3) withholding of the final grant payment, amounting to \$1.7 million, from the city. This report provides a statement of facts surrounding the operations of the Hopewell facility and questions raised by the city.

The report was requested by Virginia Senators Harry F. Byrd, Jr., and John W. Warner, Jr., and Congressman Robert W. Daniel, Jr.



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COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON D.C. 20548

B-200272

The Honorable Harry F. Byrd, Jr.
The Honorable John W. Warner, Jr.
United States Senate

The Honorable Robert W. Daniel, Jr.
House of Representatives

In response to your letter of January 2, 1980, we reviewed (1) Environmental Protection Agency (EPA) enforcement actions against the Hopewell Regional Wastewater Treatment Facility in Hopewell, Virginia, (2) EPA's technical assistance to the city of Hopewell, and (3) EPA's withholding of the final grant payment from the city.

Your letter also asked us to review EPA's handling of enforcement actions against wastewater treatment plants throughout the United States, comparing those actions to actions taken against the Hopewell facility. A chronology of events prepared by the city concerning the facility was included with your request. Subsequently, you agreed to modify your request, eliminating the comparison of enforcement actions taken against treatment plants throughout the United States to those taken against Hopewell because we were already performing a nationwide review 1/ to assess the degree and severity of municipal treatment plant problems.

In addition, you agreed that our report would be limited to a statement of facts surrounding the operations of the Hopewell facility and the subsequent enforcement action taken by the State Water Control Board and EPA. Appendix I contains the detailed information you requested.

In summary, the city-prepared chronology readily indicates that the facility has been plagued with problems since it opened and has not been in compliance with its National Pollutant Discharge Elimination System permit. However, the chronology claims that EPA

1/"Costly Wastewater Treatment Plants Fail To Perform as Expected" (CED-81-9, Nov. 14, 1980) performed at the request of the Chairman and Ranking Minority Member, Subcommittee on Oversight and Review, House Committee on Public Works and Transportation.

- is pursuing enforcement action against the city without providing it with requested technical assistance and in one instance has withheld requested technical data and
- is withholding final grant payment to the city pending completion of an interim audit, approval of an operations and maintenance manual, and performance of a final inspection even though EPA has caused delays in the completion of these requirements.

EPA ENFORCEMENT ACTION

The facility opened prematurely in August 1977 and experienced almost immediate problems with the solids-handling system and incompatible and excessive industrial discharges. During the period October 1977 to February 1979, the facility exceeded its permit limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS) by 290 and 246 percent, respectively. However, the city made modifications to the solids-handling system and in February 1979 brought the modified system online. As of September 1980, the facility had met its monthly BOD requirements for the past 9 months and its TSS requirements for the past 4 months.

The following table shows the facility's performance in attempting to meet its permit requirements for BOD and TSS from October 1977 through September 1980. As shown, the situation improved for the period beginning March 1979 after the modified solids-handling system went online in February 1979.

<u>Period</u>	<u>BOD (permit requirement = 30 mg/l)(note a)</u>	<u>TSS (permit requirement = 50 mg/l)</u>
	<u>Average monthly con- centration for period</u> (mg/l)	<u>Average monthly con- centration for period</u> (mg/l)
10/77 - 04/78	197	202
05/78 - 02/79	61	153
03/79 - 03/80	31	65
04/80 - 09/80	25	35

a/Milligrams per liter.

The Federal Water Pollution Control Act, as amended, states that EPA is to take action against dischargers that do not meet their permit conditions. Violators are subject to severe penalties, including fines and imprisonment. However, in our nationwide review we looked at 15 plants determined by EPA to be "worst case situations" in three EPA regions and found that EPA's enforcement action varied from none to minimal, followed no particular pattern, and was not as timely or as effective as it could or should have been.

EPA took its first action against the city in March 1978 by sending a notice of permit violation to both the city and the State. At this time, according to the State Water Control Board, Hopewell was the most serious violator in Virginia.

As of August 1980, EPA had presented the city with numerous consent decrees. 1/ Among other things, the final version of the consent decree, dated August 15, 1980, requires the city to (1) set time frames for completion of construction and installation of facilities, completion of studies, and implementation of procedures, (2) implement a program to remedy any deficiency in the facility and its manner of operation and any deficiency in the degree of pretreatment of influent provided by contributors to the facility, and (3) pay \$50,000 for past violations. The decree also stipulated payments of up to \$10,000 daily for future noncompliance with consent decree requirements and raised the permit limits on an interim basis.

Because the city refused to sign the decree, on August 26, 1980, EPA and the State of Virginia filed suit in Federal court against the city and two industrial dischargers--Continental Forest Industries and Hercules, Inc.--for violations of the Clean Water Act. As of January 22, 1981, the case was in the pretrial stages.

The EPA enforcement attorney assigned to this case told us that enforcement action against the city is still warranted because of its past violations even though the facility is now in compliance with its permit. According to the attorney, it is necessary to evaluate the propriety of EPA's actions from the time the facility began operations and was in gross violation of its permit. In his opinion, it is improper to look

1/Agreement by a defendant to cease activities asserted as illegal by the Government.

only at the facility's recent discharge record. The attorney also feels that EPA's continued pressure is the reason the plant came into compliance with its permit in June 1980. The State Water Control Board agrees with EPA that continued pressure was needed to achieve full compliance. However, it also feels that efforts by the city, particularly since January 1979, and the continuing efforts made by the State Water Control Board were also important factors in bringing the plant into compliance.

The city contends that EPA has improperly linked a prior Kepone (pesticide) spill to the current enforcement action. The city cites correspondence from EPA's Regional Director as the reason for its contention. The EPA enforcement attorney disagrees with the city's contention on the Kepone issue and said the enforcement action was taken because of the degree of the city's noncompliance and the large amount of the Federal grant, which exceeds \$28 million.

Further, the city feels that it has done everything to correct the problems at the facility; it has asked for but was denied EPA technical assistance; and it is being unfairly singled out for enforcement action.

TECHNICAL ASSISTANCE

The city contends that EPA has continued the enforcement action against it without providing the requested technical assistance and had withheld a detailed evaluation study on the facility's operations.

In October 1978, EPA's National Enforcement Investigations Center evaluated the facility at the request of EPA's regional enforcement staff. The review was requested, according to EPA's enforcement staff, to build the legal case against the city. The city said it was unaware of the purpose of the review and thought it was to help it solve its problems. The legal branch chief of EPA's Enforcement Division said that EPA is not in the business of being a professional consultant and if technical assistance was provided, EPA would have a hard time justifying enforcement action. On October 25, 1978, the city asked EPA for the results of the study to use in improving plant operations. This request was denied because the center was not prepared at that time to suggest improvements and was continuing its analysis.

On January 29, 1979, the city again requested the center's report, pursuant to the Freedom of Information Act.

EPA denied the request because

"* * *disclosure of these documents at this time will interfere with anticipated enforcement proceedings and will, therefore, not best serve the public interest."

On June 25, 1979, the report, minus its recommendations, was sent to the city. The EPA enforcement attorney assigned to this case told us that the legal process had reached a point where releasing the report would best serve the public interest. Accompanying the report was a draft consent decree which incorporated the center's recommendations.

WITHHOLDING OF FINAL GRANT PAYMENT

The city claims that EPA has withheld a final grant payment of \$1.7 million since July 31, 1978, pending completion of an interim audit, approval of an operations and maintenance manual, and performance of a final inspection even though EPA has caused delays in the completion of these steps. Correspondence from EPA to the city tends to support this claim.

In summary, the details on the manual, inspection, and audit are as follows:

- The facility's operations and maintenance manual was submitted by the State Water Control Board to EPA for approval in November 1978. EPA, however, did not approve the manual until October 1979.

The State Water Control Board said it was surprised at the length of time EPA took to approve the manual, since both the State and EPA use the same approval checklist. Normally, once the State approves a manual, EPA will quickly follow suit. We noted that on April 30, 1979, EPA's enforcement attorney assigned to this case told the Virginia section team leader of the Grants Administration Branch, EPA's Regional Water Division, not to approve the manual because EPA was contemplating legal action that could require substantial changes in operations and maintenance requirements.

- Although the facility was not meeting its permit limits, in October 1978 the city requested a final inspection. The city's rationale was that EPA had cited lack of a final inspection as one of the reasons

that final payment was not made. EPA made the inspection about 1 year later and concluded that, while operations were much improved, the facility still was not meeting its permit and thus another final inspection would be needed. The EPA enforcement attorney told us that to pass final inspection, the facility must be in compliance with its permit. Since the Hopewell facility was not in compliance with its permit, it would have failed the final inspection. Therefore, the final inspection was delayed.

--The EPA interim audit questioned \$2 million in claimed construction costs. In June 1978, EPA met with the city to discuss the findings. However, it was not until June 1979, about 1 year later, that EPA sent the draft audit report to the city for written comment. The branch manager of EPA's Office of Audit told us the delay was caused by questions on the legality of the grant and the methodology used in determining engineering charges. The city replied in July 1979. EPA's Office of Audit analyzed the city's comments and issued its report on February 11, 1980. As of February 1981, considerable progress has been made toward resolving the dollar amount in question; however, resolution of the issue will not be made until receipt of the final inspection report.

The EPA enforcement attorney assigned to this case told us that the final grant payment was being withheld because the facility was in noncompliance with its permit and because the interim audit questioned costs equivalent to the amount withheld. He added that failure to have an approved operations and maintenance manual and a successful final inspection are grounds for withholding the final grant payment, according to EPA regulations.

AGENCY AND OTHER COMMENTS

Comments on this draft report were requested from EPA, the Virginia State Water Control Board; the city of Hopewell, Virginia; and two of the five major industrial contributors to the Hopewell Regional Wastewater Treatment Plant-- Continental Forest Industries and Hercules, Inc. Comments were requested specifically from the two industries because they were named as defendants in the lawsuit EPA and the State of Virginia filed in Federal court on August 26, 1980.

Comments have not been received from Hercules, Inc. Continental Forest Industries acknowledged receiving the

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draft report but declined to comment, stating that the report does not reflect industry's point of view. (See app. VI.)

The Virginia State Water Control Board restricted its comments to areas where (1) its information was at variance with statements in the draft report, (2) the draft report appears to be silent, and (3) it believes the report would benefit from some amplification. Comments that specifically helped to clarify a position or statement of fact were added. No change or addition was made to the report when the comment, in our opinion, had no impact on these areas. (See app. III.)

The city of Hopewell stated that it generally found our draft report to be an accurate statement of the facts concerning EPA's actions toward the Hopewell Regional Wastewater Treatment Facility and the city of Hopewell. Additional comments keyed to specific paragraphs in the report were also provided. Where these comments specifically helped to clarify the city's position on a statement of fact, the comment was added. No change or addition was made to the report when the comment, in our opinion, was of a general nature. (See app. IV.)

EPA, while not disagreeing with the facts as stated in the report, offered further explanation of its position--justification for bringing the enforcement action against the city and denial of technical assistance--and updated financial information relating to the final grant payment. Since the facts themselves have not been altered by these comments, no changes were made to the final report. (See app. V.)

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time, the report will be provided to the appropriate congressional committees; the Administrator, Environmental Protection Agency; the Executive Secretary, Virginia State Water Control Board; the city manager, city of Hopewell; and the plant managers of Continental Forest Industries and Hercules, Inc.



Comptroller General
of the United States

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ABBREVIATIONS

AWARE	Associated Water and Air Resources Engineers, Inc.
BOD	biochemical oxygen demand
EPA	Environmental Protection Agency
GAO	General Accounting Office
mg/l	milligrams per liter
NEIC	National Enforcement Investigation Center
NPDES	National Pollutant Discharge Elimination System
SWCB	State Water Control Board
TSS	total suspended solids

GLOSSARY

Activated sludge process	A biological wastewater treatment process in which a mixture of wastewater and activated sludge is agitated and aerated. The activated sludge is then separated from the treated wastewater (mixed liquor) by sedimentation and wasted or returned to the process as needed.
Biochemical oxygen demand (BOD)	A measure of the oxygen consumed in the biological process of waste decomposition.
Chlorination	The application of chlorine to water or wastewater, generally for the purpose of disinfection, but frequently for accomplishing other biological or chemical results.
Clarification	Any process or combination of processes, the primary purpose of which is to reduce the concentration of suspended matter in a liquid.
Effluent	The wastewater discharged by an industry or municipality.
Effluent limitations	Restrictions established by a State or EPA on quantities, rates, and concentrations of chemical, physical, biological, and other constituents discharged from point sources.
Heat treatment	A sludge conditioning process which improves its dewatering characteristics.
Industrial wastes	The liquid wastes from industrial processes, as distinct from domestic or sanitary wastes.
Influent	Wastewater flowing into a wastewater treatment plant.
Pollution (of water)	Contamination or other alteration of the physical, chemical, or biological properties of water, including changes in temperature, taste, color, or odor of the water, or the discharge into the water of any liquid, gaseous,

radioactive, solid, or other substance that may create a nuisance or render such water detrimental or injurious to public health, safety, or welfare.

Primary waste treatment

Treatment usually involving screening and sedimentation for removal of the larger solids in wastewater. The carbonaceous BOD removal from domestic sewage by this process is about 30 percent.

Secondary waste treatment

Treatment using biological processes to accelerate the decomposition of sewage and thereby reduce carbonaceous BOD by 80 to 90 percent.

Sedimentation

The process of subsidence and deposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material. Also called settling.

Sludge

Solid matter removed from sewage during wastewater treatment.

Total suspended nonfilterable solids (TSS)

Small particles of solid pollutants in sewage that contribute to turbidity and that resist separation by conventional means.

Water quality standards

A plan for water quality management specifying the use (recreation, fish and wildlife propagation, drinking water, industrial, or agricultural) to be made of the water; criteria to measure and protect these uses; implementation and enforcement plans; and an antidegradation statement to protect existing water quality.

Vacuum filtration

A sludge-dewatering process consisting of a cylindrical drum covered with filtering material, such as cotton, felt, or nylon. The drum revolves, partially submerged in the liquid sludge, and a vacuum is maintained under the cloth to extract moisture. The sludge cake is scraped off continuously.

INFORMATION ON QUESTIONS ABOUT THE HOPEWELL
REGIONAL WASTEWATER TREATMENT FACILITY

BACKGROUND

Hopewell is a community with a population of approximately 25,000 located at the junction of the Appomattox and James Rivers in the southeast part of Virginia. Hopewell is a heavily industrialized city with five major industries--Continental Forest Industries; Allied Chemical; Firestone; Hercules, Inc.; and Virginia-American Water Company--located in the area.

Located in Hopewell is a regional wastewater treatment facility operated by the city through the Hopewell Regional Wastewater Treatment Facility Commission. The commission members include a city council member, who serves as chairman; the city manager; the city attorney; and representatives of the five major industries. This facility processes wastewater for the city of Hopewell; the U.S. Army's Fort Lee; the Federal Correctional Institution in Petersburg, Virginia; parts of Prince George County; and the five major industries. The five industries account for approximately 90 percent of the wastewater treated by the facility.

Construction of the facility has cost more than \$44 million. The following table shows the amount of funds contributed by each party.

EPA	<u>a/\$28,781,240</u>
Fort Lee	2,027,754
State of Virginia	3,696,450
Industry	<u>9,617,032</u>
Total	<u><u>\$44,122,476</u></u>

a/Of this grant, EPA is withholding \$1,717,740.

The city also received EPA grants of \$660,370 and \$761,490, respectively, for designing the facility and installing discharge interceptors.

HISTORY OF THE REGIONAL WASTEWATER TREATMENT FACILITY

Between 1968 and 1970, the city recognized the need for expansion and upgrading of its existing primary treatment plant. During this same period, the major industries of the Hopewell area were experiencing environmental problems that would have required them to construct individual wastewater treatment facilities. As a result, the Virginia State Water Control Board (SWCB) asked the city and industries to determine the feasibility of a regional facility that would serve both of them as well as Fort Lee. The feasibility study, completed in August 1970, proposed a regional concept which was favorably received by both the city and industries. The study concluded that a regional system would have considerable economic and pollution control advantages over a series of individual plants.

A March 1971 study upgraded the August 1970 study and showed that a regional treatment facility would be highly desirable from the standpoint of complying with State water quality standards. The city authorized the design engineering firm of R. Kenneth Weeks, Norfolk, Virginia, to provide plans and specifications for a regional wastewater treatment plant. In June 1971 SWCB approved the regional facility.

Pilot plant studies

During the predesign stage, the design engineer conducted two pilot plant studies. The purpose of these studies was to determine if one facility could adequately handle combined municipal-industrial wastes. In each pilot study, the industries were responsible for providing samples of their waste that were representative of their ultimate wastewater.

The design engineer started a bench-scale pilot study in September 1971 to formulate a process design. In this first study, the design was based on waste temperatures of 98 degrees F ¹/ even though the March 1971 study showed that the incoming wastewater from Continental Forest Industries was about 120 degrees F (Continental Forest Industries provides

¹/The temperature of the plant influent wastewater has become an issue in the failure of the Hopewell facility. Therefore, it is important to understand the temperature parameters used in the design.

about 50 percent of all plant influent). The design engineer, however, advised us that he was proceeding under the assumption that when the city passed its required sewer ordinance, the temperature of the combined wastewater influent would be limited to 100 degrees F. This temperature would be within the design criteria. The ordinance was also to provide for further discharge limits as were deemed necessary. However, as discussed on pages 9 to 12, the city did not limit the industries' wastes to 100 degrees F.

The design engineer's initial report, completed in February 1972, concluded that the incoming waste was amenable to biological treatment using an activated sludge process and that a regional plant could be designed to meet State water quality standards. In August 1972, the SWCB recommended approval of this report subject to several conditions.

One critical condition involved the heat treatment process. Because the SWCB considered the proposed heat treatment process unproven, its approval of the report in part was conditioned on the owner (city of Hopewell) assuming responsibility for corrective action, including replacement, of the proposed heat treatment process should performance prove unsatisfactory. On September 20, 1972, SWCB approved the first pilot study.

The second pilot study was conducted from May 1973 to March 1974 to (1) allow a more accurate characterization of the influent, (2) make it possible to design a treatment system, and (3) allow a prediction of effluent quality. It showed good results with respect to BOD removal but, because of the industrial character of the waste, TSS concentrations of less than 50-60 milligrams per liter (mg/l) in the water could not be consistently achieved. This study used effluent samples provided by industry with temperatures ranging from 65 to 94 degrees F.

Based on the results of the second pilot study, R. Kenneth Weeks, the design engineer, prepared final design plans and specifications for the facility. In October 1974 and May 1975, SWCB and EPA respectively approved the city's final plans and specifications for a 50 million gallon a day regional wastewater treatment facility. Treatment consists of primary sedimentation using clarifiers followed

by chlorination for the municipal wastes before they are combined with industrial wastes. Combined municipal and industrial wastes again receive primary sedimentation using clarifiers, followed by biological treatment using pure-oxygen-activated sludge, followed by secondary clarification. Sludge is then heat treated, thickened, and dewatered by vacuum filtration. Final sludge disposal is by incineration.

Following EPA grant approvals of \$28,781,240, construction of the plant started in July 1975; the plant began accepting wastes in August 1977. SWCB issued the city a permit in August 1977 which provided, among other items, monthly limitations of 30 mg/l for BOD and 50 mg/l for TSS. EPA approved the monthly TSS limit of 50 mg/l because of the high percentage of industrial waste coming into the facility.

Although the permit was set above the national standards, the design engineer objected to it because he thought the facility should have only poundage limitations 1/ rather than poundage and concentration limits. SWCB did not accept his objections and issued a permit with both poundage and concentration limits. SWCB told the city that EPA would object to removing permit concentration limits because Federal regulations require that discharge limitations included in permits for publicly owned treatment works must have concentration limits. See page 14 for more information on the city's request for permit revisions.

THE FACILITY HAS HAD MAJOR PROBLEMS--BUT PERFORMANCE HAS IMPROVED

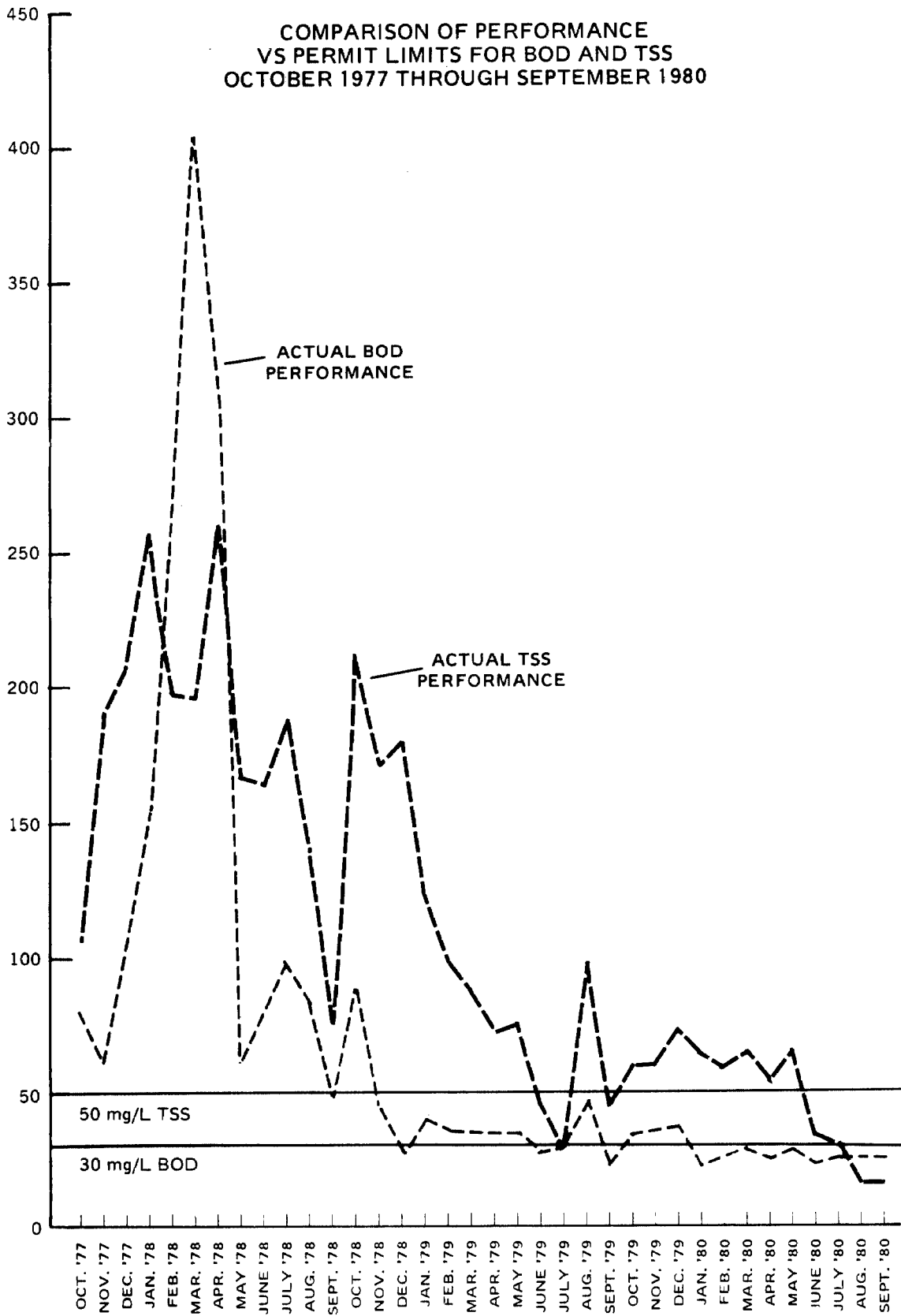
The facility, which first accepted wastewater flow in August 1977, has had problems in meeting its permit. From August 1977 until early 1979, discharges were far in excess of permit limits. However, since early 1979, performance has improved. From June through September 1980 (as in June and July 1979), the facility met its permit conditions for

1/What the engineer wanted here is a limitation on the total pounds of TSS and BOD being discharged into the river without relating the discharge to the amount of water with which it was mixed.

both BOD and TSS. While there are many requirements in its permit, the two major items are BOD and TSS. The problem area involves TSS.

The following graph illustrates the facility's performance in meeting its permit for BOD and TSS from October 1977 through September 1980.

COMPARISON OF PERFORMANCE
VS PERMIT LIMITS FOR BOD AND TSS
OCTOBER 1977 THROUGH SEPTEMBER 1980



A numerical presentation of this improvement and the dates involved follows.

<u>Period</u>	BOD (permit requirement =30 mg/l)	TSS (permit requirement = 50 mg/l)
	<u>Average monthly con- centration for period</u>	<u>Average monthly con- centration for period</u>
	----- (mg/l) -----	
10/77 - 04/78	197	202
05/78 - 02/79	61	153
03/79 - 03/80	31	65
04/80 - 09/80	25	35

A complete chart of all monthly and weekly concentration and poundage discharges compared to permit requirements is shown in appendix II.

The various parties--EPA; SWCB; R. Kenneth Weeks, the design engineer; AWARE, the consulting engineer; 1/ and the city--believe there is not one but a number of factors which caused the plant to be unable to meet its permit limits. Many of the factors are interrelated so that it is difficult to clearly point to one cause. However, there is agreement that some of the factors involved (1) the plant opening prematurely, (2) problems in the solids-handling equipment, especially an inoperable heat treatment system, and (3) incompatible and excessive industrial overloading. According to SWCB, various other factors included unanticipated chemical discharges, equipment maintenance problems, and insufficient operating staff, which further contributed to the facility's inability to meet its permit.

1/Associated Water and Air Resources Engineers, Inc. (AWARE),
Nashville, Tenn.

Plant opened prematurely

The facility started operation even though its sludge heat treatment system and incinerator were not ready. On August 4, 1977, at the request of R. Kenneth Weeks, the design engineer, SWCB issued a discharge permit to the city. At that time, the design engineer certified the facility was basically complete with the exception of the above items. Based on the contractor's (George Hyman Construction Company's) written confirmation that the remaining work would be completed and the plant operational by August 31, 1977, the design engineer told SWCB that the uncompleted work would not interfere with treatment of the initial wastewater flows to the plant and that the sludge-handling system would be completed by the time sludge accumulated in the system.

On August 8, 1977, the facility began accepting wastewater flows despite the fact that neither the sludge heat treatment system nor the incinerator were operational. The contractor did not actually complete construction of these systems until December 1977, which was too late to avoid problems caused by sludge buildup in the system.

Inoperable heat treatment system

Problems occurred in the heat treatment portion of the solids-handling system almost immediately. These problems primarily involved leaks in the heat exchange gaskets and affected, at various times, all three heat exchangers. The city faced a constant battle to keep the equipment going. At times only one or two exchangers were operational; when one was fixed, another would fail. Without adequate heat treatment, this kind of plant will not operate properly. High BOD and TSS readings can be directly attributable to this problem. The city believes that the heat treatment problem was due to equipment failure as opposed to construction deficiencies.

In our report "Costly Wastewater Treatment Plants Fail To Perform as Expected" (CED-81-9, Nov. 14, 1980), prepared for the Chairman and Ranking Minority Member, Subcommittee on Oversight and Review, House Committee on Public Works and Transportation, we noted that equipment failure is one of the primary reasons plants do not work properly.

Between December 1977 and February 1979, the city tried one solution after another to resolve the heat treatment problem. Finally, a technique was developed that successfully prevented further leaks and in February 1979, the city felt that, for the first time, the heat treatment system became operational.

Delays in adopting a sewer use ordinance and issuing industrial permits preceded overloading

Contributing to the facility's problems was the slowness in passing a sewer ordinance and issuing industrial discharge permits. After passing the ordinance, the city was reluctant to enforce it. Also, when passed, the ordinance permitted incoming wastewater temperatures greater than that for which the plant was designed. As discussed on pages 4 to 8, the plant's past inability to meet its permit limits may be directly attributable to high influent temperatures.

Because of unauthorized Kepone discharges in 1975, for which the city was placed on probation by Federal district court, SWCB issued a special order to the city dated September 27, 1976. This order required the city to implement eight specific programs, including

- adoption of a sewer use ordinance not later than December 1, 1976, and
- issuance of industrial permits, pursuant to the sewer use ordinance, by December 1, 1976.

As discussed below the city did not meet these dates.

Late adoption of city sewer use ordinance

Although required to adopt a sewer use ordinance by December 1, 1976, the city did not do so until April 12, 1977. The city initially circulated a draft "sewer use ordinance" to each contributing industry in July 1976. Between October 1976 and January 1977, SWCB and the city held discussions on the ordinance. On March 7, 1977, SWCB told the city that it conditionally approved the ordinance. City council adopted the final version on April 12, 1977. One significant change occurred between the initial draft and the final ordinance: influent temperatures had been

limited to 100 degrees F in the initial draft, but were permitted to be 120 degrees F in the final version. The city does not know the basis for the increased temperature requirement because documentation is not available. However, it believes that the design engineer proposed the change based upon industry comments. The design engineer told us that the city agreed to the 120-degree F limit with the stipulation that the ordinance be revised if operating difficulties resulted. The final version includes a provision for the plant director to limit industry discharges as may be necessary.

Even though the ordinance limits combined influent temperatures to 120 degrees F, influent temperatures ranged up to 129 degrees F in July 1978. The city took no action to enforce the ordinance. In the opinion of the current plant director, the city did not take action because, compared to the other compounding problems at that time, temperature did not have a significant effect upon plant performance.

Late issuance of industrial permits

Issuance of the industrial permits was delayed. The sewer ordinance required all existing nondomestic users connected to or discharging into a public sewer to obtain a permit within 120 days after the effective date of the ordinance. Although the city council adopted the ordinance on April 12, 1977, permits were not issued until April 1, 1980.

Incompatible and excessive industrial overloading

Shortly after startup in late 1977, the plant experienced severe loadings of fly ash, wood chips, char, and other incompatible material from Continental Forest Industries. This overloading resulted in plant equipment and pump failures in January 1978. By early February 1978, treatment was virtually nonexistent due to heavy accumulations of solids and resulting equipment malfunctions. SWCB believes that these incompatible discharges and the premature opening were the plant's primary problems. On February 10, 1978, the city asked SWCB for permission to shut down the facility to resolve this problem. SWCB denied the request. SWCB was concerned that the city was not enforcing its sewer ordinance. Therefore, the city

ordered Continental to stop discharging this material. During the following months, the city spent more than \$300,000 to repair and rehabilitate the plant. This problem was resolved, and there is no evidence that overloadings have occurred since February 1978.

Another cause of the plant's early history of noncompliance was the sporadic loading of high concentrations of BOD and TSS by industry between August and November 1978. These discharges exceeded the allowable loadings as stated in the Hopewell agreement with the industries. 1/ Even before the plant recovered from the damage caused by Continental Forest Industries discharge, industrial dischargers continued to periodically exceed their allocated BOD and TSS loading, causing total loadings to be above the plant's design capacity. Excessive industrial loadings from Continental Forest Industries and Hercules, Inc., also occurred on numerous occasions during the period August to November 1978.

To address the problem of excessive loading and to supplement the city's efforts to adequately monitor and treat the complex industrial flows, SWCB initiated efforts to issue wastewater discharge permits 2/ to the major industrial users. The city and SWCB distributed draft permits to the industries on November 21, 1978. Subject permits were to be jointly issued by the city and SWCB. Each permit contained a maximum flow limitation, limits for both monthly daily average and daily maximum loadings for BOD and TSS, and a weighted average temperature limit which would result in a combined facility influent temperature not exceeding 104 degrees F.

Although SWCB and the city formally agreed to the 104-degree F temperature, the city now claims that based on the temperatures in the individual draft permits, the combined temperature should have been 109.5 degrees F. However, the city told us that because of contemplated litigation, SWCB would not issue the permits.

1/On July 1, 1975, the city and the five major industrial contributors entered into an agreement which provided for limits on the volume and character of the wastewaters coming from each industry.

2/These permits spell out the exact nature of industrial effluent and are considered legally binding.

In January 1979, a new plant director arrived at the facility. One of his major concerns was the lack of a city industrial permit program. Primarily as a result of the new plant director's efforts, industrial wastewater discharge permits were finally issued on April 1, 1980. Notably, issued permits do not stipulate temperature requirements. The facility's plant director told us that this is because the effects of temperature on facility operations are still being studied.

Unanticipated chemical discharges

Unanticipated chemical discharges commonly occurred in late 1978 and occasionally in early 1979. According to SWCB, some of these discharges resulted in a loss of biological organisms, thereby affecting plant performance. In December 1978, the city passed a resolution which required the installation of monitoring equipment at each industrial site. This equipment gives the city the capability to ascertain the hourly wastewater effluent (by category of volume and character) coming from each industrial user and the ability to automatically detect the occurrence of an industrial spill. With this capability, the discharging industry can be identified.

Equipment maintenance problems

The facility has had problems with much of the plant's solids-handling equipment. The city claims it has had to replace inferior equipment purchased because of "low-bid" EPA grant purchasing requirements. Some equipment was sent to the manufacturer for repair and never returned. According to SWCB records, other equipment orders were delayed by the supplier for 6 months. As of December 1978, 30 percent of the spare parts and instruments ordered were overdue. Inadequate planning further contributed to the problem of insufficient spare parts. As of October 1980, the facility still had a problem with inoperable instrumentation.

Insufficient staff

There was general agreement among the SWCB, city, consulting engineer, and contractor that another problem affecting the early operation of the facility was insufficient staff. With a staff of 50 (already increased from a design engineer projection of 35), compounded by numerous

equipment problems, the city could perform only corrective maintenance. In early 1979 the city implemented a preventive maintenance program and increased its personnel to 81.

CURRENT PROBLEMS AND PROPOSED
CORRECTIVE ACTIONS

Efforts at correcting the problem of not meeting permit conditions have centered around resolving the solids-handling system and the high temperature problem. Since December 1978 the consulting engineer--AWARE--has been working with the city to identify and resolve its problems. Through June 1980 AWARE has been paid approximately \$187,000. In addition, the city has applied for revisions to its permit.

Proposed solutions

In January 1980 AWARE concluded that the TSS problem was caused by high temperatures in the facility's activated sludge system. According to this study, due to deterioration of sludge settling characteristics at higher temperatures, the facility was not capable of meeting design treatment levels at basin temperatures higher than 96 to 97 degrees F. The study indicated that temperatures beyond this level decreased the rate of solids/liquid separation in the final clarifiers. AWARE gave two possible procedures that could be followed to mitigate the effects of the higher temperatures that the facility was facing. These were to:

- Cool the plant influent, which could be done centrally or at the source. The study showed that (1) 89 percent of the net heat contribution above 95 degrees F came from Continental Forest Industries and (2) 98 percent of the net heat contribution above 100 degrees F also came from Continental Forest Industries.
- Expand the treatment facilities, which could involve expanding the aeration facilities or the clarification facilities or both.

In October 1980 AWARE said there are two major problems which have prevented, or may in the future prevent, consistent permit compliance at the Hopewell plant. They are:

- The inability to achieve consistent operation of the solids-handling facility.

--The historically high wastewater temperatures during summer months.

AWARE believes that the solids-handling system has had a number of mechanical problems which have prevented consistent operation. However, Hopewell facility officials have made many changes that have helped substantially to resolve these problems. Further, the city has a number of other programs underway to improve system reliability.

AWARE feels that specific actions to address the temperature problem should be deferred until all alternatives to provide consistent compliance have been thoroughly investigated. According to AWARE, examining alternatives would allow the city to come up with the most cost-effective solution.

Request for permit revision

Another approach the city is taking concerns the revision of its discharge permit. In November 1979 and March 1980, the city submitted permit amendment requests to SWCB. The city believes that its discharge limitations should be raised because (1) accurate data on plant influent is now known and (2) excess plant capacity will offset concentrations higher than those in the current permit. SWCB told us that it was leaning toward approval of the requested revision. Major changes would be a rise in TSS from 50 mg/l to 68 mg/l and in BOD from 30 mg/l to 43 mg/l. 1/ AWARE believes that permit limitations should be raised to reflect current influent data and treatment technology. The city's design engineer, R. Kenneth Weeks, believes that because the plant's influent is primarily industrial, the only permit limitation the plant should have is poundage rather than poundage and concentration. He has held this opinion since the time of application for a discharge permit.

ENFORCEMENT ACTIONS

Since March 1978, EPA has been pursuing various enforcement actions against the city. The actions include (1) notices of violation indicating enforcement action by

1/The facility has not exceeded 68 mg/l for TSS since Aug. 1979 and has exceeded 43 mg/l for BOD only once since Nov. 1978.

EPA if local action was not taken, (2) the threat of a court suit if the city did not accede to a consent decree that required specific construction, development of a remedial program to correct deficiencies, monetary payments for past noncompliance, and stipulated payments for future noncompliance, (3) filing of a complaint against the city for violations of the Clean Water Act, and (4) withholding of \$1.7 million in final grant funds.

Initial enforcement efforts

In passing the Federal Water Pollution Control Act Amendments of 1972, the Congress clearly made illegal the discharge of any pollutant into the Nation's waters or the violation of any permit condition by a discharger. According to the act, violators would be subject to severe penalties, including fines, imprisonment, or both, enforceable in a court of law. It was equally clear in the legislation that EPA was to enforce these requirements.

On March 13, 1978, EPA issued to the city and SWCB its first notice of permit violation, stating that EPA might commence enforcement action in the absence of appropriate State action any time after 30 days. At this time SWCB considered Hopewell to be a serious violator. On June 13, 1978, EPA issued a letter to the city asking for detailed information on the city's noncompliance and requesting plans on how it would achieve compliance. The EPA enforcement attorney assigned to this case told us that enforcement action was undertaken against the city because of the degree of the city's noncompliance at the time enforcement action began and the large amount of the EPA grant given to the city.

Following startup of plant operations, SWCB, in response to permit violations, began making periodic inspections of the plant in late 1977. According to SWCB, in March 1978, when it was obvious that the problems at the plant were more unmanageable than first believed, the city was ordered to appear before SWCB. At that meeting, SWCB directed the city to take steps to bring the plant into compliance. The city was again ordered to appear before SWCB in June and December 1978.

In the fall of 1978, other entities expressed interest in the Hopewell problem. For example:

--On October 2, 1978, the Executive Director of the Virginia Environmental Endowment (an environmental

fund created by Allied Chemical after the 1975 Kepone discharge) asked the Governor of Virginia to "let us know what action you intend to take to correct the problem at Hopewell and to prevent the State Water Control Board from dragging its feet on problems such as this in the future, lest we have to learn the lessons of the Kepone disaster once again."

--On October 3, 1978, the U.S. Attorney for the Eastern District of Virginia, who was also a director of the Virginia Environmental Endowment, demanded an explanation from EPA for its inaction against the city and threatened an investigation and action by his office if it continued.

--In early October 1978, the Washington Post published an article titled "Hopewell Sewage Plant Pollutes River." The article referred to the October 2 letter from the Executive Director of the Virginia Environmental Endowment.

On December 1, 1978, EPA issued to the city and SWCB its second notice of violation stating that one or more of the five major industrial contributors was introducing pollutants into the facility in violation of law. The notice informed the city of EPA's intent to sue the violating industries as well as the city unless adequate local enforcement action was taken within 30 days.

Consent decree negotiations

On January 9, 1979, SWCB voted to request EPA to join in a suit in Federal district court to seek compliance by the city with its wastewater discharge permit. On April 3, 1979, EPA's National Office of Water Enforcement sent a legal package to the U.S. Department of Justice requesting that the case be filed as soon as possible. On June 25, 1979, EPA issued its first draft consent decree to the city. Since then, numerous negotiating sessions have been held among EPA, the U.S. Department of Justice, the Virginia Attorney General, and the city to review and discuss various consent decree drafts. By August 1980, EPA had presented city officials with numerous versions of consent decrees. Negotiations were unsuccessful and the city did not sign.

Why Hopewell would not sign

The various versions of the consent decree have had different conditions. Generally, the final version, dated August 15, 1980:

- Raised the facility's effluent limitation on an interim basis. The monthly average concentration limit for BOD increased from 30 mg/l to 40 mg/l and for TSS from 50 mg/l to 65 mg/l. Weekly average concentration levels were raised proportionately.
- Set out time frames for completion of construction, installation of facilities, completion of studies, and implementation of procedures.
- Required the city to implement a program designed to remedy any deficiency in the facility and its manner of operation and any deficiency in the degree of pretreatment of influent provided by contributors to the facility.
- Required the city to pay \$50,000 to the United States of America and to spend an additional \$25,000 on an environmentally beneficial project. These payments were required because of past noncompliance.
- Called for stipulated payments of up to \$10,000 per day for future noncompliance with consent decree requirements.

In replying for the city, the plant director told us that the final version of the consent decree was unacceptable and the city did not sign because (1) EPA and SWCB held full control over the development of the remedial program while holding the city solely responsible for its success or failure, (2) the timetables established for study, design, engineering, construction, and startup and shakedown were totally unrealistic and could not be met, (3) EPA and SWCB could change the program at any time without the concurrence of the city, yet the city was held responsible and subject to daily fines for any failure to meet the EPA- and SWCB-dictated construction schedules, and (4) the city would be agreeing that the facility would be in full compliance immediately and subject to severe duplicate and triplicate stipulated penalties for any future violations.

The city acknowledged that it has not met all of the permit conditions in the past. However, it feels that it has taken extensive corrective actions, with significant success, at substantial cost. According to the city, the progress was made with no assistance from EPA and SWCB since all requests for their technical assistance have been denied. Further, they contend the plant's performance should not have been evaluated until February 1979, at which time repairs to the solids-handling system were completed.

Also, the city believes the facility is close to consistent compliance and that it is doing everything that could reasonably be expected to keep the plant in compliance.

Underlying the city's allegations of unfair treatment is its belief that it is being penalized for a prior Kepone discharge and that it is still paying a price for an event that happened before the present facility was built. It contends that what happened with Kepone has nothing to do with this plant.

In May 1976, Allied Chemical and the city were charged with violating water pollution laws because of Kepone discharges. Subsequently, both parties pleaded no-contest to the charges, were required to pay a fine, and were placed on probation for 5 years. The city's conditions of probation included requirements that it refrain from violation of any Federal, State, or local law.

Specifically, the city's belief that EPA is tying its enforcement actions to Kepone is linked to August 1979 through November 1979 correspondence from EPA's Regional Director in which the Kepone violation is mentioned even though the main topic of the correspondence is release of grant funds. In the correspondence, references are made that the city was in violation of its probation from its 1976 criminal conviction because it was currently in civil violation of the Clean Water Act and Virginia's pollution laws. Because of the probation factor, EPA's Regional Director told the mayor of Hopewell that "the relationship between the 1976 Kepone incident and the plant's current compliance and funding problems is not merely geographical, as you assert."

In addition, we found that in a Washington Post article dated October 17, 1978, an EPA spokesman is quoted as stating the National Enforcement Investigation Center (NEIC) 1/ investigation was prompted by "* * * the potential importance of the plant. We remember Kepone. It is a sensitive issue."

The EPA enforcement attorney assigned to this case told us enforcement action was taken against the city not because

1/NEIC, an arm of EPA's Office of Enforcement, is located in Denver, Colo. The major function of NEIC is to provide technical information and evidence in support of EPA enforcement actions.

of the Kepone incident but because of the degree of the city's noncompliance with its permit at the time enforcement action began and the large EPA grant given to the city.

EPA files complaint

On August 26, 1980, the Department of Justice, on behalf of EPA, filed suit in U.S. district court against the city, Continental Forest Industries, and Hercules, Inc., for violations of the Clean Water Act. The Commonwealth of Virginia has joined in the suit against the city. As of January 22, 1981, the case was in the pretrial stages.

The suit alleges that the city has violated its discharge permit limits and has accepted wastes that interfere with the treatment process at its facility. The complaint alleges that, as a result, the plant is discharging wastes into the James River which exceed the limits in the city's discharge permit. The suit also alleges that Continental Forest Industries and Hercules, Inc., discharged incompatible wastes to the treatment facility, thereby interfering with treatment at the plant. The Federal suit requests a court-imposed schedule for bringing the facility into compliance and civil penalties for past noncompliance from each of the defendants.

Why EPA filed complaint

Because the city refused to sign the consent decree, EPA filed the complaint. The EPA enforcement attorney assigned to the case acknowledges that the city has taken numerous corrective actions in attempts to bring the plant into compliance. However, EPA believes that continued enforcement action is warranted because the city is not doing all it can to bring the facility into full compliance. EPA and SWCB both believe that high influent temperatures are the facility's major problem and the city could take more action to lower influent temperatures. Further, both the EPA enforcement attorney and SWCB believe that their continued pressure on the city is the reason why the facility came into compliance in June 1980.

However, in our report "Costly Wastewater Treatment Plants Fail To Perform as Expected," we pointed out that EPA's enforcement action in 15 "worst case situations" 1/

1/EPA identified for us the 15 treatment plants in the Boston, Chicago, and San Francisco regions that it considered the worst polluters.

in three EPA regions varied from nonexistent to minimal, 1/ followed no particular pattern, and was not as timely or as effective as it could have or should have been.

EPA's enforcement attorney assigned to this case told us that the propriety of EPA's continuing enforcement actions should be reviewed from the time the facility began operations and was in gross violation of its permit. In his opinion, it is improper to only look at the facility's recent discharges.

Withholding final grant payment

The city claims EPA has withheld a final grant payment of \$1.7 million since July 31, 1978, pending approval of an operations and maintenance manual, completion of a final inspection, and resolution of an interim audit even though EPA has caused delays in the accomplishment of these events. It is true that EPA in correspondence to the city cited these reasons for withholding funds. However, the EPA enforcement attorney assigned to this case told us that in reality funds were being withheld because of the facility's noncompliance with its permit and because the interim audit questioned costs equivalent to the amount withheld. The EPA enforcement attorney further commented that the failure to have an approved operations and maintenance manual and a successful final inspection according to EPA regulations are grounds for withholding the final grant payment.

Approval of operations and maintenance manual delayed

EPA regulations require that a facility's operations and maintenance manual be approved before final Federal grants are approved for payment. According to the former director of SWCB's Division of Applied Technology, the initial manual submitted by the city in April 1977 was totally inadequate. The city submitted a revised manual to SWCB on June 15, 1978. On October 25, 1978, SWCB approved it and on November 1, 1978, forwarded it with a completed review checklist to EPA for what is normally an automatic approval.

1/For example, EPA would issue a notice of violation to a municipality noting that its plant was in violation of its permit. However, EPA took no followup action.

The team leader of the Virginia Section, Grants Administration Branch, EPA Regional Water Division, told us that EPA normally only performs a spot check review of State-approved manuals because it is using the same checklist. However, on April 30, 1979, EPA's enforcement attorney assigned to the case told the team leader not to approve the manual because of "on-going enforcement action against the grantee" that could require manual changes. After the city added appendices to the manual, EPA approved it on October 19, 1979.

Final inspection delayed

EPA regulations call for grantees to notify EPA upon completion of project construction. EPA is required to perform a final inspection within 60 days of the receipt of this notice. When the final inspection is completed and EPA determines that the facility has been satisfactorily constructed in accordance with the grant agreement, 1/ the grantee may make a request for final payment.

Even though the facility was far from being in compliance with its permit, on October 25, 1978, the city informed EPA that the basic contract work was substantially complete and that early scheduling of the final inspection would be appreciated. An EPA Regional Water Division staff engineer indicated to the city that the final inspection might be done in early November. On October 31, 1978, EPA's Enforcement Division requested EPA's Water Division not to make the final inspection and final payment until both could be coordinated with an enforcement investigation that was being conducted.

Following this, the city made numerous requests for its final inspection and final grant payment but was continually turned down by EPA. EPA generally tied payment to the approval of an operations and maintenance manual, final inspection, and interim audit. On February 16, 1979, EPA told the city that it would not perform a final inspection until questions on the operational capability of the plant were resolved. In July 1979, EPA told the city that final inspection was scheduled but subsequently canceled the

1/EPA regulations provide for withholding of funds when a plant is in noncompliance with its permit.

inspection. Finally, on September 13, 1979, EPA notified the city that the final inspection was scheduled for October 22, 1979. The inspection was made and noted that major process control problems existed at the facility.

Resolution of
interim audit delayed

EPA conducts two types of field audits--interim and final. EPA regulations require final audits; interim audits are not required and are performed only on selected projects.

An interim audit of the Hopewell facility was made between February 7 and June 21, 1978. The audit was made, according to EPA, because of (1) the significant Federal dollars involved in plant construction and (2) the operational problems the plant was experiencing. EPA's Office of Audit discussed its findings with the city in June 1978. However, it did not provide the city with its draft audit report until June 28, 1979.

EPA's Office of Audit told us the major reasons for the delay were (1) question over whether the grant was a legal municipal grant when 90 percent of the waste being treated was industrial and (2) question over the methodology used in determining engineering charges.

The city provided written comments to the draft audit report on July 27, 1979. However, EPA did not issue the audit report until February 11, 1980. The branch manager of EPA's Office of Audit told us the elapsed period was used to (1) evaluate the city's comments, (2) incorporate the city's comments in the report, and (3) handle other emergency matters that came up during this period.

The audit questions over \$2 million in claimed construction costs. EPA's Water Division disagrees with many of the recommendations made by EPA's Office of Audit. As of February 1981, considerable progress has been made toward resolving the dollar amount in question; however, resolution of the issue will not be made until receipt of the final inspection report.

The branch manager expects that some of the unresolved issues will be deferred until the final audit is performed.

TECHNICAL ASSISTANCE

The city contends that EPA has pursued enforcement action against it without providing requested technical assistance and has deliberately withheld a requested evaluation study report.

The city's allegation that EPA deliberately withheld an evaluation study centers around a report made by the EPA (NEIC). In October 1978, at the request of EPA, NEIC evaluated the Hopewell facility. According to the Enforcement Division, this review was requested because, while Hopewell's violations were already documented, it wanted to use NEIC to help build its case. Specifically, NEIC was to (1) answer certain questions, (2) analyze the cause of the violations, and (3) find an equitable solution to the problem. We found no evidence that the city was advised of the purpose of the evaluation.

On October 25, 1978, the city requested that EPA provide the results of the NEIC review so that it could improve plant operations. On November 6, 1978, EPA's NEIC office replied to Hopewell that it was not yet prepared to suggest any steps that Hopewell could take to improve operations and that its analysis was continuing. Further, NEIC hoped to pinpoint the reasons for permit violations and would do everything possible to expedite its report.

NEIC completed a preliminary report on November 21, 1978. In January 1979 it completed the final report, which identified numerous problems and made recommendations to correct them. NEIC sent the final report to EPA's Regional Enforcement Division.

On January 29, 1979, pursuant to the Freedom of Information Act, the city requested the report, citing that the requested information would facilitate its pursuit of the most expeditious and informed solution to its operation problems. On March 5, 1979, the EPA Regional Administrator denied Hopewell's request because "It is our opinion that the disclosure of these documents at this time will interfere with anticipated enforcement proceedings and will, therefore, not best serve the public interest." Although there is no supporting documentation, EPA's enforcement attorney assigned to this case contends that the contents of the NEIC report were discussed with city officials within 1 month of the city's request. City officials deny any such discussion.

On June 25, 1979, the EPA enforcement attorney sent a copy of the NEIC report, minus the recommendations to Hopewell. The attorney told us the report was released at this time because the legal process had reached a point where release of the report would best serve the public interest. City officials said they were unaware, until later, that the NEIC report had contained recommendations. In the same letter, the city was provided with a draft consent decree which incorporated many of the recommendations contained in the NEIC report.

City officials told us that they were unaware that the NEIC review was for the purpose of building a legal case; they thought it was to help them solve their problems. The chief of the Legal Branch, EPA's Enforcement Division, told us that EPA is not in the business of being a professional consultant and if technical assistance was provided, EPA would have a hard time justifying enforcement action if it had provided specific recommendations to a facility.

The issue of technical assistance was discussed in detail in our report "Costly Wastewater Treatment Plants Fail To Perform as Expected." In that report we noted that EPA provides little technical assistance because of the lack of resources--money, manpower, and expertise--and if assistance was provided, it could jeopardize enforcement actions. We pointed out that this situation puts communities in a "catch 22" situation. If they do not solve their plant performance problems, EPA will take enforcement action. Yet when they turn to EPA for help, they are told that no help will be provided since it might jeopardize future enforcement action. We recommended that the Administrator, EPA, require all EPA regions and strongly encourage the States to institute a technical assistance program to help grantees who seek assistance.

In addition to the NEIC inspection, EPA regional enforcement personnel, between December 1977 and October 1979, made four inspections of the Hopewell facility. These inspections identified many of the problems experienced by the facility. Even though the inspections were made by EPA enforcement personnel, the results were not shared with city officials. However, we did not find any evidence that the city asked for the reports.

Synopsis of the four inspection reports follows.

- In December 1977, a joint EPA and SWCB inspection found that six inoperable primary settling tanks and the inability to dispose of sludge caused the plant to be in noncompliance.
- In March 1978, a joint EPA and SWCB inspection found that the plant had been started prematurely and was choked with excess sludge. Discharge (char, bark, etc.) from Continental Forest Industries damaged plant equipment and interfered with plant operations. EPA's report recommended that the city submit quarterly reports to both EPA and SWCB on causes of equipment failures for possible enforcement actions. The report noted that the city may be eligible for an increase in its permit limitation because of treatment of high-strength industrial waste.
- In August 1979, a joint EPA and SWCB inspection found that the facility was having a TSS problem. The EPA report stated that AWARE and the plant director contended that the plant could be maintained in compliance at temperatures above 100 degrees F with chemical addition in the secondary clarifiers. EPA felt that influent temperatures should be controlled at industry sites, thereby placing full burden on the industries for their discharges to the plant.
- In October 1979, an EPA inspection noted that the plant's overall level of operation and maintenance was much improved but major process problems existed. Specifically, the report concluded that there were settleability problems most likely caused by high temperatures. The report recommended
 - either a relaxation of the plant's permit or submission of a plan for temperature control;
 - increased emphasis on control of industrial waste loadings, particularly from Continental Forest Industries and Hercules, Inc., to reduce peak loads on the plant;
 - construction of a third gravity thickener; and
 - other specific repair and monitoring procedures.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our review was done at the request of Senator Harry F. Byrd, Jr.; Senator John W. Warner, Jr.; and Congressman Robert W. Daniel, Jr., all of Virginia. They requested that we investigate the treatment which EPA has afforded the Hopewell Regional Wastewater Treatment Facility in Hopewell, Virginia. Specifically, the city of Hopewell asserted that EPA (1) could be enforcing requirements upon the city above and beyond those imposed on other grantees, (2) is pursuing enforcement action against the city without providing them with requested technical assistance, and (3) is withholding final grant payment to the city pending completion of certain events even though EPA has caused delays in accomplishment of the events.

In order to determine the treatment that EPA afforded Hopewell, we obtained documentation from and discussed the facility with officials representing (1) EPA's Region III Enforcement and Water Divisions and Office of Audit located in Philadelphia, Pennsylvania, (2) SWCB's Bureau of Enforcement, Bureau of Applied Technology, and Piedmont Regional Office located in Richmond, Virginia, (3) the city of Hopewell, Virginia, (4) R. Kenneth Weeks Engineers--the city's design engineer--located in Norfolk, Virginia, and (5) AWARE--the city's consulting engineer--headquartered in Nashville, Tennessee.

We examined documents, procedures, and practices pertaining to the facility's design, construction, operation, and funding. We also used selected information developed in another GAO review concerning operation and maintenance of wastewater treatment plants. This review was done at the request of the Chairman and Ranking Minority Member, Subcommittee on Oversight and Review, House Committee on Public Works and Transportation, and resulted in a report entitled "Costly Wastewater Treatment Plants Fail To Perform as Expected."

Our fieldwork began in April 1980 and was completed in August 1980.

SUMMARY OF DISCHARGES VERSUS PERMIT LIMITATIONS
FOR THE PERIOD OCTOBER 1977 THROUGH SEPTEMBER 1980

Reporting Period	Biochemical oxygen demand			Total suspended solids		
	Monthly average concentration <u>30 mg/l</u>	Weekly average concentration <u>45 mg/l</u>	Monthly average quantity <u>5675 kg/day</u>	Monthly average concentration <u>50/mg/l</u>	Weekly average concentration <u>75 mg/l</u>	Monthly average quantity <u>9457 kg/day</u>
Oct. '77	81	240	7,615	105	308	9,896
Nov. '77	61	(a)	6,818	190	(a)	21,574
Dec. '77	106	246	15,246	206	850	29,629
Jan. '78	153	335	22,774	258	608	38,349
Feb. '78	269	407	41,134	197	565	29,904
Mar. '78	405	534	54,725	195	435	26,349
Apr. '78	304	573	39,763	260	1,495	34,242
May '78	60	167	7,626	167	616	21,488
June '78	81	137	10,072	164	740	22,025
July '78	98	165	11,165	187	550	21,305
Aug. '78	83	107	12,176	139	495	20,145
Sept. '78	49	99	6,248	75	236	9,904
Oct. '78	89	373	12,045	212	950	28,255
Nov. '78	46	75	6,512	172	276	24,348
Dec. '78	29	43	4,294	179	362	26,504

a/Figures not available.

SUMMARY OF DISCHARGES VERSUS PERMIT LIMITATIONSFOR THE PERIOD OCTOBER 1977 THROUGH SEPTEMBER 1980

Reporting Period	Biochemical oxygen demand			Total suspended solids		
	Monthly average concentration 30 mg/l	Weekly average concentration 45 mg/l	Monthly average quantity 5675 kg/day	Monthly average concentration 50/mg/l	Weekly average concentration 75 mg/l	Monthly average quantity 9457 kg/day
Jan. '79	39	89	5,932	135	135	20,536
Feb. '79	34	42	4,957	99	167	14,434
Mar. '79	33	50	4,594	88	122	12,251
Apr. '79	32	42	4,446	73	113	10,143
May '79	32	41	4,400	76	174	10,450
June '79	27	36	3,612	44	46	5,885
July '79	29	43	3,602	28	45	3,478
Aug. '79	46	50	6,477	98	110	13,799
Sept. '79	22	28	3,204	55	96	8,018
Oct. '79	33	36	4,528	60	94	8,232
Nov. '79	34	44	4,671	60	71	8,243
Dec. '79	37	48	4,957	73	90	9,781
Jan. '80	21	25	3,017	63	106	9,051
Feb. '80	25	32	3,472	60	82	8,332
Mar. '80	29	33	4,117	63	88	8,944
Apr. '80	24	25	3,313	53	64	7,316
May '80	28	39	3,659	65	96	8,495
June '80	23	28	3,092	32	38	4,302
July '80	25	35	2,767	30	37	3,320
Aug. '80	24	26	3,514	16	20	2,342
Sept. '80	25	29	3,644	16	20	2,332



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December 19, 1980

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Mr. Henry Eschwege, Director
Community and Economic Development Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

Thank you for this opportunity to review and comment upon your draft report, "Information On Questions about the Hopewell Wastewater Treatment Facility" and the accompanying Summary. The comments below address areas where our staff members have direct knowledge of the situation or where documents in our files provide the basis for comments. We have restricted our comments to areas where our information is at variance with statements in your draft report, areas where your report appears to be silent, and areas where we believe the report would benefit from some amplification.

I first address the five-page "Summary Statement to the Senate and Congress":

1. Page 2 indicates that the HRWTF had met its permit requirement for monthly average BOD for six months as of September, 1980. In fact, as of September the facility has met its BOD requirement for nine consecutive months. In passing, I note that the facility went out of compliance in November, 1980, and remains out of compliance with its permit requirements.

2. On pages 3 and 4, the Summary Statement quotes an EPA attorney as saying it was EPA's continued pressure that brought the plant into compliance in June of 1980. That statement implies that EPA's pressure was the sole reason and is inaccurate insofar as it overlooks the efforts made by the City, particularly since January 1979, and the continuing efforts made by the State Water Control Board.

3. Page 4 contains a statement that the NEIC review was conducted to build a legal case. In contrast, the

December 17, 1980
Page 2

introduction to the NEIC report itself states that the review was requested to determine the reasons for the "consistent and severe" violations of the plant's NPDES permit.

I next address the 28-page "Information on Questions About the Hopewell Wastewater Treatment Facility":

1. At two places on page 3, the draft report refers to the proposed heat treatment system as "experimental." The Water Control Board considered the proposed heat treatment system unproven for waste of the type to be encountered at Hopewell because the system used conventional technology in an unconventional arrangement. Nonetheless, the system was not "experimental."
2. On pages 9 and 10, the statement is made that the slowness in passing a sewer ordinance contributed to the facilities problems. Since the ordinance was adopted in April 1977, and the plant did not begin operation until August 1977, we do not understand how the adoption of the sewer ordinance could have contributed to the problems. The sewer ordinance was submitted on December 15, 1976, in a form which was almost acceptable to the staff of the State Water Control Board and State Health Department. Meetings were held at that time to finalize the December 15 submittal. The final draft was submitted to the State Water Control Board and State Health Department on January 24, 1977, for their review. The January 24, 1977, submittal was approved on March 2, 1977, by the State Water Control Board.
3. We should emphasize that the draft industrial permits referred to on page 11, as developed by the staffs of the Water Control Board and the City, were first-cut proposals. Thus, the input temperatures proposed were intended as a starting point for future negotiations with the users of the system. The thermal load from each contributor would be averaged in the wastewater mix. However, due to the pending litigation, the staff of the Water Control Board withdrew from the actual permit development process, leaving the City to complete the permit issuance.
4. At page 15, the draft states that the Water Control Board had "classified" the HRWTF as the most serious violator in the State. By initiating legal action, the Board confirmed that it viewed Hopewell a serious municipal violator in the State. Nonetheless, the Board had no formal classification scheme so the term "classified" is misleading.
5. Under "Initial Enforcement Efforts" on page 15 and 16, the report quotes statements from "other entities" who expressed "interest" in the Hopewell problem. The draft report glosses over the concerted efforts of the State Water Control Board, both in cooperative

December 17, 1980
Page 3

and enforcement actions, to correct the problems with HRWTF.

In response to the permit violations during early start-up, the staff of the Water Control Board began periodic inspections to the plant in late 1977. When it became obvious that the problems at the plant were more unmanageable than first believed, the City was ordered to appear before the Water Control Board in March 1978, and at that meeting the City was directed to take the necessary corrective steps to bring the plant into permit compliance. The Board also requested a senior staff member of the Piedmont Regional Office of the Water Control Board to make weekly inspection visits of the Hopewell plant in order to maintain close supervision of the progress and actions being taken by the City. The City appeared at the June 1978, Board meeting and detailed the corrective actions taken in response to the Board's order. Because of the amount of progress that had been made in correcting and repairing the Hopewell plant, the Board deferred further enforcement action. The Board again ordered the City to appear at its December 1978, meeting because of continued effluent violations. It was at this meeting that the Board considered legal action and in January 1979, decided to join suit with the Environmental Protection Agency against the City.

I trust that our comments will assist you in preparing the final version of your report. If I can provide any further information or suggestions, please do not hesitate to call me.

With every kind regard, I am,

Sincerely yours,



R. V. Davis
Executive Secretary



23860

City of Hopewell
Virginia

December 16, 1980

Henry Eschwege, Director
Community and Economic Development Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

Enclosed for your review and incorporation into your final report are our comments on GAO draft report entitled "Information on Questions About the Hopewell (VA) Wastewater Treatment Facility."

In general we find the report to be an accurate statement of the facts concerning EPA's action relative to the Hopewell Regional Wastewater Treatment Facility and the City of Hopewell; however, there are several areas which we feel require comment.

First, regarding the aborted negotiation of a consent decree and the City's failure to agree to the final version dated August 15, 1980, the final consent decree reserved to EPA the right to establish and direct the specific technical changes that the City would be required to undertake in correcting actual or supposed deficiencies in the plant. While EPA could direct the exact nature of the changes to be implemented, the City was to assume full responsibility for their success or failure. In addition to directing the specific changes to be undertaken, EPA also could establish the time frames in which the changes were to be designed, engineered, and constructed. The time frames proposed by EPA were, in the opinion of the City and its consultant, AWARE, INC., completely unrealistic and impossible to meet. Failure to meet these impossible EPA directed time schedules automatically subjected the City to double and triple fines. The technical changes under consideration could take up to 36 months to engineer, design, construct, and bring on line. Despite this extended time period, the consent decree required the City to state that the plant would be in continuous compliance from the date of entry of the decree. Such a condition could not be assured before the changes were completed and brought on line. It was for these reasons that the City did not act on the final consent decree.

Secondly, regarding the issue of EPA's refusal to provide technical assistance to the City of Hopewell, the draft report clearly establishes the "double-think" processes of EPA. While EPA officials verbally and in correspondence denied technical assistance to the City, claiming that they were not in the technical consulting business and/or that the providing of technical assistance would make it hard for EPA to justify enforcement action, EPA, in its first consent decree listed specific technical changes required in the plant and in the final version of the consent decree reserved to itself the specifics of the technical modification to be made. In addition, EPA has reached the technical conclusion that elevated

Mr. Henry Eschwege
December 16, 1980
Page Two

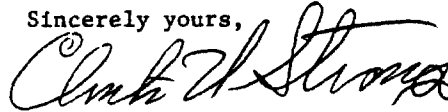
temperatures are the major problem effecting plant performance, despite evidence and consultant opinion that question such a firm conclusion.

Finally, regarding the withholding of grant funds, the report fully documents the extended inexcusable delays within EPA on the approval of the Operations and Maintenance Manual and the resolution of internal problems in the interim audit and the scheduling and conduct of the final inspection. The report documents a further "Catch 22" when the EPA attorney asserts that the City is in noncompliance with its permit because the EPA attorney himself blocked approval of the manual for six months.

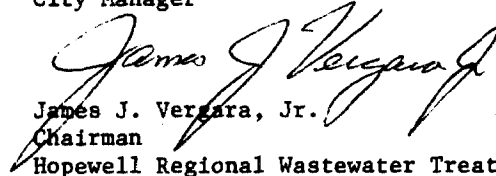
Enclosed are additional comments keyed to specific paragraphs.

We thank you for the opportunity to review and comment on the draft report. We wish to commend the GAO personnel who prepared this report. At all times they acted in a highly effective, professional, and cooperative manner.

Sincerely yours,



Clinton H. Strong
City Manager



James J. Vergara, Jr.
Chairman
Hopewell Regional Wastewater Treatment
Facility Commission

Enclosures



23860

City of Hopewell
Virginia

CITY OF HOPEWELL
COMMENTS ON DRAFT GAO REPORT

"INFORMATION ON QUESTIONS ABOUT THE HOPEWELL (VA) WASTEWATER TREATMENT FACILITY"

<u>Reference</u>	<u>Comment</u>
Page 2, Paragraph Titled, "EPA Enforcement Action," Line 11	Line should read ". . .the past <u>9</u> months and. . ." Reason: As shown in the table at Appendix II, the facility met its monthly BOD requirements for each and every month of 1980 through September.
Page 3, Third Paragraph	The August 15, 1980, version of the consent decree reserved to EPA the right to establish the specific requirements and time schedule of the remedial program while holding the City responsible for its success or failure.
Page 4, Second Paragraph of Section titled, "Technical Assistance"	EPA officials on one hand are quoted that EPA was not in the business of being a professional consultant; the same officials, in drafting the consent decree reserved to EPA the right to dictate the specific technical modifications to be made by the City of Hopewell. Further, as cited on Page 19 of Appendix I, EPA has made the technical determination "the high influent temperatures are the facility's major problem."
Page 4, Final Paragraph	The EPA's refusal to release a technical report to the City because it would "interfere with anticipated enforcement proceedings and would therefore not best serve the public interest" raises the question as to how EPA views its charter. Is it, in active cooperation with state and local government, to clean up the environment, or is it to pursue enforcement action?
Page 5, Final Sub-Paragraph Line 8	This is the first information the City has received that "another final inspection would be needed." EPA has never advised the City of the results of the "final" inspection conducted in October, 1979, nor that a further final inspection would be required.
Page 6, First Full Paragraph	The assertion by the EPA Enforcement Attorney that the City's failure to have an approved Operations and Maintenance Manual constituted noncompliance with its permit is a further "Catch 22," inasmuch as it was this same individual who blocked approval of the state approved manual for six months because of the possibility of litigation.

Comments on Draft GAO Report

Page Two

Appendix I, Page 3, Third Paragraph

While some individual in the SWCB may have considered the proposed heat-treatment process to be experimental, it has been in use in Europe since the 1930's and in the U.S. since the 1950's. It was not considered as experimental in the approval of the plans and specifications by either SWCB or EPA.

Appendix I, Page 3, Third Full Paragraph

Union Carbide study indicates 50-60 mg/l limit on performance. Consultant study that was extension of Union Carbide study did not find support for that limitation.

Appendix I, Page 4, First

The national standards referenced are applicable to domestic plants. The increased values for the Hopewell plant were based on very specific EPA guidelines (BPT), not just arbitrarily set.

Appendix I, Page 6, Graph

Second graph attached indicating mass loading performance compared to permit.

Appendix I, Page 8, Second Paragraph

Actual construction of heat treatment system completed 12-77, but manufacturers' problems prevented the units from becoming fully operational until March 1979.

Appendix I, Page 9 Second Paragraph

The temperature problem referenced is still undefined. It is not clear as to what degree temperatures can be related to past performance.

Appendix I, Page 10, First Full Paragraph

The plant director who was quoted only offered an opinion. Not being employed nor familiar with the project at that time, a concrete statement could not be made.

Appendix I, Page 10, First Full Paragraph under "Late Issuance of Industrial Permits"

It should be noted that nine months of the delay in issuing permits was as a direct result of EPA's pending litigation against the City during which the State refused to act with the City. Upon notification that the State would not proceed in August 1979, the City proceeded independently and issued the permits in the most timely manner possible within the time frame outlined in the use ordinance.

Appendix I, Page 11, Second Full Paragraph

The combined temperature level of 104° F resulting from the individual limits as established in the draft industrial permits was apparently an error. Recalculation of the heat balance indicates the limits would have resulted in a level of 109.5° F.

Comments on Draft GAO Report

Page Three

Appendix I, Page 12, Second Paragraph

The equipment referenced provides capability to determine the character and time of discharge but does not provide capability to automatically detect the occurrence of an industrial spill.

Page 14
"Request for Permit Revision"
Comment

The EPA handling of the City's permit amendment requests illustrate again the inconsistent position of EPA. The initial request for a permit amendment submitted in November 1979 was based upon plant performance and this request was denied with the statement that the only basis for amendment that could be considered was BPT. Plant performance could not be used as a basis for change. The amendment request of March 1980 was based upon the EPA's BPT numbers for paper mills and the organic chemical industry. SWCB reviewed this request, increased the BOD and TSS numbers above what had been requested, approved the request, and forwarded it to EPA. On September 2, 1980, SWCB released a copy of a draft amendment to the City after EPA had approved it. During the City's review of the draft, it was noticed that a computation error had been made in the weekly limit numbers. SWCB was advised of this error and requested to review it and make a correction. SWCB agreed that an error had been made, corrected the numbers, and resubmitted the amendment to EPA for their approval. After a delay, the EPA Enforcement Attorney advised SWCB that the amendment would have to be reconsidered, since recent facility performance indicated that a change might not be necessary. Once again the City is caught in the "Catch 22." After being told that facility performance cannot be used to justify a permit amendment, the City is now told that facility performance can be used to deny an amendment.

Page 16
"Consent Decree Negotiations"

During the period from June 25, 1979, to August 1980, numerous drafts were exchanged for review, comment, and negotiations; however, the City was asked to sign only the final review.

Page 19
"Why EPA Filed Complaint"

It is apparent that despite EPA's continued assertions that they are not in the technical consulting business, EPA's Enforcement Attorney made the technical determination that high influent temperatures are the facility's major problem and is trying to force the City to undertake an expensive program to cool the influent. The record of plant performance in no way supports such a definitive statement of cause and effect. For the past two years the best performance

Comments on Draft GAO Report

Page Four

of the plant has been recorded during the summer months when influent temperatures are the highest. The plant staff and its consultant agree that the true effects of elevated influent temperature have not yet been fully determined.

Page 22, Third and Fourth Lines

The technical inspector spent less than one hour in the plant and viewed only a small part of it. He could not have possibly concluded that major process control problems existed at the plant.

Page 25, First Paragraph

Why should the City be required to ask for a report of an EPA inspection of our facility?

Page 25, Third Paragraph under "Synopsis. . ."

The August 1979 "inspection" was only a walk-through by EPA attorney and technician, scheduled after a lengthy consent decree negotiating session in Richmond. The statement that ". . . facility was attempting to solve TSS problem by adding chemicals to secondary clarifiers to deal with high temperatures" is a totally false statement with no basis whatsoever.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 19 1980

OFFICE OF
PLANNING AND MANAGEMENT

Mr. Henry Eschwege
Director, Community & Economic Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

The Environmental Protection Agency (EPA) has reviewed the General Accounting Office (GAO) draft report entitled "Information On Questions About The Hopewell (VA) Wastewater Treatment Facility." The report addresses three concerns expressed by the City of Hopewell. These issues are: (1) enforcement action being taken by the U.S. Environmental Protection Agency (EPA) against the Hopewell Regional Wastewater Treatment Facility, (2) lack of technical assistance to the City by EPA, and (3) withholding of the final grant payment, amounting to \$1.7 million, from the City by EPA. I will address these issues in this order.

Justification for Bringing the Enforcement Action

As the report accurately points out, the City had an extremely poor National Pollutant Discharge Elimination System (NPDES) permit compliance record for over two years due to their inability to operate the plant as designed and due to upsets caused by industrial users. The initiation of enforcement activities in early 1978 was necessary and justified, and there is no basis for the City's accusation that EPA has singled them out due to the Kepone incident. Municipal enforcement has always been a difficult and sensitive area of activity compared to action against industrial dischargers. Improving the effectiveness of the program is currently a top priority.

The City's recently improved compliance record does not obviate the need for the present enforcement action for the following three reasons: (1) Civil penalties for almost two years of Clean Water Act violations must still be paid; (2) Information received in the course of pursuing the lawsuit has revealed continuing technical problems and inability to

ensure consistent compliance in the future; (3) and dismissal of the industrial contributors from the lawsuit has increased the need for relief from the city pertaining to enforcement of Pretreatment Regulations.

It is EPA's responsibility to ensure that the three considerations stated above are dealt with in a comprehensive and reliable manner. A judicially enforceable agreement or order is the only way to achieve that goal at the present time.

The report also describes Hopewell's refusal to sign a consent decree. It should be noted in this regard that EPA made every effort to accommodate the needs of the City during a year of settlement negotiations and the demands made of the City were both reasonable and necessary.

Denial of Technical Assistance

Regarding EPA's refusal to share the National Enforcement Investigation Center (NEIC) report with the City, I would point out that the report was a confidential document prepared in anticipation of legal proceedings. In the event of a trial, this document would be offered as proof of the necessity for various remedial measures. Hopewell had a capable consultant studying its facility and did not need "technical assistance." EPA, on the other hand, needed an independent evaluation of the plant in order to conduct an effective enforcement action.

Once negotiations commenced and EPA and the City were cooperating to find a solution to Hopewell's problem, the results of the NEIC study were furnished. The recommendation of that study formed the basis for our negotiating position with the City.

Withholding of Grant Funds

According to the draft GAO report, the final payment has been delayed for three reasons. These include a delay in approval of the operation and maintenance (O&M) manual for the facility, a delay in scheduling the final inspection, and issues raised during the interim audit which remained unresolved as of November, 1980.

Concerning the first reason, the draft report states that approval of the O&M manual was ordered stopped by the EPA Regional Enforcement attorney in April, 1979, because of contemplated legal action. It should be noted in this regard that enforcement activity was under way well before that time. The goal of this activity was to have the City perform the modifications to its facility which would result in compliance with the Clean Water Act. In light of the fact that the

facility had operational problems from the outset, it was not proper to give approval to an O & M manual at a time when these problems had still not been worked out.

Concerning the second reason, the draft report states that the Regional Office delayed final inspection for about a year. It should be noted that by acceptance of its grant, the City agreed to make the treatment facility operate in compliance with its discharge permit. However, the Hopewell plant was not operating in compliance for quite some time after construction was completed and is still not consistently in compliance. Since one purpose of the final inspection is to ensure that the grantee has achieved compliance before the final grant payment is released, the Regional office delayed their final inspection until there was a reasonable expectation that the plant could comply with its permit. The inspection has been carried out and a written report is expected in February 1981.

Concerning the third reason, the draft report states that the EPA Office of the Inspector General issued its final interim audit report on \$2.8 million in questioned construction costs in February, 1980, and that the matter is still unresolved. However, it should be pointed out that considerable progress has been made toward resolution of this issue. The Regional office, at a meeting held in November, 1980, discussed approximately ten points in the audit report with which they disagreed, reaching an agreement on all but three of the points. As a result, this reduced the amount in question to \$507 thousand. Those involved agreed at this meeting that these three disagreements could be resolved during the final audit. At the request of the region, such audit would be performed within a reasonable period of time after receipt of the final inspection report.

In addition, the report, on page 6, erroneously quotes an enforcement attorney to the effect that failure to obtain approval of the operations and maintenance manual and failure to pass final inspection are violations of the permit. In fact, these constitute grounds for withholding final grant payment under our regulations and are not related to the NPDES discharge permit.

We appreciate the opportunity to comment on the draft report prior to its issuance to Congress.

Sincerely yours,



for William Drayton, Jr.
Assistant Administrator for
Planning and Management

Continental Forest Industries
Mill Operations Division
PO Box 201
Hopewell VA 23860
Telephone 804 458 9831



DEC 2 1980

December 16, 1980

Mr. Henry Eschwege, Director
United State General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege,

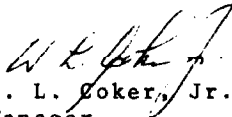
We are in receipt of a copy of "Information on Questions About the Hopewell (Va.) Wastewater Treatment Facility" forwarded to you with your letter of November 19.

As our Company was not interviewed during the composition of this report and the report does not reflect the point of view of industry, we would decline to comment.

We appreciate your offering us the opportunity to review this draft.

Yours very truly,

CONTINENTAL FOREST INDUSTRIES
Mill Operations Division


W. L. Coker, Jr.
Manager

WLC/dft
cc: Harvey Chappell
Larry Jenkins

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