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STATEMENT OF  
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RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION

BEFORE THE  
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT  
OF THE  
HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION  
ON

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
COMPLIANCE BY MAJOR INDUSTRIAL DISCHARGERS IN LOUISIANA

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to present the results of our most recent work on how well certain major industrial dischargers in Louisiana have been complying with National Pollutant Discharge Elimination System (NPDES) permits--the principal means of controlling the nation's water pollution.

On December 2, 1983, we issued a report entitled "Wastewater Dischargers Are Not Complying With EPA Pollution Control Permits" (GAO/RCED-84-53), which included an analysis of 50 major industrial dischargers in Louisiana. We testified on that report before your subcommittee in March of this year. In June you asked us to follow up on information we had included in the report regarding industrial dischargers along the lower Mississippi River between Baton Rouge and New Orleans. At your request, we have



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reviewed (1) the frequency, duration, and severity of permit violations that are continuing to occur in that area and (2) the adequacy of Environmental Protection Agency (EPA) actions to improve compliance with permit conditions.

Because 34 of the 50 dischargers we reported on earlier were located in the lower Mississippi River area, we selected with your agreement, these 34 for our current analysis. Since one discharger did not have a permit with enforceable effluent limits, we did not include this discharger in our current analysis. The compliance data for the 33 dischargers we analyzed spans a 45-month period from October 1, 1980, to June 30, 1984. The first 18-month-period data were obtained from our December 1983 report, and the last 27-month-period data were obtained by our latest effort. EPA's Dallas regional office provided us the data, which were based on periodic compliance data received from the dischargers.

Our current analysis was not directed at determining the causes for noncompliance, at identifying the impact of the noncompliance on water quality, or the effect that achieving compliance might have on individual dischargers in terms of their operations.

In summary, our update on permit compliance for the cases we reviewed in Louisiana shows:

- Permit noncompliance over a 45-month period was frequent and extensive.
- Compliance reporting to top EPA management does not fully disclose the frequency and severity of noncompliance problems.

--The EPA region's enforcement actions have little impact on abating noncompliance.

These findings are similar to those we have reported on over the past 6 years. (Appendix 1 lists the reports.)

#### THE NPDES PROGRAM

The Clean Water Act established the NPDES permit program in 1972 as the principal tool for controlling pollution entering our waterways from point sources, such as factories and sewage treatment plants. The act requires that any facility discharging pollutants into the nation's waters must have an EPA-approved NPDES permit. The permits specify discharge limitations for particular pollutants, actions and time frames for complying with permit limits, and the dischargers' self-monitoring and reporting requirements. The permits must be renewed and updated at least every 5 years.

The permit program is managed by EPA or a state or territory which has been delegated program responsibility by EPA. As of August 31, 1984, EPA had delegated program responsibility to 36 of the 56 states and territories. Louisiana has not been delegated such responsibility.

Of the 65,000 permits issued as of January 1984, 49,000 were to industrial facilities and 16,000 to municipal facilities. EPA has classified about 8,000 permits as "major" on the basis of discharge volume and the type of pollutants in the discharge. As

of August 1984, 140 of the 464 major industrial dischargers in the Dallas region were located in Louisiana.

NONCOMPLIANCE IS A CONTINUING PROBLEM

Noncompliance with the permit limits by dischargers located in the lower Mississippi River area is still a problem. According to EPA records, all of the 33 dischargers we analyzed exceeded their permits for at least 1 month during the 45-month period of our review. During this period, the number of dischargers violating their permits in a given month ranged from 7 to 22. Compared with our earlier analysis in Louisiana, noncompliance is getting worse. For example, all 33 dischargers exceeded their permits at least once during the most recent 27-month period (Apr. 1982 to June 1984). By contrast, 29 of the 33 dischargers exceeded their permits during the previous 18-month period (Oct. 1980 to Mar. 1982).

In terms of noncompliance frequency, we found that the number of months the dischargers exceeded one or more of their permit limits ranged from 1 to 37 months. For example, 10 dischargers exceeded their permits from 1 to 10 months; 12 dischargers exceeded them from 11 to 20 months; 7 dischargers exceeded them from 21 to 30 months; and 4 dischargers exceeded them for over 31 months.

EPA REPORTING DOES NOT FULLY  
DISCLOSE NONCOMPLIANCE DATA

Although our analysis showed that most of the 33 dischargers were extensively and frequently exceeding their permits, all such violations are not being summarized and reported to top EPA

management. Rather, EPA requires each region to prepare quarterly noncompliance reports, which show only the number of dischargers in what EPA has defined as significant noncompliance. EPA defines significant noncompliance as exceeding any monthly average permit limit by (1) more than 40 percent for conventional pollutants (such as suspended solids) and 20 percent for toxic pollutants (such as heavy metals) in any 2 months of a 6-month period or (2) any amount for 4 months in a 6-month period.

To illustrate how EPA's reporting on significant violators can understate continuing noncompliance problems, we prepared three charts in overlay fashion. As we previously mentioned, the information we used was provided by the EPA regional office, on the basis of data received from the dischargers.

The first chart (app. II) shows the months the 33 dischargers appeared on EPA's quarterly noncompliance report. During these months, EPA determined that the dischargers were in significant noncompliance with their permit limits during the 45-month period.

While this data are important in identifying the significant violators, other information which EPA receives from the dischargers is not being reported to top EPA management. To identify dischargers at significant levels above permit limits but at levels less than reported to EPA management, we analyzed noncompliance for the 33 dischargers in terms of whether the dischargers exceeded at least one monthly average permit limit by 100 percent or

more. As shown by our first overlay (app. III), 29 of the 33 dischargers met this criterion for at least 1 of the 45 months; 6 of the 29 dischargers exceeded at least one permit limit by 100 percent or more for 10 or more of the 45 months.

The second overlay (app. IV) shows the months in which any violation of any permit was reported to EPA. As you can see, there is a vast difference in the first chart, which shows significant violations according to EPA's definition, and the last chart, which shows all instances of permit violations. This last chart provides a historical perspective on the frequency and persistence of noncompliance which EPA's reporting does not disclose.

ENFORCEMENT EFFORTS ARE HAVING  
LITTLE IMPACT ON NONCOMPLIANCE

Compliance with permit conditions is the primary goal of EPA and state NPDES enforcement efforts. EPA and the states have a number of tools available, both informal and formal. Informal measures include phone calls, warning letters, and meetings with dischargers. Formal actions include administrative orders, which demand compliance within a specified time period; consent orders, by which the discharger agrees to comply by a certain date; and referrals to federal or state prosecutors for appropriate civil or criminal proceedings.

Against this background of potential enforcement measures, we determined the extent to which the EPA region had taken informal and formal enforcement action against 10 of the 33 dischargers. We selected the 10 dischargers generally because they had exceeded their permits for at least 6 of the most recent 27-month period.

We noted that the EPA region used an informal enforcement approach such as phoning and writing warning letters to the 10 dischargers, rather than a formal approach. For example, over the last 27-month period, the region took 68 informal enforcement actions against the 10 dischargers, compared with 5 administrative orders issued to these dischargers. The effect of the informal enforcement, however, was very limited, as noncompliance continued afterwards. For example, the EPA region sent warning letters to and held meetings with one discharger, which had been exceeding its permit for 9 months out of a 12-month period ending in December 1983. Despite these efforts, the discharger continued to exceed its permit for 5 of the next 6 months.

The EPA region took formal enforcement actions against 17 of the 33 dischargers by issuing 25 administrative orders and making one referral to federal prosecutors. Sixteen dischargers never received any administrative orders during the 45-month period, although it appeared to us that such action was justified in a number of cases. For example, one discharger exceeded its permit for 21 consecutive months and for a total of 33 of the 45 months. In 9 of the 33 months, a permit limit was exceeded by 100 percent or more.

The effectiveness of the administrative orders in achieving permit compliance for the 17 dischargers was questionable in that in all but one case, the noncompliance continued in the months that followed. For example, one discharger had violated its

permit for 35 consecutive months--from October 1980 to August 1983--after receiving a total of six administrative orders in 1976, 1977, 1980, 1982, and 1983.

According to EPA regional officials, their enforcement of permit limits has been hampered by scarce resources. The region covers five states and has issued 5,734 permits, including 876 permits to major dischargers. In fiscal year 1984, the technical engineering staff which performed compliance reviews and initiated formal and informal enforcement actions totaled 19 staff; also, 10 administrative specialists took informal enforcement actions such as issuing warning letters. Each of the 15 engineers involved in enforcement efforts has a workload of 75 to 80 cases; 1 engineer has 102 cases. Turnover of the engineering staff has become a problem recently, as 4 of the 12 engineers who deal with major dischargers have less than 2 years experience. According to the section chiefs of both staffs, there is a staff shortage which does not allow the region to take enforcement action against as many dischargers as it would like.

This staffing situation caused the region to develop a screening criterion to determine which dischargers will receive a formal or informal enforcement action or no enforcement action at all. The EPA regional management designed this enforcement strategy based on limited resources that would only allow the compliance engineers to take formal enforcement action against about 20 percent of the major industrial dischargers in the region. The

remaining 80 percent receive either a phone call or a form letter for reported violations.

According to EPA's regional general counsel, the screening criterion has no legal basis because all permit violations are violations of the Clean Water Act. He told us that because of this criterion, he believes the region has some dischargers which need formal enforcement action because they chronically violate their permit limits but are screened out and only receive an informal action.

In our December 1983 report, we identified resource problems in six states regarding enforcement and other permit program activities. We recommended that the EPA Administrator determine to what degree limited resources contribute to continued high non-compliance and enforcement problems in the permit program and present this analysis to the Congress for its consideration in determining whether additional resources should be provided to improve the program's effectiveness. EPA agreed with our recommendation and in February 1984 informed us that its Office of Water would analyze information from the agency's management information system to determine the predominant causes of noncompliance. EPA further stated that if the analysis showed that limited resources were adversely affecting the effectiveness of NPDES compliance and enforcement activities, it would present the analysis to the Congress. This study is currently underway and will take several months to complete.

In addition to resources, EPA regional officials told us that the effectiveness of their enforcement efforts were affected by their lack of authority to assess fines for noncompliance. If EPA believes a discharger should be fined, the case must be referred to the Department of Justice for litigation. In our 1978 and 1983 reports, we recommended that EPA request the Congress to give it administrative penalty authority. EPA requested such authority and the Water Quality Renewal Act of 1984 (H.R. 3282) which passed the House in July 1984, contains a provision on administrative penalties.

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In conclusion, let me caution that because of the limited scope of our review, we cannot extend the noncompliance data beyond the dischargers we reviewed in Louisiana. However, our analysis surfaced a problem relating to EPA's reporting of noncompliance results. EPA's nationwide reporting of only those dischargers that are in significant noncompliance with permit conditions can give the impression as we identified in our current analysis that the noncompliance problem is not widespread. Our previous work has clearly shown that noncompliance--exceeding a permit limit by any amount--is widespread and frequent for both major municipal and industrial dischargers. Our work in Louisiana has shown that some dischargers are exceeding permit limits over extended time frames without meeting EPA's "significance" definition.

A more complete picture of permit noncompliance in the region would provide an important benefit. Since the region's level of resources can only provide a certain enforcement capability, this capability is generally directed to dischargers EPA identified to be in significant noncompliance. We believe that EPA regional and headquarters management would be in a better position to direct the appropriate level of resources for enforcement when it has information regarding the full extent and severity of noncompliance in each region. Therefore, we would suggest that EPA expand its reporting to include a historical analysis of discharger noncompliance, as we have shown in the charts, as well as severity and frequency analyses.

Mr. Chairman, this concludes my prepared remarks. We will be pleased to respond to your questions.

LIST OF GAO REPORTS ON NPDES PERMIT COMPLIANCE

More Effective Action by the Environmental Protection Agency Needed to Enforce Industrial Compliance With Water Pollution Control Discharge Permits (CED-78-182, Oct. 17, 1978).

Costly Wastewater Treatment Plants Fail To Perform As Expected (CED-81-9, Nov. 14, 1980).

Wastewater Discharges Are Not Complying With EPA Pollution Control Permits (GAO/RCED-84-53, Dec. 2, 1983).

APPENDIX II

Company Name	1980				1981				1982				1983				1984	
	Q	N	D	C	J	J	J	J	J	J	J	J	J	J	J	J	J	J
ALLIED CHEMICAL CO.																		
AMERICAN HOECHST																		
CELOTEX CORPORATION																		
E. I. DUPONT																		
KAISER ALUMINUM																		
BASF WYANDOTTE																		
GULF OIL PRODUCTS																		
LOUISIANA POWER & LIGHT CO.																		
SMELL OIL PRODUCTS																		
BEKER INDUSTRIES CORP.																		
ARUPHY OIL CORP.																		
UNIONOYAL, INC.																		
ETHYL CORPORATION																		
FREEMONT CHEMICAL CO.																		
STAUFFER CHEMICAL CO.																		
STAUFFER CHEMICAL CO.																		
MOUSANTO																		
ALLIED CHEMICAL CORP.																		
EXXON COMPANY																		
ORNET CORP.																		
CHEVRON CHEMICAL CO.																		
SHELL CHEMICAL CO.																		
SHELL CHEMICAL CO.																		
TRAD CHEMICAL CO.																		
KAISER ALUMINUM																		
ALLENANMA CHEMICAL CO.																		
FORMOSA PLASTICS CORP.																		
B. F. GOODRICH CHEMICAL CO.																		
LOUISIANA POWER & LIGHT CO.																		
AGRICO CHEMICAL CO.																		
GULF OIL CHEMICAL																		
PLACID REFINING CO.																		
MARATHON OIL CO.																		
GOOD HOPE REFINERS																		

■ SIGNIFICANT VIOLATIONS REPORTED ON EPA'S QUARTERLY NONCOMPLIANCE REPORT  
 ● HAS NO ENFORCEABLE PERMIT LIMITS

APPENDIX III

- ALLIED CHEMICAL CO.
- MERCKAN HOECHST
- CELOTEX CORPORATION
- I. DUPONT
- KAISER ALUMINUM
- ASF WYANDOTTE
- SULF OIL PRODUCTS
- LOUISIANA POWER & LIGHT CO.
- HELL OIL PRODUCTS
- BEKER INDUSTRIES CORP.
- MURPHY OIL CORP.
- UNIROYAL, INC.
- ETHYL CORPORATION
- FREEMONT CHEMICAL CO.
- STAUFFER CHEMICAL CO.
- STAUFFER CHEMICAL CO.
- MONSANTO
- ALLIED CHEMICAL CORP.
- EXXON COMPANY
- ORNET CORP.
- CHEVRON CHEMICAL CO.
- SHELL CHEMICAL CO.
- SHELL CHEMICAL CO.
- TRIAD CHEMICAL CO
- KAISER ALUMINUM
- ALLEMANIA CHEMICAL CO.
- FORMOSA PLASTICS CORP.
- B. F. GOODRICH CHEMICAL CO.
- LOUISIANA POWER & LIGHT CO.
- AGRICO CHEMICAL CO
- GULF OIL CHEMICAL
- PLACID REFINING CO
- MARATHON OIL CO
- GOOD HOPE REFINERIES

Company Name	1980				1981				1982				1983				1984		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
ALLIED CHEMICAL CO.																			
MERCKAN HOECHST																			
CELOTEX CORPORATION																			
I. DUPONT																			
KAISER ALUMINUM																			
ASF WYANDOTTE																			
SULF OIL PRODUCTS																			
LOUISIANA POWER & LIGHT CO.																			
HELL OIL PRODUCTS																			
BEKER INDUSTRIES CORP.																			
MURPHY OIL CORP.																			
UNIROYAL, INC.																			
ETHYL CORPORATION																			
FREEMONT CHEMICAL CO.																			
STAUFFER CHEMICAL CO.																			
STAUFFER CHEMICAL CO.																			
MONSANTO																			
ALLIED CHEMICAL CORP.																			
EXXON COMPANY																			
ORNET CORP.																			
CHEVRON CHEMICAL CO.																			
SHELL CHEMICAL CO.																			
SHELL CHEMICAL CO.																			
TRIAD CHEMICAL CO																			
KAISER ALUMINUM																			
ALLEMANIA CHEMICAL CO.																			
FORMOSA PLASTICS CORP.																			
B. F. GOODRICH CHEMICAL CO.																			
LOUISIANA POWER & LIGHT CO.																			
AGRICO CHEMICAL CO																			
GULF OIL CHEMICAL																			
PLACID REFINING CO																			
MARATHON OIL CO																			
GOOD HOPE REFINERIES																			

■ VIOLATIONS OF PERMIT LIMIT(S) BY AT LEAST 100 PERCENT

● HAS NO ENFORCEABLE PERMIT LIMITS

