

U.S. EPA REGION 6 EFFLUENT TOXICITY TESTING PROGRAM: EVALUATION OF RESULTS

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PROGRAM: EVALUATION OF RESULTS

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INTRODUCTION

Background

Although the U.S. Environmental Protection Agency, Region 6 (EPA) Laboratory has had an effluent toxicity testing program for over 10 years, the emphasis was increased in Fiscal Year (FY) 1984 with regard to both types and numbers of tests conducted. Initially, acute testing with Daphnia and mysid shrimp served to complement the EPA "second round" permitting approach effective during FY 1982-87, at which time effluent toxicity screening with those species was required for most major industrial permittees. This initiated permittees on the whole effluent toxicity testing concept, and familiarized them with the methodology and data interpretation. Along with the self-monitoring data, the EPA Region 6 Laboratory results served to establish an effluent toxicity database. Many data were also entered into EPA's national database, the Complex Effluent Toxicity Testing Information System (CETIS). As the capability of the Regional Laboratory improved and testing methods became more sophisticated, the purposes of the program diversified. Starting FY 1985-86, standard short-term chronic tests were conducted in conjunction with Daphnia tests to address inter-species differences in sensitivity. The chronic methods included 8 d fathead minnow, and to a limited extent, 7 d Ceriodaphnia, and 96 h alga (Selenastrum capricornutum) tests. Also, during this period, an important purpose of the testing was to screen facilities to determine the need for water quality based control measures.

In FY 1987, the Region developed a "third round" permitting policy to be implemented during FY 1988-93, which included toxicity testing requirements for all major NPDES permittees. Since initiation of this policy, the need for the Region to screen facilities prior to permit renewal has diminished. However, the need to assess the sensitivity and compare the newly developed fresh and salt water testing methodologies was considered important. The tests were utilized in an effluent testing program and in numerous water quality-related special studies. Additionally, there was a continued need to establish an effluent toxicity database for discharges in the Region, particularly those which could adversely affect receiving waters. Data were provided to the states and, through inspection reports, the permittees also became aware of the toxicity of their discharges.

An ancillary function, not initially envisioned, developed from the Clean Water Act amendments of 1987. Under Section 304(l), the states and/or EPA are required to list water bodies which are known to be, or are suspected of being, impaired by toxic pollutants. As part of this process, the states are required to evaluate available water quality as well as effluent chemical and toxicity data. The Section 304(l) activities are viewed as an agency priority, and the needs of the states will play an important role in the future of the effluent testing program, particularly with regard to identifying toxic discharges and shifting more to special studies to evaluate toxicity of water bodies, instead of effluents alone.

Purpose and Objectives

The purpose of this report was to compile and evaluate whole effluent toxicity testing data generated by the EPA Regional Laboratory. The specific objectives are identified as follows:

1. Compile and present all effluent toxicity data collected from FY 1984 through mid-FY 1988. A spreadsheet was developed which includes toxicity data, plus additional information and data on the facilities, receiving waters and effluent chemical characteristics.
2. Compare relative sensitivity of several standard test organisms and methods, including 24-48 h Daphnia pulex acute test, 8 d fathead minnow (Pimephales promelas) embryo/larval survival and teratogenicity (chronic) test and the 96 h algal (Selenastrum capricornutum) chronic growth test.
3. Evaluate and compare effluent toxicity for various facility types (Standard Industrial Classifications=SIC Codes), including: municipal sewage treatment plants (SIC Code 4952); Plastics Materials and Resins (2821); Industrial Organic Chemicals (2869); Petroleum Refining (2911); Plating and Polishing (3471); and Federal Facilities (9711).
4. Evaluate where receiving waters could be affected by whole effluent toxicity, based on available instream dilution.

METHODS AND MATERIALS

Selection of Facilities

An average of about 80 facilities were selected per year for effluent toxicity testing during the period FY 1984-88. About two-thirds of the facilities were selected by the Water Quality Management Branch. These facilities were selected primarily on the basis of having the potential to affect the receiving waters (dilution ratio $\leq 100:1$), or because they discharged to water bodies with known or suspected water quality problems. The Permits Branch selected the remaining one-third of the facilities. They were selected on the basis of having expiring NPDES permits, such that toxicity data could be considered prior to permit reissuance.

Sample Collection, Shipping and Storage

Single grab samples were collected from process wastewater discharges by compliance inspectors during facility inspections. Samples were placed in coolers, iced, and shipped to the Regional Laboratory through an overnight courier service. Standard chain of custody procedures (U.S. EPA 1978) were followed in processing of samples. Samples were stored in a refrigerator at 4 C until test initiation. Testing was initiated within 36 h of sample collection.

The decision to collect grab samples was based on resource constraints. Grab samples provide a measure of instantaneous toxicity and spikes are not masked by dilution. They may yield representative results if the

wastewater treatment system has a long (>14 d) retention time. Composite samples integrate toxicity spikes and may be more representative of average conditions, and may provide more representative results when the retention time is short (<14 d) (U.S. EPA 1985a). From this rationale, it may be more appropriate to consider the data as screening results which are most representative for facilities having longer retention times.

Toxicity Testing Procedures

Culture of all test organisms and toxicity testing was conducted at the Regional Laboratory, Houston, Texas. Culture and testing methodology is presented in U.S. EPA 1985a; 1985b; and 1988. The test procedures are summarized below.

Species	Test Type (Duration)	Test Endpoints	Test Container (Test Volume)
<u>Freshwater</u>			
<u>Daphnia pulex</u>	Acute (48h)	Survival	50 ml glass (50 ml)
<u>Ceriodaphnia dubia</u>	Chronic (7d)	Survival; Reproduction	50 ml glass (15 ml)
Fathead minnow (<u>Pimephales promelas</u>)	Chronic (8d)	Survival; Teratogenicity	400 ml plastic (250 ml)
Alga (<u>Selenastrum capricornutum</u>)	Chronic (96h)	Cell Growth	20x150 mm glass (25 ml)
<u>Saltwater</u>			
Mysid Shrimp (<u>Mysidopsis bahia</u> or <u>M. almyra</u>)	Acute (48h)	Survival	400 ml plastic (250 ml)
Sheepshead Minnow (<u>Cyprinodon variegatus</u>)	Chronic (8d)	Survival; Teratogenicity	400 ml plastic (250 ml)

During FY 1984-85, in the majority of cases, single species tests were run on effluent samples. Testing with multiple (two or three species) was initiated during FY 1986 and continued through 1988, for the purpose of reducing uncertainty related to species sensitivity. The high level of resources required for culturing mysids and testing Ceriodaphnia resulted in limited use of those test organisms during FY 1986-88. Generally because of resource limitations only single test species were used in testing marine effluents. Usually these consisted of the mysid acute test (through FY 1985) or the sheepshead minnow chronic (FY 1986-88).

To better evaluate potential toxicity due to total residual chlorine (TRC), chlorinated effluent samples were tested "as is" as well as following dechlorination with sodium thiosulfate. The dechlorination procedure consisted of addition of 1.0 ml of a 100 mg/l sodium thiosulfate ($\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$) solution per liter of sample. This procedure is recommended for dechlorination of wastewater samples prior to BOD analysis (APHA 1980). Following this procedure, samples were reanalyzed to verify that TRC was nondetectable.

For the most part, a dilution factor of 0.5 was used in diluting effluent samples for testing, which resulted in effluent concentrations of 100%, 50%, 25%, 12% and 6%. This scheme was occasionally modified to accommodate highly toxic effluents. In all tests, except for the algal test, culture water was used as the performance control, and as the diluent. The culture water consisted of dechlorinated, carbon filtered City of Houston tap water. Marine tests incorporated the same water, supplemented with sea salts (Hawaiian Marine Mix[®]). The chemical makeup of the freshwater most closely resembled moderately hard water (described in U.S. EPA 1985a), although alkalinity was slightly lower. The algal culture medium did not include the complexing agent EDTA.

The approximate composition of the control/dilution water is presented below.

	pH	Alkalinity ----mg/l as	Hardness CaCO ₃ ----	Conductivity uMHO/cm	Salinity o/oo
Freshwater	8.0	45	85	400	0
Algal Culture Medium (Freshwater)	7.3	4	14	100	0
Saltwater	8.3			37,000	20

A primary advantage in using a standard water source, as was done in this study, is that it makes results more comparable for different effluents, categories of facilities, and collection times. A disadvantage is that this does not take into account the site-specific chemical characteristics of receiving waters, which could influence instream effects. Resources were not available to collect ambient water samples above the discharge, for use as control/dilution water.

In all cases the type of test species used--fresh or salt water--was dictated by the effluent salinity, i.e., for effluents <5 o/oo, freshwater organisms were used, and at ≥ 5 o/oo, saltwater organisms were used. For brackish samples with salinities of 3-5 o/oo, "salinity controls" were included to determine the effects of salinity on the test organisms. This treatment involved exposing test organisms to culture water to which sea salts had been added, to achieve the same salinity as the effluent sample. The approach to select the test organisms based

on effluent rather than receiving water salinity is adequate for screening, as well as for consistency and quality control. It should be noted that preliminary information, from EPA Region 4 and the Environmental Research Laboratory-Duluth, suggests that freshwater test organisms serve as viable surrogates to marine species and therefore can be used in assessing impacts to marine receiving waters (Bill Peltier, Personal Communication).

For the majority of tests, conductivity, salinity, hardness, alkalinity, pH, DO, and temperature were measured initially. If mortality occurred during the test, then DO was measured every 24 h thereafter. Test temperatures were maintained at 24 ± 1 C. During FY 1984-86, if no significant mortality (i.e., > 10% mortality in 100% effluent) occurred in acute tests during the first 24 h, the test was terminated. Because it was recognized that acute effects could occur after longer exposures, starting in FY 1986 acute tests were continued to 48 h, regardless of effect. Mortality as well as non-lethal endpoints (if applicable) were monitored every 24 h. Acute LC50 and chronic EC50 values were calculated using either trimmed Spearman-Kärber (pre-April 1987) or Probit (April 1987-88) procedures (U.S. EPA 1985a). Significance of survival or reproduction in given treatments was analyzed using Dunnett's Test and ANOVA at $P=0.05$ (U.S. EPA 1985b). Ninety-five percent confidence intervals around the LC/EC50 values were calculated if possible.

Data Compilation and Evaluation

All data generated from FY 1984 through mid-1988 were compiled in a LOTUS 1-2-3[®] spreadsheet. Effluent toxicity and other data and information entered into the spreadsheet included: NPDES number, outfall number, SIC code, location, receiving water name, stream flows, discharge flows, instream waste concentration, sample collection date, effluent physical/chemical characteristics, test organism, test length, LC50, mortality in 100% effluent, Lowest Observed/No Observed Effect Concentrations (LOEC/NOEC), comments, and potential for instream effects. A description of the elements, and the spreadsheet are contained in Appendix A.

Relative toxicity comparisons were made using several test methods for the following municipal and industrial facility types: Municipal Sewage Treatment Plants (SIC Code 4952); Plastics Materials and Resins (2821); Industrial Organic Chemicals (2869); Petroleum Refining (2911); Plating and Polishing (3471); and Federal Facilities (9711).

Relative toxicity was defined in terms of the commonly applied 0.5 dilution factor, as shown on the following page.

Term	Definition
Nontoxic	No significant effect in 100% effluent
Low Toxicity	Significant mortality in 100% effluent; LC50 or EC50=100% to 50% effluent
Medium Toxicity	LC50 or EC50=50% to 25% effluent
High Toxicity	LC50 < 25% effluent

These are not standard measures of toxicity, however, they are useful for purposes of grouping and assessing data. The measures may not have a direct bearing on potential water quality effects and are used only for comparisons between SIC categories. Additional "side-by-side" comparisons of the sensitivity of Daphnia, fathead minnow and algal tests were also made, primarily using LC50 or EC50 as the basis for ranking.

Potential for receiving water effects was evaluated by considering instream waste concentration (IWC), along with the degree of toxicity. IWC is the estimated percent effluent dilution in the receiving water after mixing, calculated using the following equation:

$$IWC(\%) = \frac{Q_e \times 100}{Q_e + Q_s},$$

where Q_e and Q_s are average pipe flow and critical stream flow rates, respectively. The following decision criteria, from the Technical Support Document (U.S. EPA 1985c), and from the states' implementation procedures or policy, were used to assess potential receiving water effects:

- Potential for instream acute effects if $IWC \geq LC1$, where $LC1 = 0.3 \times LC50$.
- Potential for instream chronic effects if $IWC \geq NOEL$.
- The state of Texas draft water quality standards implementation procedures incorporated the following assumptions:
 - Estuaries have a 61 m (200 ft.) mixing zone with an IWC of 8% effluent at which chronic toxicity is evaluated;
 - Lakes have a 30 m (100 ft.) mixing zone with an IWC of 16% effluent at which chronic toxicity is evaluated; and
 - The Houston Ship Channel has an IWC of 30% effluent at which acute toxicity is evaluated.

-The state of Louisiana has requested that a low flow value of 111,000 cfs be used for the Mississippi River.

-In some cases best professional judgement was used in assessing potential effects in "no flow" situations (e.g., lakes), or where stream and/or pipe flow data or mixing zone procedures were not available.

Flow data were obtained primarily from the Permits Branch and consisted of either 7Q2 or 7Q10, depending on the applicable state water quality standards. These data were received from the states for expiring NPDES permits. Stream flow data for other (non-expiring) permittees was developed by Permits Branch using available information including published reports containing low flows, USGS data, from consultation with the states, and through the STORET Industrial Facilities Discharge (IFD) File. The IFD file incorporates industrial and municipal facility names, NPDES numbers, receiving water reach numbers, reach names, locations, and Gage File data. The STORET Gage File calculates stream flow for receiving waters of interest using the Velz-Gumbel Graphical Technique (W.E. Gates & Associates, Inc. 1982).

Quality Assurance

This study followed QA/QC procedures and data quality objectives presented in "FY 1987 Effluent Toxicity Testing Project Plan," developed by the Water Quality Management Branch. In addition, a QA/QC plan outlining calibration and standardization of instrumentation, test procedures, and test organism maintenance is on file with the Houston Laboratory's Quality Assurance Office. The Regional Laboratory followed standard operating procedures (SOP's) adapted from acute and chronic testing manuals. These SOP's were consistently followed by the same two laboratory personnel throughout the study period.

SOP's included reference toxicant tests conducted monthly for each test organism using copper sulfate (CuSO_4). Control charts were maintained for each reference toxicant-organism combination and successive toxicity values (i.e., LC50 or EC50) were plotted to determine any variation in sensitivity of the test organisms.

Once test results were received by the Regional Office, a review was performed by the Water Quality Management Branch to ensure all necessary data and calculations were provided. Any corrections or modifications of the test results were made through communication with the lab. All data presented met the requirements of acceptability pertaining to the standard methods used. In all cases, control survival of fish and daphnids was $\geq 90\%$. The data entry procedure consisted of logging data in a standard format; checking data; data entry into an IBM PC/AT; retrieval and checking entered data; followed by final check and correction. This protocol minimized errors in lab reports and during transcription.

RESULTS AND DISCUSSION

Spreadsheet of Effluent Toxicity Results

All whole effluent toxicity data, plus other related data and information on the facility, effluent chemistry, and receiving waters are presented in Appendix A. This database contains results for a total of 520 effluent tests. Most of the data were collected under the effluent testing program, although some were collected during special projects (e.g., U.S. Naval Air Station, Corpus Christi, TX; Tinker Air Force Base, Midwest City, OK; Tyler Pipe, Swan, TX). Only data collected by the Regional Laboratory were evaluated below.

Comparative Sensitivity of Test Methods

Fig. 1 summarizes results for 38 effluents where side-by-side testing with the 96 h algal test and either 24-48 h Daphnia, 8 d fathead minnow tests, or both, were conducted during FY 1987-88 (see also, Appendix B.1). Sensitivity was evaluated by directly comparing EC/LC50 values in terms of percent effluent. This evaluation included a wide variety of facility types and potential pollutants. In 31 cases when all three tests were conducted on the same samples, the algal test was most sensitive in 16 (52%) of the cases; the Daphnia test in 5 (16%) of the cases; and the minnow test was most sensitive in two (6%) cases. On eight occasions (26%) the alga was equally sensitive to the Daphnia or minnow tests, or both. In some respects this comparison may be biased since the endpoint in the algal test reflects cell numbers, expressed as EC50, compared to lethality of Daphnia and minnow, which is expressed as LC50. Also, because the tests differed in duration, it is important to realize that test sensitivity, rather than species sensitivity, is being compared.

A total of 96 effluents from a variety of facility types were concurrently tested with 24-48 h Daphnia and 8 d fathead minnow tests (Fig. 2; Appendix B.2). Overall, the Daphnia test was more sensitive in 40 (42%) of the cases, while the fathead minnow test was most sensitive in 31 (32%) of the cases. The response was similar in 25 (26%) of the effluents tested. In situations where unionized ammonia was considered to be the primary toxic agent, based on chemical measurement of the effluent sample, the minnow was more sensitive than the Daphnia. The opposite was true when Total Residual Chlorine (TRC) was the suspected primary toxic agent. These findings are consistent with the published literature on the toxicity of these substances to aquatic life, which is summarized on the following page (U.S. EPA 1985d; 1985e).

Toxicant	<u>Daphnia</u>	Fathead Minnow
Total Residual Chlorine		
Acute Value (LC50)	27.7 ug/l	105.2 ug/l
Chronic Value (ChV)	3.7 ug/l	11.2 ug/l
Un-Ionized Ammonia		
Acute Value	1.91 mg/l	2.07 mg/l
Chronic Value	0.53 mg/l	0.22 mg/l

It is interesting that the Daphnia pulex acute test was generally more sensitive than the fathead minnow tests, in spite of the much shorter test duration. This may be reflective of the relative intolerance of Daphnia pulex to metals, TRC and/or chloramines.

The findings here give further weight to the multiple species testing approach to account for ranges of tolerance of different species to particular toxic agents. While the algal test was more sensitive to effluents than either Daphnia or fathead minnow tests, it has generally not been considered in EPA or state permitting programs. The test is relevant in all discharge situations where aquatic plants are ecologically important and/or where chronic tests more sensitive than the daphnid/fathead minnow tests may be necessary to adequately protect water quality.

One possible reason why the algal test has not been considered in toxicity testing programs is the presumption that stimulatory effects could complicate the procedure. In this investigation stimulation was not a problem. Of the 38 Selenastrum tests conducted, only six (16%) were stimulatory at one or more effluent concentrations (see Appendix A). In one situation a dechlorinated municipal effluent was stimulatory. In several cases, when stimulation was found at low effluent concentrations, toxicity occurred at higher concentrations, which indicates the presence of ammonia. In the few cases where stimulation was demonstrated, we do not view this to be a problem which would hinder assessment of toxicity: stimulatory effects show that the effluent is nontoxic to the alga. However, this may indicate the potential for eutrophication problems.

Comparison of Toxicity of Industrial and Municipal Discharges

Results of toxicity tests on various industrial facility types are summarized in Figs. 3 and 4, and Appendix C. Of the five industrial categories evaluated, Industrial Organic Chemicals (SIC Code=2869) was the most toxic to Daphnia, and least toxic to the fathead minnow. Although the number of tests was limited (see Appendix C.5), federal facilities (9711) ranked high with regard to the incidence and degree

of effluent toxicity, particularly to the minnow, where all tests showed an effect. The incidence of toxicity was lower for Daphnia (46% of tests toxic), but the percent of tests exhibiting high toxicity was greater. At least half of the samples tested from these federal facilities may have been toxic due to TRC based on a comparison of measured effluent values and generally accepted chronic values for TRC. The percentage of samples from federal facilities with high effluent toxicity was greater than other industrial categories, which suggests that this group may deserve priority consideration with regard to toxics control. Results were very similar for the plating and polishing facilities, which ranked high in terms of incidence of toxicity to the fathead minnow, and degree of effect to the Daphnia. Plastics Materials and Resins (2821) and Petroleum Refining (2911) categories ranked intermediately, with the fathead minnow test exhibiting a considerably higher incidence of toxicity than the Daphnia. Overall, 100% effluent from the five industrial categories investigated exhibited acute toxicity to Daphnia about 30% to 55% of the time, while chronic toxicity to the fathead minnow was found 45% to 100% of the time.

Fig. 5. summarizes the data for municipal sewage treatment plants. The occurrence and degree of toxicity was relatively high for all three types of tests, with 70%-90% of the effluents showing toxic effects, depending on the species. Of those effluents exhibiting significant toxicity, an extraordinarily high percentage were highly toxic to Daphnia (55%) and alga (58%), compared to the fathead minnow (15%). The findings were probably most reflective of the intolerance of these species to TRC. However, it is clear from the data summarized in Fig. 6, that toxicity was not being caused by TRC exclusively. This figure demonstrates that toxicity occurs in Daphnia, minnow and algal tests, even when the effluent TRC was nondetectable, or after samples were dechlorinated. It is plausible that TRC could have been present in some of these samples at concentrations below the detection limit. However, other substances may also be toxic, including ammonia. Toxic effects considered not to be due to TRC were more apparent in minnow and algal tests (>50% of effluents tested) compared to the Daphnia test (10%). Overall, municipal effluents were more toxic than the industrial categories investigated, which was probably influenced by, but not limited to, the presence of TRC. These findings support the Region's initiative to require dechlorination of major municipal discharges, and Toxicity Reduction Evaluations (TRE's), which serve to identify and control toxic pollutants, and are required under the present permitting policy.

Potential Effects of Discharges on Receiving Waters

Table 1 lists 109 discharges in EPA Region 6 which, based on calculated instream dilution, could potentially result in toxic effects to receiving waters. The list was developed using both acute and chronic test results, and the critical stream flow. The general policy of EPA and many states, is to prohibit acute toxicity in the mixing zone. In all cases, the state water quality standards allow for a percentage of the stream flow or width for a zone of passage. This study did not include an evaluation of potential toxic effects within

mixing zones. Doing so would have increased the number of facilities listed, since the degree of dilution would be lower for the mixing zone than the entire stream flow.

In the majority of cases, only very limited chemical analyses were performed on the samples, therefore, determination of toxic agents was problematic. In many cases, it appears that TRC and ammonia were significant pollutants. Ammonia was prevalent at toxic levels in numerous municipal and industrial discharges.

Overall, there are concerns regarding the potential impacts of dischargers on waters in the Region. In these situations, more definitive effluent testing, toxicity testing of receiving waters, and biological surveys may be appropriate to elucidate and resolve water quality concerns. These water bodies should also be evaluated to determine the need for listing under Section 304(1).

CONCLUSIONS

The purpose of this study was to compile and evaluate whole effluent toxicity data generated by the EPA Region 6 Laboratory during FY 1984-88. A LOTUS 1-2-3^R spreadsheet was developed to present toxicity data, as well as pertinent information on the facilities, effluent chemical characteristics, and receiving water. The database contains results for 520 tests. The testing procedures included the 24-48 h daphnid acute, 8 d fathead minnow chronic, and 96 h algal (Selenastrum capricornutum) chronic methods for freshwater effluents, and 8 d sheepshead minnow chronic test for saltwater situations. When all three freshwater tests were conducted side by side on a variety of effluents, the algal test was most sensitive (52% of the time), followed by Daphnia and fathead minnow tests (most sensitive 16% and 6% of the time, respectively). However, because these tests have different durations and endpoints, caution should be used in gauging sensitivity. The findings support EPA's recommendations concerning the importance of multiple species testing to address differences in species sensitivity.

Effluent toxicity results for several industrial categories and municipal sewage treatment plants were evaluated and compared. For the industrial categories evaluated, the daphnid test was most sensitive to Industrial Organic Chemical facilities (SIC Code=2869) and Federal Facilities (9711), followed by the Plating and Polishing category (3471). The Plastics Materials and Resins (2821) and Petroleum Refining (2911) effluents affected Daphnia less than other industrial categories investigated. Federal Facilities and Plating and Polishing facilities had the greatest effect in the fathead minnow test, with all effluents showing significant toxicity in 100% effluent. These were followed by petroleum refining (with about 65% of effluents significantly toxic), Plastics Materials and Resins (50% toxic) and Industrial Organic Chemicals (about 45% toxic). Overall, the industrial categories evaluated demonstrated acute toxicity to Daphnia in about 30%-55% of the cases, while chronic toxicity to fathead minnow was exhibited in 45%-100% of the cases, depending on the category examined.

Municipal effluents were generally more toxic than the industrial categories investigated, which was probably most influenced by total residual chlorine, although toxicity also resulted from other toxic agents. Overall, significant toxic effects were demonstrated in Daphnia, fathead minnow and algal tests in 69%, 74% and 92%, respectively, of the municipal effluents evaluated.

Finally, an assessment of the potential for receiving water toxic effects was conducted, which incorporated the degree of effluent toxicity and instream dilution. A total of 109 dischargers in EPA Region 6 were found to have the potential for causing receiving water effects. In these situations, more definitive effluent testing, toxicity testing of receiving waters, and biological surveys may be appropriate to elucidate and resolve water quality concerns. These water bodies should also be evaluated to determine the need for listing under Section 304(1).

RECOMMENDATIONS

1. To the extent possible, the algal (Selenastrum capricornutum) chronic test should be integrated with other standard short-term chronic tests, as in most situations the aquatic plant community warrants protection. Applications could include effluent testing under the NPDES program, and in special water quality studies to define the effects of effluent discharges.
2. Continued effluent screening should be conducted to further expand the present database. The testing conducted to date has provided insight into the occurrence and magnitude of effluent toxicity in the Region. Based on the differences in species sensitivity, the multiple species testing approach should be maintained. The Regional effluent testing program should be reevaluated with regard to emphasis, direction and methodology, on an annual basis. If possible, the direction should be shifted to include site-specific testing of effluents and receiving waters which need consideration under CWA Section 304(1). Also, while it is understood that resources at the Regional Lab are limited, an effort should be made to incorporate Regional Permitting Policy sampling and testing procedures, if resources allow.
3. To the extent possible, the Regional Laboratory should further develop its marine chronic testing capability, which would allow for multiple species testing of effluents which discharge to marine and estuarine environments.
4. The states should evaluate the testing results contained herein. They should use their discretion in further investigating discharges which could result in instream toxicity. Such investigations could include receiving water and effluent toxicity testing, chemical analyses and biosurveys.

5. The Permits Branch should utilize the data contained in this report (Appendix A) when establishing requirements for reissued permits. The data could be useful with regard to establishing monitoring frequency; to evaluate the need for whole effluent toxicity testing and permit limitations; to supplement self monitoring data; and to target and prioritize facilities for special emphasis.

6. Based on the likelihood of instream toxicity resulting from total residual chlorine and ammonia present in both industrial and municipal discharges, the states should develop numeric water quality standards for these parameters as a measure to better protect aquatic life related beneficial uses.

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FIGURES

SIDE BY SIDE TESTING

RELATIVE SENSITIVITY OF DAPHNID, MINNOW AND ALGA TOXICITY TESTS

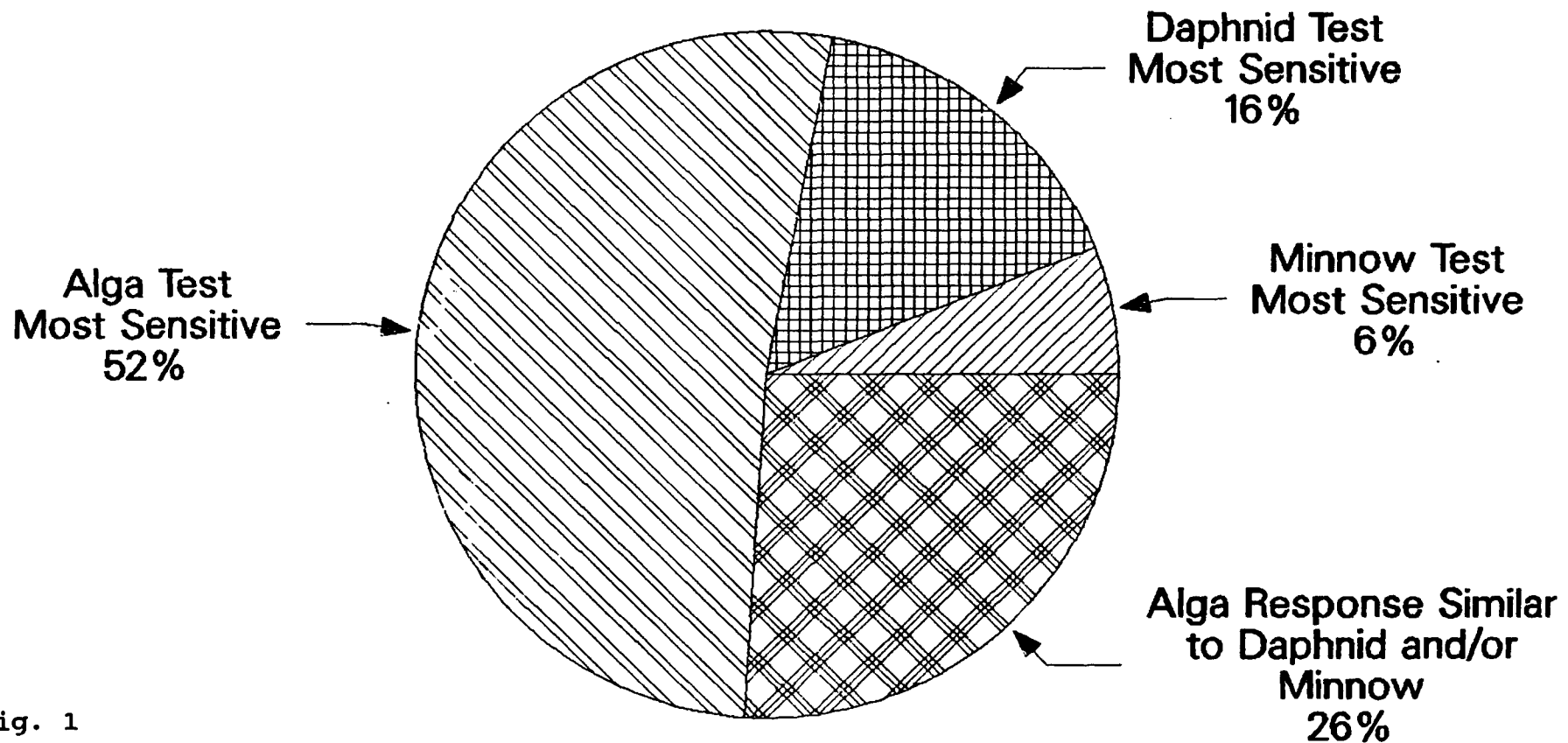


Fig. 1

Relative Sensitivity of 48 h Daphnia pulex, 8 d Fathead Minnow, and/or 96 h Algal (Selenastrum capricornutum) Toxicity Tests Conducted Concurrently for 38 Effluents.

SIDE BY SIDE TESTING

RELATIVE SENSITIVITY OF DAPHNID AND MINNOW TOXICITY TESTS

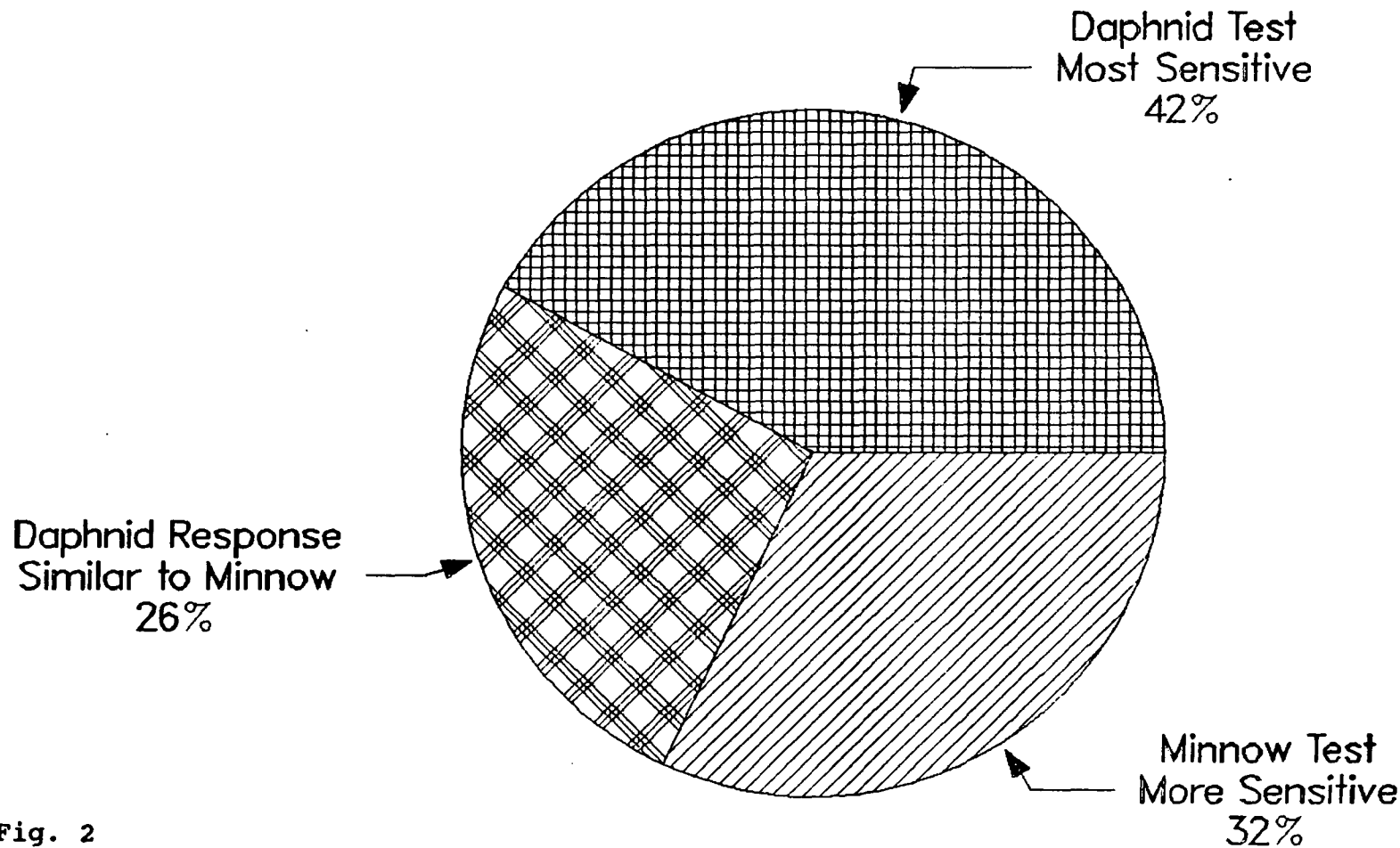


Fig. 2

Relative Sensitivity of 48 h Daphnia pulex and 8 d Fathead Minnow Toxicity Tests Conducted Concurrently for 96 Effluents.

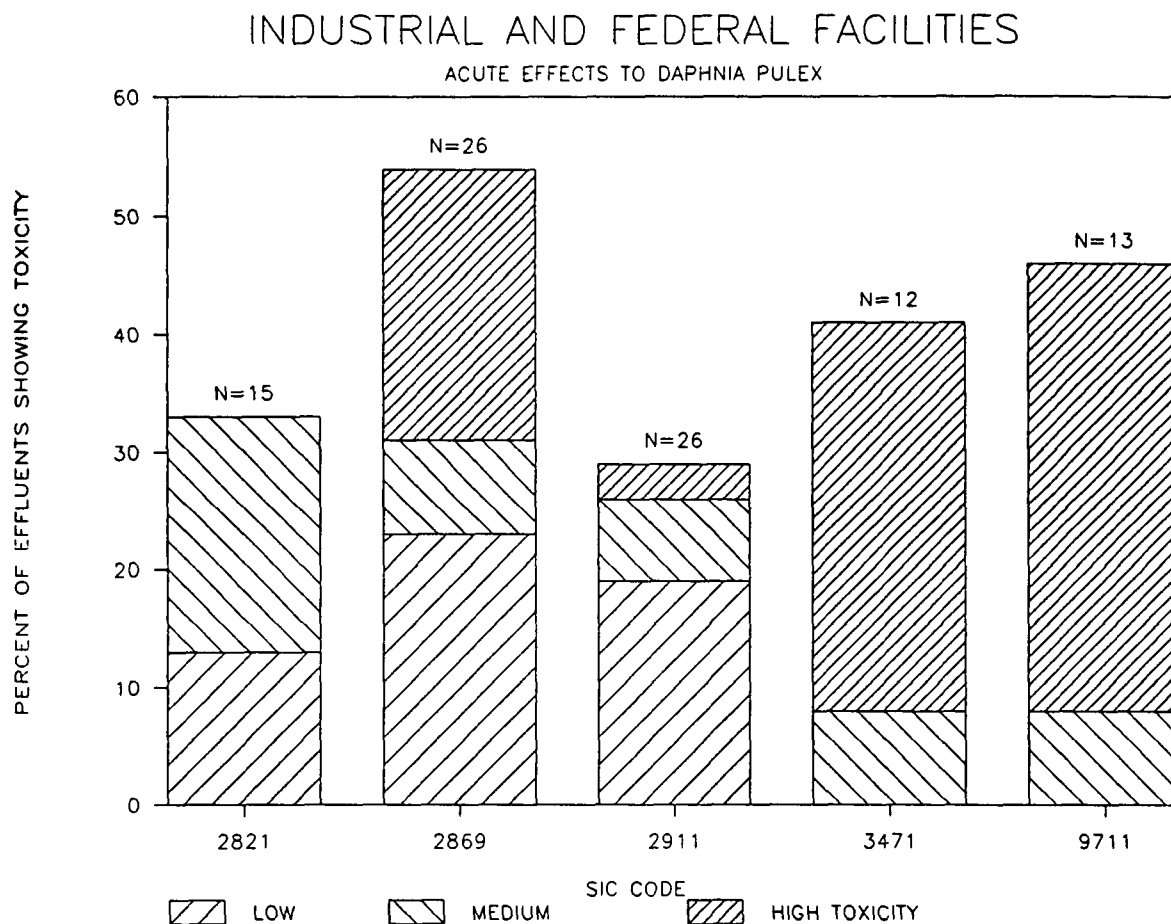


Fig. 3.

Relative Toxicity of Industrial and Federal Facilities to Daphnia pulex. Standard Industrial Classification Codes Investigated include: 2821 (Plastics Materials and Resins); 2869 (Industrial Organic Chemicals); 2911 (Petroleum Refining); 3471 (Plating and Polishing); and 9711 (Federal Facilities).

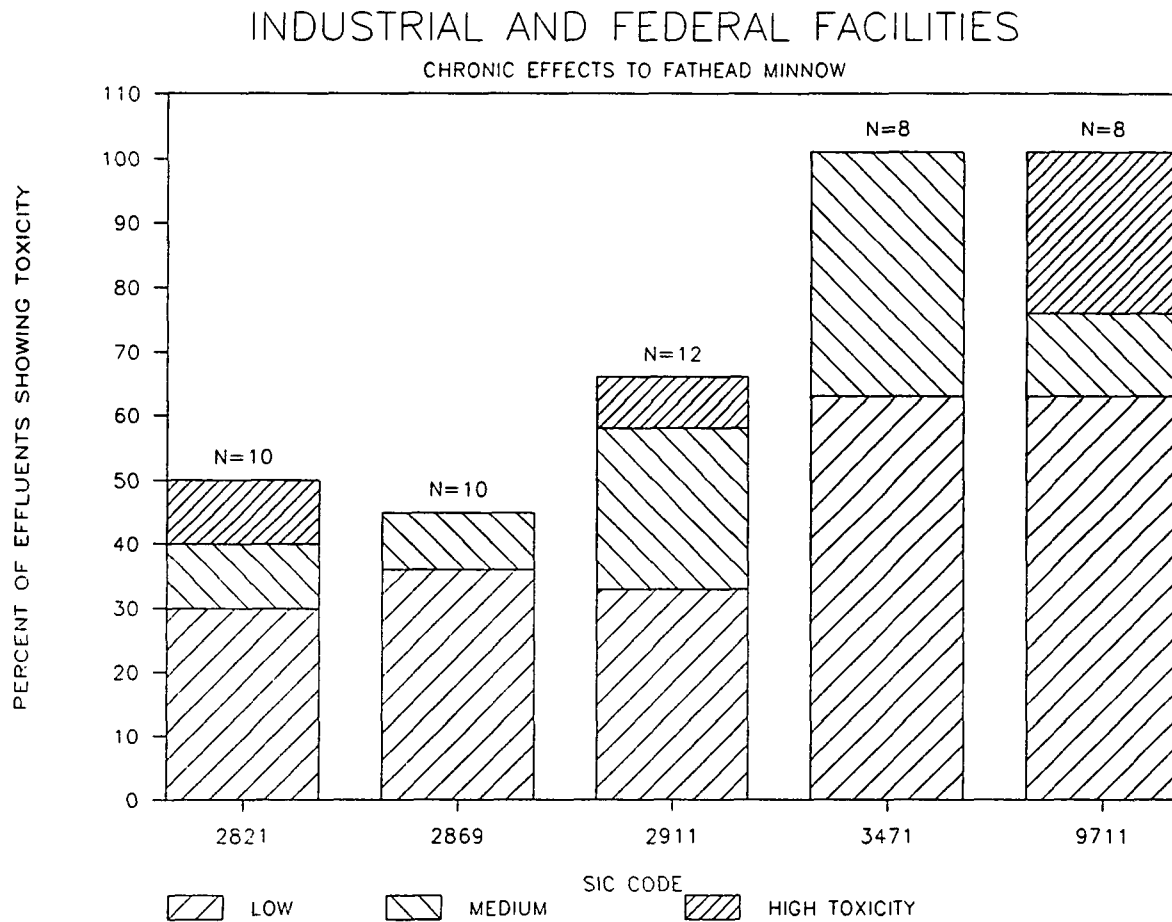


Fig 4.

Relative Toxicity of Industrial and Federal Facilities to the Fathead Minnow. Standard Industrial Classification Codes Investigated include: 2821 (Plastics Materials and Resins); 2869 (Industrial Organic Chemicals); 2911 (Petroleum Refining); 3471 (Plating and Polishing); and 9711 (Federal Facilities).

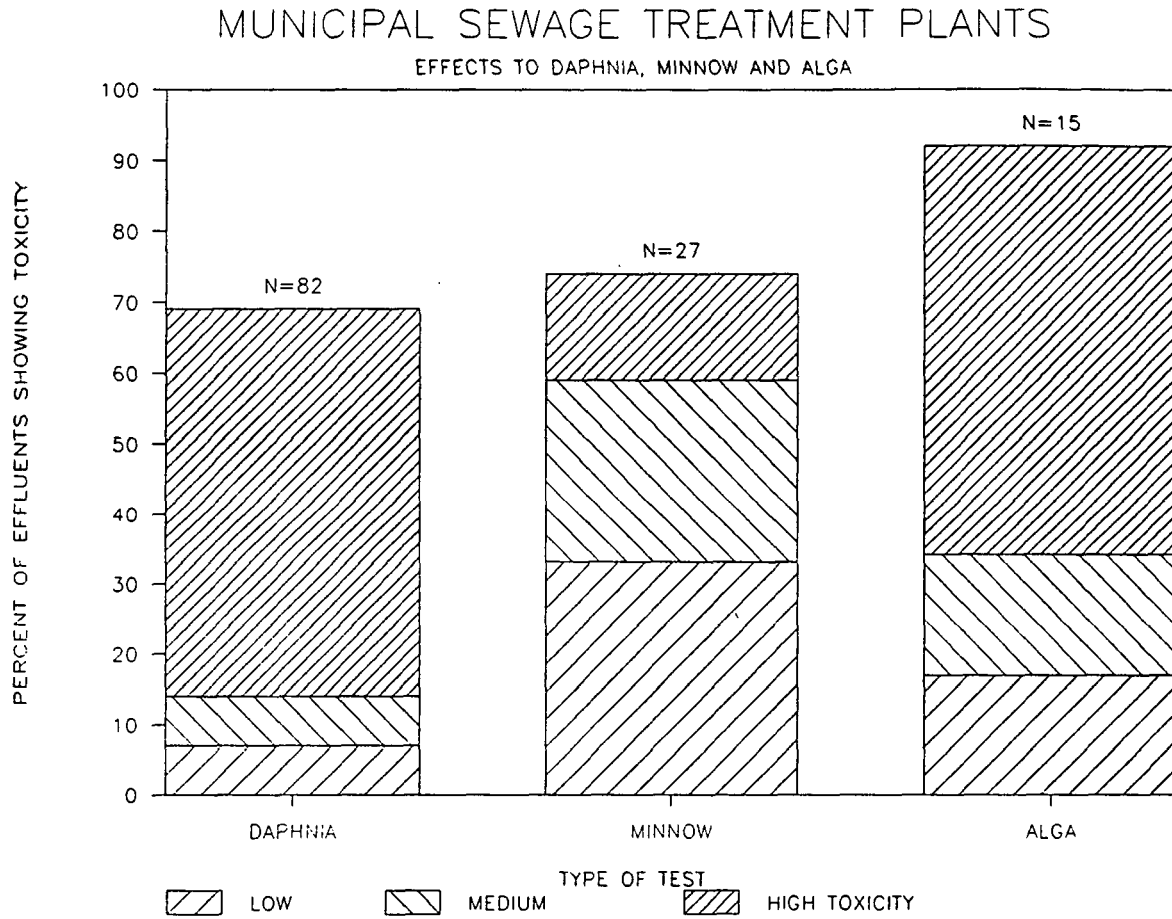


Fig. 5.

Relative Toxicity of Municipal Sewage Treatment Plants to Daphnia pulex, Fathead Minnow and Alga (Selenastrum capricornutum).

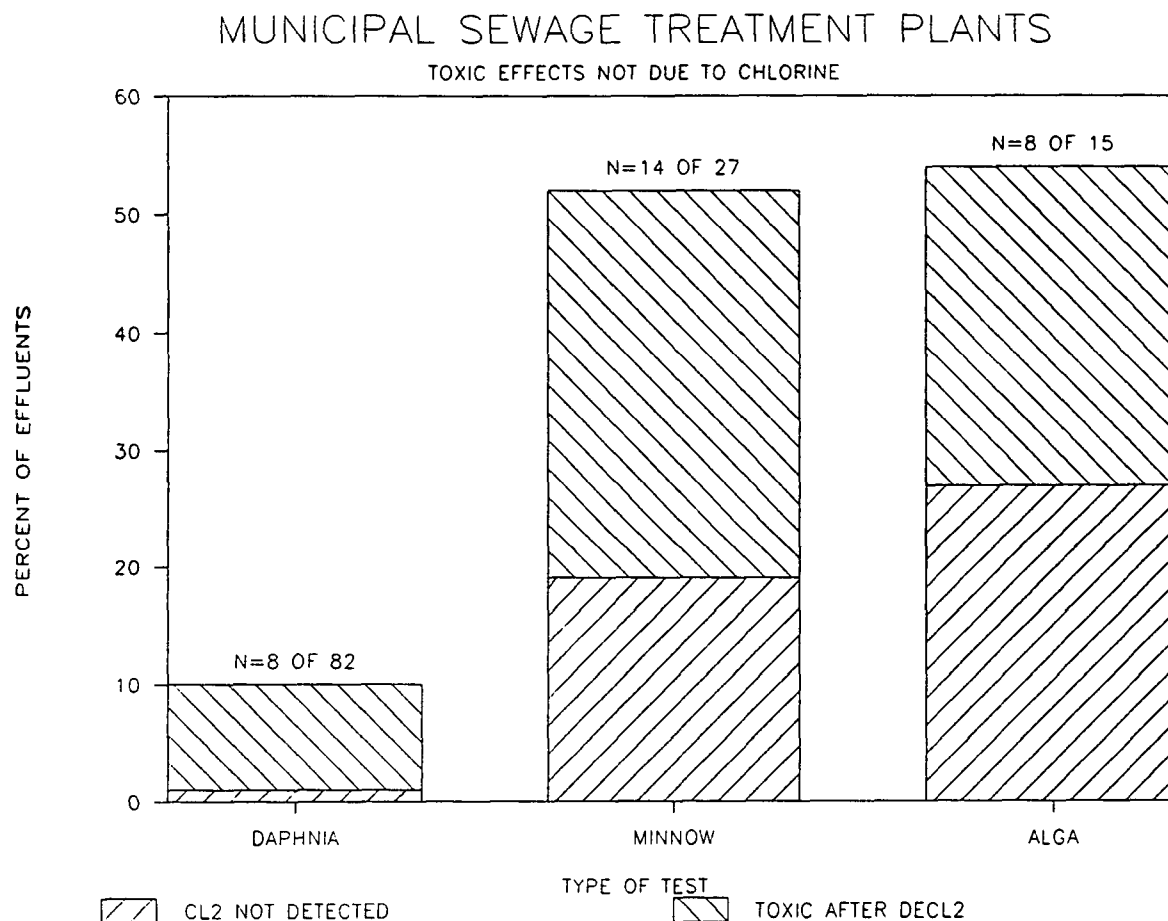


Fig. 6.

Percentage of Municipal Sewage Treatment Plant Effluents Tested With Daphnia pulex, Fathead Minnow and Alga (Selenastrum capricornutum) Where Chlorine was not Detected, or Which Were Toxic After Samples were Dechlorinated.

TABLES

Table 1.

List of Water Bodies in Region 6 Which Have the Potential for Instream Toxicity.

NPDES NUMBER	FACILITY NAME	RECEIVING WATER	POSSIBLE TOXIC AGENTS
ARKANSAS			
AR 0000523	001 STRATEGIC MINERAL CORP.	LAKE CATHERINE	AMMONIA/VANADIUM
AR 0000582	010 ALCOA	HURRICANE CREEK	METALS ?
AR 0000680	GREAT LAKES CHEMICAL	GUM CREEK	?
AR 0001210	001 GEORGIA PACIFIC	COFFEE CRK TO OUACHITA R.	?
AR 0001236	001 BTL SPECIALTY RESINS	BIG CRK TO FRANCOIS CRK	AMMONIA
AR 0003018	TYSON FOODS	LITTLE R., ROLLING FK.	CHLORINE
AR 0020338	001 USAF-BLYTHEVILLE AFB	PEMISCOT BAYOU	?
AR 0021733	001 DEQUEEN	BEAR CREEK	?
AR 0021750	001 FORT SMITH-MASSARD CRK	ARKANSAS RIVER	CHLORINE
AR 0021792	BERRYVILLE	OSAGE CREEK	?
AR 0022624	001 HOWMET (ALUMAX)	BIG CREEK	pH
AR 0033375	001 STERLING FAUCET	TOWN BRANCH/HURRICANE CRK	METALS
AR 0033766	001 PARAGOULD	EIGHTMILE CREEK	AMMONIA
AR 0034321	HARRISON	CROOKED CREEK	CHLORINE AND OTHER(S)
AR 0034380	001 STUTTGART	KINGS BAYOU	AMMONIA
AR 0035645	001 GLENWOOD	CADDO RIVER	CHLORINE
LOUISIANA			
LA 0000493	001 REICHOLD CHEMICAL	TRIB. TO CALCASIEU RIVER	UNKNOWN ORGANICS
LA 0002917	001 S.W. ELECTRIC POWER	CADDO LAKE	AMMONIA
LA 0003824	001 FIRESTONE	BAYOU d'INDE	?
LA 0004057	001 GRANT CHEMICAL	DITCH TO BATON ROUGE BAYOU	AMMONIA
LA 0004090	001 ETHYL CORP.	MONTE SANO BAYOU	?
LA 0005941	003 CITCO CITIES SERVICE	CALCASIEU RIVER	AMMONIA
LA 0006131	001 TECHNIGRAPHICS	DITCH TO 40 ARPENT CANAL	?
LA 0008036	004 CLECO	LAKE RODEMACHER	?
LA 0020044	001 PLAIN DEALING	CYPRESS BAYOU	?
LA 0020087	001 OBERLIN	BLUE BAYOU	?
LA 0032417	001 ATLAS PROCESSING	BRUSHY BAYOU	?
LA 0034568	BERNICE	BAYOU D'ARBONNE	?
LA 0036366	LAKE CHARLES PLT C	CALCASIEU RIVER	?
LA 0038091	001 NEW ORLEANS-E. BANK	MISSISSIPPI RIVER	AMMONIA/CHLORINE
LA 0041751	001 EUNICE	BAYOU MALLET	?
LA 0046477	001 JONESBORO	DUGDEMONA CREEK	AMMONIA
LA 0056502	001 MANY	BAYOU LA NANA	?
NEW MEXICO			
NM 0020737	001 GRANTS	RIO SAN JOSE	CHLORINE ?
NM 0028827	001 LAS VEGAS	GALLINAS RIVER	AMMONIA/CHLORINE/OTHER(S)

TABLE 1, Continued...

NPDES NUMBER	FACILITY NAME	RECEIVING WATER	POSSIBLE TOXIC AGENTS
OKLAHOMA			
OK 0000191	001 SEQUOYAH FUEL	ILLINOIS RIVER	?
OK 0000256	001 CONOCO	OMAHA CREEK	?
OK 0000531	001 ALLIED MATERIALS	SALT CREEK	AMMONIA/CHLORINE
OK 0000795	001 TYSON FOODS	LITTLE RIVER	AMMONIA
OK 0000744	001 WEYERHAUSER	GARLAND CREEK	AMMONIA
OK 0000809	001 USAF-TINKER AFB	SOLDIER CREEK	CHLORINE/METALS
OK 0001261	001 EAGLE-PICHER INDUSTRIES	SPRING RIVER	CHLORINE
OK 0001295	001 TOTAL PETROLEUM	SAND CREEK	AMMONIA/OTHERS(S)
OK 0022616	001 GUYMON-SWIFT PLANT	BEAVER RIVER	?
OK 0026701	001 CUSHING-SOUTH STP	COTTONWOOD CREEK	?
OK 0026221	002 TULSA NORTHSIDE	BIRD CREEK	?
OK 0026841	001 MIDWEST CITY NORTHSIDE	CRUTCHO CREEK	CHLORINE/OTHER(S)
OK 0026859	001 MIDWEST CITY SOUTHSIDE	CRUTCHO CREEK	?
OK 0027931	001 MOORE	LITTLE RIVER	CHLORINE
OK 0030295	001 USA-FORT SILL	E. CACHE CREEK	AMMONIA/CHLORINE/OTHER(S)
OK 0030333	BARTLESVILLE	CANEY RIVER	CHLORINE
OK 0034568	002 OK ORDINANCE WORKS AUTH.	CHATEAU CREEK	?
OK 0035246	001 LAWTON	E. CACHE CREEK	CHLORINE
OK 0036978	OKLA. CITY-N. CANADIAN	N. CANADIAN RIVER	AMMONIA/CHLORINE
TEXAS			
TX 0000132	001 USA-RED RIVER ARMY DEPOT	E. FORK ELLIOTT CREEK	CHLORINE
TX 0000353	001 GENERAL DYNAMICS	LAKE WORTH	METALS ?
TX 0000892	001 BELL HELICOPTER	TRIB./W. FK. TRINITY R.	COPPER/ZINC
TX 0003697	001 MARATHON OIL CO.	TEXAS CITY SHIP CHANNEL	CHLORINE/OTHER(S)
TX 0003875	001 MONSANTO	CHOCOLATE BAYOU	?
TX 0005096	101 KOPPERS CO.	BUFFALO BAYOU	?
TX 0006025	001 CELANESE CHEMICAL	SAN FERNANDO CREEK	METALS ?
TX 0006025	101 CELANESE CHEMICAL	SAN FERNANDO CREEK	METALS ?
TX 0006068	001 ARCO POLYMERS	TRIB. TO HOUSTON SC	SALINITY
TX 0006084	001 ROHM & HAAS	HOUSTON SHIP CHANNEL	?
TX 0006327	202 DUPONT-SABINE RIVER WORKS	SABINE RIVER	AMMONIA
TX 0007048	001 LUBRIZOL CORP.	PATRICK BAYOU TO HSC	?
TX 0007439	001 SDS BIOTECH CORP.	GREENS BAYOU TO HSC	SALINITY
TX 0007889	001 USN-CORPUS CHRISTI NAS	CORPUS CHRISTI BAY	CHLORINE
TX 0008907	001 DUPONT	CORPUS CHRISTI BAY	?
TX 0009075	001 PHILLIPS PETROLEUM	?	AMMONIA/CHLORINE/OTHER(S)
TX 0009148	001 PHILLIPS 66 CO.	E. DIXON CREEK	?
TX 0009181	001 SID RICHARDSON CARBON	TRIB. TO CANADIAN R.	pH
TX 0022527	001 TERRELL	KINGS CREEK	CHLORINE
TX 0022608	001 USAF-LAUGHLIN AFB	TRIB. TO SACATOSA CREEK	AMMONIA
TX 0022811	001 TRA-TEN MILE CREEK	TRIB. TO TEN MILE CREEK	AMMONIA/CHLORINE/OTHER(S)
TX 0023001	001 VERNON	PEASE RIVER	CHLORINE/OTHER(S)
TX 0023418	KINGSVILLE	TRANQUITOS CREEK	CHLORINE
TX 0023931	001 NTMWD-RICHARDSON	DUCK CREEK	CHLORINE

TABLE 1, Continued...

NPDES NUMBER	FACILITY NAME	RECEIVING WATER	POSSIBLE TOXIC AGENTS
TX 0024228 001	STEPHENVILLE	N. BOSQUE RIVER	AMMONIA/CHLORINE
TX 0024309 001	LUFKIN	HURRICANE CREEK	CHLORINE
TX 0024368 001	JASPER	SANDY CREEK	CHLORINE/OTHER(S)
TX 0024678 001	GARLAND-DUCK CREEK	DUCK CREEK	CHLORINE
TX 0024686 001	GARLAND-ROWLETT CREEK	ROWLETT CREEK	AMMONIA/CHLORINE
TX 0025429 001	USAF-SHEPPARD AFB	PLUM C. TO WICHITA R.	CHLORINE/ORGANICS
TX 0026263 001	SPENCER ROAD MUD	HORSEPEN CREEK TO HSC	AMMONIA/CHLORINE
TX 0026751 001	EL PASO-HASKELL	RIO GRANDE	AMMONIA/CHLORINE
TX 0027537 001	WAXAHACHIE	N. PRONG CREEK	CHLORINE
TX 0046884 001	HOUSTON-NORTHSIDE	BUFFALO BAYOU	CHLORINE ?
TX 0046957 001	AUSTIN-GOVALLE	COLORADO RIVER	CHLORINE
TX 0046990 001	BEAUMONT	HILDEBRANDT BAYOU	?
TX 0047058 001	CORPUS CHRISTI-OSO	OSO BAY	CHLORINE/OTHER(S)
TX 0047074 001	CORPUS CHRISTI-WEST SIDE	LA VOLLO CRK TO OSO CRK	CHLORINE/OTHER(S)
TX 0047104 001	C. CHRISTI-LAGUNA MADRE	LAGUNA MADRE	CHLORINE/OTHER(S)
TX 0047295 001	FORT WORTH-VILLAGE CREEK	W. FORK TRINITY RIVER	CHLORINE
TX 0047309 001	GALVESTON-MAIN	GALVESTON BAY	CHLORINE
TX 0047431 001	NTMWD-MESQUITE	MESQUITE CREEK	CHLORINE
TX 0047651 001	TEMPLE	LITTLE ELM CREEK	METALS ?
TX 0047830 001	DALLAS-CENTRAL	TRINITY RIVER	AMMONIA/CHLORINE
TX 0047848 001	DALLAS-SOUTHSIDE	TRINITY RIVER	AMMONIA/CHLORINE
TX 0052761 001	SHELL DEVELOPMENT CO.	D. TO W. FORK BRAYS B.	CHLORINE
TX 0052892 001	LEWISVILLE	ELM FK. TRINITY RIVER	CHLORINE
TX 0053023 001	CHAMPION PAPER CO.	HOUSTON SHIP CHANNEL	?
TX 0055611 001	GREENVILLE	COWLEECH CREEK	CHLORINE ?
TX 0056111 001	USAF-LACKLAND AFB	TRIB. TO MEDIO CREEK	CHLORINE
TX 0056731 001	CORSICANA-PLANT #2	RICHLAND CREEK	AMMONIA/CHLORINE
TX 0072982 001	HOLLY FARMS	PRAIRIE CRK TO TENAHA CRK	CHLORINE/OTHER(S)
TX 0084409 002	DENKA CHEMICAL	SIMS BAYOU TO HSC	?
TX 0085570 001	FORMOSA PLASTICS	TRIB. TO COX CREEK	AMMONIA
TX 0089125 001	EXXON CHEMICAL	CEDAR BAYOU	CHLORINE/OTHER(S)

APPENDICES

APPENDIX A

U.S. EPA REGION VI EFFLUENT TOXICITY DATA

A description of the data, information, and evaluations included in the spreadsheet are presented below.

- Numerical Order of Data.

NPDES # - Generally accepted NPDES number, taken from PCS or permit.

Facility Name - Most current facility name, taken from PCS or permit.

SIC Code - Standard Industrial Classification Code, taken from PCS.

Location - City where facility is located.

Receiving Water Name - Generally accepted receiving water name, taken from the NPDES permit file.

Stream Flows (Mean and 7Q10) - Stream flow values (in CFS), were obtained from the Permits Branch and consist of data from published low flow values, USGS data, or from the STORET Gage File. For states using 7Q2 as the critical low flow, 7Q2 values are presented in place of 7Q10's, if data was available. Some stream flow values from facilities which do not yet have "third round" permits should be considered tentative.

Pipe Flow (Mean and Maximum) - Discharge flow values (in MGD) were primarily taken from PCS. In some cases DMR flow data were also taken from discharge monitoring reports (DMR's). Mean flows were calculated using 10-15 monthly average values; maxima are maximum recorded values for the same period of record.

IWC - Instream Waste Concentration, estimated as the percent effluent dilution in the receiving water after mixing, calculated using the following equation:

$$\text{IWC}(\%) = \frac{Q_e \times 100}{Q_e + Q_s},$$

where Q_e and Q_s are average pipe flow and critical (7Q10) stream flows, respectively, in CFS units. Because the stream flow values are considered tentative, the IWC should also be considered as such.

Sample Collection Date - Date when the facility was sampled.

Effluent Physical/Chemical Characteristics - Parameters measured included salinity (o/oo); specific conductance (uMHO/cm); hardness and alkalinity (mg/l as CaCO_3), pH, total residual chlorine (mg/l); and unionized ammonia. These measurements were taken at test initiation, and in some cases during tests. Minimum DO (mg/l or

% saturation) experienced during the course of the of the test is also presented to determine whether low DO could have contributed to mortality, if it occurred.

Test Species - The test organisms included daphnids Daphnia pulex and Ceriodaphnia dubia; fathead minnow, Pimephales promelas; green alga, Selenastrum capricornutum; opossum shrimp, Mysidopsis bahia or M. almyra; sheepshead minnow, Cyprinodon variegatus; sea urchin, Arbacia punctulata; and red macroalga, Champia parvula. The most data are available for D. pulex (acute test), although a considerable amount of chronic data were collected during FY 1986-88 for fathead minnow, sheepshead minnow and alga. One special study (U.S. Naval Air Station, Corpus Christi), includes data for sea urchin and red alga and in, one case, a MICROTOX test was conducted.

Test Length - Duration of test in days, as follows:

1-3 d (24-96 h) ---- Acute Tests
4-9 d (96-216 h) --- Chronic Tests

LC50 - Calculated LC50 or EC50 is presented in percent effluent where mortality is $\geq 50\%$ in 100% effluent. The Trimmed Spearman-Kärber procedure was used prior to April, 1987, and the Probit procedure was used thereafter. Where calculations have been made, 24 h, 48 h, and chronic LC50's or EC50's are presented.

Mortality in 100% Effluent - Mortality (%) in undiluted effluent. If effluents had detectable chlorine, results for 100% dechlorinated effluent were also included.

NOEC/LOEC - Lowest observed and no observed effect concentrations for chronic tests. Effects include mortality, combined with teratogenicity, in fish tests, and mortality and reproduction in Ceriodaphnia tests. Significance was evaluated using Dunnett's Test and ANOVA at $P=0.95$.

Comments - Included here are: the 95% confidence interval (CI, in percent effluent) around the LC50/EC50, the chronic value (ChV, in percent effluent, and pertinent notes regarding effluent chemical characteristics and toxicity. In many cases the CI's were not calculable, thus, are not provided. The ChV was calculated as the geometric mean of the LOEC and NOEC, and is equivalent to the maximum acceptable toxicant concentration (MATC).

Potential for Instream Effects - The potential for receiving water toxic effects was assessed primarily with the following criteria from EPA's Technical Support Document (U.S. EPA 1985c) and state water quality standards implementation procedures or policy:

-Potential for instream acute effects if $IWC \geq LC1$,
where $LC1 = 0.3 \times LC50$;

-Potential for instream chronic effects if $IWC \geq NOEC$;

- For Texas estuaries, the IWC=8% effluent;
- For Texas Lakes, the IWC is 16% effluent;
- Houston Ship Channel Dischargers have an assumed IWC of 30% effluent, at which acute effects are evaluated;
- The state of Louisiana has requested that a low flow of 111,000 be used for the Mississippi River; and
- Some best professional judgement was used in assessing potential effects in "no flow" situations (e.g., lakes), or where stream or pipe flow data, and specific implementation procedures were not available.

It should be realized that prediction of instream toxic effects is contingent on whole effluent toxicity behaving conservatively in the receiving water. This evaluation also assumes zero upstream toxicity. In fact, these assumptions may not be valid in every case.

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO OR % SAT.
							MEAN	7010	MEAN	MAX.						CaCO3	CaCO3				
1	AR 0000043	001	DARLING STORE FIXTURES	3471	PARAGOULD	EIGHTMILE CREEK	133.88	0.12	0.12	0.23	61.21	06-Jan-86	0	2100	92	182	8.3			8.7	
2	AR 0000523	001	STRATEGIC MINERAL CORP.	1094	HOT SPRINGS	LAKE CATHERINE		120	0.29	1.69	0.37	07-May-85	78	49000			7.7			8.6	
3	AR 0000523	002	STRATEGIC MINERAL CORP.	1094	HOT SPRINGS	LAKE CATHERINE		120	0.42	8.65	0.83	25-Feb-86	0	800	204	17	6.8		(0.2	90%	
4	AR 0000523	002	STRATEGIC MINERAL CORP.	1094	HOT SPRINGS	LAKE CATHERINE		120	0.42	8.65	0.83	25-Feb-86	0	800	204	17	6.8		(0.2	7.9	
5	AR 0000523	001	STRATEGIC MINERAL CORP.	1094	HOT SPRINGS	LAKE CATHERINE		120	0.29	1.69	0.37	25-Feb-86	0	1200	373	42	8.0			8.2	
6	AR 0000523	001	STRATEGIC MINERAL CORP.	1094	HOT SPRINGS	LAKE CATHERINE		120	0.29	1.69	0.37	25-Feb-86	0	1200	373	42	8.0		(0.2	92%	
7	AR 0000531	002	REYNOLDS METALS	3334	ARKADELPHIA	QUACHITA RIVER	2401	95	1.17	1.66	1.87	24-Mar-86	0	140	29	29	7.6	0.2	0.7	8.2	
8	AR 0000582	009	ALCOA	3334	BAUXITE	HURRICANE CREEK	116	0	4.84	12.43	60.78	21-Jan-85	1	700	92	19	6.9			8.4	
9	AR 0000582	009	ALCOA	3334	BAUXITE	HURRICANE CREEK	116	0	4.84	12.43	60.78	21-Jan-85	1	700	92	19	6.9			8.4	
10	AR 0000582	010	ALCOA	3334	BAUXITE	HURRICANE CREEK	116	0	2.49	4.75	100	21-Nov-85		850	509	4	6.3			9.3	
11	AR 0000591	001	CROSS OIL	2911	SHACKOVER	SHACKOVER CREEK	365	0.353	0.1	0.23	19.69	29-Jul-86	3	1700	102	54	7.8	(0.1	(0.1	8.6	
12	AR 0000591	001	CROSS OIL	2911	SHACKOVER	SHACKOVER CREEK	365	0.353	0.1	0.23	19.69	29-Jul-86	3	1700	102	54	7.8	(0.1	(0.1	8.2	
13	AR 0000647	001	TOSCO CORP. REFINERY	2911	EL DORADO	BAYOU DE LOUIRE	89	1.8	2.03	2.79	63.64	12-Mar-84	0	3000	70	101	7.6			8.4	
14	AR 0000663	002	BERRY PETROLEUM	2911	STEPHENS	TRIB. TO SHACKOVER CRK	247	0.353	0.04	0.1	9	12-Mar-85	0	2350	130	136	8.6			8.8	
15	AR 0000680		GREAT LAKES CHEMICAL	2879	EL DORADO	GUM CREEK			0.4	0.87		23-Sep-86	0	650	39	8	6.4	(0.1	(0.1	8.3	

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% CHRONIC EFFLUENT	MORTALITY IN 100% DECHLOR-INATED EFFLUENT	EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50	
						24H	48H				CHV=CHRONIC VALUE IN PERCENT EFFLUENT	
1	AR 000043	001	DARLING STORE FIXTURES	D. PULEX	1			0			-	NO ACUTE
2	AR 0000523	001	STRATEGIC MINERAL CORP.	M. BAHIA	2	3	3	100	100		SPEC. COND. FOR 50% EFFL.; NOTE HIGH SALINITY	YES ACUTE
3	AR 0000523	002	STRATEGIC MINERAL CORP.	P. PROMELAS	7			15			NO SIG. MORT. AFTER 7 DAYS	NO CHRONIC
4	AR 0000523	002	STRATEGIC MINERAL CORP.	D. PULEX	2	100	44	95	90		CI: 35-57 (48H)	NO ACUTE
5	AR 0000523	001	STRATEGIC MINERAL CORP.	D. PULEX	2	7	4	100	100		CI: 5-10 (24H); 3-6 (48H)	YES ACUTE
6	AR 0000523	001	STRATEGIC MINERAL CORP.	P. PROMELAS	7			53	100	50	CI: 45-63; CHV=35%	YES CHRONIC
7	AR 0000531	002	REYNOLDS METALS	D. PULEX	2	68	68	100	100		CI: 64-73 (24H & 48H)	NO ACUTE
8	AR 0000582	009	ALCOA	D. PULEX	1			0	0		-	NO ACUTE
9	AR 0000582	009	ALCOA	P. PROMELAS	1			0	0		-	NO ACUTE
10	AR 0000582	010	ALCOA	D. PULEX	3			80	90		-	YES ACUTE
11	AR 0000591	001	CROSS OIL	P. PROMELAS	1			0			-	NO ACUTE
12	AR 0000591	001	CROSS OIL	D. PULEX	1			5			-	NO ACUTE
13	AR 0000647	001	TOSCO CORP. REFINERY	D. PULEX	1			0	20		-	NO ACUTE
14	AR 0000663	002	BERRY PETROLEUM	P. PROMELAS	1			0			-	NO ACUTE
15	AR 0000680		GREAT LAKES CHEMICAL	D. PULEX	2	72	67	100			-	YES ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINI-
							MEAN	7Q10	MEAN	MAX.										NUM
																				OR % SAT.
16	AR 0000680		GREAT LAKES CHEMICAL	2879	EL DORADO	SUM CREEK			0.4	0.87		23-Sep-86	0	650	39	8	6.4	(0.1)	(0.1)	91%
17	AR 0000752	001	EL DORADO CHEMICAL CO.	2873	EL DORADO	TRIB. TO FLAT CREEK	58	1.14	1.18	3.45	38.38	16-Apr-85	0	995	92	27	7.3			8.4
18	AR 0001210	001	GEORGIA PACIFIC	2621	CROSSETT	COFFEE CRK TO QUACHITA	6113	108	44.89	88.1	39.19	16-Jul-85	0	2300	256	180	7.7			9
19	AR 0001236	001	BTL SPECIALTY RESINS	2821	MALVERN	BIG C. TO FRANCOIS C.	142.3	1.35	0.31	0.41	26.25	29-Oct-86	3	2300	8	853	8.9	(0.1)	14.7	69%
20	AR 0001236	001	BTL SPECIALTY RESINS	2821	MALVERN	BIG C. TO FRANCOIS C.	142.3	1.35	0.31	0.41	26.25	29-Oct-86	3	2300	8	853	8.9	(0.1)	14.7	8
21	AR 0001236	001	BTL SPECIALTY RESINS	2821	MALVERN	BIG C. TO FRANCOIS C.	142.3	1.35	0.31	0.41	26.25	16-Mar-88	2	2800	20	835	8.1	(0.1)	6.6	72%
22	AR 0001236	001	BTL SPECIALTY RESINS	2821	MALVERN	BIG C. TO FRANCOIS C.	142.3	1.35	0.31	0.41	26.25	16-Mar-88	2	2800	20	835	8.1	(0.1)	6.6	81%
23	AR 0001449	001	A T & T TELETYPE	3661	LITTLE ROCK	FOURCHE CREEK	63	2.7	0.09	0.15	3.41	29-Jul-86	0	950	40	18	7.8	(0.1)	(0.1)	8.3
24	AR 0001449	001	A T & T TELETYPE	3661	LITTLE ROCK	FOURCHE CREEK	63	2.7	0.09	0.15	3.41	20-May-87	0	500	22	7	6.3	(0.1)	(0.1)	95%
25	AR 0001449	001	A T & T TELETYPE	3661	LITTLE ROCK	FOURCHE CREEK	63	2.7	0.09	0.15	3.41	20-May-87	0	500	22	7	6.3	(0.1)	(0.1)	
26	AR 0001449	001	A T & T TELETYPE	3661	LITTLE ROCK	FOURCHE CREEK	63	2.7	0.09	0.15	3.41	20-May-87	0	500	22	7	6.3	(0.1)	(0.1)	8
27	AR 0001678	002	USA-PINE BLUFF ARSENAL	2892	PINE BLUFF	TRIB. TO ARKANSAS RIVER	41732	1387	0.27	0.75	0.015	13-Nov-84	0	500	118	17	6.2			8.6
28	AR 0001678	002	USA-PINE BLUFF ARSENAL	2892	PINE BLUFF	TRIB. TO ARKANSAS RIVER	41732	1387	0.27	0.75	0.015	22-Apr-86	0	1325	528	35	8.3	(0.1)	0.4	8.2
29	AR 0001678	002	USA-PINE BLUFF ARSENAL	2892	PINE BLUFF	TRIB. TO ARKANSAS RIVER	41732	1387	0.27	0.75	0.015	19-Oct-87	0	850			8.7	(0.1)	0.8	91%
30	AR 0001678	002	USA-PINE BLUFF ARSENAL	2892	PINE BLUFF	TRIB. TO ARKANSAS RIVER	41732	1387	0.27	0.75	0.015	19-Oct-87	0	850			8.7	(0.1)	0.8	8

EFFLUENT TOXICITY											COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT		POTENTIAL FOR INSTREAM EFFECTS
						24H	48H				CHRONIC	LDEC	
16	AR 0000680		GREAT LAKES CHEMICAL	P. PROMELAS	7			73	100	75	50	CI:64-84; ChV=61%	YES CHRONIC
17	AR 0000752	001	EL DORADO CHEMICAL CO.	D. PULEX	1			5	0	-			NO ACUTE
18	AR 0001210	001	GEORGIA PACIFIC	D. PULEX	2			45	30	-			YES ACUTE
19	AR 0001236	001	BTL SPECIALTY RESINS	P. PROMELAS	8			28	100	1	(1	ChV(1; VERY HIGH NH3; MORT. IN ALL 6 DILUTIONS	YES CHRONIC
20	AR 0001236	001	BTL SPECIALTY RESINS	D. PULEX	1	70			100			NOTE EXTREMELY HIGH NH3; ABBREVIATED TEST	YES ACUTE
21	AR 0001236	001	BTL SPECIALTY RESINS	P. PROMELAS	8			8	100	12	6	ChV=8.5%; NOTE HIGH NH3 AND COD	YES CHRONIC
22	AR 0001236	001	BTL SPECIALTY RESINS	D. PULEX	2		27		100			CI:22-34; VERY HIGH NH3 AND COD	YES ACUTE
23	AR 0001449	001	A T & T TELETYPE	D. PULEX	1			0		-			NO ACUTE
24	AR 0001449	001	A T & T TELETYPE	P. PROMELAS	8			0		-			NO CHRONIC
25	AR 0001449	001	A T & T TELETYPE	SELENASTRUM	8			11				NO SIG. EFFECT	NO CHRONIC
26	AR 0001449	001	A T & T TELETYPE	D. PULEX	2			0		-			NO ACUTE
27	AR 0001678	002	USA-PINE BLUFF ARSENAL	D. PULEX	1			0	0	-			NO ACUTE
28	AR 0001678	002	USA-PINE BLUFF ARSENAL	D. PULEX	2	24	1		95			CI: 7-81 (24H)	NO ACUTE
29	AR 0001678	002	USA-PINE BLUFF ARSENAL	P. PROMELAS	8			46	100	50	25	ChV=35%	NO CHRONIC
30	AR 0001678	002	USA-PINE BLUFF ARSENAL	D. PULEX	2		36		65			CI:22-66	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	BIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IMC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L)	
							MEAN	7010	MEAN	MAX.											
31	AR 0003018		TYSON FOODS	2016	GRANNIS	LITTLE R., ROLLING FK.	122.55	0.12	0.2	0.38	60.78	22-Feb-88	0	790			7.9	2	(0.1	87%	
32	AR 0003018		TYSON FOODS	2016	GRANNIS	LITTLE R., ROLLING FK.	122.55	0.12	0.2	0.38	60.78	22-Feb-88	0	790			7.9	2	(0.1	91%	
33	AR 0020338	001	USAF-BLYTHEVILLE AFB	9711	BLYTHEVILLE	PENISCOOT BAYOU	6.05	0	0.5	1.1	100	17-Dec-84	0	400	60	90	7.1			7.6	
34	AR 0020702	001	BATESVILLE	4952	BATESVILLE	WHITE RIVER	11909	896	2.81	5.38	0.48	29-Mar-88	0	300	128	106	7.1	0.2	(0.1	87%	
35	AR 0020702	001	BATESVILLE	4952	BATESVILLE	WHITE RIVER	11909	896	2.81	5.38	0.48	29-Mar-88	0	300	128	106	7.1	0.2	(0.1	97%	
36	AR 0021211	002	MOUNTAIN HOME	4952	MOUNTAIN HOME	HICKS CREEK	43.16	14	1.4	3.97	10.86	30-Mar-88	0	425	194	151	7.6	0.4	(0.1	97%	
37	AR 0021733	001	DEQUEEN	4952	DEQUEEN	BEAR CREEK	114	0.12	1.43	2.77	94.87	06-Nov-84	0	400	44	76	6.9			8.1	
38	AR 0021750	001	FORT SMITH-MASSARD CRK	4952	FORT SMITH	ARKANSAS RIVER	30206	722	6.7	17.1	1.42	02-Jun-86	0	400	60	48	6.9	0.8	(0.1	8.7	
39	AR 0021750	001	FORT SMITH-MASSARD CRK	4952	FORT SMITH	ARKANSAS RIVER	30206	722	6.7	17.1	1.42	02-Jun-86	0	400	60	48	6.9	0.8	(0.1	86%	
40	AR 0021792		BERRYVILLE	4952	BERRYVILLE	OSAGE CREEK	204	0	1.4	2.62	100	11-Sep-84	2							7.8	
41	AR 0021806	001	LITTLE ROCK-ADAMS FIELD	4952	LITTLE ROCK	ARKANSAS RIVER	40961	1355	27.88	74.46	3.09	25-Jun-84	0	300	38	29	6.5			6.6	
42	AR 0022624	001	HOMMET (A.K.A. ALUMAX)	3354	MAGNOLIA	BIG CREEK	115.5	0.1	0.16	0.41	71.43	05-Sep-84	2		12	307	9.4			7.6	
43	AR 0033278	001	FORT SMITH-P STREET	4952	FORT SMITH	ARKANSAS RIVER	29628	709	8.3	17.1	1.78	19-Feb-86	0	500	65	184	7.0	1.4	3.6	90%	
44	AR 0033278	001	FORT SMITH-P STREET	4952	FORT SMITH	ARKANSAS RIVER	29628	709	8.3	17.1	1.78	19-Feb-86	0	500	65	184	7.0	1.4	3.6	91%	
45	AR 0033278	001	FORT SMITH-P STREET	4952	FORT SMITH	ARKANSAS RIVER	29628	709	8.3	17.1	1.78	31-May-88	0	500	66	109	6.9	(0.1	0.2	97%	

EFFLUENT TOXICITY											COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH		LC50	MORTALITY		MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50 ChV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
					DAYS	24H		48H	CHRONIC				
31	AR 0003018		TYSON FOODS	D. PULEX	2		18		100	10		CI:15-22	YES ACUTE
32	AR 0003018		TYSON FOODS	P. PROMELAS	7			56	100	5	100 50	ChV=71%	YES CHRONIC
33	AR 0020338	001	USAF-BLYTHEVILLE AFB	D. PULEX	2	16	9		100	100		CI: 12-25 (24H); 6-12 (48H); CHLOR.; SOME IND.	YES ACUTE
34	AR 0020702	001	BATESVILLE	P. PROMELAS	8			93	60	20	100 50	ChV=71%	NO CHRONIC
35	AR 0020702	001	BATESVILLE	D. PULEX	2				20	0		NO SIG. MORT.	NO ACUTE
36	AR 0021211	002	MOUNTAIN HOME	D. PULEX	2				10	0		NO SIG. MORT.	NO ACUTE
37	AR 0021733	001	DEQUEEN	D. PULEX	2	8	8		100	0		CI: 6-12 (24 & 48H)	YES ACUTE
38	AR 0021750	001	FORT SMITH-MASSARD CRK	D. PULEX	2	5	4		100	20		CI: 3-6 (24 & 48H); NOTE MORT. IN DECHLOR.	YES ACUTE
39	AR 0021750	001	FORT SMITH-MASSARD CRK	C. AFFINIS	7			16	100	0	25 10	ChV=16%; DECHL. 50% EFFL. TESTED; GRAPH. INTER.	NO CHRONIC
40	AR 0021792		BERRYVILLE	D. PULEX	2	1.9	1.6		100			CI: 1.7-2.1 (24H); 1.5-1.8 (48H)	YES ACUTE
41	AR 0021806	001	LITTLE ROCK-ADAMS FIELD	D. PULEX	2	17	14		100			CI: 15-20 (24H); 13-15 (48H); DECHL. NOT TESTED	NO ACUTE
42	AR 0022624	001	HOMMET (A.K.A. ALUMAX)	D. PULEX	3		11		100			LC50 IS A 72H VALUE; NOTE HIGH pH	YES ACUTE
43	AR 0033278	001	FORT SMITH-P STREET	P. PROMELAS	7				100		10 5	ChV=7%; 30% MORT. IN 10% EFFL.	NO CHRONIC
44	AR 0033278	001	FORT SMITH-P STREET	C. AFFINIS	7			8	100		10 5	ChV=7%; GRAPHICALLY INTERPOLATED	NO CHRONIC
45	AR 0033278	001	FORT SMITH-P STREET	P. PROMELAS	8			76	70		100 50	ChV=71%	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE	UNIONIZED NH3	MINIMUM DO
							MEAN	7010	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L)
46	AR 0033278	001	FORT SMITH-P STREET	4952	FORT SMITH	ARKANSAS RIVER	29628	709	8.3	17.1	1.78	31-May-88	0	500	66	109	6.9	(0.1	0.2	87%
47	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	22-Jul-85	2	1750	422	70	7.5			9.4
48	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	22-Jul-85	2	1750	422	70	7.5			9
49	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	21-Apr-86	0	1700	560	53	7.4	(0.1	(0.1	7.6
50	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	21-Apr-86	0	1700	560	53	7.4	(0.1	(0.1	82%
51	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	08-Oct-86	2	4000	410	95	7.7	(0.1	(0.1	7
52	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	08-Oct-86	2	4000	410	95	7.7	(0.1	(0.1	88%
53	AR 0033375	001	STERLING FAUCET	3471	SHERIDAN	TOWN BRANCH/HURRICANE C	254	0	0.3	0.4	100	25-Jul-87	8	6000			7.4	(0.1	(0.1	81%
54	AR 0033553	001	ROGERS	4952	ROGERS	OSAGE CREEK	152	12.43	4.15		34.09	11-Sep-84	0	650	114	128	7.1			7.2
55	AR 0033766	001	PARAGOULD	4952	PARAGOULD	EIGHTMILE CREEK	134	0.1	1.32	3.65	95.34	17-Sep-85		600	39	162	7.8			6.8
56	AR 0033766	001	PARAGOULD	4952	PARAGOULD	EIGHTMILE CREEK	134	0.1	1.32	3.65	95.34	09-Sep-87	0	600			7.8	(0.1	0.2	91%
57	AR 0033766	001	PARAGOULD	4952	PARAGOULD	EIGHTMILE CREEK	134	0.1	1.32	3.65	95.34	09-Sep-87	0	600			7.8	(0.1	0.2	7.6
58	AR 0034321		HARRISON	4952	HARRISON	CROOKED CREEK	132.12	44	1.08	2.05	3.67	05-May-87	2	850	107	134	7.3	1.8	0.4	
59	AR 0034321		HARRISON	4952	HARRISON	CROOKED CREEK	132.12	44	1.08	2.05	3.67	05-May-87	2	850	107	134	7.3	1.8	0.4	8
60	AR 0034321		HARRISON	4952	HARRISON	CROOKED CREEK	132.12	44	1.08	2.05	3.67	05-May-87	2	850	107	134	7.3	1.8	0.4	93%

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LCSO		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT
						24H	48H					
46	AR 0033278	001	FORT SMITH-P STREET	D. PULEX	2		83	75				CI:64-100
47	AR 0033375	001	STERLING FAUCET	P. PROMELAS	8			56	100		50	CI:49-63; CHV=35%
48	AR 0033375	001	STERLING FAUCET	D. PULEX	2			20	0			EXTENSION OF TEST TO 80=NO SIG. MORTALITY
49	AR 0033375	001	STERLING FAUCET	D. PULEX	1			10				-
50	AR 0033375	001	STERLING FAUCET	P. PROMELAS	7			45			50	CHV=22%
51	AR 0033375	001	STERLING FAUCET	D. PULEX	1			5				-
52	AR 0033375	001	STERLING FAUCET	P. PROMELAS	8			83	60		75	CI:47-100; CHV=61%
53	AR 0033375	001	STERLING FAUCET	C. VARIEBATUS	9			54	100		100	CHV=71%; NOTE HIGH SALINITY
54	AR 0033553	001	ROGERS	D. PULEX	1			0				-
55	AR 0033766	001	PARAGOULD	D. PULEX	1			0	0			-
56	AR 0033766	001	PARAGOULD	P. PROMELAS	8			45			100	CHV=71%
57	AR 0033766	001	PARAGOULD	D. PULEX	2			0				-
58	AR 0034321		HARRISON	SELENASTRUM	4		16	95	81	6	16	CHV(6%); NOTE EFFECT IN DECHL. EFFL.
59	AR 0034321		HARRISON	D. PULEX	1	16		100	0			100% MORT. IN 6-100% EFFL. AFTER 24H
60	AR 0034321		HARRISON	P. PROMELAS	8			61	100	100	50	CHV=35%; GRAPHICALLY INTERPOLATED; MORT. IN DECHL.

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L) OR % SAT.
							MEAN	7010	MEAN	MAX.						AS	AS				
61	AR 0034380	001	STUTTGART	4952	STUTTGART	KINGS BAYOU	257.22	0.72	1.71	4.69	78.64	19-Oct-87	0	700				7.7	(0.1	0.2	7.7
62	AR 0034380	001	STUTTGART	4952	STUTTGART	KINGS BAYOU	257.22	0.72	1.71	4.69	78.64	19-Oct-87	0	700				7.7	(0.1	0.2	87%
63	AR 0034452	001	USA-FORT CHAFFEE	9711	FORT CHAFFEE	LITTLE VACHE GRASSE CRK	178.5	20.37	1.26	2.83	8.74	27-Aug-85	0	190	55	74	7.8				8.8
64	AR 0034452	001	USA-FORT CHAFFEE	9711	FORT CHAFFEE	LITTLE VACHE GRASSE CRK	178.5	20.37	1.26	2.83	8.74	31-May-88	0	160	46	33	6.2	0.4	(0.1		83%
65	AR 0034452	001	USA-FORT CHAFFEE	9711	FORT CHAFFEE	LITTLE VACHE GRASSE CRK	178.5	20.37	1.26	2.83	8.74	31-May-88	0	160	46	33	6.2	0.4	(0.1		93%
66	AR 0034851	001	PIPER INDUSTRIES	3496	CLARENDON	WHITE RIVER	30267	4829	0.013	0.025	0.0004	29-Jul-86	4	6000	540	59	9.0	(0.1	0.7		8
67	AR 0035386	002	ARKANSAS EASTMAN	2869	BATESVILLE	WHITE RIVER	12600	905	1.2	1.9	0.21	20-Aug-86	3	4500	1112	129	7.4	(0.1	(0.1		7.8
68	AR 0035645	001	GLENNWOOD	4952	GLENNWOOD	CADDO RIVER	5	0	0.22	0.5	100	21-Jul-87	0	510	72	9	6.6	0.4	(0.1		
69	AR 0035645	001	GLENNWOOD	4952	GLENNWOOD	CADDO RIVER	5	0	0.22	0.5	100	21-Jul-87	0	510	72	9	6.6	0.4	(0.1		91%
70	AR 0035645	001	GLENNWOOD	4952	GLENNWOOD	CADDO RIVER	5	0	0.22	0.5	100	21-Jul-87	0	510	72	9	6.6	0.4	(0.1		7.7
71	AR 0036412	002	VERTAC	2819	WEST HELENA	BEAR C. TO MISS. R.	484387	103334	0.04	0.07	0.0006	05-Nov-85	0	4000	90	560	8.7				8.6
72	AR 0036532	001	BEKAERT STEEL WIRE	3315	VAN BUREN	ARKANSAS RIVER	30206	816.7	0.074	0.252	0.014	22-Aug-84		2100	828	5	7.0				8.1
73	AR 0036532	001	BEKAERT STEEL WIRE	3315	VAN BUREN	ARKANSAS RIVER	30206	816.7	0.074	0.252	0.014	21-May-85	3	4500	1600	10	7.2				8.4
74	AR 0037770	002	CPS CHEMICAL	2869	WEST MEMPHIS	MISSISSIPPI RIVER	470057	69646	0.037	0.067	0.0001	27-Mar-84	4	6600	24	676	7.0				7.1
75	AR 0037770	002	CPS CHEMICAL	2869	WEST MEMPHIS	MISSISSIPPI RIVER	470057	69646	0.037	0.067	0.0001	18-Dec-84	5	11000	60	638	7.1				6.4

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN		LC50	MORTALITY IN 100% EFFLUENT		CHRONIC EFFECT AS PERCENT EFFLUENT	LOEC	NOEC
					DAYS	24H	48H	CHRONIC	DECHLORINATED			
61	AR 0034380	001	STUTTGART	D. PULEX	2			10				
62	AR 0034380	001	STUTTGART	P. PROMELAS	8			17	100	12 (12		
63	AR 0034452	001	USA-FORT CHAFFEE	D. PULEX	1			0	0	-		
64	AR 0034452	001	USA-FORT CHAFFEE	P. PROMELAS	8			59	100	100	50	
65	AR 0034452	001	USA-FORT CHAFFEE	D. PULEX	2			5	5	-		
66	AR 0034851	001	PIPER INDUSTRIES	D. PULEX	2	81	35		100			
67	AR 0035386	002	ARKANSAS EASTMAN	D. PULEX	1			10				
68	AR 0035645	001	GLENNWOOD	SELENASTRUM	4			31	93	25	12	
69	AR 0035645	001	GLENNWOOD	P. PROMELAS	8			46	100	50	25	
70	AR 0035645	001	GLENNWOOD	D. PULEX	2	31	27		100			
71	AR 0036412	002	VERTAC	D. PULEX	2	37	3		100			
72	AR 0036532	001	BEKAERT STEEL WIRE	D. PULEX	2	31	24		100			
73	AR 0036532	001	BEKAERT STEEL WIRE	D. PULEX	2	77	55		100			
74	AR 0037770	002	CPS CHEMICAL	D. PULEX	2		10		100			
75	AR 0037770	002	CPS CHEMICAL	D. PULEX	2	10	9		100			

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L) OR % SAT.
							MEAN	7Q10	MEAN	MAX.										
76	AR 0037770	002	CPS CHEMICAL	2869	WEST MEMPHIS	MISSISSIPPI RIVER	470057	69646	0.037	0.067	0.0001	09-Dec-86	10	12000			7.9	(0.1	0.7	25%
77	AR 0037800	009	ENSCO	2869	EL DORADO	TRIB. TO BOGGY CREEK	58.1	1.14	0.24	4.67	24.5	17-Apr-84	0	450	52	69	8.1			8
78	AR 0038512	001	VERTAC	2865	JACKSONVILLE	ROCKY BRANCH CREEK		0	0.13	0.61	100	28-Nov-84	0		95	110	6.5			8.8
79	AR 0041203	009	REYNOLDS METALS	1051	BAUXITE	HURRICANE CREEK						19-Nov-85		1500	299	28	7.3			8.2
80	AR 0041211	001	REYNOLDS METALS	1051	BAUXITE	COLD SPRING BRANCH		0	2.9	3.1	100	19-Nov-85		1400	190	27	7.6			8.2
81	AR 0041220	007	REYNOLDS METALS	1051	BAUXITE	FOURCHE BAYOU			0.03			19-Nov-85		700	161	14	6.9			8.9

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50	MORTALITY IN 100% IN 48H	MORTALITY IN 100% IN 100% IN 48H	CHRONIC EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT
76	AR 0037770	002	CPS CHEMICAL	C. VARIATUS	8		2	100		1 (1		CHV(1; HIGHLY TOXIC (AERATED AND UNAERATED)
77	AR 0037800	009	ENSCO	D. PULEX	1			5				NO CHRONIC
78	AR 0038512	001	VERTAC	D. PULEX	1			0				NO ACUTE
79	AR 0041203	009	REYNOLDS METALS	D. PULEX	1			0	10			NO ACUTE
80	AR 0041211	001	REYNOLDS METALS	D. PULEX	1			0	0			NO ACUTE
81	AR 0041220	007	REYNOLDS METALS	D. PULEX	1			0	0			NO ACUTE

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.						AS	AS				
1	LA 0000183	001	REYNOLDS METALS	2999	BATON ROUGE	TR. TO BATON ROUGE B.	51	6	1.84	3.65	32.22	22-Oct-85	0	500	47	93	7.8			8.4	
2	LA 0000191	001	UNION CARBIDE	2869	HAMMVILLE	MISSISSIPPI RIVER	460000	111000	1.63	2.54	0.0023	19-Jun-84	4	4700	60	>600	7.6			4.2	
3	LA 0000191	001	UNION CARBIDE	2869	HAMMVILLE	MISSISSIPPI RIVER	460000	111000	1.63	2.54	0.0023	19-Jun-84	4	4700	60	>600	7.6			6.2	
4	LA 0000191	001	UNION CARBIDE	2869	HAMMVILLE	MISSISSIPPI RIVER	460000	111000	1.63	2.54	0.0023	05-Mar-85	2	5500	76	>600	7.7			8.2	
5	LA 0000281	001	BORDEN CHEMICAL	2869	GEISMAR	MISSISSIPPI RIVER	460000	111000	1.63	2.54	0.0023	18-Mar-86	0	1400	232	114	7.6			8.8	
6	LA 0000493	001	REICHOLD CHEMICAL	2861	OAKDALE	CALCASIEU RIVER	918	27	0.15	0.3	0.85	09-Apr-86	0	1700	800	158	7.4	(0.1)	0.1	2.5	
7	LA 0000493	001	REICHOLD CHEMICAL	2861	OAKDALE	CALCASIEU RIVER	918	27	0.15	0.3	0.85	05-Dec-86	0	700	36	203	7.3	(0.1)	(0.1)	6.2	
8	LA 0000493	001	REICHOLD CHEMICAL	2861	OAKDALE	CALCASIEU RIVER	918	27	0.15	0.3	0.85	05-Dec-86	0	700	36	203	7.3	(0.1)	(0.1)	72x	
9	LA 0000604	001	COLONIAL SUGAR	2062	GRAMERCY	SWAMP TP COLONIAL CANAL	84	10	8.97	10.5	47	18-Mar-86	0	900	151	123	7.3		2.1	7.8	
10	LA 0000604	002	COLONIAL SUGAR	2062	GRAMERCY	SWAMP TP COLONIAL CANAL	84	10	0.07	0.11	1.67	18-Mar-86	0	500	122	62	7		(0.2)	4.8	
11	LA 0000752	001	UNIROYAL CHEMICAL CO.	2822	GEISMAR	MISSISSIPPI RIVER	460000	111000	0.53	1.04	0.0007	11-Aug-87	2	590	64	0	4.3	(0.1)	(0.1)	87x	
12	LA 0000752	001	UNIROYAL CHEMICAL CO.	2822	GEISMAR	MISSISSIPPI RIVER	460000	111000	0.53	1.04	0.0007	11-Aug-87	2	590	64	0	4.3	(0.1)	(0.1)		
13	LA 0000752	001	UNIROYAL CHEMICAL CO.	2822	GEISMAR	MISSISSIPPI RIVER	460000	111000	0.53	1.04	0.0007	11-Aug-87	2	590	64	0	4.3	(0.1)	(0.1)	7.7	
14	LA 0000761	001	PPG	2812	LAKE CHARLES	BAYOU D'INDE		0	200	300	100	29-Feb-84	1	4100	194	72	7.1			7.8	
15	LA 0000761	001	PPG	2812	LAKE CHARLES	BAYOU D'INDE		0	200	300	100	29-Feb-84	1	4100	194	72	7.1			9.6	

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LCSO		MORTALITY IN 100% IN 100% CHRONIC EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT LOEC NOEC	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LCSO CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H					
1	LA 0000183	001	REYNOLDS METALS	D. PULEX	1			5	0		-	NO ACUTE
2	LA 0000191	001	UNION CARBIDE	P. PROMELAS	2			100			LCSO NOT CALCULABLE; 100% MORT. IN 10% EFFL.	NO ACUTE
3	LA 0000191	001	UNION CARBIDE	D. PULEX	2	16	12	100			SALINITY CONTROL NOT RUN	NO ACUTE
4	LA 0000191	001	UNION CARBIDE	D. PULEX	2	10	10	100	100		CI: 9-11 (24 & 48H); NOTE HIGH COND./ALK.	NO ACUTE
5	LA 0000281	001	BORDEN CHEMICAL	D. PULEX	1			0	0		-	NO ACUTE
6	LA 0000493	001	REICHOLD CHEMICAL	D. PULEX	2	31	(1	100			CI: 38-38 (24H); MORT. IN DILUTIONS W/ SATISFACTORY DO	YES ACUTE
7	LA 0000493	001	REICHOLD CHEMICAL	D. PULEX	2		73	80			CI: 64-83	NO CHRONIC
8	LA 0000493	001	REICHOLD CHEMICAL	P. PROMELAS	8			13	100	25 10	CHV=17x	NO CHRONIC
9	LA 0000604	001	COLONIAL SUGAR	D. PULEX	1			5			-	NO ACUTE
10	LA 0000604	002	COLONIAL SUGAR	D. PULEX	2	43	43	100			CI: 37-51 (24 & 48H); CHLORINE NOT MEASURED	NO ACUTE
11	LA 0000752	001	UNIROYAL CHEMICAL CO.	P. PROMELAS	8			(25	100	(25 (25	CHV(25x); NOTE LOW pH	NO CHRONIC
12	LA 0000752	001	UNIROYAL CHEMICAL CO.	SELENASTRUM	4			(6	100	(6 (6	CHV(6x); NOTE LOW pH	NO CHRONIC
13	LA 0000752	001	UNIROYAL CHEMICAL CO.	D. PULEX	2	33	5	100			HIGHLY TOXIC; NOTE LOW pH	NO ACUTE
14	LA 0000761	001	PPG	D. PULEX	1			0			-	NO ACUTE
15	LA 0000761	001	PPG	P. PROMELAS	1			5			-	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IMC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR SAT.)
							MEAN	7Q10	MEAN	MAX.						AS	AS				
16	LA 0000841	001	EXXON CORP.	2821	BATON ROUGE	CYPRESS BAYOU	556	46	0.2	0.28	0.67	05-Mar-85	0	500	24	119	8.3			8.4	
17	LA 0000841	001	EXXON CORP.	2821	BATON ROUGE	CYPRESS BAYOU	556	46	0.2	0.28	0.67	03-Dec-86	0	450	44	76	8.5	(0.1	0.8	82%	
18	LA 0000841	001	EXXON CORP.	2821	BATON ROUGE	CYPRESS BAYOU	556	46	0.2	0.28	0.67	03-Dec-86	0	450	44	76	8.5	(0.1	0.8	75%	
19	LA 0000841	001	EXXON CORP.	2821	BATON ROUGE	CYPRESS BAYOU	556	46	0.2	0.28	0.67	03-Dec-86	0	450	44	76	8.5	(0.1	0.8	7	
20	LA 0000868	001	WESTVACO	2861	DERIDDER	PALMETTO CREEK	371	21	0.91	3.26	6.29	05-Feb-85	0	350	28	34	6.9			8.6	
21	LA 0000876	002	KAISER ALUMINUM	3334	CHALMETTE	MISSISSIPPI RIVER	460000	111000	3.01	18.77	0.0042	26-Feb-86	0	2600	397	324	7.7			90%	
22	LA 0000876	002	KAISER ALUMINUM	3334	CHALMETTE	MISSISSIPPI RIVER	460000	111000	3.01	18.77	0.0042	26-Feb-86	0	2600	397	324	7.7			8.2	
23	LA 0000914	001	COPOLYMER & CHEMICAL	2822	BATON ROUGE	MONTE SAND BAYOU	34	4	2.43	3.57	48.52	05-Jun-85	0	400	40	51	7.5			8.4	
24	LA 0001333	001	M. R. BRACE & CO.	2819	LAKE CHARLES	CALCASIEU RIVER	4416	259	1.95	3.56	1.15	08-Apr-86	8				7.3			92%	
25	LA 0002771	002	E. I. DUPONT	2819	BURNSIDE	MISSISSIPPI RIVER	460000	111000	0.05	0.17	0.00007	29-Apr-86	4	8000	124	54	8.1	(0.1	(0.1	8.4	
26	LA 0002780	001	E. I. DUPONT	2819	PINEVILLE	TR. TO FLAGSON BAYOU	0	0			100	11-Sep-85		590	37	34	8			8.2	
27	LA 0002909	007	KAISER ALUMINUM	2819	BATON ROUGE	MONTE SAND BAYOU	34	4	0.01	1.56	0.4	19-Mar-85	0				8.4			8.6	
28	LA 0002917	001	S.W. ELECTRIC POWER	4911	MOORINGSPOUT	CADDO LAKE			124.3	268.4		25-Feb-86	0	135	16	14	7.2		2	8	
29	LA 0002933	001	VULCAN MATERIALS	2869	GEISMAR	MISSISSIPPI RIVER	460000	111000	1.13	2.11	0.0016	25-Oct-83	58	76000			7.6				
30	LA 0002933	001	VULCAN MATERIALS	2869	GEISMAR	MISSISSIPPI RIVER	460000	111000	1.13	2.11	0.0016	23-Apr-85	74	76000			7.6			7.9	

EFFLUENT TOXICITY											COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	DAYS	TEST LENGTH		LC50	MORTALITY		CHRONIC EFFECT AS IN 100% EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS
						IN	IN 100%		IN 100%	DECHLORINATED			
					24H	48H	CHRONIC	EFFLUENT	EFFLUENT	LOEC	MOEC		
16	LA 0000841	001	EXXON CORP.	D. PULEX	2	86	26		100	100		-	NO ACUTE
17	LA 0000841	001	EXXON CORP.	P. PROMELAS	8			60	70		50 25	Chv=35%; CI:41-93	NO CHRONIC
18	LA 0000841	001	EXXON CORP.	CERIODAPHNIA	7				10			NO SIG. EFFECT	NO CHRONIC
19	LA 0000841	001	EXXON CORP.	D. PULEX	2	81	47		100			CI:69-94(24H); 39-57(48H)	NO ACUTE
20	LA 0000868	001	WESTVACO	D. PULEX	1				0	0		-	NO ACUTE
21	LA 0000876	002	KAISER ALUMINUM	P. PROMELAS	7				0			-	NO CHRONIC
22	LA 0000876	002	KAISER ALUMINUM	D. PULEX	1				0	5		-	NO ACUTE
23	LA 0000914	001	COPOLYMER & CHEMICAL	D. PULEX	1				0	0		-	NO ACUTE
24	LA 0001333	001	M. R. BRACE & CO.	C. VARIEGATUS	8				100		50 10	Chv=22%; NO SIG. MORT. IN SALINITY CONTROL	NO CHRONIC
25	LA 0002771	002	E. I. DUPONT	D. PULEX	2	50	28		100			CI:39-64(24H); 20-39(48H); MORT. IN SALINITY CNTRL	NO ACUTE
26	LA 0002780	001	E.I DUPONT	D. PULEX	1				0	0		-	NO ACUTE
27	LA 0002909	007	KAISER ALUMINUM	D. PULEX	1				0	0		-	NO ACUTE
28	LA 0002917	001	S.W. ELECTRIC POWER	D. PULEX	2	89	88		60	30		CI: 71-100 (24H); 80-100 (48H)	YES ACUTE
29	LA 0002933	001	VULCAN MATERIALS	M. BAHIA	2		5		100			SALINITY CONTROL NOT RUN	NO ACUTE
30	LA 0002933	001	VULCAN MATERIALS	M. BAHIA	2	16	7		100			CI:4-12(48H); 100% MORT. IN 46 & 74 o/oo CONTROLS	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR SAT.)
							MEAN	7010	MEAN	MAX.						AS	AS				
31	LA 0003026	001	CONOCO REFINERY	2911	LAKE CHARLES	BAYOU VERDINE			0	1.83	3.44	100	29-Feb-84	0	2700	220	156	7.2			6.8
32	LA 0003026	001	CONOCO REFINERY	2911	LAKE CHARLES	BAYOU VERDINE			0	1.83	3.44	100	29-Feb-84	0	2700	220	156	7.2			5.8
33	LA 0003271	001	MORTON THIOKOL	2819	WEEKS ISLAND	GULF INTRACASTAL WM	994	108	4.98	23.1	6.67	06-Apr-85	4	7500			8.2				8.6
34	LA 0003271	001	MORTON THIOKOL	2819	WEEKS ISLAND	GULF INTRACASTAL WM	994	108	4.97	8.39	6.66	14-Aug-86	9	12000			7.7	(0.1)	(0.1)		93%
35	LA 0003301	521	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	4	6000	90	738	9.1	1	(0.1)		
36	LA 0003301	321	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	2600	440	67	7.8	(0.1)	(0.1)		8
37	LA 0003301	521	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	4	6000	90	738	9.1	1	(0.1)		7
38	LA 0003301	511	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	1700	100	90	10.4	(0.1)	(0.1)		
39	LA 0003301	511	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	1700	100	90	10.4	(0.1)	(0.1)		91%
40	LA 0003301	001	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.62	3.07	0.0023	15-Jul-87	2	3700	210	97	7.9	(0.1)	(0.1)		8.1
41	LA 0003301	001	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.62	3.07	0.0023	15-Jul-87	2	3700	210	97	7.9	(0.1)	(0.1)		
42	LA 0003301	001	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.62	3.07	0.0023	15-Jul-87	2	3700	210	97	7.9	(0.1)	(0.1)		93%
43	LA 0003301	321	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	2600	440	67	7.8	(0.1)	(0.1)		90%
44	LA 0003301	2001	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	65				8	(0.1)	(0.1)		81%
45	LA 0003301	511	DOW CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	1700	100	90	10.4	(0.1)	(0.1)		8.2

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH			LC50	MORTALITY IN 100% IN		CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50
					DAYS	24H	48H		CHRONIC EFFLUENT	DECHLOR- INATED EFFLUENT		
31	LA 0003026	001	CONOCO REFINERY	P. PROMELAS	1				5		-	
32	LA 0003026	001	CONOCO REFINERY	D. PULEX	1				0		-	
33	LA 0003271	001	MORTON THIOKOL	D. PULEX	2	66	59		100	100	-	CI:60-72(24H); 52-68(48H); 100% MORT. IN 4 o/oo
34	LA 0003271	001	MORTON THIOKOL	C. VARIEGATUS	7				5		-	
35	LA 0003301	521	DOW CHEMICAL	SELENASTRUM	4				48	18	(12) (12)	Chv(12%); CELL NO. SIG. LOWER IN DECHL. EFFL.
36	LA 0003301	321	DOW CHEMICAL	D. PULEX	2				5		-	
37	LA 0003301	521	DOW CHEMICAL	D. PULEX	1	(12)			100	100	-	HIGHLY TOXIC; NOTE MORT. IN DECHL. EFFL.
38	LA 0003301	511	DOW CHEMICAL	SELENASTRUM	4				34		100 50	Chv=71%
39	LA 0003301	511	DOW CHEMICAL	P. PROMELAS	8				20		-	NO SIG. EFFECT
40	LA 0003301	001	DOW CHEMICAL	D. PULEX	2				10		-	
41	LA 0003301	001	DOW CHEMICAL	SELENASTRUM	4				12		100 50	Chv=71%; SLIGHT EFFECT
42	LA 0003301	001	DOW CHEMICAL	P. PROMELAS	8				20		-	NO SIG. EFFECT
43	LA 0003301	321	DOW CHEMICAL	P. PROMELAS	8				15		-	NO SIG. EFFECT
44	LA 0003301	2001	DOW CHEMICAL	C. VARIEGATUS	9			33	100		50 25	Chv=35%; ADEQUATE SURVIVAL IN 65 o/oo CONTROL
45	LA 0003301	511	DOW CHEMICAL	D. PULEX	2				5		-	

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.										
46	LA 0003301	321	DOM CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	2	2600	440	67	7.8	(0.1	(0.1	
47	LA 0003301	311	DOM CHEMICAL	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000				15-Jul-87	20				8.9	(0.1	(0.1	92%
48	LA 0003476	001	VISTA CHEMICAL	2869	WESTLAKE	DITCH TO BAYOU VERDINE		0	0.71	1.33	100	22-Jan-86		2350	794	115	7.2			87%
49	LA 0003522	001	SHELL OIL CO.	2911	NORCO	MISSISSIPPI RIVER	460000	111000	0.13	0.35	0.00018	30-Apr-85	0	1300	188	104	7.7			7.2
50	LA 0003549	002	USA-LOU. ARMY AMMO. PLT	3483	SHREVEPORT	BOONE CREEK	1132	1.06	0.04	0.07	5.53	05-Nov-84	2	2900	728	24	7.7			8.8
51	LA 0003549	002	USA-LOU. ARMY AMMO. PLT	3483	SHREVEPORT	BOONE CREEK	1132	1	0.04	0.07	5.84	14-May-86	4	6900	1260	137	6.7	(0.1	(0.1	7.8
52	LA 0003549	005	USA-LOU. ARMY AMMO. PLT	3483	SHREVEPORT	BOONE CREEK	1132	1.06	0.01	0.01	1.4	29-Feb-88	0	750			7.5	(0.1	(0.1	86%
53	LA 0003549	005	USA-LOU. ARMY AMMO. PLT	3483	SHREVEPORT	BOONE CREEK	1132	1.06	0.01	0.01	1.4	29-Feb-88	0	750			7.5	(0.1	(0.1	98%
54	LA 0003654	002	ZAPATA HAYNIE	2077	CAMERON	CALCASIEU SHIP CHANNEL	5346	262	0.1		0.059	15-Apr-86	5	10000	1636	270	8.8	0.1	0.4	78%
55	LA 0003689	001	HIMONT-HERCULES	2821	CAMERON	CALCASIEU SHIP CHANNEL	4581	260	1.56	2.71	0.92	04-Mar-86	3	600	69	743	8.4	8.4	1.4	90%
56	LA 0003689	001	HIMONT-HERCULES	2821	CAMERON	CALCASIEU SHIP CHANNEL	4581	260	1.56	2.71	0.92	04-Mar-86	3	600	69	743	8.4	8.4	1.4	7.4
57	LA 0003735	007	LAKE CHARLES CARBON	3334	LAKE CHARLES	CALCASIEU RIVER	4416	259	0.3	1.01	0.18	21-Apr-86	0	600	148	146	7.9	(0.1	0.2	7.6
58	LA 0003735	007	LAKE CHARLES CARBON	3334	LAKE CHARLES	CALCASIEU RIVER	4416	259	0.3	1.01	0.18	21-Apr-86	0	600	148	146	7.9	(0.1	0.2	93%
59	LA 0003824	001	FIRESTONE	2822	LAKE CHARLES	BAYOU d'INDE	300	0	0.8	2.2	100	16-Feb-88	0	990			7.5	(0.1	(0.1	94%
60	LA 0003824	001	FIRESTONE	2822	LAKE CHARLES	BAYOU d'INDE	300	0	0.8	2.2	100	16-Feb-88	0	990			7.5	(0.1	(0.1	94%

EFFLUENT TOXICITY										COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	
						24H	48H			CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
46	LA 0003301	321	DOM CHEMICAL	SELENASTRUM	4			45	(12 (12	CHV=12%	NO CHRONIC
47	LA 0003301	311	DOM CHEMICAL	C. VARIEBATUS	9		66	100	100 50	CHV=71%	NO CHRONIC
48	LA 0003476	001	VISTA CHEMICAL	P. PROMELAS	7			10		NO SIGNIFICANT MORTALITY	NO CHRONIC
49	LA 0003522	001	SHELL OIL CO.	D. PULEX	1			0	0	-	NO ACUTE
50	LA 0003549	002	USA-LOU. ARMY AMMO. PLT	D. PULEX	1			0		-	NO ACUTE
51	LA 0003549	002	USA-LOU. ARMY AMMO. PLT	D. PULEX	1	45		95		COMPLETE MORTALITY IN 40/00 CONTROL	NO ACUTE
52	LA 0003549	005	USA-LOU. ARMY AMMO. PLT	P. PROMELAS	8		23	100	25 12	CHV=17%; NOTE DIFFERENCE FROM DAPHNIA RESPONSE	NO CHRONIC
53	LA 0003549	005	USA-LOU. ARMY AMMO. PLT	D. PULEX	2			15		NOTE DIFFERENCE WITH FATHEAD MINNOW RESPONSE	NO ACUTE
54	LA 0003654	002	ZAPATA HAYNIE	P. PROMELAS	7			40	100 50	CHV=71%; ADEQUATE SURVIVAL IN SALINITY CONTROL	NO CHRONIC
55	LA 0003689	001	HIMONT-HERCULES	P. PROMELAS	7		87	55	100 50	CHV=71%; SALINITY CONTROL AND DECHL. NOT TESTED	NO CHRONIC
56	LA 0003689	001	HIMONT-HERCULES	D. PULEX	1	71		100	90	SALINITY CONTROL AND DECHLORINATED NOT TESTED	NO CHRONIC
57	LA 0003735	007	LAKE CHARLES CARBON	D. PULEX	1			5		-	NO ACUTE
58	LA 0003735	007	LAKE CHARLES CARBON	P. PROMELAS	7			10		MORT. IN 50% EFFL. PROB. DUE TO INFERT. EGGS	NO CHRONIC
59	LA 0003824	001	FIRESTONE	D. PULEX	2			30		SIG. MORT. IN 100% EFFL.	YES ACUTE
60	LA 0003824	001	FIRESTONE	P. PROMELAS	8			10		NO SIG. EFFECT	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO OR % SAT.
							MEAN	7010	MEAN	MAX.										
61	LA 0004057	001	GRANT CHEMICAL	2869	LAKE CHARLES	DITCH TO BATON ROUGE R.	51	6.62	17.7	27.1	82.05	18-Mar-86	4	9000	112	203	7.8		2.2	5.1
62	LA 0004090	001	ETHYL CORP.	2869	BATON ROUGE	MONTI SAND BAYOU	33.6	4.1	7.76	14.4	80.56	17-Sep-85		750	73	111	7.6			7.4
63	LA 0004154	001	COLUMBIAN CHEMICAL	2895	FRANKLIN	INTRACOSTAL WATERWAY			1.4	1.8		27-Aug-87	2	4200	214	104	7.5	(0.1)	0.2	92%
64	LA 0004154	001	COLUMBIAN CHEMICAL	2895	FRANKLIN	INTRACOSTAL WATERWAY			1.4	1.8		27-Aug-87	2	4200	214	104	7.5	(0.1)	0.2	8.4
65	LA 0004464	001	SCHUYKILL METALS	3332	E. BATON ROUGE	BATON ROUGE BAYOU	50.9	0	0.27	2.08	100	20-Aug-85		4000	126	124	9			8.2
66	LA 0004847	001	FREEPORT CHEMICAL	2874	UNCLE SAM	MISSISSIPPI RIVER	460000	111000	144	192	0.2	15-Apr-84	0	900	144	(40)	2.9			8.2
67	LA 0005258	001	GEORGIA PACIFIC	2611	ZACHARY	MISSISSIPPI RIVER	460000	111000	24.65	44.2	0.034	11-Aug-87	3	2750	400	198	7.5	(0.1)	0.5	62%
68	LA 0005258	001	GEORGIA PACIFIC	2611	ZACHARY	MISSISSIPPI RIVER	460000	111000	24.65	44.2	0.034	11-Aug-87	3	2750	400	198	7.5	(0.1)	0.5	7.4
69	LA 0005266	001	MONSANTO	2869	LULING	MISSISSIPPI RIVER	460000	111000	0.12	0.36	0.00017	01-Nov-83								
70	LA 0005347	001	OLIN CO.	2869	LAKE CHARLES	CALCASTEUX RIVER	4416	259	2.16	3.81	1.28	18-Jun-86	6				7.4	(0.1)	(0.1)	87%
71	LA 0005355	001	EXXON	2821	BATON ROUGE	FORTUNE BAYOU	15	2	1.13	2.95	46.67	08-Jul-85		750	40	180	8.2			6.2
72	LA 0005461	001	GENERAL ELECTRIC	3612	SHREVEPORT	BOGEY BAYOU	46	0				08-Aug-84	0	390	64	25	6.7			6.6
73	LA 0005487	001	CIBA-GEIGY	2879	SAINT GABRIEL	MISSISSIPPI RIVER	460000	111000	3.3	11.9	0.005	02-Feb-88	15				6.9	(0.1)	0.3	90%
74	LA 0005941	003	CITGO CITIES SERVICE	2911	LAKE CHARLES	CALCASTEUX RIVER	4416	259	38	150	18.53	04-Mar-86	2	6500	102	95	7.7		3.6	87%
75	LA 0005941	003	CITGO CITIES SERVICE	2911	LAKE CHARLES	CALCASTEUX RIVER	4416	259	38	150	18.53	04-Mar-86	2	6500	102	95	7.7		3.6	7.8

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% CHRONIC EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT LDEC NOEC	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 ChV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H					
61	LA 0004057	001	GRANT CHEMICAL	D. PULEX	2	71	71				COMPLETE MORTALITY IN 4 o/oo SALINITY CONTROL	YES ACUTE
62	LA 0004090	001	ETHYL CORP.	D. PULEX	1	100		50	20		-	YES ACUTE
63	LA 0004154	001	COLUMBIAN CHEMICAL	P. PROMELAS	8			5			NO SIG. EFFECT	NO CHRONIC
64	LA 0004154	001	COLUMBIAN CHEMICAL	D. PULEX	2			15			-	NO ACUTE
65	LA 0004464	001	SCHUYKILL METALS	D. PULEX	1			0	0		-	NO ACUTE
66	LA 0004847	001	FREEPORT CHEMICAL	D. PULEX	2	13	10	100	100		CI: 12-16(24H); 7-12(48H); NOTE LOW pH	NO ACUTE
67	LA 0005258	001	GEORGIA PACIFIC	P. PROMELAS	4			57	100	100	ChV=71%; NOTE HIGH TOTAL AND UNIONIZED NH3	NO CHRONIC
68	LA 0005258	001	GEORGIA PACIFIC	D. PULEX	2			5			NOTE HIGH TOTAL AND UNIONIZED NH3	NO ACUTE
69	LA 0005266	001	MONSANTO	D. PULEX	2			0			-	NO ACUTE
70	LA 0005347	001	OLIN CO.	C. VARIEGATUS	6			25		100	ChV=87%; NO MORT. IN SAL. CONTROL; IWC OVEREST.	NO CHRONIC
71	LA 0005355	001	EXXON	D. PULEX	2			0	0		-	NO ACUTE
72	LA 0005461	001	GENERAL ELECTRIC	D. PULEX	1			0			-	NO ACUTE
73	LA 0005487	001	CIBA-GEIGY	C. VARIEGATUS	9			54	100	100	ChV=71%	NO CHRONIC
74	LA 0005941	003	CITGO CITIES SERVICE	P. PROMELAS	7			25		25	CI: 16-36; NOTE HIGH NH3	YES CHRONIC
75	LA 0005941	003	CITGO CITIES SERVICE	D. PULEX	1	81		65	80		CI: 65-100; NOTE HIGH NH3	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7010	MEAN	MAX.						AS	AS				
76	LA 0005983	001	OCCIDENTAL CHEMICAL	2812	TAFT	MISSISSIPPI RIVER	460000	111000	2.47	5.52	0.0034	07-Feb-84	18								
77	LA 0005983	001	OCCIDENTAL CHEMICAL	2812	TAFT	MISSISSIPPI RIVER	460000	111000	2.47	5.52	0.0034	30-Apr-85	38	50000				7.6			8
78	LA 0005991	001	KAISER ALUMINUM	2819	GRAMERCY	MISSISSIPPI RIVER	460000	111000	38.2	75	0.053	14-Sep-87	3	1500	122	94		8.9	(0.1	0.4	95%
79	LA 0005991	001	KAISER ALUMINUM	2819	GRAMERCY	MISSISSIPPI RIVER	460000	111000	38.2	75	0.053	14-Sep-87	3	1500	122	94		8.9	(0.1	0.4	8.1
80	LA 0006041	001	TEXACO	2911	CONVENT	ST JAMES CANAL	84	10	1.72	7.1	21.08	11-Feb-86	0	2100	226	145		7.3			7.6
81	LA 0006041	001	TEXACO	2911	CONVENT	ST JAMES CANAL	84	10	1.72	7.1		11-Feb-86	0	2100	226	145		7.3			77%
82	LA 0006131	001	TECHNIGRAPHICS	2621	LOCKPORT	DITCH TO 40 ARPERT CANAL		0	2.97	8.2	100	15-Apr-86		900	186	202		7.7	0.2	(0.1	77%
83	LA 0006131	001	TECHNIGRAPHICS	2621	LOCKPORT	DITCH TO 40 ARPERT CANAL		0	2.97	8.2	100	04-Aug-87	0	6000	126	104		7.3	(0.1	(0.1	8.1
84	LA 0006131	001	TECHNIGRAPHICS	2621	LOCKPORT	DITCH TO 40 ARPERT CANAL		0	2.97	8.2	100	04-Aug-87	0	6000	126	104		7.3	(0.1	(0.1	
85	LA 0006131	001	TECHNIGRAPHICS	2621	LOCKPORT	DITCH TO 40 ARPERT CANAL		0	2.97	8.2	100	04-Aug-87	0	6000	126	104		7.3	(0.1	(0.1	88%
86	LA 0006831	001	BELLE CHASSE WATER WORKS	4941	BELLE CHASSE	MISSISSIPPI RIVER	460000	111000	0.19	0.3	0.0003	22-Jul-87	0	1190	294	171		8	(0.1	(0.1	8
87	LA 0006831	001	BELLE CHASSE WATER WORKS	4941	BELLE CHASSE	MISSISSIPPI RIVER	460000	111000	0.19	0.3	0.0003	22-Jul-87	0	1190	294	171		8	(0.1	(0.1	90%
88	LA 0006831	001	BELLE CHASSE WATER WORKS	4941	BELLE CHASSE	MISSISSIPPI RIVER	460000	111000	0.19	0.3	0.0003	22-Jul-87	0	1190	294	171		8	(0.1	(0.1	
89	LA 0006963	105	CANAL REFINERY	2911	CHURCH POINT	TR. TO BAYOU PLAQUEMINE	155	7	0.01	0.02	0.23	04-Jun-85		790	248	290		7.9			6
90	LA 0007129	102	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.84	3.67	0.0026	12-May-86	14					8	(0.1	0.2	84%

EFFLUENT TOXICITY											COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	CHRONIC MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS
						24H	48H	CHRONIC				CHV=CHRONIC VALUE IN PERCENT EFFLUENT		
76	LA 0005983	001	OCCIDENTAL CHEMICAL	M. BAHIA	2		19		100			STRESS OBSERVED IN 100% EFFL. AFTER 15 MIN.		NO CHRONIC
77	LA 0005983	001	OCCIDENTAL CHEMICAL	M. BAHIA	2	3	3		100	100		NO MORTALITY IN 38 o/oo SALINITY CONTROL		NO ACUTE
78	LA 0005991	001	KAISER ALUMINUM	P. PROMELAS	8			52	100		50	25	CHV=35%; ADEQUATE SURVIVAL IN SALINITY CONTROL	NO ACUTE
79	LA 0005991	001	KAISER ALUMINUM	D. PULEX	2		44		75				20% MORT. IN 3 o/oo SALINITY CONTROL	NO ACUTE
80	LA 0006041	001	TEXACO	D. PULEX	1				5	0			-	NO ACUTE
81	LA 0006041	001	TEXACO	P. PROMELAS	7			91	60		75	50	CHV=61%; CI:78-100; DECHLORINATED NOT TESTED	NO CHRONIC
82	LA 0006131	001	TECHNIGRAPHICS	P. PROMELAS	7				0				-	NO CHRONIC
83	LA 0006131	001	TECHNIGRAPHICS	D. PULEX	2				15				-	NO ACUTE
84	LA 0006131	001	TECHNIGRAPHICS	SELENASTRAUM	4				46		16	16	CHV(6%	YES CHRONIC
85	LA 0006131	001	TECHNIGRAPHICS	P. PROMELAS	7				10				-	NO CHRONIC
86	LA 0006831	001	BELLE CHASSE WATER WORKS	D. PULEX	2				15				-	NO ACUTE
87	LA 0006831	001	BELLE CHASSE WATER WORKS	P. PROMELAS	8				10				-	NO CHRONIC
88	LA 0006831	001	BELLE CHASSE WATER WORKS	SELENASTRAUM	4			24	92		112	112	CHV(12%; CI:20-28	NO CHRONIC
89	LA 0006963	105	CANAL REFINERY	D. PULEX	2	51	4		100	100			CI:27-96(24H); 2-7(48H)	NO CHRONIC
90	LA 0007129	102	GEORGIA GULF	C. VARIEBATUS	8				100		100	50	CHV=71%	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNIONIZED NH3	MINIMUM DO
							MEAN	7Q10	MEAN	MAX.								CHLORINE (MG/L)	(MG/L)	(MG/L OR % SAT.)
91	LA 0007129	002	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	3.84	8.72	0.0054	12-May-86	20				8.3	(0.1)	0.3	5.8
92	LA 0007129	003	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	0.87	7.62	0.0012	12-May-86	12				8.7	(0.1)	0.6	8.1
93	LA 0007129	102	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.84	3.67	0.0026	12-May-86	14				8	(0.1)	0.2	7.9
94	LA 0007129	002	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	3.84	8.72	0.0054	12-May-86	20				8	(0.1)	0.3	91%
95	LA 0007129	003	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	0.87	7.62	0.0012	12-May-86	12				8.8	(0.1)	0.6	83%
96	LA 0007129	102	GEORGIA GULF	2869	PLAQUEMINE	MISSISSIPPI RIVER	460000	111000	1.84	3.67	0.0026	02-Feb-88	15				8.4	(0.1)	2.5	90%
97	LA 0007501	001	CHEMICAL BOND CORP.	2869	DODSON	DITCH TO BRUSHY CREEK	0.7	0	0.036	0.112	100	05-Mar-85	1	2800	52	367	8.3			8.6
98	LA 0007579	005	LOUL. POWER & LIGHT	4911	STERLINGSTON	QUACHITA RIVER	6314	273.74	65	65	26.9	23-Jun-86	0	1200	200	85	6.6	(0.1)	(0.1)	9.1
99	LA 0007579	005	LOUL. POWER & LIGHT	4911	STERLINGSTON	QUACHITA RIVER	6314	273.74	65	65	26.9	23-Jun-86	0	1200	200	85	6.6	(0.1)	(0.1)	87%
100	LA 0007684	001	STONE CONTAINER CORP.	2621	HODGE	DUGDEMONA RIVER	325	1.205	11.42		61.24	16-Jul-86	2	1300	72	533	8.3	(0.1)	0.2	8.4
101	LA 0007684	001	STONE CONTAINER CORP.	2621	HODGE	DUGDEMONA RIVER	325	1.205	11.42		61.24	16-Jul-86	2	1300	72	533	8.3	(0.1)	0.2	80%
102	LA 0007854	001	IMC CHEMICAL GROUP	2869	STERLINGSTON	QUACHITA RIVER	6314	273.74	2.59	3.42	1.45	19-May-87	4	3400	102	95	8.6	(0.1)	3.4	6.8
103	LA 0007854	001	IMC CHEMICAL GROUP	2869	STERLINGSTON	QUACHITA RIVER	6314	273.74	2.59	3.42	1.45	19-May-87	4	3400	102	95	8.6	(0.1)	3.4	88%
104	LA 0007854	001	IMC CHEMICAL GROUP	2869	STERLINGSTON	QUACHITA RIVER	6314	273.74	2.59	3.42	1.45	19-May-87	4	3400	102	95	8.6	(0.1)	3.4	
105	LA 0007927	001	BOISE SOUTHERN	2621	DERIDDER	DITCH TO CYPRESS CREEK	500	24	23.98	61.5	37.79	05-Feb-85	0	2000	138	74	7.3			8.8

EFFLUENT TOXICITY										COMMENTS				
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 ChV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H							
91	LA 0007129	002	GEORGIA GULF	C. VARIEGATUS	2		100	50				NO MORTALITY IN 50% EFFLUENT	NO ACUTE	
92	LA 0007129	003	GEORGIA GULF	C. VARIEGATUS	1			5				-	NO ACUTE	
93	LA 0007129	102	GEORGIA GULF	C. VARIEGATUS	1			0				-	NO ACUTE	
94	LA 0007129	002	GEORGIA GULF	C. VARIEGATUS	8			100	100	50	50	ChV=71%	NO CHRONIC	
95	LA 0007129	003	GEORGIA GULF	C. VARIEGATUS	8			100	100	50	50	ChV=71%	NO CHRONIC	
96	LA 0007129	102	GEORGIA GULF	C. VARIEGATUS	9		54	100	100	50	50	ChV=71%	NO CHRONIC	
97	LA 0007501	001	CHEMICAL BOND CORP.	D. PULEX	1			0		0		-	NO ACUTE	
98	LA 0007579	005	LOUL. POWER & LIGHT	D. PULEX	1			0				-	NO ACUTE	
99	LA 0007579	005	LOUL. POWER & LIGHT	P. PROMELAS	7			0				-	NO CHRONIC	
100	LA 0007684	001	STONE CONTAINER CORP.	D. PULEX	1			0				-	NO ACUTE	
101	LA 0007684	001	STONE CONTAINER CORP.	P. PROMELAS	7			5				-	NO CHRONIC	
102	LA 0007854	001	IMC CHEMICAL GROUP	D. PULEX	2	16	16	90+				*MORTALITY DATA FOR 50% EFFL.	NO ACUTE	
103	LA 0007854	001	IMC CHEMICAL GROUP	P. PROMELAS	8			8	100		12	6	ChV=9%	NO CHRONIC
104	LA 0007854	001	IMC CHEMICAL GROUP	SELENASTRUM	4			91			50	25	ChV=35%; STIMULATORY IN 6% AND 12% EFFL.	NO CHRONIC
105	LA 0007927	001	BOISE SOUTHERN	D. PULEX	1			0		0		-	NO ACUTE	

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L SAT.)	
							MEAN	7010	MEAN	MAX.											
1106	LA 0008036	004	CLECO	4911	BOYCE	LAKE RIDEMACHER	234	3	1.45	7.66	42.86	27-Mar-84	0	180	86	52	8.4			8.4	
1107	LA 0020044	001	PLAIN DEALING	4952	PLAIN DEALING	CYPRESS BAYOU	124	0.08	0.17	0.35	76.47	06-Aug-85		1000	32	403	8.5			7.2	
1108	LA 0020087	001	BERLIN	4952	BERLIN	BAYOU BLUE	119.2	7.02	0.25	0.7	5.23	21-Jul-87	0	4900	37	82	7.1	(0.1)	(0.1)	87%	
1109	LA 0020087	001	BERLIN	4952	BERLIN	BAYOU BLUE	119.2	7.02	0.25	0.7	5.23	21-Jul-87	0	4900	37	82	7.1	(0.1)	(0.1)		
1110	LA 0020087	001	BERLIN	4952	BERLIN	BAYOU BLUE	119.2	7.02	0.25	0.7	5.23	21-Jul-87	0	4900	37	82	7.1	(0.1)	(0.1)	8.2	
1111	LA 0029769	001	AGRICO CHEMICAL	2873	DONALDSON	MISSISSIPPI RIVER	460000	111000	5.09	11.8	0.007	26-Aug-87	1	1400	376	58	7	(0.1)	0.2	8.2	
1112	LA 0029769	001	AGRICO CHEMICAL	2873	DONALDSON	MISSISSIPPI RIVER	460000	111000	5.09	11.8	0.007	26-Aug-87	1	1400	376	58	7	(0.1)	0.2	94%	
1113	LA 0029769	001	AGRICO CHEMICAL	2873	DONALDSON	MISSISSIPPI RIVER	460000	111000	5.04	11.8	0.007	02-Feb-88	0	1250			6.9	(0.1)	0.3		
1114	LA 0029769	001	AGRICO CHEMICAL	2873	DONALDSON	MISSISSIPPI RIVER	460000	111000	5.04	11.8	0.007	02-Feb-88	0	1250			6.9	(0.1)	0.3	100%	
1115	LA 0029963	001	GULF OIL CHEMICAL	2863	ST. JAMES	MISSISSIPPI RIVER	460000	111000	0.2	0.38	0.00028	06-Jun-85	8	28000			8.4			8.2	
1116	LA 0032221	004A	USA-FORT POLK	9711	FORT POLK	BUNDICK CREEK	371	27	0.79	3.02	4.33	05-Aug-86	1	400	30	97	10	(0.1)	0.9	8.4	
1117	LA 0032221	001A	USA-FORT POLK	9711	FORT POLK	DRAKES CREEK	371	27	1.1	3.3	5.94	15-Sep-87	0	390	56	95	9.5	(0.1)	0.2	91%	
1118	LA 0032221	001A	USA-FORT POLK	9711	FORT POLK	DRAKES CREEK	371	27	1.1	3.3	5.94	15-Sep-87	0	390	56	95	9.5	(0.1)	0.2	7.8	
1119	LA 0032417	001	ATLAS PROCESSING	2911	SHREVEPORT	BRUSHY BAYOU	20	0.3	1.36	8.48	87.54	26-Jun-84		1700	270	61	8			8.2	
1120	LA 0032417	001	ATLAS PROCESSING	2911	SHREVEPORT	BRUSHY BAYOU	20	0.3	1.36	8.48	87.54	17-Nov-87	0	690			7.4	(0.1)	(0.1)	64%	

EFFLUENT TOXICITY												COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS	
						DAYS	24H	48H				CHRONIC	CHV=CHRONIC VALUE IN PERCENT EFFLUENT		
													LOEC		NOEC
1106	LA 0008036	004	CLECO	D. PULEX	2		75						4C TEMP. DIFF. BETWEEN CONTROL AND 100% EFFL.	YES ACUTE	
1107	LA 0020044	001	PLAIN DEALING	D. PULEX	2		78		100	100			CI: 67-77	YES ACUTE	
1108	LA 0020087	001	BERLIN	P. PROMELAS	8				15				NO SIGNIFICANT EFFECT	NO CHRONIC	
1109	LA 0020087	001	BERLIN	SELENASTRUM	4			(12)	94		(12)	(12)	ChV(12%)	YES CHRONIC	
1110	LA 0020087	001	BERLIN	D. PULEX	2				5				-	NO ACUTE	
1111	LA 0029769	001	AGRICO CHEMICAL	D. PULEX	2				5				-	NO ACUTE	
1112	LA 0029769	001	AGRICO CHEMICAL	P. PROMELAS	8				15				NO SIG. EFFECT	NO CHRONIC	
1113	LA 0029769	001	AGRICO CHEMICAL	SELENASTRUM	4				54		100	50	ChV=71%; STIMULATORY IN 50% AND LESS EFFL.	NO CHRONIC	
1114	LA 0029769	001	AGRICO CHEMICAL	D. PULEX	1				5				-	NO ACUTE	
1115	LA 0029963	001	GULF OIL CHEMICAL	M. BAHIA	1				0	0			-	NO ACUTE	
1116	LA 0032221	004A	USA-FORT POLK	D. PULEX	2				20				NOTE HIGH pH (10.3)	NO ACUTE	
1117	LA 0032221	001A	USA-FORT POLK	P. PROMELAS	8				65	100	100	50	ChV=71%	NO CHRONIC	
1118	LA 0032221	001A	USA-FORT POLK	D. PULEX	2				0				-	NO ACUTE	
1119	LA 0032417	001	ATLAS PROCESSING	D. PULEX	1				0				-	NO ACUTE	
1120	LA 0032417	001	ATLAS PROCESSING	P. PROMELAS	7				47	100		50	25	ChV=35%; CI:39-58	YES CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	BIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.						PH	ALKALINITY				
121	LA 0032417	001	ATLAS PROCESSING	2911	SHREVEPORT	BRUSHY BAYOU	20	0.3	1.36	8.48	87.54	17-Nov-87	0	690				7.4	(0.1	(0.1	
122	LA 0032417	001	ATLAS PROCESSING	2911	SHREVEPORT	BRUSHY BAYOU	20	0.3	1.36	8.48	87.54	17-Nov-87	0	690				7.4	(0.1	(0.1	7.1
123	LA 0034568		BERNICE	4952	BERNICE	BAYOU D'ARBONNE	214	0	0.25	0.38	100	06-Mar-85	0	390	20	60	7.1			7.4	
124	LA 0036340	001	LAKE CHARLES PLT A	4952	LAKE CHARLES	CALCASIEU RIVER	4416	259	4.56	15.84	2.66	09-Oct-84	0	900	96	157	7.4			8.7	
125	LA 0036366		LAKE CHARLES PLT C	4952	LAKE CHARLES	CALCASIEU RIVER	4416	259	3.15	6.7	1.85	09-Oct-84	0	700	86	242	7.2			8.7	
126	LA 0038091	001	NEW ORLEANS-E. BANK	4952	NEW ORLEANS	MISSISSIPPI RIVER	460000	111000	86.2	106.2	0.12	08-Dec-87	0	1000			7	2.8	0.5		
127	LA 0038091	001	NEW ORLEANS-E. BANK	4952	NEW ORLEANS	MISSISSIPPI RIVER	460000	111000	86.2	106.2	0.12	08-Dec-87	0	1000			7	2.8	0.5	8.6	
128	LA 0038091	001	NEW ORLEANS-E. BANK	4952	NEW ORLEANS	MISSISSIPPI RIVER	460000	111000	86.2	106.2	0.12	08-Dec-87	0	1000			7	2.8	0.5	91x	
129	LA 0038741	001	MONROE	4952	MONROE	OUACHITA RIVER	1694	720	8.87	33.87	1.81	23-Jun-86	0	700	88	38	6.1	(0.1	(0.1	8.8	
130	LA 0039390	001	PLACID REFINING	2911	PORT ALLEN	MISSISSIPPI RIVER	460000	111000	0.52	0.72	0.0007	01-Nov-83									
131	LA 0041025	001	CERTAIN TEED	2821	LAKE CHARLES	PPG CANAL/BAYOU D'INDE	500	300	0.72	1.04	0.37	10-Feb-86	0	925	86	74	7.3			8.6	
132	LA 0041394	001	SHREVEPORT	4952	SHREVEPORT	RED RIVER	24210	1150	26.82	57.89	3.49	14-May-86	0	700	118	68	7.4	(0.1	(0.1	8.3	
133	LA 0041718	001	KAISER ALUMINUM	2819	BATON ROUGE	MISSISSIPPI RIVER	460000	111000	0.69	1.04	0.001	19-Mar-85	20	29000	26	1800	8.9			8	
134	LA 0041751	001	EUNICE	4952	EUNICE	BAYOU MALLET	154	7.2	1.19	2	30.1	26-Feb-85	0	600	126	158	7.2			8.8	
135	LA 0046477	001	JONESBORO	4952	JONESBORO	DUGDEMONA CREEK	56.52	0.02	0.4		96.8	23-Jun-87	0	550	55	128	7.2	(0.1	0.1		

EFFLUENT TOXICITY											COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% CHRONIC EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS
						24H	48H	CHRONIC				CHV=CHRONIC VALUE IN PERCENT EFFLUENT		
											LOEC	NOEC		
121	LA 0032417	001	ATLAS PROCESSING	SELENASTRUM	4				4			NO SIG. EFFECT		NO CHRONIC
122	LA 0032417	001	ATLAS PROCESSING	D. PULEX	1				40			-		YES ACUTE
123	LA 0034568		BERNICE	D. PULEX	2	77	74		80	0		-		YES ACUTE
124	LA 0036340	001	LAKE CHARLES PLT A	D. PULEX	2	17	17		100	0		-		NO ACUTE
125	LA 0036366		LAKE CHARLES PLT C	D. PULEX	2	4	4		100	0		-		YES ACUTE
126	LA 0038091	001	NEW ORLEANS-E. BANK	SELENASTRUM	4			(3	94*		(3 (3	CHV(3x; *DATA FOR 50% EFFL.; DECHL. EFFL. STIM.		YES CHRONIC
127	LA 0038091	001	NEW ORLEANS-E. BANK	D. PULEX	1	(6			100	5		-		YES ACUTE
128	LA 0038091	001	NEW ORLEANS-E. BANK	P. PROMELAS	7			27	100	20	50 25	CHV=35x		NO CHRONIC
129	LA 0038741	001	MONROE	D. PULEX	1				5			-		NO ACUTE
130	LA 0039390	001	PLACID REFINING	D. PULEX	2				0			GREEN ALGAE PRESENT IN SAMPLE		NO ACUTE
131	LA 0041025	001	CERTAIN TEED	P. PROMELAS	1				0	0		INSTREAM DILUTION FROM PPG'S DISCHARGE		NO ACUTE
132	LA 0041394	001	SHREVEPORT	P. PROMELAS	1				0			-		NO ACUTE
133	LA 0041718	001	KAISER ALUMINUM	M. ALMYRA	2	12	3		100	100		CI: 10-16(24H); 2-4(48H)		NO ACUTE
134	LA 0041751	001	EUNICE	D. PULEX	2	4	4		100	0		-		YES ACUTE
135	LA 0046477	001	JONESBORO	SELENASTRUM	4			11	63		12 6	CHV=9x		YES CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7010	MEAN	MAX.						AS	AS				
1136	LA 0046477	001	JONESBORO	4952	JONESBORO	DUGDEMONA CREEK	56.52	0.02	0.4		96.8	23-Jun-87	0	550	55	128	7.2	(0.1	0.1	83%	
1137	LA 0046477	001	JONESBORO	4952	JONESBORO	DUGDEMONA CREEK	56.52	0.02	0.4		96.8	23-Jun-87	0	550	55	128	7.2	(0.1	0.1	7.7	
1138	LA 0051993	001	CLARK OIL	2911	MT. AIRY	MISSISSIPPI RIVER	460000	149370	0.05	0.12	0.00006	09-Apr-84	0	2500	367	130	7.9			7.6	
1139	LA 0051993	001	CLARK OIL	2911	MT. AIRY	MISSISSIPPI RIVER	460000	149370	0.05	0.12	0.00006	09-Apr-84	0	2600	367	130	7.9			6.4	
1140	LA 0052370	001	CALCASIEU REFINING	2911	LAKE CHARLES	CALCASIEU RIVER	4581	260	0.03	0.06	0.018	17-Feb-88	4	6000			8.4	(0.1	0.2	93%	
1141	LA 0052370	001	CALCASIEU REFINING	2911	LAKE CHARLES	CALCASIEU RIVER	4581	260	0.03	0.06	0.018	17-Feb-88	4	6000			8.4	(0.1	0.2	93%	
1142	LA 0053716	001	BOSSIER CITY	4952	BOSSIER CITY	RED RIVER	19203	972	5.5	12.7	0.87	03-Nov-87	0	1200			6.9	(0.1	(0.1		
1143	LA 0056502	001	MANY	4952	MANY	BAYOU LA NANA	101.15	0.69	0.36	1.72	44.71	10-Sep-85		700	49	64	7.1			8.4	
1144	LA 0056651	001	INTERNATIONAL PAPER	2631	DE SOTO P.	RED RIVER	22353	1016	5.9	13.8	0.89	02-Nov-87	0	3200			8.4	(0.1	4.8		
1145	LA 0056651	001	INTERNATIONAL PAPER	2631	DE SOTO P.	RED RIVER	22353	1016	5.9	13.8	0.89	02-Nov-87	0	3200			8.4	(0.1	4.8	71%	
1146	LA 0059153	001	CECOS INTERNATIONAL	2833	LIVINGSTON	POOLEY BR. TO WHITE R.	306.5	2.9	17.2		1.45	20-Oct-86	2	350	53	60	8.2	(0.1	(0.1	93%	
1147	LA 0059153	001	CECOS INTERNATIONAL	2833	LIVINGSTON	POOLEY BR. TO WHITE R.	306.5	2.9	17.2		1.45	20-Oct-86	2	350	53	60	8.2	(0.1	(0.1	8.2	
1148	LA 0059153	001	CECOS INTERNATIONAL	2833	LIVINGSTON	POOLEY BR. TO WHITE R.	306.5	2.9	17.2		1.45	20-Oct-86	2	350	53	60	8.2	(0.1	(0.1	92%	

EFFLUENT TOXICITY										COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LCSO CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H					
1136	LA 0046477	001	JONESBORO	P. PROMELAS	7			87	55	25 12	ChV=17%	YES CHRONIC
1137	LA 0046477	001	JONESBORO	D. PULEX	2				0		-	NO ACUTE
1138	LA 0051993	001	CLARK OIL	D. PULEX	1				0		-	NO ACUTE
1139	LA 0051993	001	CLARK OIL	P. PROMELAS	1				0		-	NO ACUTE
1140	LA 0052370	001	CALCASIEU REFINING	D. PULEX	2			79	75		CI:66-96	NO ACUTE
1141	LA 0052370	001	CALCASIEU REFINING	P. PROMELAS	8				30	100 50	ChV=71%	NO CHRONIC
1142	LA 0053716	001	BOSSIER CITY	SELENASTRUM	4			74	56	25 12	ChV=17%; CI:59-99	NO CHRONIC
1143	LA 0056502	001	MANY	D. PULEX	2	15	15		100	0	CI: 12-17 (24 & 48H)	YES ACUTE
1144	LA 0056651	001	INTERNATIONAL PAPER	SELENASTRUM	4				41	12 6	ChV=9%; NOTE HIGH NH3	NO CHRONIC
1145	LA 0056651	001	INTERNATIONAL PAPER	P. PROMELAS	7			36	90	50 25	ChV=35%; CI:27-48; NOTE HIGH NH3	NO CHRONIC
1146	LA 0059153	001	CECOS INTERNATIONAL	CERIODAPHNIA	7				0		NO SIG. EFFECT	NO CHRONIC
1147	LA 0059153	001	CECOS INTERNATIONAL	D. PULEX	2				5		-	NO ACUTE
1148	LA 0059153	001	CECOS INTERNATIONAL	P. PROMELAS	8				10		NO SIG. EFFECT	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE	UNIONIZED NH3	MINIMUM DO
							MEAN	7010	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L)
1	NM 0000159	008	GENERAL ELECTRIC	3724	ALBUQUERQUE	SAN JOSE DR./RIO GRANDE	1021	0	0.8	100	21-May-87	0	660	250	106	7.2	(0.1	(0.1	7.8	
2	NM 0020737	001	GRANTS	4952	GRANTS	RIO SAN JOSE	6.73	0.99	1.04	1.56	100	19-Nov-85	2	2200	558	263	7.7		8	
3	NM 0028100	001	GULF MINERAL RESOURCES	1094	SAN MATEO	TRIB. TO SAN MIGUEL CR.		0	6.28	7.1	100	10-Apr-84	0				8.8			
4	NM 0028355	050	USDE-LOS ALAMOS NTL LAB	4612	LOS ALAMOS	TRIB. TO RIO GRANDE		169	0.015	0.042	0.014	11-Mar-86	0	2600	195	428	8.3	(0.1	3.6	5.4
5	NM 0028827	001	LAS VEGAS	4952	LAS VEGAS	GILLINAS RIVER		0.1	1.57	2.4	96.05	15-Sep-86	0	650	307	158	7.6	1.3	(0.1	7.4
6	NM 0028827	001	LAS VEGAS	4952	LAS VEGAS	GILLINAS RIVER		0.1	1.57	2.4	96.05	28-Dec-87	0	950			7.4	1.5	0.5	94x

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH (DAYS)		LC50 (%EFFLUENT)		MORTALITY IN 100% IN 100% EFFLUENT	CHRONIC MORTALITY IN 100% EFFLUENT	EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT
					24H	48H	CHRONIC	EFFLUENT				
1	NM 0000159	008	GENERAL ELECTRIC	D. PULEX	2			0				NO MORT.; VARIABLE DISCHARGE; STORMWATER/COOLING
2	NM 0020737	001	GRANTS	D. PULEX	1	3		100	0			CI: 2-5 (24H)
3	NM 0028100	001	GULF MINERAL RESOURCES	D. PULEX	1			0				-
4	NM 0028355	050	USDE-LOS ALAMOS NTL LAB	D. PULEX	2	78	52	80				CI: 65-93 (24H); 39-70 (48H)
5	NM 0028827	001	LAS VEGAS	D. PULEX	2	3	3	100	50			CI: NOT CALCULABLE; NOTE TOX. IN DECHL TEST
6	NM 0028827	001	LAS VEGAS	D. PULEX	1	16		100	5			NOTE HIGH NH3 (TOT. NH3=36 MG/L)

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMH/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L) OR SAT. (%)
							MEAN	7Q10	MEAN	MAX.										
1	OK 0000159	003	MCDONNELL-DOUGLAS	3471	TULSA	TRIB. TO MINGO CREEK	16.14	0.11	0.75	9.02	91.36	09-Jul-84	0	1300	628	64	7.3			3.2
2	OK 0000159	003	MCDONNELL-DOUGLAS	3471	TULSA	TRIB. TO MINGO CREEK	16.14	0.11	0.75	9.02	91.36	04-Dec-85	2	1650	649	31	5.9			6.8
3	OK 0000191	001	SEQUOYAH FUEL	2819	GORE	ILLINOIS RIVER	1537	75.78	2.16	2.89	4.23	11-Aug-87	0	220	92	54	7.9	(0.1)	(0.1)	93%
4	OK 0000191	001	SEQUOYAH FUEL	2819	GORE	ILLINOIS RIVER	1537	75.78	2.16	2.89	4.23	11-Aug-87	0	220	92	54	7.9	(0.1)	(0.1)	
5	OK 0000191	001	SEQUOYAH FUEL	2819	GORE	ILLINOIS RIVER	1537	75.78	2.16	2.89	4.23	11-Aug-87	0	220	92	54	7.9	(0.1)	(0.1)	8.2
6	OK 0000256	002	CONOCO	2911	PONCA CITY	OMAHA CREEK	1234	0			100	30-Apr-85	0	2200	320	125	7.6			6.2
7	OK 0000256	001	CONOCO	2911	PONCA CITY	OMAHA CREEK	1234	0			100	30-Apr-85	0	350	88	48	7.6			8.5
8	OK 0000256	001	CONOCO	2911	PONCA CITY	OMAHA CREEK	1234	0			100	10-May-88	2	3900	492	74	7	(0.1)	0.1	82%
9	OK 0000272	001	PRYOR IND. CONSERV. CORP.	4953	PRYOR	GRAND NEOSHO RIVER	2971	146.54	1.79	3.5	1.86	02-Apr-85	0	500	104	138	7.5			8.2
10	OK 0000531	001	ALLIED MATERIALS	2911	STROUD	SALT CREEK	7.3	0.01	0.06	0.5	90.29	20-Jun-88	0	490	175	113	8.5	0.2	0.2	92%
11	OK 0000531	001	ALLIED MATERIALS	2911	STROUD	SALT CREEK	7.3	0.01	0.06	0.5	90.29	20-Jun-88	0	490	175	113	8.5	0.2	0.2	98%
12	OK 0000744	001	MEYERHAUSER	2621	VALLIANT	GARLAND CREEK		0	18.46	29.7	100	08-Feb-88	0	3000			8.6	(0.1)	0.6	55%
13	OK 0000744	001	MEYERHAUSER	2621	VALLIANT	GARLAND CREEK		0	18.46	29.7	100	08-Feb-88	0	3000			8.6	(0.1)	0.6	80%
14	OK 0000795	001	TYSON FOODS	2016	NORMAN	LITTLE RIVER	1851	1.77	0.68	0.98	37.32	19-Nov-86	1	1000	36	229	7.3	(0.1)	2.2	
15	OK 0000795	001	TYSON FOODS	2016	NORMAN	LITTLE RIVER	1851	1.77	0.68	0.98	37.32	19-Nov-86	1	1000	36	229	7.3	(0.1)	2.2	6.6

EFFLUENT TOXICITY												COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC				CHV=CHRONIC VALUE IN PERCENT EFFLUENT	LOEC		NOEC
1	OK 0000159	003	MCDONNELL-DOUGLAS	D. PULEX	1				0			INITIAL DO 3.2 MG/L; AERATION STARTED		NO ACUTE	
2	OK 0000159	003	MCDONNELL-DOUGLAS	D. PULEX	1				0	0		-		NO ACUTE	
3	OK 0000191	001	SEQUOYAH FUEL	P. PROMELAS	8				15			NO SIG. EFFECT		NO CHRONIC	
4	OK 0000191	001	SEQUOYAH FUEL	BELENASTRUM	4			36	69		12	6	Chv=8.5%	YES CHRONIC	
5	OK 0000191	001	SEQUOYAH FUEL	D. PULEX	2				5			-		NO ACUTE	
6	OK 0000256	002	CONOCO	D. PULEX	1				10	20		-		NO ACUTE	
7	OK 0000256	001	CONOCO	D. PULEX	1				10	0		-		NO ACUTE	
8	OK 0000256	001	CONOCO	D. PULEX	2		62		100			CI:50-79		YES CHRONIC	
9	OK 0000272	001	PRYOR IND. CONSERV. CORP.	D. PULEX	1				0	0		-		NO ACUTE	
10	OK 0000531	001	ALLIED MATERIALS	P. PROMELAS	8			100	50	45		PRIORITY POLL. DATA AVAIL.; MORT. IN DECHL. EFFL.		YES CHRONIC	
11	OK 0000531	001	ALLIED MATERIALS	D. PULEX	2				0	0		PRIORITY POLLUTANT DATA AVAILABLE		NO ACUTE	
12	OK 0000744	001	MEYERHAUSER	P. PROMELAS	8			47	100		100	50	CI:35-67; Chv=71%	YES CHRONIC	
13	OK 0000744	001	MEYERHAUSER	D. PULEX	2		79		70			-		YES ACUTE	
14	OK 0000795	001	TYSON FOODS	MICROTOX		1100			-			NO EFFECT (15 AND 30 MIN.)		NO ACUTE	
15	OK 0000795	001	TYSON FOODS	D. PULEX	1	68			100			CI:64-73; NOTE HIGH NH3		YES ACUTE	

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO
							MEAN	7010	MEAN	MAX.										OR % SAT.
16	OK 0000795	001	TYSON FOODS	2016	NORMAN	LITTLE RIVER	1851	1.77	0.68	0.98	37.32	19-Nov-86	1	1000	36	229	7.3	(0.1	2.2	68%
17	OK 0000795	001	TYSON FOODS	2016	NORMAN	LITTLE RIVER	1851	1.77	0.68	0.98	37.32	23-Feb-88	0	1000			7.5	3.5	0.1	93%
18	OK 0000795	001	TYSON FOODS	2016	NORMAN	LITTLE RIVER	1851	1.77	0.68	0.98	37.32	23-Feb-88	0	1000			7.5	3.5	0.1	89%
19	OK 0000809	001	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.58	1.07	100	29-Oct-84	2	1800	874	115	7.2			8.5
20	OK 0000809	004	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.075		100	29-Oct-84	0	400	168	178	7.5			6.8
21	OK 0000809	*	USAF-TINKER AFB	3471	MIDWEST CITY	CRUTCH CREEK	37.2	0			100	29-Oct-84	0	500	170	182	7.9			8
22	OK 0000809	001	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.58	1.07	100	30-Jul-86	2	1100	556	89	7.2	(3.0	(0.1	90%
23	OK 0000809	001	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.58	1.07	100	30-Jul-86	2	1100	556	89	7.2	(3.0	(0.1	8.4
24	OK 0000809	001	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.58	1.07	100	17-Aug-87	0	1300	480	58	7	3.5	(0.1	7.9
25	OK 0000809	001	USAF-TINKER AFB	3471	MIDWEST CITY	SOLDIER CREEK		0	0.58	1.07	100	17-Aug-87	0	1300	480	58	7	3.5	(0.1	92%
26	OK 0000825		KERR-McGEE	2911	WYNNEWOOD	TURKEY SANDY CR.	834.2	0	0.67	0.95	100	27-Mar-84	0	1380	276	10	7.1			6.4
27	OK 0000825	001	KERR-McGEE	2911	WYNNEWOOD	TURKEY SANDY CR.	834.2	0	0.67	0.95	100	14-Mar-88	0	1800			7.4	(0.1	(0.1	96%
28	OK 0001031	001	VISTA POLYMERS	2821	OKLAHOMA CITY	CRUTCH CREEK	37.18	0	0.58	52.43	100	10-Feb-88	0	900			8	(0.1	0.1	
29	OK 0001031	001	VISTA POLYMERS	2821	OKLAHOMA CITY	CRUTCH CREEK	37.18	0	0.58	52.43	100	10-Feb-88	0	900			8	(0.1	0.1	96%
30	OK 0001031	001	VISTA POLYMERS	2821	OKLAHOMA CITY	CRUTCH CREEK	37.18	0	0.58	52.43	100	10-Feb-88	0	900			8	(0.1	0.1	99%

EFFLUENT TOXICITY											COMMENTS				
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	CHRONIC MORTALITY IN 100% DECHLORINATED EFFLUENT	EFFECT AS PERCENT EFFLUENT	LOEC	NOEC	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H	CHRONIC							
16	OK 0000795	001	TYSON FOODS	P. PROMELAS	8			4	100		10	1		CI:3-6; Chv=3.2; NOTE HIGH NH3	YES CHRONIC
17	OK 0000795	001	TYSON FOODS	P. PROMELAS	7			14	100	100	25	12		Chv=17%; HIGHLY TOXIC; SIG. MORT. IN DECHL. EFFL.	YES CHRONIC
18	OK 0000795	001	TYSON FOODS	D. PULEX	2	16			100	0				HIGHLY TOXIC; 100% MORT IN 6-100% EFFL.	YES ACUTE
19	OK 0000809	001	USAF-TINKER AFB	D. PULEX	2	19	19		100	80				CI: 12-25 (24 & 48H); PROBIT; EPA/DWRB STUDY	YES ACUTE
20	OK 0000809	004	USAF-TINKER AFB	D. PULEX	1				0					SEE EPA/DWRB SPECIAL STUDY REPORT	NO ACUTE
21	OK 0000809	*	USAF-TINKER AFB	D. PULEX	1				0					*UNPERM. DISCH. (LOWWATER DAM); SEE EPA/DWRB STUDY	NO ACUTE
22	OK 0000809	001	USAF-TINKER AFB	P. PROMELAS	7			37	75	10	50	25		Chv=35%	YES CHRONIC
23	OK 0000809	001	USAF-TINKER AFB	D. PULEX	2	32			90	0				CI: 28-38; MORTALITY DATA IS FOR 50% EFFLUENT	YES ACUTE
24	OK 0000809	001	USAF-TINKER AFB	D. PULEX	2	16	16		100	30				NOTE HIGH CHLORINE	YES ACUTE
25	OK 0000809	001	USAF-TINKER AFB	P. PROMELAS	8			30	100	25	50	25		Chv=35%	YES CHRONIC
26	OK 0000825		KERR-McGEE	D. PULEX	1				0					-	NO ACUTE
27	OK 0000825	001	KERR-McGEE	D. PULEX	2				5					-	NO ACUTE
28	OK 0001031	001	VISTA POLYMERS	SELENASTRUM	4				0					STIMULATORY IN 50 % AND 100% EFFL.	NO CHRONIC
29	OK 0001031	001	VISTA POLYMERS	P. PROMELAS	8				10					-	NO CHRONIC
30	OK 0001031	001	VISTA POLYMERS	D. PULEX	1				0					-	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		TWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLOR-INE (MG/L)	UNION-IZED NH3 (MG/L)	MINI-MUM DO OR SAT. (%)
							MEAN	7/10	MEAN	MAX.						CaCO3	CaCO3				
31	OK 0001261	001	EAGLE-PICHER INDUSTRIES	3339	QUAPAW	SPRING RIVER	2058	235.4	0.93	26.14	0.61	09-Jun-87	0	180	126	58	7	7.2	(0.1	8.4	
32	OK 0001261	001	EAGLE-PICHER INDUSTRIES	3339	QUAPAW	SPRING RIVER	2058	235.4	0.93	26.14	0.61	09-Jun-87	0	180	126	58	7	7.2	(0.1		
33	OK 0001261	001	EAGLE-PICHER INDUSTRIES	3339	QUAPAW	SPRING RIVER	2058	235.4	0.93	26.14	0.61	09-Jun-87	0	180	126	58	7	7.2	(0.1	94%	
34	OK 0001295	001	TOTAL PETROLEUM	2911	ARDMORE	SAND CREEK	182.1	0	0.088	0.151	100	06-Aug-86	2	5250	208	212	7.8	(0.1	0.2	7.8	
35	OK 0001309	003	SINCLAIR OIL	2911	TULSA	ARKANSAS RIVER	2720	619	1.03		0.26	23-Jul-84	0	1100	256	40	7.2			7.2	
36	OK 0021024	001	FARMLAND INDUSTRIES	2873	ENID	SKELETON CREEK	42.4	3.31	0.98	1.42	30.8	03-Jun-86		5000	1122	92	7.2	(0.1	0.2	90%	
37	OK 0022616	001	BUYMON-SWIFT PLANT	4952	BUYMON	BEAVER RIVER	34.59	0	1.05	1.09	100	27-Oct-87	0	750			8	(0.1	(0.1		
38	OK 0022616	001	BUYMON-SWIFT PLANT	4952	BUYMON	BEAVER RIVER	34.59	0	1.05	1.09	100	27-Oct-87	0	750			8	(0.1	(0.1	91%	
39	OK 0022624		BUYMON-NORTH PLANT	4952	BUYMON	BEAVER RIVER	24.95	0	0.53	0.65	100	17-Oct-85		1300	271	398	8.6			8.9	
40	OK 0022861		HARTSHORN	4952	HARTSHORN	BRUSHY CREEK	130	76	0.17	1.1	0.35	26-Mar-85	0	550	108	62	7.3			9.2	
41	OK 0026000	001	SAPULA	4952	SAPULA	ROCK CREEK	39.8	0.638	1.44		76.18	23-Sep-85		600	130	85	7.3			7.5	
42	OK 0026221	002	TULSA NORTHSIDE	4952	TULSA	BIRD CREEK	16.14	0.11	6	30	98.83	26-Mar-85	0	700	218	203	7.8			8	
43	OK 0026221	002	TULSA NORTHSIDE	4952	TULSA	BIRD CREEK	16.14	0.11	6	30	98.83	26-Mar-85	0	700	218	203	7.8			8.4	
44	OK 0026701	001	CUSHING-SOUTH STP	4952	CUSHING	COTTONWOOD CREEK	1240	0	0.98	2.09	100	20-Jun-88	0	700	83	166	7.3	(0.1	(0.1	89%	
45	OK 0026701	001	CUSHING-SOUTH STP	4952	CUSHING	COTTONWOOD CREEK	1240	0	0.98	2.09	100	20-Jun-88	0	700	83	166	7.3	(0.1	(0.1	65%	

EFFLUENT TOXICITY											COMMENTS				
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% CHRONIC EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: C1=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC				CHV=CHRONIC VALUE IN PERCENT EFFLUENT			
31	OK 0001261	001	EAGLE-PICHER INDUSTRIES	D. PULEX	2	6	6		100	0		NOTE EXTREMELY HIGH CHLORINE		YES ACUTE	
32	OK 0001261	001	EAGLE-PICHER INDUSTRIES	SELENASTRUM	4			13	99	49	13	13	ChV13%; NOTE EXTREMELY HIGH CHLORINE		YES CHRONIC
33	OK 0001261	001	EAGLE-PICHER INDUSTRIES	P. PROMELAS	8			10.5	100	5	12	6	ChV=8.5%; NOTE EXTREMELY HIGH CHLORINE		YES CHRONIC
34	OK 0001295	001	TOTAL PETROLEUM	D. PULEX	1				45				-		YES ACUTE
35	OK 0001309	003	SINCLAIR OIL	D. PULEX	1				0				-		NO ACUTE
36	OK 0021024	001	FARMLAND INDUSTRIES	P. PROMELAS	7				0				-		NO CHRONIC
37	OK 0022616	001	GUYMON-SWIFT PLANT	SELENASTRUM	4				53	96	50	25	ChV=35%		YES CHRONIC
38	OK 0022616	001	GUYMON-SWIFT PLANT	P. PROMELAS	8				64	70	100	50	C1:50-87; ChV=71%		YES CHRONIC
39	OK 0022624		GUYMON-NORTH PLANT	D. PULEX	1				5	0			-		NO ACUTE
40	OK 0022861		HARTSHORN	D. PULEX	1				0	0			-		NO ACUTE
41	OK 0026000	001	SAPULA	D. PULEX	1				0	0			-		NO ACUTE
42	OK 0026221	002	TULSA NORTHSIDE	P. PROMELAS	1				100	0			LC50 NOT CALCULATED; MORT. OCCURRED AFTER 2.5H		YES ACUTE
43	OK 0026221	002	TULSA NORTHSIDE	D. PULEX	2		8	8	100	0			-		YES ACUTE
44	OK 0026701	001	CUSHING-SOUTH STP	D. PULEX	2				30				-		YES ACUTE
45	OK 0026701	001	CUSHING-SOUTH STP	P. PROMELAS	8				15				NO SIG. EFFECT		NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		1WC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNION-IZED NH3	MINI-MUM DO
							MEAN	7D10	MEAN	MAX.								CHLORINE (MG/L)	(MG/L)	OR % SAT.)
46	OK 0026841		MIDWEST CITY NORTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	5.59	6.28	56.02	08-Apr-85	0	850	204	230	7.7			8.1
47	OK 0026841		MIDWEST CITY NORTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	5.59	6.28	56.02	08-Apr-85	0	850	204	230	7.7			8.3
48	OK 0026841	001	MIDWEST CITY NORTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	5.59	6.28	56.03	12-Apr-88	0	550	227	223	6.9	0.2	(0.1	87%
49	OK 0026841	001	MIDWEST CITY NORTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	5.59	6.28	56.03	12-Apr-88	0	550	227	223	6.9	0.2	(0.1	85%
50	OK 0026859	001	MIDWEST CITY SOUTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	1.6		26.72	08-Apr-85	0	1000	208	285	7.7			6
51	OK 0026859	001	MIDWEST CITY SOUTHSIDE	4952	MIDWEST CITY	CRUTCHO CREEK	37.2	6.8	1.6		26.72	08-Apr-85	0	1000	208	285	7.7			6
52	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	4952	OKLAHOMA CITY	CHISHOLM CREEK			4.66	11.3		09-Feb-88	0	1500			7.5	(0.1	(0.1	
53	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	4952	OKLAHOMA CITY	CHISHOLM CREEK			4.66	11.3		09-Feb-88	0	1500			7.5	(0.1	(0.1	85%
54	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	4952	OKLAHOMA CITY	CHISHOLM CREEK			4.66	11.3		09-Feb-88	0	1500			7.5	(0.1	(0.1	97%
55	OK 0027931	001	MOORE	4952	MOORE	LITTLE RIVER	8.44	0	4.22	11.09	100	17-Aug-87	0	900	180	204	7.2	0.8	(0.1	91%
56	OK 0027931	001	MOORE	4952	MOORE	LITTLE RIVER	8.44	0	4.22	11.09	100	17-Aug-87	0	900	180	204	7.2	0.8	(0.1	7
57	OK 0028134	001	OKMULGEE	4952	OKMULGEE	CANADIAN R., DEEP FORK	238	14.17	2.17	4.47	19.19	20-Mar-84	0	510	112	134	7.1			8
58	OK 0029131	001	MUSKOGEE	4952	MUSKOGEE	ARKANSAS RIVER	21762	2196	6.21	9.1	0.64	20-Oct-87	0	700			7	0.4	(0.1	87%
59	OK 0029131	001	MUSKOGEE	4952	MUSKOGEE	ARKANSAS RIVER	21762	2196	6.21	9.1	0.64	20-Oct-87	0	700			7	0.4	(0.1	7.2
60	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	26-Feb-85	0	600	46	202	8.1			6.4

EFFLUENT TOXICITY											COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTE: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC					
46	OK 0026841		MIDWEST CITY NORTHSIDE	P. PROMELAS	2				0	10	-	NO CHRONIC	
47	OK 0026841		MIDWEST CITY NORTHSIDE	D. PULEX	1				0	0	-	NO ACUTE	
48	OK 0026841	001	MIDWEST CITY NORTHSIDE	P. PROMELAS	8			25	80	45	12 6	CI:14-43; CHV=8.5%; SIG. MORT. IN DECHL. EFFL.	YES CHRONIC
49	OK 0026841	001	MIDWEST CITY NORTHSIDE	D. PULEX	2		27		100	0		CI: 22-34	YES ACUTE
50	OK 0026859	001	MIDWEST CITY SOUTHSIDE	D. PULEX	2				15	0		-	NO ACUTE
51	OK 0026859	001	MIDWEST CITY SOUTHSIDE	P. PROMELAS	2	71	71		100	10		-	YES ACUTE
52	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	SELENASTRUM	4				0			STIMULATORY AT 12, 50 AND 100% EFFL.	NO CHRONIC
53	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	P. PROMELAS	8				15			NO SIG. EFFECT	NO CHRONIC
54	OK 0027553	001	OKLA. CITY-CHISHOLM CRK	D. PULEX	2				0			NOTE SIG. MORT. IN DECHL. EFFL.	NO ACUTE
55	OK 0027931	001	MOORE	P. PROMELAS	8			56	100	5	100 50	CHV=71%	YES CHRONIC
56	OK 0027931	001	MOORE	D. PULEX	2	9	9		100	10		CI:7-10	YES ACUTE
57	OK 0028134	001	OKMULGEE	D. PULEX	1				5			24H COMPOSITE SAMPLE	NO ACUTE
58	OK 0029131	001	MUSKOGEE	P. PROMELAS	8			36	100	100	50 25	CHV=35%; NOTE SIG. EFFECT IN DECHL. EFFL.	NO CHRONIC
59	OK 0029131	001	MUSKOGEE	D. PULEX	2	35	29		100	20		CI:27-44(24H); 23-35(48H)	NO ACUTE
60	OK 0030295	001	USA-FORT SILL	P. PROMELAS	2	5	5		100	0		CI: 3.7-7.1 (24 & 48H); TRIMMED SPEARMAN KARBER	YES ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNIONIZED NH3	MINIMUM DO
							MEAN	7Q10	MEAN	MAX.								INE (MG/L)	(MG/L)	(MG/L) OR % SAT.
61	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	22-May-86		800	198	98	7.1	2.7	(0.1	90%
62	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	04-Dec-86	0	1000	203	91	6.9	1.5	0.3	87%
63	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	04-Dec-86	0	1000	203	91	6.9	1.5	0.3	8.3
64	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	29-Mar-88	0	600	215	105	6.7	3.2	0.1	85%
65	OK 0030295	001	USA-FORT SILL	9711	FORT SILL	E. CACHE CREEK	49.95	0	2.14	4.1	100	29-Mar-88	0	600	215	105	6.7	3.2	0.1	96%
66	OK 0030333		BARTLESVILLE	4952	BARTLESVILLE	CANEY RIVER	860	1.55	7.21	30	87.82	29-Apr-86	0	750	222	130	7.4	0.3	(0.1	7.2
67	OK 0034568	002	OK ORDINANCE WORKS AUTH.	4953	CHATEAU	CHATEAU CREEK	54.7	0.72	1.92	6	80.52	02-Apr-85	0	900	128	122	7.1			4
68	OK 0035246	001	LAWTON	4952	LAWTON	E. CACHE CREEK	148.4	1.38	14.95	21.87	94.38	19-Sep-84	0	800	124	182	7.6			8.8
69	OK 0035246	001	LAWTON	4952	LAWTON	E. CACHE CREEK	148.4	1.38	14.95	21.87	94.4	29-Mar-88	0	800	227	175	7.7	0.5	(0.1	91%
70	OK 0035246	001	LAWTON	4952	LAWTON	E. CACHE CREEK	148.4	1.38	14.95	21.87	94.4	29-Mar-88	0	800	227	175	7.7	0.5	(0.1	94%
71	OK 0036978		OKLA. CITY-N. CANADIAN	4952	OKLAHOMA CITY	NORTH CANADIAN RIVER			54.44	89.55		29-Apr-86	0	1100	204	177	7.8	0.4	0.6	93%
72	OK 0036978		OKLA. CITY-N. CANADIAN	4952	OKLAHOMA CITY	NORTH CANADIAN RIVER			54.44	89.55		29-Apr-86	0	1100	204	177	7.8	0.4	0.6	8.2
73	OK 0036978	001	OKLA. CITY-N. CANADIAN	4952	OKLAHOMA CITY	NORTH CANADIAN RIVER			54.44	89.55		09-May-88	0	1000	240	260	7.3	0.1	0.2	92%

EFFLUENT TOXICITY										COMMENTS									
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH		LC50		MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT		DOEC NOEC		POTENTIAL FOR INSTREAM EFFECTS				
					DAYS	24H	48H	CHRONIC EFFLUENT			DOEC	NOEC							
61	OK 0030295	001	USA-FORT SILL	P. PROMELAS	7			16	100	80	25	10	CHV=10%; LC50 GRAPHICALLY INTERPOLATED					YES	CHRONIC
62	OK 0030295	001	USA-FORT SILL	P. PROMELAS	8			28	100	40	10	1	CHV=3.2%; HIGH CHLORINE; SIG. MORT. IN DECHL.					YES	CHRONIC
63	OK 0030295	001	USA-FORT SILL	D. PULEX	2	3	3		100	0			NOTE HIGH CHLORINE LEVEL					YES	ACUTE
64	OK 0030295	001	USA-FORT SILL	P. PROMELAS	8			17	100	10	25	12	CHV=17%; HIGHLY TOXIC					YES	CHRONIC
65	OK 0030295	001	USA-FORT SILL	D. PULEX	2		(3		100	5			HIGHLY TOXIC: 100% MORT IN 3% EFFL.					YES	ACUTE
66	OK 0030333		BARTLESVILLE	D. PULEX	2	10	7		100	10			CI: 7-14(24H), 5-7(48H)					YES	ACUTE
67	OK 0034568	002	OK ORDINANCE WORKS AUTH.	D. PULEX	2			45	90				DO WAS 4 MG/L AFTER 48H					YES	ACUTE
68	OK 0035246	001	LAWTON	D. PULEX	1	6			100				MOVING AVG-ANGLE; DECHL. EFFL. NOT TESTED					YES	ACUTE
69	OK 0035246	001	LAWTON	P. PROMELAS	8			15	5				NO SIG. MORT.					NO	CHRONIC
70	OK 0035246	001	LAWTON	D. PULEX	2		21		100	5			CI:16-20					YES	ACUTE
71	OK 0036978		OKLA. CITY-N. CANADIAN	CERIODAPHNIA	7			18	100	100	50	10	CHV=22%; REPRO LOEC/NOEC SAME AS FOR SURVIVAL					YES	CHRONIC
72	OK 0036978		OKLA. CITY-N. CANADIAN	D. PULEX	2	18	13		100	0			CI: 12-27(24H), 6-29(48H)					YES	ACUTE
73	OK 0036978	001	OKLA. CITY-N. CANADIAN	D. PULEX	2				10	5			NO SIG. MORT.					NO	ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNIONIZED NH3	MINIMUM DO
							MEAN	7Q10	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L SAT.)
1	TX 0000132	003	USA-RED RIVER ARMY DEPOT	3471	TEXARKANA	PANTHER CREEK	0	0	0.49	1.09	100	21-Aug-84		550	84	128	7.1			0.1
2	TX 0000132	001	USA-RED RIVER ARMY DEPOT	3471	TEXARKANA	E. FORK ELLIOTT CREEK	0	0	0.56	1.94	100	24-Jun-86		350	90	30	6.6	2.1	(0.1	86%
3	TX 0000353	001	GENERAL DYNAMICS	3721	FORT WORTH	LAKE WORTH			1.32	3.61	16	10-Sep-86	0	500	142	92	8.4	1.5	0.3	
4	TX 0000353	001	GENERAL DYNAMICS	3721	FORT WORTH	LAKE WORTH			1.32	3.61	16	10-Sep-86	0	500	142	92	8.4	1.5	0.3	8.4
5	TX 0000353	001	GENERAL DYNAMICS	3721	FORT WORTH	LAKE WORTH			1.32	3.61	16	13-Jul-87	0	400	132	79	8.3	(0.1	(0.1	
6	TX 0000353	001	GENERAL DYNAMICS	3721	FORT WORTH	LAKE WORTH			1.32	3.61	16	13-Jul-87	0	400	132	79	8.3	(0.1	(0.1	8
7	TX 0000353	001	GENERAL DYNAMICS	3721	FORT WORTH	LAKE WORTH			1.32	3.61	16	13-Jul-87	0	400	132	79	8.3	(0.1	(0.1	89%
8	TX 0000540	001	S.W. ELECTRIC POWER CO.	4911	LONGVIEW	LAKE CHEROKEE	1980	6.8	216	469	16	23-Jan-86	0	375	132	87	7.9			8.7
9	TX 0000671	001	USAF-KELLY AFB	3471	SAN ANTONIO	LEON CREEK	84	3	1.38	3.87	41.62	10-Jul-85		1450	130	80	7.4			6.1
10	TX 0000710	001	AMERICAN NORIT	2819	MARSHALL	POTTERS CREEK	51	3.89	0.86	2.18	25.52	10-Sep-86	5	8000			8	0.9	1.4	81%
11	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	11-Aug-86	0	200	100	59	7.8	(0.1	(0.1	8.2
12	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	18-Aug-86	0	240	87	41	7.6	(0.1	(0.1	8.4
13	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	18-Aug-86	0	240	87	41	7.6	(0.1	(0.1	92%
14	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	13-Jul-87	0	230	86	41	7.6	(0.1	(0.1	8
15	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	13-Jul-87	0	230	86	41	7.6	(0.1	(0.1	91%

EFFLUENT TOXICITY												COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	LOEC NOEC	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC							
1	TX 0000132	003	USA-RED RIVER ARMY DEPOT	D. PULEX	1				0				LOW DO IN 100% EFFL.; AERATED	NO ACUTE	
2	TX 0000132	001	USA-RED RIVER ARMY DEPOT	P. PROMELAS	7			30	90	0	50	25	IMPORTANT NOTE: MORT. DATA FOR 50% EFFL.; CHV=35%	YES CHRONIC	
3	TX 0000353	001	GENERAL DYNAMICS	P. PROMELAS	7			21	100	40	25	10	MORT. DATA FOR 50% EFFL.; CI(LC50):14-33; CHV=16%	YES CHRONIC	
4	TX 0000353	001	GENERAL DYNAMICS	D. PULEX	2	3	3		100	0			-	YES ACUTE	
5	TX 0000353	001	GENERAL DYNAMICS	SELENASTRUM	4				35		50	25	CHV=35%	NO CHRONIC	
6	TX 0000353	001	GENERAL DYNAMICS	D. PULEX	2				0				-	NO ACUTE	
7	TX 0000353	001	GENERAL DYNAMICS	P. PROMELAS	8				10				NO SIG. EFFECT	NO CHRONIC	
8	TX 0000540	001	S.W. ELECTRIC POWER CO.	D. PULEX	1				0	0			-	NO ACUTE	
9	TX 0000671	001	USAF-KELLY AFB	D. PULEX	1				0	0			-	NO ACUTE	
10	TX 0000710	001	AMERICAN NORIT	C. VARIEGATUS	7				10				NO SIGNIFICANT EFFECT	NO CHRONIC	
11	TX 0000892	001	BELL HELICOPTER	D. PULEX	2	6	3		100				CI:4-8(24H)	YES ACUTE	
12	TX 0000892	001	BELL HELICOPTER	D. PULEX	2	25	12		100				CI:19-33(24H); 8-17(48H); SEE CHEMICAL ANALYSIS	NO ACUTE	
13	TX 0000892	001	BELL HELICOPTER	P. PROMELAS	7				55		50	25	IMPORTANT NOTE: MORT. DATA FOR 50% EFFL.; CHV=35%	NO CHRONIC	
14	TX 0000892	001	BELL HELICOPTER	D. PULEX	2	3	(1		100				CI:NOT CALCULABLE; NOTE HIGH TOXICITY	YES ACUTE	
15	TX 0000892	001	BELL HELICOPTER	P. PROMELAS	8			31	100		50	25	CHV=35%	NO CHRONIC	

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.										
16	TX 0000892	001	BELL HELICOPTER	3721	HURST	TRIB./W. FK. TRINITY R.	1230	4.55	0.073	0.617	2.42	13-Jul-87	0	230	86	41	7.6	(0.1	(0.1	
17	TX 0000949	003	TEXAS EASTMAN	2869	LONGVIEW	SABINE RIVER	932	70.01	4.26	7.81	8.62	23-Sep-86	6				9	(0.1	0.9	92%
18	TX 0001007	002	TUGCO	4911	DALLAS	MOUNTAIN CREEK LAKE			0.81	2.35	16	17-Sep-86	0	400	120	63	7.9	(0.1	(0.1	8
19	TX 0001201	003	TEMPLE-EASTEX	2661	DIBOLL	NECHES RIVER	1573	5.62	1.41	4.9	28	07-Apr-86	0	2600	52	224	6.7	(0.1	(0.1	7.2
20	TX 0001465	001	TYLER PIPE, INC.	3321	SWAN	LITTLE SALINE CREEK	32.68	2.5	0.269	0.733	14.29	12-Jun-84	0	790	102	81	8.5			8.2
21	TX 0001465	002	TYLER PIPE, INC.	3321	SWAN	LITTLE SALINE CREEK	32.68	2.5	0.292	0.749	15.33	12-Jun-84	0	800	64	67	7.7			7.8
22	TX 0002844	001	UNION CARBIDE	2869	SEADRIFT	VICTORIA BARGE CANAL			4.67	13.68	8	08-Dec-86								
23	TX 0002933	001	DOW CHEMICAL CO.	2869	LAPORTE	SAN JACINTO BAY			1.1	1.83	8	03-Jul-84	28	42000		413	8			5.4
24	TX 0002968	001	FIRESTONE RUBBER	2822	ORANGE	COM BAYOU	8.63	0.042	0.8		96.72	15-Oct-84	1	1900	42	68	7.5			8
25	TX 0003522	001	AMOCO OIL CO.	2911	TEXAS CITY	LOWER GALVESTON BAY			13	20.7	8	10-Aug-87	4	2400	264	171	7.8	(0.1	2.1	89%
26	TX 0003522	001	AMOCO OIL CO.	2911	TEXAS CITY	LOWER GALVESTON BAY			13	20.7	8	10-Aug-87	4	2400	264	171	7.8	(0.1	2.1	7.7
27	TX 0003654	001	POLYSAR GULF COAST	2822	ORANGE	COM BAYOU	8.63	0.42	1.64	7.13	98.38	06-Nov-84	0	1300	44	132	7.3			7.5
28	TX 0003697	001	MARATHON OIL CO.	2911	TEXAS CITY	TEXAS CITY SHIP CHANNEL			1.3	2.03	8	15-Jul-86	2	1700	290	80	7	0.4	(0.1	8.2
29	TX 0003875	001	MONSANTO	2869	ALVIN	CHOCOLATE BAYOU	394	1.18	4.12	9.41	84.4	23-Jan-85	0	1500	124	170	8.2			5.9
30	TX 0003891	001	TEMPLE-EASTEX	2621	SILSBEE	NECHES RIVER	3823	995.4	50.44	63.33	7.28	22-Oct-86	1	2400	171	212	7.6	(0.1	(0.1	7.8

EFFLUENT TOXICITY											COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT		NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H	CHRONIC			LOEC	NOEC		
16	TX 0000892	001	BELL HELICOPTER	SELENASTRUM	4				28	96	25	12	CHV=17%	NO CHRONIC
17	TX 0000949	003	TEXAS EASTMAN	C. VARIEGATUS	8					15			NO SIGNIFICANT EFFECT; NOTE HIGH SALINITY	NO CHRONIC
18	TX 0001007	002	TUGCO	D. PULEX	1					5			-	NO ACUTE
19	TX 0001201	003	TEMPLE-EASTEX	D. PULEX	1					0			EFFL. TESTED 40H AFTER COLLECTION	NO ACUTE
20	TX 0001465	001	TYLER PIPE, INC.	D. PULEX	1					0			SPECIAL EPA/TWC STUDY--SEE REPORT	NO ACUTE
21	TX 0001465	002	TYLER PIPE, INC.	D. PULEX	1					0			SPECIAL EPA/TWC STUDY--SEE REPORT	NO ACUTE
22	TX 0002844	001	UNION CARBIDE	A. PUNCTULATA	1.5H			110					SALTS ADDED; PART OF EPA SPECIAL STUDY	NO CHRONIC
23	TX 0002933	001	DOW CHEMICAL CO.	M. BAHIA	2	75	75			100			-	NO ACUTE
24	TX 0002968	001	FIRESTONE RUBBER	D. PULEX	1					0			-	NO ACUTE
25	TX 0003522	001	AMOCO OIL CO.	P. PROMELAS	8				20	100	25	12	CI:16-24; CHV=17%; SAL. CNTRL NOT RUN; HIGH NH3	NO CHRONIC
26	TX 0003522	001	AMOCO OIL CO.	D. PULEX	2	65	36			100			CI: 30-43; HIGH NH3; MORT. IN SALINITY CONTROL	NO ACUTE
27	TX 0003654	001	POLYSAR GULF COAST	D. PULEX	1					0			-	NO ACUTE
28	TX 0003697	001	MARATHON OIL CO.	D. PULEX	2	38	25			100	100		CI:35-42(24H); 19-32(48H)	YES ACUTE
29	TX 0003875	001	MONSANTO	D. PULEX	1	76				90	0		-	YES ACUTE
30	TX 0003891	001	TEMPLE-EASTEX	D. PULEX	1					0			-	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L)
							MEAN	7010	MEAN	MAX.								DO	OR	SAT.
31	TX 0003891	001	TEMPLE-EASTEX	2621	SILSBEE	NECHES RIVER	3823	995.4	50.44	63.33	7.28	22-Oct-86	1	2400	171	212	7.6	(0.1)	(0.1)	
32	TX 0003891	001	TEMPLE-EASTEX	2621	SILSBEE	NECHES RIVER	3823	995.4	50.44	63.33	7.28	22-Oct-86	1	2400	171	212	7.6	(0.1)	(0.1)	81%
33	TX 0003891	001	TEMPLE-EASTEX	2621	SILSBEE	NECHES RIVER	3823	995.4	50.44	63.33	7.28	26-Jan-88	0	1600			7.5	(0.1)	0.4	79%
34	TX 0003891	001	TEMPLE-EASTEX	2621	SILSBEE	NECHES RIVER	3823	995.4	50.44	63.33	7.28	26-Jan-88	0	1600			7.5	(0.1)	0.4	
35	TX 0004201	003	AMERICAN PETROFINA	2911	GROVES	NECHES RIVER	3823	1060.5	1.191	2.94	0.28	31-Jan-85	0	2250	110	47	6.6			6.4
36	TX 0004669	001	DUPONT	2869	BEAUMONT	NECHES RIVER	3823	1060.5	7	21.9	1.01	29-Apr-87	5	2900			7.9	(0.1)	(0.1)	92%
37	TX 0004669	001	DUPONT	2869	BEAUMONT	NECHES RIVER	3823	1060.5	7	21.9	1.01	29-Apr-87	5	2900			7.9	(0.1)	(0.1)	91%
38	TX 0004715	004	ALCOA	3334	POINT COMFORT	LAVACA BAY			3.65	6.99	12	15-Jan-85	23	28000	1800	110	8.2			8.6
39	TX 0004715	006	ALCOA	3334	POINT COMFORT	LAVACA BAY			1.05	5	12	15-Jan-85	1	800	73	104	6.9			8.4
40	TX 0004821	001	AMOCO CHEMICAL CO.	2821	ALVIN	CHOCOLATE BAYOU	30.71	1.89	4.65	7.6	79.23	24-Jul-86	2	2100	228	81	8.2	(0.1)	(0.1)	91%
41	TX 0004853	002	GULF CHEM. & METALLURGICAL	3339	TEXAS CITY	UPPER GALVESTON BAY			0.15	1.5	8	19-Aug-86	4	4000	1625	33	7.9	(0.1)	(0.1)	91%
42	TX 0004853	002	GULF CHEM. & METALLURGICAL	3339	TEXAS CITY	UPPER GALVESTON BAY			0.15	1.5	8	19-Aug-86	4	4000	1625	33	7.9	(0.1)	(0.1)	8.4
43	TX 0004871	007	SHELL OIL CO.	2911	DEER PARK	HOUSTON SHIP CHANNEL			5.75	8.6	30	30-Jul-86	2	2900	282	255	8.1	(0.1)	(0.1)	87%
44	TX 0004871	007	SHELL OIL CO.	2911	DEER PARK	HOUSTON SHIP CHANNEL			5.75	8.6	30	30-Jul-86	2	2900	282	255	8.1	(0.1)	(0.1)	8.3
45	TX 0004898	001	CAMERON IRON WORKS	3312	BUFFALO BAYOU	KATY	275.5	22.65	0.28	3.49	100	06-Aug-85		800	78	278	8.1			6.7

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH		LC50		MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% INACUTED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 ChV=CHRONIC VALUE IN PERCENT EFFLUENT
					DAYS	24H	48H	CHRONIC				
31	TX 0003891	001	TEMPLE-EASTEX	CERIODAPHNIA	8				0			NO SIG. EFFECT
32	TX 0003891	001	TEMPLE-EASTEX	P. PROMELAS	7				5			NO SIG. EFFECT
33	TX 0003891	001	TEMPLE-EASTEX	D. PULEX	2				10			NO SIG. MORT.
34	TX 0003891	001	TEMPLE-EASTEX	SELENASTRUM	4				20			STIMULATORY; 6-50% EFFL.; NO SIG EFFECT IN 100%
35	TX 0004201	003	AMERICAN PETROFINA	D. PULEX	1				0			CHEMISTRY OF PERMIT PARAMETERS AVAILABLE
36	TX 0004669	001	DUPONT	C. VARIIGATUS	8				10			NO SIG. EFFECT
37	TX 0004669	001	DUPONT	P. PROMELAS	8			66	100		100 50	ChV=71%; NO SIG. MORT. IN 5 O/DO SALINITY CONTROL
38	TX 0004715	004	ALCOA	M. BAHIA	1				0			-
39	TX 0004715	006	ALCOA	D. PULEX	1				0			-
40	TX 0004821	001	AMOCO CHEMICAL CO.	P. PROMELAS	7				0			NO SIGNIFICANT EFFECT
41	TX 0004853	002	GULF CHEM. & METALLURGICAL	P. PROMELAS	7				15			NO SIGNIFICANT EFFECT
42	TX 0004853	002	GULF CHEM. & METALLURGICAL	D. PULEX	2				5			-
43	TX 0004871	007	SHELL OIL CO.	P. PROMELAS	7				0			NO SIGNIFICANT EFFECT
44	TX 0004871	007	SHELL OIL CO.	D. PULEX	1				0			-
45	TX 0004898	001	CAMERON IRON WORKS	D. PULEX	1				0		0	-

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SAL-INITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLOR-INE (MG/L)	UNION-IZED NH3 (MG/L)	MINI-MUM DO (MG/L OR % SAT.)
							MEAN	7D10	MEAN	MAX.										
46	TX 0005061	001	GOODYEAR TIRE AND RUBBER	2822	BEAUMONT	KIDD GULLY/DINN B.	146	0.8	1.92	2.31	78.81	04-Feb-85		900	144	140	7.3			
47	TX 0005096	101	KOPPERS CO., INC.	2865	HOUSTON	BUFFALO BAYOU	855	37.3	0.014	0.061	30	30-Jul-85		2300	840	88	7.3			8.4
48	TX 0005380	001	SCADA-BAYPORT (CENTRAL)	4953	BAYPORT	BAYPORT CH./GALV. BAY			7.67	15	8	30-Apr-85	2	2200	328	244	7.4			6.3
49	TX 0005835	011	STAR ENTERPRISES	2911	PORT ARTHUR	ALLIGATOR B./TAYLOR B.	626	3.1	8.86	11.85	81.58	10-Dec-84	4	2600	748	33	7.5			8.4
50	TX 0005835	001	STAR ENTERPRISES	2911	PORT ARTHUR	ALLIGATOR B./TAYLOR B.	626	3.1	17.2	27.65	89.58	10-Dec-84	0	1800	104	144	8			7
51	TX 0005860	001	CHEMICAL EXCHANGE	2865	GALENA PARK	PANTHER CREEK TO HSC	855	2.21	0.026	0.086	30	25-Jan-84	1				6.4	(0.1)		
52	TX 0006025	101	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	08-Jan-85	2	3800	122	1000	8.4			6.2
53	TX 0006025	101	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	02-Feb-87	3	5000	384	167	7.9	(0.1)	(0.1)	8.4
54	TX 0006025	101	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	02-Feb-87	3	5000	384	167	7.9	(0.1)	(0.1)	89%
55	TX 0006025	001	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	02-Feb-87	3	5000	384	167	7.9	(0.1)	(0.1)	
56	TX 0006025	101	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	02-Feb-87	3	5000	384	167	7.9	(0.1)	(0.1)	81%
57	TX 0006025	001	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	21-Sep-87	1	500	320	117	7.9	(0.1)	0.1	7.9
58	TX 0006025	001	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	21-Sep-87	1	500	320	117	7.9	(0.1)	0.1	92%
59	TX 0006025	001	CELANESE CHEMICAL	2869	BISHOP	SAN FERNANDO CREEK	25.13	1.02	0.41	0.67	38.38	21-Sep-87	1	500	320	117	7.9	(0.1)	0.1	
60	TX 0006033	003	SOLTEX POLYMER CORP.	2821	DEER PARK	PHILLIPS DITCH TO HSC	855	37.3			8	23-Jul-85	1	3200	212	126	8.3			8.6

EFFLUENT TOXICITY										COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H				
46	TX 0005061	001	GOODYEAR TIRE AND RUBBER	CERIODAPHNIA	7			0		NO SIGNIFICANT EFFECT (SURVIVAL/REPRODUCTION)	NO CHRONIC
47	TX 0005096	101	KOPPERS CO., INC.	D. PULEX	2	57	41	100		CI:49-67(24H); 33-51(48H)	YES ACUTE
48	TX 0005380	001	SCADA-BAYPORT (CENTRAL)	D. PULEX	1			0			NO ACUTE
49	TX 0005835	011	STAR ENTERPRISES	D. PULEX	1			0		NO MORT. IN DILUTIONS + SALINITY CONTROL	NO ACUTE
50	TX 0005835	001	STAR ENTERPRISES	D. PULEX	1			0			NO ACUTE
51	TX 0005860	001	CHEMICAL EXCHANGE	D. PULEX	1			0		INCOMPLETE EFFLUENT CHEMISTRY	NO ACUTE
52	TX 0006025	101	CELANESE CHEMICAL	D. PULEX	2	92	59	95	100	CI:50-70(48H)	YES ACUTE
53	TX 0006025	101	CELANESE CHEMICAL	D. PULEX	1	45		60		CI:18-100; UPSTREAM WATER USED FOR DILUTION	YES ACUTE
54	TX 0006025	101	CELANESE CHEMICAL	P. PROMELAS	8			15		UPSTREAM WATER USED FOR DILUTION	NO CHRONIC
55	TX 0006025	001	CELANESE CHEMICAL	A. PUNCTULATA	1.5H		10			SALTS ADDED; PART OF EPA SPEC. STUDY	NO CHRONIC
56	TX 0006025	101	CELANESE CHEMICAL	SELENASTRUM	4		6			UPSTREAM WATER USED FOR DILUTION	YES CHRONIC
57	TX 0006025	001	CELANESE CHEMICAL	D. PULEX	2			0			NO ACUTE
58	TX 0006025	001	CELANESE CHEMICAL	P. PROMELAS	8			10		NO SIG. EFFECT	NO CHRONIC
59	TX 0006025	001	CELANESE CHEMICAL	SELENASTRUM	4		37	75	25 12	CHV=17%	YES CHRONIC
60	TX 0006033	003	SOLTEX POLYMER CORP.	D. PULEX	1			5	0		NO ACUTE

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.										
61	TX 0006033	001	SOLTEX POLYMER CORP.	2821	DEER PARK	PHILLIPS DITCH TO HSC	548.7	37.3	1		30	24-Jul-85	0	1800	172	135	8			7.8
62	TX 0006033	001	SOLTEX POLYMER CORP.	2821	DEER PARK	PHILLIPS DITCH TO HSC	855	37.3	1		30	24-Jul-85	0	1800	172	135	8			
63	TX 0006068	001	ARCO POLYMERS	2869	HOUSTON	TRIB. TO HOUSTON SC	480	1.1	0.246	0.313	30	23-Apr-84	4	6300	160	135	7.6			7.8
64	TX 0006084	001	ROHM & HAAS	2869	DEER PARK	HOUSTON SHIP CHANNEL	1014	37.3	3.81	9.82	30	31-Jan-84								
65	TX 0006084	001	ROHM & HAAS	2869	DEER PARK	HOUSTON SHIP CHANNEL	1014	37.3	3.81	9.82	30	31-Jan-84								
66	TX 0006297	001	NATL. DISTILLERS & CHEM.	2821	PORT ARTHUR	INTRACOSTAL WATERWAY	626	3.1			8	03-Dec-84	0	3000	360	380	7.5			7.5
67	TX 0006297	001	NATL. DISTILLERS & CHEM.	2821	PORT ARTHUR	INTRACOSTAL WATERWAY	626	3.1			8	03-Dec-84	0	2900	230	300	7.5			
68	TX 0006327	202	DUPONT-SABINE RIVER WORKS	2869	ORANGE	SABINE RIVER	8313	889	9.22	13.94	3	29-Apr-87	5	7900			8.1	(0.1	0.8	84%
69	TX 0006327	202	DUPONT-SABINE RIVER WORKS	2869	ORANGE	SABINE RIVER	8313	889	9.22	13.94	3	29-Apr-87	5	7900			8.1	(0.1	0.8	83%
70	TX 0006327	202	DUPONT-SABINE RIVER WORKS	2869	ORANGE	SABINE RIVER	8313	889	9.22	13.94	3	19-Aug-87								
71	TX 0006483	001	DOM CHEMICAL	2869	FREEPORT	BRAZOS RIVER (TIDAL)	8061	237	510	723	100	16-Sep-85	26	45000			7.8			8.2
72	TX 0007048	001	LUBRIZOL CORP.	2869	HOUSTON	PATRICK BAYOU TO HSC	1014	37.3	0.63	1.89	30	30-Apr-84	26	40000						
73	TX 0007048	001	LUBRIZOL CORP.	2869	HOUSTON	PATRICK BAYOU TO HSC	1014	37.3	0.63	1.89	30	29-Apr-85	22	30000			7.1			5.9
74	TX 0007056	001	U.S. GYPSUM CO.	2631	GALENA PARK	HOUSTON SHIP CHANNEL	1014	37.3	0.137	0.27	30	21-Jul-86	2	1700	240	330	8.4	0.2	0.3	91%
75	TX 0007056	001	U.S. GYPSUM CO.	2631	GALENA PARK	HOUSTON SHIP CHANNEL	1014	37.3	0.137	0.27	30	21-Jul-86	2	1700	240	330	8.4	0.2	0.3	8.6

EFFLUENT TOXICITY										COMMENTS									
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS IN 100% DECHLORINATED EFFLUENT	MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS IN 100% DECHLORINATED EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS					
						24H	48H												
61	TX 0006033	001	SOLTEX POLYMER CORP.	D. PULEX	1			0	0			-		NO ACUTE					
62	TX 0006033	001	SOLTEX POLYMER CORP.	CERIODAPHNIA	7			0				-		NO CHRONIC					
63	TX 0006068	001	ARCO POLYMERS	D. PULEX	2	79	75	95				-		YES ACUTE					
64	TX 0006084	001	ROHM & HAAS	P. PROMELAS	4		76					-		YES CHRONIC					
65	TX 0006084	001	ROHM & HAAS	D. PULEX	2		41					-		YES ACUTE					
66	TX 0006297	001	NATL. DISTILLERS & CHEM.	D. PULEX	1			0				-		NO ACUTE					
67	TX 0006297	001	NATL. DISTILLERS & CHEM.	CERIODAPHNIA	7			5				-		NO CHRONIC					
68	TX 0006327	202	DUPONT-SABINE RIVER WORKS	C. VARIEGATUS	8			10				-		NO CHRONIC					
69	TX 0006327	202	DUPONT-SABINE RIVER WORKS	P. PROMELAS	8			66				-		NO CHRONIC					
70	TX 0006327	202	DUPONT-SABINE RIVER WORKS	A. PUNCTULATA	1.5H			5.8				-		YES CHRONIC					
71	TX 0006483	001	DOM CHEMICAL	M. ALMYRA	1			0				-		NO ACUTE					
72	TX 0007048	001	LUBRIZOL CORP.	M. BAHIA	2	70	60	100				-		YES ACUTE					
73	TX 0007048	001	LUBRIZOL CORP.	M. BAHIA	2	71	19	100	100			-		YES ACUTE					
74	TX 0007056	001	U.S. GYPSUM CO.	P. PROMELAS	7			0				-		NO CHRONIC					
75	TX 0007056	001	U.S. GYPSUM CO.	D. PULEX	1			0				-		NO ACUTE					

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLOR-INE	UNION-IZED NH3	MINI-MUM DO
							MEAN	7010	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L SAT.)
76	TX 0007293	001	DUPONT	2879	LAPORTE	SAN JACINTO BAY			3.49	11.14	8	19-Aug-85	4	6000	1203	25	6.7			8.2
77	TX 0007323	001	BAF	2869	TEXAS CITY	MOSES LAKE			0.19	0.33	16	17-Jan-84								
78	TX 0007323	001	BAF CORP.	2869	TEXAS CITY	MOSES LAKE			0.19	0.33	16	24-Feb-87	2	2100	300	124	7.8	(0.1)	(0.1)	8.3
79	TX 0007323	001	BAF CORP.	2869	TEXAS CITY	MOSES LAKE			0.19	0.33	16	24-Feb-87	2	2100	300	124	7.8	(0.1)	(0.1)	8.5
80	TX 0007323	001	BAF CORP.	2869	TEXAS CITY	MOSES LAKE			0.19	0.33	16	24-Feb-87	2	2100	300	124	7.8	(0.1)	(0.1)	8.3
81	TX 0007421	001	ARCO CHEMICAL	2821	DEER PARK	TRIB. TO PEGGY LAKE	480	1.1	0.438	1.13	30	23-May-84	0							
82	TX 0007439	001	SDS BIOTECH CORP.	2869	HOUSTON	GREENS BAYOU TO HSC	228	0.71	0.57	0.9	55.44	29-Jun-87	2	8000	145	37	7.5	(0.1)	(0.1)	90
83	TX 0007439	001	SDS BIOTECH CORP.	2869	HOUSTON	GREENS BAYOU TO HSC	228	0.71	0.57	0.9	55.44	29-Jun-87	2	8000	145	37	7.5	(0.1)	(0.1)	8.1
84	TX 0007552	001	PHILLIPS PETROLEUM	2821	PASADENA	HOUSTON SHIP CHANNEL	855	2.21	2.85	7	30	12-Dec-83								
85	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	23-Jul-86		1200	190	122	7.7	0.8	0.1	91
86	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	23-Jul-86		1200	190	122	7.7	0.8	0.1	7.2
87	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	17-Mar-87								
88	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	28-Apr-87	2	1000			7.6	0.6	0.1	
89	TX 0007889	101	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	28-Apr-87	4	1100			7.5	(0.1)	(0.1)	91
90	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	28-Apr-87	2	1000			7.6	0.6	0.1	91

EFFLUENT TOXICITY											COMMENTS				
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH		LC50		MORTALITY		CHRONIC		NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
					DAYS	24H	48H	CHRONIC	EFFLUENT	DECHLORINATED	EFFLUENT	LOEC			NOEC
76	TX 0007293	001	DUPONT	D. PULEX	2	31	22		100	100			CI:24-40(24H); 17-29(48H); 4 o/oo CONTROL DIED	YES ACUTE	
77	TX 0007323	001	BAF	D. PULEX	1				0				NO EFFL. CHEMISTRY	NO ACUTE	
78	TX 0007323	001	BAF CORP.	D. PULEX	2				0				PART OF EPA SPECIAL STUDY	NO ACUTE	
79	TX 0007323	001	BAF CORP.	C. VARIEBATUS	8				5				NO SIG. EFFECT; PART OF EPA SPEC. STUDY	NO CHRONIC	
80	TX 0007323	001	BAF CORP.	A. PUNCTULATA	1.5H			>10					SALTS ADDED; PART OF EPA SPEC. STUDY	NO CHRONIC	
81	TX 0007421	001	ARCO CHEMICAL	D. PULEX	1				0				NO EFFLUENT CHEMISTRY DATA	NO ACUTE	
82	TX 0007439	001	SDS BIOTECH CORP.	P. PROMELAS	8			73	70		25	12	CHV=17%	YES CHRONIC	
83	TX 0007439	001	SDS BIOTECH CORP.	D. PULEX	2		93		55				PIPE FLOW FOR OUTFALL 101	YES ACUTE	
84	TX 0007552	001	PHILLIPS PETROLEUM	D. PULEX	2				0				NO EFFLUENT CHEMISTRY	NO ACUTE	
85	TX 0007889	001	USN-CORPUS CHRISTI NAS	P. PROMELAS	7			85	85	10	100	75	CI:76-96; CHV=87%	NO CHRONIC	
86	TX 0007889	001	USN-CORPUS CHRISTI NAS	D. PULEX	1	6			100	0			CI:4-8(24H)	YES ACUTE	
87	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			3.1					SALTS ADDED; PART OF EPA SPEC. STUDY	YES CHRONIC	
88	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			7.2					SALTS ADDED; PART OF SPECIAL STUDY	YES CHRONIC	
89	TX 0007889	101	USN-CORPUS CHRISTI NAS	C. VARIEGATUS	8				5				SALTS ADDED; PART OF SPECIAL STUDY	NO CHRONIC	
90	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. VARIEGATUS	8			66	100		100	50	CHV=71%; SALTS ADDED; PART OF SPECIAL STUDY	NO CHRONIC	

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNIONIZED	MINIMUM
							MEAN	7Q10	MEAN	MAX.								CHLORINE	NH3	DO
91	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	28-Apr-87	2	1000			7.6	0.6	0.1	
92	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	1				7.2	2.9		
93	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	2				7.3	3		
94	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	1				7.2	2.9		
95	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	1				7.2	2.9		
96	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	1				7.2	2.9		
97	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	22-Jun-87	1				7.2	2.9		
98	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	23-Jun-87	1				6.6	3.8		
99	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	25-Jun-87	0				7.3	1.3		
100	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	25-Jun-87	0				7.3	1.3		
101	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	26-Jun-87	1				7.3	3.5		
102	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	26-Jun-87	1				7.3	3.5		
103	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	15-Sep-87	2	900	240	105	7.9	0.7	0.1	
104	TX 0007889	001	USN-CORPUS CHRISTI NAS	3741	CORPUS CHRISTI	CORPUS CHRISTI BAY			0.849	1.543	8	15-Sep-87	2	900	240	105	7.9	0.7	0.1	
105	TX 0007897	001	ALLIED CORP.	2821	ORCHARD	CDW BAYOU	8.63	0.042	0.59	3.77	95.61	19-Feb-85		450	100	54	7.9			

EFFLUENT TOXICITY										COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS
						24H	48H	CHRONIC					
91	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. PARVULA	7			6.1				SALTS ADDED; PART OF SPECIAL STUDY	YES CHRONIC
92	TX 0007889	001	USN-CORPUS CHRISTI NAS	M. BAHIA	7						10 3.2	SALTS ADDED; 30% MORT. IN 32% EFFL.; ChV=5.6%	YES CHRONIC
93	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. PARVULA	7			4			7.5 5	POST-CHLORINATED (FINAL); SALTS ADDED; ChV=6.1%	YES CHRONIC
94	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			5.9			5 2.5	POST-CHLORINATED (FINAL); ChV=3.5%; SALTS ADDED	YES CHRONIC
95	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. VARIEGATUS	7						132 10	9% MORT. IN 32% EFFL.; NO SIG. EFFECT AT 32% EFFL.	NO CHRONIC
96	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			13.9			17.5 8.8	DECHLORINATED; ChV=12.4; SALTS ADDED	NO CHRONIC
97	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			0.47			12.2 12.2	PRECHLORINATED; CI:0-2.2; SALTS ADDED	YES CHRONIC
98	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. PARVULA	7			7.7			7.5 5	POST-CHLORINATED (FINAL); SALTS ADDED; ChV=6.1%	YES CHRONIC
99	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			110			110 110	PRECHLORINATED; SALTS ADDED; PART OF SPEC. STUDY	NO CHRONIC
100	TX 0007889	001	USN-CORPUS CHRISTI NAS	A. PUNCTULATA	1.5H			110			110 110	POST-CHLORINATED (FINAL); SALTS ADDED; SPEC. STUDY	NO CHRONIC
101	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. PARVULA	7			4.5			5 2.5	PRECHLORINATED; ChV=3.5; SPECIAL STUDY	YES CHRONIC
102	TX 0007889	001	USN-CORPUS CHRISTI NAS	C. PARVULA	7			110			110 110	POST-CHLORINATED (FINAL); PART OF SPECIAL STUDY	NO CHRONIC
103	TX 0007889	001	USN-CORPUS CHRISTI NAS	P. PROMELAS	8			69	100	10	100 50	ChV=71%	NO CHRONIC
104	TX 0007889	001	USN-CORPUS CHRISTI NAS	D. PULEX	2	14	12		100	0		CI:11-17(24H); 7-15(48H)	YES ACUTE
105	TX 0007897	001	ALLIED CORP.	CERIODAPHNIA	7			0				NO SIG. EFFECT IN REPRODUCTION	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		TMC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7Q10	MEAN	MAX.						AS	AS				
1106	TX 0008907	001	DUPONT	2869	INGLESIDE	CORPUS CHRISTI BAY			2.66	6.14		8 02-Sep-86						7.6	(0.1	(0.1	
1107	TX 0008907	001	DUPONT	2869	INGLESIDE	CORPUS CHRISTI BAY			2.66	6.14		8 28-Apr-87	6	7500				7.6	(0.1	(0.1	
1108	TX 0008907	001	DUPONT	2869	INGLESIDE	CORPUS CHRISTI BAY			2.66	6.14		8 28-Apr-87	6	7500				7.6	(0.1	(0.1	92%
1109	TX 0008907	001	DUPONT	2869	INGLESIDE	CORPUS CHRISTI BAY			2.66	6.14		8 28-Apr-87	6	7500				7.6	(0.1	(0.1	
1110	TX 0008907	001	DUPONT	2869	INGLESIDE	CORPUS CHRISTI BAY			2.66	6.14		8 16-Sep-87	10	19000				7.5	(0.1	(0.1	90%
1111	TX 0009075	001	PHILLIPS PETROLEUM	2911	BORGER	?	1.46	0			100	02-Jun-87	0	1100	325	67	7.2	0.5	0.2	87%	
1112	TX 0009075	001	PHILLIPS PETROLEUM	2911	BORGER	?	1.46	0			100	02-Jun-87	0	1100	325	67	7.2	0.5	0.2	8.2	
1113	TX 0009075	001	PHILLIPS PETROLEUM	2911	BORGER	?	1.46	0			100	02-Jun-87	0	1100	325	67	7.2	0.5	0.2		
1114	TX 0009148	001	PHILLIPS 66 CO.	2911	BORGER	E. DIXON CREEK	0.27	0	5.08	7.14	100	14-Oct-87	0	1700			7.6	(0.1	(0.1	8.2	
1115	TX 0009148	001	PHILLIPS 66 CO.	2911	BORGER	E. DIXON CREEK	0.27	0	5.08	7.14	100	14-Oct-87	0	1700			7.6	(0.1	(0.1	94%	
1116	TX 0009181	001	SID RICHARDSON CARBON	2822	BORGER	TRIB. TO CANADIAN R.		0.1	0.39		85	14-Oct-87	2	3000			9.4	(0.1	(0.1	8.2	
1117	TX 0009181	001	SID RICHARDSON CARBON	2822	BORGER	TRIB. TO CANADIAN R.		0.1	0.39		85	14-Oct-87	2	3000			9.4	(0.1	(0.1	89%	
1118	TX 0022527	001	TRA-TEN MILE CREEK	4952	FERRIS	TEN MILE CREEK	52.25	0.4	11.9	30.22	97.88	26-Aug-86	0	900	92	167	7.5	3.2	0.2	8.3	
1119	TX 0022527	001	TERRELL	4952	TERRELL	TRIB. TO KINGS CREEK	17.25	0	2.14	5.93	100	23-Sep-86	1	600	110	7	6.1	1.5	(0.1	8.2	
1120	TX 0022608	001	USAF-LAUGHLIN AFB	9711	VAL VERDE CO.	TRIB. TO SACATOSA CRK			0.57	1	100	30-Nov-87	0	790			8.2	(0.1	1.8	8	

EFFLUENT TOXICITY											COMMENTS					
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLOR-INATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50		POTENTIAL FOR INSTREAM EFFECTS		
						24H	48H	CHRONIC				CHV=CHRONIC VALUE IN PERCENT EFFLUENT				
106	TX 0008907	001	DUPONT	A. PUNCTULATA	1.5H			5.9				SALTS ADDED; PART OF EPA SPEC. STUDY		YES	CHRONIC	
107	TX 0008907	001	DUPONT	C. PARVULA	7			8.7				SALTS ADDED; PART OF EPA SPECIAL STUDY		YES	CHRONIC	
108	TX 0008907	001	DUPONT	C. VARIEGATUS	8				10			NO SIG. EFFECT; PART OF EPA SPEC. STUDY		NO	CHRONIC	
109	TX 0008907	001	DUPONT	A. PUNCTULATA	1.5H			170				SALTS ADDED; PART OF EPA SPECIAL STUDY		NO	CHRONIC	
110	TX 0008907	001	DUPONT	C. VARIEGATUS	9				15			NO SIG. EFFECT		NO	CHRONIC	
111	TX 0009075	001	PHILLIPS PETROLEUM	P. PROMELAS	8			33	100	100	50 25	PERMIT DISCONT.; CHV=35%		YES	CHRONIC	
112	TX 0009075	001	PHILLIPS PETROLEUM	D. PULEX	2	16	16		100	0		PERMIT DISCONT.; FLOW APPARENTLY STORMWATER		YES	ACUTE	
113	TX 0009075	001	PHILLIPS PETROLEUM	SELENASTRUM	4			20	98	9	12 6	PERMIT DISCONT.; CHV=9%		YES	CHRONIC	
114	TX 0009148	001	PHILLIPS 66 CO.	D. PULEX	2				5			NO SIG. MORT.		NO	ACUTE	
115	TX 0009148	001	PHILLIPS 66 CO.	P. PROMELAS	8			54	100		100 50	CHV=71%		YES	CHRONIC	
116	TX 0009181	001	SID RICHARDSON CARBON	D. PULEX	2				10			NO SIG. MORT.		NO	ACUTE	
117	TX 0009181	001	SID RICHARDSON CARBON	P. PROMELAS	8			76	70		100 50	CHV=71%		YES	CHRONIC	
118	TX 0022527	001	TRA-TEN MILE CREEK	D. PULEX	2	4	4		100	100		NOTE MORT IN DECHL. EFFL.		YES	ACUTE	
119	TX 0022527	001	TERRELL	D. PULEX	2	21	20		100	10		-		YES	ACUTE	
120	TX 0022608	001	USAF-LAUGHLIN AFB	D. PULEX	2				0			SEWAGE & UNPERM. PAINT-STRIPPING WASTESTREAMS		NO	ACUTE	

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		TMC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)	
							MEAN	7010	MEAN	MAX.											
121	TX 0022608	001	USAF-LAUGHLIN AFB	9711	VAL VERDE CO.	TRIB. TO SACATOSA CRK			0.57	1	100	30-Nov-87	0	790			8.2	(0.1	1.8	88%	
122	TX 0023001	001	VERNON	4952	VERNON	PEASE RIVER	107	0	1.45	2.82	100	14-Sep-87	0	1200	304	216	8.1	0.8	(0.1	8.2	
123	TX 0023001	001	VERNON	4952	VERNON	PEASE RIVER	107	0	1.45	2.82	100	14-Sep-87	0	1200	304	216	8.1	0.8	(0.1	95%	
124	TX 0023094		UVALDE	4952	UVALDE	COOKS SLOUGH/LEONA R.	2	1.45	0.024	1	7.48	20-Feb-85	0	850	254	300	7.7			8.2	
125	TX 0023418		KINGSVILLE	4952	KINGSVILLE	TRANQUITOS CREEK	48.68	0.01	1.66	4.33	99.61	22-Oct-84	2	2100	142	321	7.9			8.6	
126	TX 0023931	001	NTMWD-RICHARDSON	4952	RICHARDSON	FLOYD BRANCH	11.55	0.09	2.34	4.36	97.58	22-May-85		800			6.6			6.1	
127	TX 0023931	001	NTMWD-RICHARDSON	4952	RICHARDSON	DUCK CREEK	11.55	0.09	2.08	4.48	97.28	15-May-86	0	800	224	95	6.4	0.2	(0.1	8.6	
128	TX 0024228	001	STEPHENVILLE	4952	STEPHENVILLE	N. BOSQUE RIVER	30.52	0	1.44	2.8	100	08-Dec-87	0	1300			7.9	0.5	2.4	7.9	
129	TX 0024228	001	STEPHENVILLE	4952	STEPHENVILLE	N. BOSQUE RIVER	30.52	0	1.44	2.8	100	08-Dec-87	0	1300			7.9	0.5	2.4	91%	
130	TX 0024309	001	LUFKIN	4952	LUFKIN	HURRICANE CREEK	35.52	0.13	4.91	6.02	98.32	29-Jul-85		800	40	251	7.4			8.4	
131	TX 0024309	001	LUFKIN	4952	LUFKIN	HURRICANE CREEK	35.52	0.13	4.91	6.02	98.32	15-Jan-86	0	1000	51	209	7.7	3.8		7	
132	TX 0024325	001	SHERMAN	4952	SHERMAN	CHOCTAW CREEK	121.5	6.34	7.72	9.98	65.37	25-Sep-85		2500	39	329	7.8			8.8	
133	TX 0024368	001	JASPER	4952	JASPER	SANDY CREEK	58.5	0	1.59	4	100	02-Mar-88	0	500			6.7	0.2	(0.1	92%	
134	TX 0024368	001	JASPER	4952	JASPER	SANDY CREEK	58.5	0	1.59	4	100	02-Mar-88	0	500			6.7	0.2	(0.1	92%	
135	TX 0024678	001	GARLAND-DUCK CREEK	4952	GARLAND	DUCK CREEK	11.55	0.06	21.62	29.8	99.82	09-Sep-86	0	650	124	95	7.2	0.5	(0.1	8.2	

EFFLUENT TOXICITY											COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC						
121	TX 0022608	001	USAF-LAUGHLIN AFB	P. PROMELAS	8			52	100		100	50	CHV=71%; SEWAGE & UNPERMITTED WASTESTREAMS	YES CHRONIC
122	TX 0023001	001	VERNON	D. PULEX	1	(12			100	0		-		YES ACUTE
123	TX 0023001	001	VERNON	P. PROMELAS	8			30	100	100	50	25	CHV=35%; NOTE MORT. IN DECHL. TEST	YES CHRONIC
124	TX 0023094		UVALDE	D. PULEX	1				0	0			FACILITY DOESNT ALWAYS DISCHARGE	NO ACUTE
125	TX 0023418		KINGSVILLE	D. PULEX	2	6	5		100	0			CI:4-8(24H); 4-7(48H); MOVING AVG ANGLE METHOD	YES ACUTE
126	TX 0023931	001	NTMWD-RICHARDSON	D. PULEX	1				0	0			-	NO ACUTE
127	TX 0023931	001	NTMWD-RICHARDSON	D. PULEX	1	34			100	0			-	YES ACUTE
128	TX 0024228	001	STEPHENVILLE	D. PULEX	2	8	7		100	5			CI:6-9(24H); 5-8(48H)	YES ACUTE
129	TX 0024228	001	STEPHENVILLE	P. PROMELAS	7			26	100	100	25	12	NOTE MORT. IN DECHL. EFFL. (PROB. DUE TO NH3)	YES CHRONIC
130	TX 0024309	001	LUFKIN	D. PULEX	2	3	3		100	0			CI: NOT RELIABLE; TRIMMED SPEARMAN-KARBER METHOD	YES ACUTE
131	TX 0024309	001	LUFKIN	D. PULEX	2	3	2		100	0			-	YES ACUTE
132	TX 0024325	001	SHERMAN	D. PULEX	1				0	0			-	NO ACUTE
133	TX 0024368	001	JASPER	P. PROMELAS	8			8	100	100	(12	(12	CHV(12; CI:3-19; NOTE HIGH TOX; TOX. AFTER DECHL.	YES CHRONIC
134	TX 0024368	001	JASPER	D. PULEX	1	69			95	5			CI:54-98	YES ACUTE
135	TX 0024678	001	GARLAND-DUCK CREEK	D. PULEX	2	16	16		100	0			CI:15-18(24H)	YES ACUTE

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID.	UNIONIZED NH3	MINIMUM DO
							MEAN	7010	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L)
1136	TX 0024678	001	GARLAND-DUCK CREEK	4952	GARLAND	DUCK CREEK	11.55	0.06	21.62	29.8	99.82	11-Aug-87	0	825	164	73	7.6	0.3	(0.1	8.2
1137	TX 0024678	001	GARLAND-DUCK CREEK	4952	GARLAND	DUCK CREEK	11.55	0.06	21.62	29.8	99.82	11-Aug-87	0	825	164	73	7.6	0.3	(0.1	93%
1138	TX 0024686	001	GARLAND-ROWLETT CREEK	4952	GARLAND	ROWLETT CREEK	20.25	10.07	12.16	43.53	09-Sep-86	0	700	116	133	7.1	1.3	(0.1	7.6	
1139	TX 0024686	001	GARLAND-ROWLETT CREEK	4952	GARLAND	ROWLETT CREEK	20.25	10.07	12.16	43.53	11-Aug-87	0	800	128	147	7.9	0.8	0.5	81%	
1140	TX 0024686	001	GARLAND-ROWLETT CREEK	4952	GARLAND	ROWLETT CREEK	20.25	10.07	12.16	43.53	11-Aug-87	0	800	128	147	7.9	0.8	0.5	7	
1141	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	13-Jun-85		1200	188	75	7.1			8.2
1142	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	03-Sep-86	0	750	114	52	7.2	(0.1	(0.1	88%
1143	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	03-Sep-86	0	750	114	52	7.2	(0.1	(0.1	7.6
1144	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	03-Aug-87	2	800	134	99	6.9	0.3	(0.1	
1145	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	03-Aug-87	2	800	134	99	6.9	0.3	(0.1	8.0
1146	TX 0025429	001	USAF-SHEPPARD AFB	9711	WICHITA FALLS	PLUM C. TO WICHITA R.	274	26.86	1.79	3.28	6.56	03-Aug-87	2	800	134	99	6.9	0.3	(0.1	90%
1147	TX 0026263	001	SPENCER ROAD MUD	4952	HOUSTON	MORSEMAN CREEK TO HSC	82	0.19	0.53	1.74	81.22	31-Mar-86	0	900	126	144	7.1	4.2	1.2	7.9
1148	TX 0026751	001	EL PASO-HASKELL	4952	EL PASO	RIO GRANDE	1547	42.8	20.7	23.82	74.89	19-Jan-88	0	1100			7.1	1.8	0.9	94%
1149	TX 0026751	001	EL PASO-HASKELL	4952	EL PASO	RIO GRANDE	1547	42.8	20.7	23.82	74.89	19-Jan-88	0	1100			7.1	1.8	0.9	
1150	TX 0027537	001	WAXAHACHIE	4952	WAXAHACHIE	N. PRONG CREEK	13.71	0.1	1.77	4.19	96.48	27-Jan-86	0	1100	173	170	7.5	3.2		8.2

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN		LCSO		MORTALITY IN 100% EFFLUENT	CHRONIC MORTALITY IN 100% DECHLORINATED EFFLUENT	EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT
					DAYS	24H	48H	CHRONIC				
1136	TX 0024678	001	GARLAND-DUCK CREEK	D. PULEX	2				0	0		NO MORT.
1137	TX 0024678	001	GARLAND-DUCK CREEK	P. PROMELAS	8				10	10		NO SIG. EFFECT
1138	TX 0024686	001	GARLAND-ROWLETT CREEK	D. PULEX	2	3	3		100	0		CI:3-3(24H); 2-3(48H)
1139	TX 0024686	001	GARLAND-ROWLETT CREEK	P. PROMELAS	8			31	100	100	50	CHV=35%; NOTE COMPLETE MORT. IN DECHL. EFFL.
1140	TX 0024686	001	GARLAND-ROWLETT CREEK	D. PULEX	2	11	9		100	100		NOTE COMPLETE MORT. IN DECHL. EFFL.
1141	TX 0025429	001	USAF-SHEPPARD AFB	D. PULEX	1	7			100	0		CI:6-9; CRITICAL DIL. APPLIES TO ACUTE TEST
1142	TX 0025429	001	USAF-SHEPPARD AFB	P. PROMELAS	7				45		50	CHV=35%
1143	TX 0025429	001	USAF-SHEPPARD AFB	D. PULEX	1				10			-
1144	TX 0025429	001	USAF-SHEPPARD AFB	SELENASTRUM	4			24	85	54	12	CHV=9%; CELL NOS. SIG. LOWER IN DECHL. TEST
1145	TX 0025429	001	USAF-SHEPPARD AFB	D. PULEX	2	42	37		100	100		CI:35-50(24H); 31-43(48H); NOTE MORT. IN DECHL.
1146	TX 0025429	001	USAF-SHEPPARD AFB	P. PROMELAS	8				45	45	100	CHV=71%; NOTE MORT. IN DECHL. EFFL.
1147	TX 0026263	001	SPENCER ROAD MUD	P. PROMELAS	2	4	4		100	0		CI:3-6(24H); 3-5(48H)
1148	TX 0026751	001	EL PASO-HASKELL	D. PULEX	2		16		100	5		-
1149	TX 0026751	001	EL PASO-HASKELL	SELENASTRUM	4			16	100	69	16	-
1150	TX 0027537	001	WAXAHACHIE	D. PULEX	2	3	3		100	0		-

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR SAT.)	
							MEAN	7Q10	MEAN	MAX.											
151	TX 0033201	001	USN-KINGSVILLE NAS	9711	KINGSVILLE	CLEAR CREEK	715	0.16	0.2		65.96	22-Oct-84	2	2300	192	226	7.6			9	
152	TX 0034002	001	ALICE-SOUTHSIDE	4952	ALICE	LATTAS CREEK	172.3	0.04	0.87	3.37	97.12	20-May-85		1400	204	232	7.4			4.2	
153	TX 0034738	001	GULF CHEM. & METALLURGICAL	3341	FREEPORT	DOW "A" CANAL	694.26	539.27	0.082	0.17	0.24	16-Sep-85	76				8.9			6	
154	TX 0034738	001	GULF CHEM. & METALLURGICAL	3341	FREEPORT	DOW "A" CANAL	694.26	539.27	0.082	0.17	0.24	24-Sep-86	125				8.2	0.2	120	89%	
155	TX 0046884	001	HOUSTON-NORTHSIDE	4952	HOUSTON	BUFFALO BAYOU	624	1.68	19.85	47.64	94.82	22-Feb-84	0	750	182	268	7.5			7.8	
156	TX 0046884	001	HOUSTON-NORTHSIDE	4952	HOUSTON	BUFFALO BAYOU	624	1.68	19.85	47.64	94.82	22-Jul-85	0	800	112	128	8			8.6	
157	TX 0046957	001	AUSTIN-GOVALLE	4952	AUSTIN	COLORADO RIVER	1757	62.53	22.81	39.59	36.12	29-Jan-86	0	900	185	105	7	1.8		7.8	
158	TX 0046981	001	AUSTIN-WALNUT CREEK	4952	AUSTIN	WALNUT CR./COLORADO R.	25.25	0.58	31.4	54.2	98.8	30-Jul-85		800	0	102	7			7.6	
159	TX 0046990	001	BEAUMONT	4952	BEAUMONT	HILDEBRANDT BAYOU	3823	995.4	19.9	90.9	16	11-Feb-85	0	550	94	102	7.6			8.4	
160	TX 0047058	001	CORPUS CHRISTI-OSO	4952	CORPUS CHRISTI	OSO BAY			11.87	23.6	8	09-Jun-87	2	1950	477	109	7.1	0.9	(0.1	90%	
161	TX 0047058	001	CORPUS CHRISTI-OSO	4952	CORPUS CHRISTI	OSO BAY			11.87	23.6	8	09-Jun-87	2	1950	477	109	7.1	0.9	(0.1	8.4	
162	TX 0047058	001	CORPUS CHRISTI-OSO	4952	CORPUS CHRISTI	OSO BAY			11.87	23.6	8	09-Jun-87	2	1950	477	109	7.1	0.9	(0.1		
163	TX 0047074	001	CORPUS CHRISTI-WEST SIDE	4952	CORPUS CHRISTI	LA VOLLO CRK TO OSO CRK			2.52	6.2		25-Aug-87	2	4100	640	183	6.5	4	(0.1	7.9	
164	TX 0047074	001	CORPUS CHRISTI-WEST SIDE	4952	CORPUS CHRISTI	LA VOLLO CRK TO OSO CRK			2.52	6.2		25-Aug-87	2	4100	640	183	6.5	4	(0.1	95%	
165	TX 0047082	001	CORPUS CHRISTI-ALLISON	4952	CORPUS CHRISTI	NUECES RIVER	1077	23.42	2.04	4.3	11.9	25-Aug-87	1	3000	342	86	6.9	0.2	(0.1	7.8	

EFFLUENT TOXICITY											COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST			MORTALITY IN 100% EFFLUENT	MORTALITY IN 100% DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS		
					LENGTH IN DAYS	LC50 24H 48H	CHRONIC							
151	TX 0033201	001	USN-KINGSVILLE NAS	D. PULEX	1			0			-	NO ACUTE		
152	TX 0034002	001	ALICE-SOUTHSIDE	D. PULEX	1			0			-	NO ACUTE		
153	TX 0034738	001	GULF CHEM. & METALLURGICAL	M. ALMYRA	1	0.5		100			100% MORT. IN 76 o/oo & 0% IN 40 o/oo CONTROLS	NO ACUTE		
154	TX 0034738	001	GULF CHEM. & METALLURGICAL	C. VARIEGATUS	8			3	100	5	CI:2-4; CHV=2%; NO SIG. MORT. IN SALINITY CNTRLS	NO CHRONIC		
155	TX 0046884	001	HOUSTON-NORTHSIDE	D. PULEX	2	14	14	100			-	YES ACUTE		
156	TX 0046884	001	HOUSTON-NORTHSIDE	D. PULEX	1	72	68	100	0		CI:67-77(24H); 64-73(48H)	YES ACUTE		
157	TX 0046957	001	AUSTIN-GOVALLE	D. PULEX	2	3	2	100	0		-	YES ACUTE		
158	TX 0046981	001	AUSTIN-WALNUT CREEK	D. PULEX	1			0	0		-	NO ACUTE		
159	TX 0046990	001	BEAUMONT	D. PULEX	2	16	16	100			CI:15-18(24 & 48H)	YES ACUTE		
160	TX 0047058	001	CORPUS CHRISTI-OSO	P. PROMELAS	8			70	75	20	(12 (12	SIG. MORT. IN DECHL. EFFL.; TOXIC IN LOW DIL.	YES CHRONIC	
161	TX 0047058	001	CORPUS CHRISTI-OSO	D. PULEX	2	17	17	100	60			NOTE MORT. IN DECHL. EFFL.	YES ACUTE	
162	TX 0047058	001	CORPUS CHRISTI-OSO	SELENASTRUM	4			6	98	2	(6 (6	-	YES CHRONIC	
163	TX 0047074	001	CORPUS CHRISTI-WEST SIDE	D. PULEX	1	3		100	40			NOTE MORT. IN DECHL. TEST	YES ACUTE	
164	TX 0047074	001	CORPUS CHRISTI-WEST SIDE	P. PROMELAS	8			14	100	15	25	6	CHV=12%; TOXICITY PROBABLY DUE TO ZINC	YES CHRONIC
165	TX 0047082	001	CORPUS CHRISTI-ALLISON	P. PROMELAS	8				15	10			-	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMH/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L OR % SAT.)
							MEAN	7010	MEAN	MAX.						AS	AS		(MG/L)	(MG/L)	
166	TX 0047082	001	CORPUS CHRISTI-ALLISON	4952	CORPUS CHRISTI	MUECES RIVER	1077	23.42	2.04	4.3	11.9	25-Aug-87	1	3000	342	86	6.9	0.2	(0.1	7.8	
167	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	4952	CORPUS CHRISTI	LAGUNA MADRE			1.45	2.66	8	09-Jun-87	0	1300	288	95	7.3	1.5	(0.1	90%	
168	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	4952	CORPUS CHRISTI	LAGUNA MADRE			1.45	2.66	8	09-Jun-87	0	1300	288	95	7.3	1.5	(0.1		
169	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	4952	CORPUS CHRISTI	LAGUNA MADRE			1.45	2.66	8	09-Jun-87	0	1300	288	95	7.3	1.5	(0.1	8.4	
170	TX 0047295	001	FORT WORTH-VILLAGE CREEK	4952	FORT WORTH	W. FORK TRINITY RIVER	1160	3.83	106	207	97.72	09-Sep-86	0	850	175	137	7.5	0.3	(0.1	8.1	
171	TX 0047309	001	GALVESTON-MAIN	4952	GALVESTON	GALVESTON BAY			6.79	15.24	8	17-Apr-87	0	1400	184	76	7.0	0.6			
172	TX 0047309	001	GALVESTON-MAIN	4952	GALVESTON	GALVESTON BAY			6.79	15.24	8	17-Apr-87	0	1400	184	76	7.0	0.6	(0.1	83%	
173	TX 0047431	001	NTMWD-MESQUITE	4952	MESQUITE	MESQUITE CREEK	12.21	0.09	9.49	16.2	99.39	06-May-86	0	850	178	158	7.4	1	(0.1	6.6	
174	TX 0047651	001	TEMPLE	4952	TEMPLE	LITTLE ELM CREEK	14.29	0.73	2.89	11.6	85.99	04-Sep-84	0	850	166	220	7.8			8	
175	TX 0047651	001	TEMPLE	4952	TEMPLE	LITTLE ELM CREEK	14.29	0.73	2.89	11.6	85.99	05-Nov-85	0	800	197	241	7.9			8.4	
176	TX 0047830	001	DALLAS-CENTRAL	4952	DALLAS	TRINITY RIVER	2122	213.56	162	254	50.8	12-Aug-86	1	600	124	103	7.2	0.7	3.2	7.8	
177	TX 0047830	001	DALLAS-CENTRAL	4952	DALLAS	TRINITY RIVER	2122	213.56	162	254	50.8	26-Aug-86	0	825	132	117	7.6	0.9	0.1	8.3	
178	TX 0047848	001	DALLAS-SOUTHSIDE	4952	DALLAS	TRINITY RIVER	2196	430	33.9	49.7	10.89	12-Aug-86	1	550	96	65	7.2	1.8	0.6	8	
179	TX 0052761	001	SHELL DEVELOPMENT CO.	7391	HOUSTON	D. TO N. FORK BRAYS B.			0	0.36	0.54	100	18-Dec-86	1	1500	120	70	7.7	3.6	(0.1	8.6
180	TX 0052825	001	PENNMALT CORP.	2819	BEAUMONT	OLD R. TO NECHES R.	8165	1060.5	0.004		0.0006	19-Aug-87	0	550	32	1	7.4	(0.1	(0.1	90%	

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS		LC50		MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	
					24H	48H	CHRONIC	CHRONIC			CHV=CHRONIC VALUE IN PERCENT EFFLUENT	
166	TX 0047082	001	CORPUS CHRISTI-ALLISON	D. PULEX	2			10	0		-	NO ACUTE
167	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	P. PROMELAS	8		66	85	50	(12 (12	-	YES CHRONIC
168	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	SELENASTRUM	4		14	97	65	12	6	CHV=9%
169	TX 0047104	001	C. CHRISTI-LAGUNA MADRE	D. PULEX	2	9	9	100	0		-	YES ACUTE
170	TX 0047295	001	FORT WORTH-VILLAGE CREEK	D. PULEX	2	37	27	100	0		CI:32-44(24H); 21-35(48H)	YES ACUTE
171	TX 0047309	001	GALVESTON-MAIN	SELENASTRUM	4			42	9	(12	6	YES CHRONIC
172	TX 0047309	001	GALVESTON-MAIN	P. PROMELAS	7			0	10		NO SIG. EFFECT	NO CHRONIC
173	TX 0047431	001	NTMWD-MESQUITE	D. PULEX	2	22	1	100	10		CI:18-26(24H); ACUTE CRIT. DIL.=100%	YES ACUTE
174	TX 0047651	001	TEMPLE	D. PULEX	2	17	16	100			CI: 15-19(24H); 14-18(48H)	YES ACUTE
175	TX 0047651	001	TEMPLE	D. PULEX	2	3	3	100	100		NOTE 100% MORT IN DECHL. EFFL.	YES ACUTE
176	TX 0047830	001	DALLAS-CENTRAL	D. PULEX	2	15	13	100	0		CI:13-18(24H); 10-18(48H)	YES ACUTE
177	TX 0047830	001	DALLAS-CENTRAL	D. PULEX	2	4	4	100	0		-	YES ACUTE
178	TX 0047848	001	DALLAS-SOUTHSIDE	D. PULEX	2	36	33	100	0		CI:29-44(24H); 27-40(48H)	YES ACUTE
179	TX 0052761	001	SHELL DEVELOPMENT CO.	D. PULEX	2	(1		100	0		-	YES ACUTE
180	TX 0052825	001	PENNMALT CORP.	P. PROMELAS	8		35	100		50	25	CHV=35%

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS								
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE	UNIONIZED NH3	MINIMUM DO
							MEAN	7D10	MEAN	MAX.								(MG/L)	(MG/L)	(MG/L OR % SAT.)
181	TX 0052825	001	PENNMALT CORP.	2819	BEAUMONT	OLD R. TO NECHES R.	8165	1060.5	0.004		0.0006	19-Aug-87	0	550	32	1	7.4	(0.1)	(0.1)	7.4
182	TX 0052825	001	PENNMALT CORP.	2819	BEAUMONT	OLD R. TO NECHES R.	8165	1060.5	0.004		0.0006	19-Aug-87	0	550	32	1	7.4	(0.1)	(0.1)	
183	TX 0052892	001	LEWISVILLE	4952	LEWISVILLE	ELM FK. TRINITY RIVER	580	50.44	4.35	8.58	100	17-Sep-86	0	825	183	124	7.7	1.3	(0.1)	8.2
184	TX 0053023	001	CHAMPION PAPER CO.	2621	HOUSTON	HOUSTON SHIP CHANNEL	855	2.2	15.7	20.4	30	30-Apr-85	2	2500	180	50	6.6			
185	TX 0053023	001	CHAMPION PAPER CO.	2621	HOUSTON	HOUSTON SHIP CHANNEL	855	2.2	15.7	20.4	30	30-Apr-85	2	2500	180	50	6.6			7.2
186	TX 0055611	001	GREENVILLE	4952	GREENVILLE	COMLEECH CREEK	65.16	0.14	2.98	6.54	97.06	23-Jul-85		800	152	151	7.6			8.6
187	TX 0056111	001	USAF-LACKLAND AFB	9711	SAN ANTONIO	TRIB. TO MEDIO CREEK	34.1	1.2	0.27	0.7	25.86	23-Oct-84		1000	254	241	7.5			7.5
188	TX 0056731	001	CORSICANA-PLANT #2	4952	CORSICANA	RICHLAND CREEK	92	0.7	2.59	8.4	85.15	03-Sep-86	0	750	154	117	7.5	2.3	0.1	8.6
189	TX 0057843	001	GCMDA-SUGARLAND	4953	TEXAS CITY	BALVESTON BAY			7.59	13.35	8	29-Apr-85	2	2500	182	305	7.8			7.2
190	TX 0059447	001	DOW CHEMICAL	2869	FREEPORT	BRAZOS RIVER (TIDAL)	697.8	543.25	0.92	4.4	0.26	27-May-87	37	45000			8.3	(0.1)	0.1	61%
191	TX 0067695	001	NORTHSTAR STEEL	3312	BEAUMONT	NECHES RIVER	8165	1060.5	0.66	2.6	0.096	19-Aug-87	0	250	46	45	7.4	(0.1)	(0.1)	8.1
192	TX 0067695	001	NORTHSTAR STEEL	3312	BEAUMONT	NECHES RIVER	8165	1060.5	0.66	2.6	0.096	19-Aug-87	0	250	46	45	7.4	(0.1)	(0.1)	93%
193	TX 0067695	001	NORTHSTAR STEEL	3312	BEAUMONT	NECHES RIVER	8165	1060.5	0.66	2.6	0.096	19-Aug-87	0	250	46	45	7.4	(0.1)	(0.1)	
194	TX 0068934	001	MOBIL CHEMICAL	2821	BEAUMONT	WILLOW MARSH BAYOU	146	27	0.45	0.79	2.52	30-Nov-83								
195	TX 0068934	001	MOBIL CHEMICAL	2821	BEAUMONT	WILLOW MARSH BAYOU	146	27	0.45	0.79	46.58	19-Feb-85	1	1200	72	58	7.4			7.2

EFFLUENT TOXICITY										COMMENTS			
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50		MORTALITY IN 100% EFFLUENT	MORTALITY DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50 CHV=CHRONIC VALUE IN PERCENT EFFLUENT	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H						CHRONIC
181	TX 0052825	001	PENNMALT CORP.	D. PULEX	2		20	100			CI=16-25	NO ACUTE	
182	TX 0052825	001	PENNMALT CORP.	SELENASTRUM	4			92	57	100	50	CHV=71%; STIMULATION IN 25% AND 50% EFFLUENT	NO CHRONIC
183	TX 0052892	001	LEWISVILLE	D. PULEX	1	3		100	0			-	YES ACUTE
184	TX 0053023	001	CHAMPION PAPER CO.	CERIODAPHNIA	7			100		25	10	CHV=16%; NOEC/LOEC SAME FOR SURVIVAL & REPRO.	YES CHRONIC
185	TX 0053023	001	CHAMPION PAPER CO.	D. PULEX	1			0	0			-	NO ACUTE
186	TX 0055611	001	GREENVILLE	D. PULEX	2	3	3	100	0			CI:3-4	YES ACUTE
187	TX 0056111	001	USAF-LACKLAND AFB	D. PULEX	2	4	3	100	0			CI:3-6(24H); 1-6(48H); BINOMIAL METHOD	YES ACUTE
188	TX 0056731	001	CORSICANA-PLANT #2	D. PULEX	1	4		100	20			MORT. IN DECHL. TEST; ACUTE CRIT. DIL.=100%	YES ACUTE
189	TX 0057843	001	GCMDA-SUGARLAND	D. PULEX	1			0	0			-	NO ACUTE
190	TX 0059447	001	DOW CHEMICAL	C. VARIEGATUS	9			61	100	50	25	CHV=35%	NO CHRONIC
191	TX 0067695	001	NORTHSTAR STEEL	D. PULEX	2			10				-	NO ACUTE
192	TX 0067695	001	NORTHSTAR STEEL	P. PROMELAS	8			15				NO SIG. EFFECT	NO CHRONIC
193	TX 0067695	001	NORTHSTAR STEEL	SELENASTRUM	4			61	56	25	12	CHV=17%	NO CHRONIC
194	TX 0068934	001	MOBIL CHEMICAL	D. PULEX	1			0				NO EFFLUENT CHEMISTRY	NO ACUTE
195	TX 0068934	001	MOBIL CHEMICAL	P. PROMELAS	1			0	0			-	NO ACUTE

FACILITY/RECEIVING WATER INFORMATION													EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS							
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMH/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)	pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO
							MEAN	7010	MEAN	MAX.										(MG/L OR % SAT.)
1196	TX 0068934	001	MOBIL CHEMICAL	2821	BEAUMONT	WILLOW MARSH BAYOU	146	27	0.45	0.79	46.58	30-Jun-87	0	950	82	34	7.3	(0.1	(0.1	8.2
1197	TX 0068934	001	MOBIL CHEMICAL	2821	BEAUMONT	WILLOW MARSH BAYOU	146	27	0.45	0.79	46.58	30-Jun-87	0	950	82	34	7.3	(0.1	(0.1	90%
1198	TX 0072982	001	HOLLY FARMS	2016	CENTER	PRAIRIE CR./TENAHIA CR.	159.65	6.8	0.62	1.06	12.36	10-Feb-87	1	1100	124	121	6.8	0.4	(0.1	87%
1199	TX 0072982	001	HOLLY FARMS	2016	CENTER	PRAIRIE CR./TENAHIA CR.	159.65	6.8	0.62	1.06	12.36	10-Feb-87	1	1100	124	121	6.8	0.4	(0.1	7.6
1200	TX 0076996	001	CAIN CHEMICAL	2824	CORPUS CHRISTI	C.C. INNER HARBOR			1.3	2.48	8	16-Feb-88	0	4000			8.2	0.2	1.8	97%
1201	TX 0076996	001	CAIN CHEMICAL	2824	CORPUS CHRISTI	C.C. INNER HARBOR			1.3	2.48	8	16-Feb-88	0	4000			8.2	0.2	1.8	93%
1202	TX 0084409	002	DENKA CHEMICAL	2822	HOUSTON	SIMS BAYOU TO HSC					30	17-Oct-85	4	9000	185	600	8.5			8.6
1203	TX 0085570	001	FORMOSA PLASTICS	2869	POINT COMFORT	TRIB. TO COX CREEK			1.37	1.98	15	15-Apr-87	7	8500			8.3	(0.1	0.8	87%
1204	TX 0088170	001	NEW BRAUNFELS	4952	NEW BRAUNFELS	GUADALUPE RIVER	837	340.44	2.07	5.74	0.38	12-Aug-87	0	1400	368	139	7.9	1	(0.1	92%
1205	TX 0088170	001	NEW BRAUNFELS	4952	NEW BRAUNFELS	GUADALUPE RIVER	837	340.44	2.07	5.74	0.38	12-Aug-87	0	1400	368	139	7.9	1	(0.1	8
1206	TX 0088781	001	HI-TEK POLYMERS	2833	VERNON	PEASE R. TO RED R.	102.15	0.2	0.32	0.76	71.26	14-Sep-87	2	5000	280	740	8.1	(0.1	(0.1	8.1
1207	TX 0088781	001	HI-TEK POLYMERS	2833	VERNON	PEASE R. TO RED R.	102.15	0.2	0.32	0.76	71.26	14-Sep-87	2	5000	280	740	8.1	(0.1	(0.1	91%
1208	TX 0089125	001	EXXON CHEMICAL	2821	MONT BELVIEW	CEDAR BAYOU		0.27	0.64	0.38	78.61	02-Jun-87	2	2200	210	58	7.4	0.3	(0.1	8
1209	TX 0089125	001	EXXON CHEMICAL	2821	MONT BELVIEW	CEDAR BAYOU		0.27	0.64	0.38	78.61	02-Jun-87	2	2200	210	58	7.4	0.3	(0.1	
1210	TX 0089125	001	EXXON CHEMICAL	2821	MONT BELVIEW	CEDAR BAYOU		0.27	0.64	0.38	78.61	02-Jun-87	2	2200	210	58	7.4	0.3	(0.1	93%

EFFLUENT TOXICITY											COMMENTS	
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH LC50			MORTALITY IN 100% EFFLUENT	DECHLORINATED EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS
					DAYS	24H	48H	CHRONIC				
1196	TX 0068934	001	MOBIL CHEMICAL	D. PULEX	2			5			-	NO ACUTE
1197	TX 0068934	001	MOBIL CHEMICAL	P. PROMELAS	8			30		25	CI=17%	NO CHRONIC
1198	TX 0072982	001	HOLLY FARMS	P. PROMELAS	8			35	30	100	CI=71%; NOTE: SIGNIFICANT MORT. IN DECHL. EFFL.	NO CHRONIC
1199	TX 0072982	001	HOLLY FARMS	D. PULEX	2	24	22	100	40		CI:20-22(24H); 19-26(48H)	YES ACUTE
1200	TX 0076996	001	CAIN CHEMICAL	D. PULEX	2		40	100	100		CI:32-51; SIG. MORT. IN 30-100% EFFL.	NO ACUTE
1201	TX 0076996	001	CAIN CHEMICAL	P. PROMELAS	8			52	100	50	CI=35%	NO CHRONIC
1202	TX 0084409	002	DENKA CHEMICAL	D. PULEX	2	55	55	100	100		CI:48-64(24 & 48H); 100% MORT. IN 4 o/oo CONTROL	YES CHRONIC
1203	TX 0085570	001	FORMOSA PLASTICS	C. VARIEGATUS	8			67	100	100	CI=71%	YES CHRONIC
1204	TX 0088170	001	NEW BRAUNFELS	P. PROMELAS	8			57	90	50	CI=71%; NOTE MORT. IN DECHL. EFFL.	NO CHRONIC
1205	TX 0088170	001	NEW BRAUNFELS	D. PULEX	2	15	12	100	40		CI:11-20(24H); 8-17(48H); MORT. IN DECHL. EFFL.	NO ACUTE
1206	TX 0088781	001	HI-TEK POLYMERS	D. PULEX	2			15			NO SIG. MORT.	NO ACUTE
1207	TX 0088781	001	HI-TEK POLYMERS	P. PROMELAS	8			20		100	CI=71%; SIG. MORT. IN 100% EFFL.	NO CHRONIC
1208	TX 0089125	001	EXXON CHEMICAL	D. PULEX	2			5	0		-	NO ACUTE
1209	TX 0089125	001	EXXON CHEMICAL	SELENASTRUM	4			44	38	100	CI=71%	YES ACUTE
1210	TX 0089125	001	EXXON CHEMICAL	P. PROMELAS	8			10	5		NO SIG. EFFECT	NO CHRONIC

FACILITY/RECEIVING WATER INFORMATION												EFFLUENT PHYSICAL/CHEMICAL CHARACTERISTICS									
#	NPDES #	OUT-FALL #	FACILITY NAME	SIC CODE	LOCATION (CITY)	RECEIVING WATER NAME	STREAM FLOW (CFS) (TENTATIVE)		PIPE FLOW (MGD)		IWC (%)	SAMPLE COLLECTION DATE	SALINITY (o/oo)	SPECIFIC CONDUCTANCE (UMHO/CM)	HARDNESS (MG/L AS CaCO3)	ALKALINITY (MG/L AS CaCO3)		pH (SU)	TOTAL RESID. CHLORINE (MG/L)	UNIONIZED NH3 (MG/L)	MINIMUM DO (MG/L)
							MEAN	7Q10	MEAN	MAX.						CaCO3	CaCO3		(MG/L)	(MG/L)	(MG/L)
211	TX 0089567	001	M.R. GRACE	2899	HOUSTON	HOUSTON SHIP CHANNEL			30	0.017		26-Aug-86	2	2300	60	170	7.8	<0.1	<0.1	8.4	
212	TX 0089567	001	M.R. GRACE	2899	HOUSTON	HOUSTON SHIP CHANNEL			30	0.017		26-Aug-86	2	2300	60	170	7.8	<0.1	<0.1	87%	

EFFLUENT TOXICITY											COMMENTS		
#	NPDES #	OUT-FALL #	FACILITY NAME	TEST SPECIES	TEST LENGTH IN DAYS	LC50			MORTALITY IN 100% EFFLUENT	CHRONIC EFFECT AS PERCENT EFFLUENT	NOTES: CI=95% CONFIDENCE INTERVAL AROUND LC50	POTENTIAL FOR INSTREAM EFFECTS	
						24H	48H	CHRONIC					
211	TX 0089567	001	W.R. GRACE	D. PULEX	2				5		-	NO ACUTE	
212	TX 0089567	001	W.R. GRACE	P. PROMELAS	7				10		-	NO CHRONIC	

APPENDIX B.

Relative Sensitivity of Effluent Toxicity Tests.

APPENDIX B.1.

Relative Sensitivity of 48 h Daphnia pulex, 8 d Fathead Minnow, and 96 h Algal (Selenastrum capricornutum) Toxicity Tests Conducted Concurrently for 38 Effluents.

NPDES #	FACILITY NAME	SAMPLE DATE	LC/EC50			SUSPECTED TOXICANT(S)
			DAPHNIA (48H)	MINNOW (8D)	ALGA (96H)	
AR 0001449	001 AT&T TELETYPE	20-May-87	NSE	NSE	NSE	
AR 0034321	001 HARRISON	05-May-87	<6	61	<6	NH3/CL2/OTHER
AR 0035645	001 GLENWOOD	21-Jul-87	27	46	31	CL2/OTHER
LA 0000191	001 SEQUOYAH FUEL	11-Aug-87	NSE	NSE	36	?
LA 0000752	001 UNIROYAL CHEMICAL CO.	11-Aug-87	5	<25	<6	pH/OTHER
LA 0003301	001 DOW CHEMICAL	15-Jul-87	NSE	NSE	*	?
LA 0003301	321 DOW CHEMICAL	15-Jul-87	NSE	NSE	~100	?
LA 0003301	511 DOW CHEMICAL	15-Jul-87	NSE	NSE	*	pH
LA 0003301	521 DOW CHEMICAL	15-Jul-87	<12	--	~100	SALINITY/pH/CL2
LA 0006131	001 TECHNIGRAPHICS	04-Aug-87	NSE	NSE	~100	SALINITY ?
LA 0006831	001 BELLE CHASSE WATER WORKS	22-Jul-87	NSE	NSE	24	?
LA 0007561	001 INTERNATIONAL PAPER	19-May-87	NSE	36	11	ORGANICS ?
LA 0007854	001 IMC	19-May-87	16	8	46	NH3
LA 0007854	002 IMC	19-May-87	36	4	<6	NH3
LA 0020087	001 OBERLIN	21-Jul-87	NSE	NSE	<12	?
LA 0029769	001 AGRICO	02-Feb-88	NSE	--	94	NH3
LA 0032417	001 ATLAS PROCESSING	17-Nov-87	*	47	NSE	?
LA 0038091	001 NEW ORLEANS	08-Dec-87	<6	27	<3	CL2/NH3
LA 0046477	001 JONESBORO	23-Jun-87	NSE	87	11	NH3
LA 0056651	001 INTERNATIONAL PAPER	02-Nov-87	--	36	*	NH3
OK 0001031	001 VISTA POLYMER	10-Feb-88	NSE	NSE	NSE	
OK 0001261	001 EAGLE PICHER	09-Jun-87	<6	11	<3	CL2
OK 0022616	001 GUYMON-SWIFT PLANT	27-Oct-87	--	64	53	?
OK 0027553	001 OKLA. CITY-CHISHOLM CRK	09-Feb-88	NSE	NSE	NSE	
TX 0000353	001 GENERAL DYNAMICS	13-Jul-87	NSE	NSE	*	METALS ?
TX 0000892	001 BELL HELICOPTER	13-Jul-87	<1	31	28	COPPER
TX 0003891	001 TEMPLE-EASTEX	26-Jan-88	NSE	--	NSE	NH3
TX 0006025	101 CELANESE CHEMICAL	02-Feb-87	45	NSE	<6	ORGANICS ?
TX 0006025	001 CELANESE CHEMICAL	21-Sep-87	NSE	NSE	37	METALS ?
TX 0009075	001 PHILLIPS PETROLEUM	02-Jun-87	16	33	20	NH3/CL2
TX 0025429	001 USAF-SHEPPARD AFB	03-Aug-87	37	~100	24	CL2/OTHER
TX 0026751	001 EL PASO-HASKELL	19-Jan-88	<6	--	<6	NH3/CL2
TX 0047058	001 CORPUS CHRISTI-OSO	09-Jun-87	17	70	6	NH3/CL2/OTHER
TX 0047104	001 CORPUS CHRISTI-LM	09-Jun-87	9	66	14	NH3/CL2/OTHER
TX 0047309	001 GALVESTON-MAIN	17-Apr-87	--	NSE	*	CL2
TX 0052825	001 PENNWALT CORP.	19-Aug-87	20	35	92	?
TX 0067695	001 NORTHSTAR STEEL	19-Aug-87	NSE	NSE	61	?
TX 0089125	001 EXXON CHEMICAL	02-Jun-87	NSE	NSE	*	CL2/OTHER

NSE=NO SIGNIFICANT TOXIC EFFECT

*=SIGNIFICANT TOXIC EFFECT IN 100% OR LOWER EFFLUENT DILUTION

--=NOT TESTED

APPENDIX B.2.

Relative Sensitivity of 48 h *Daphnia pulex* and 8 d Fathead Minnow Toxicity Tests Conducted Concurrently for 96 Effluents.

NPDES #	FACILITY NAME	DATE	LC/EC50		SUSPECTED TOXICANT(S)	MOST SENSITIVE
			DAPHNIA (48H)	MINNOW (8D)		
AR 0000523	002 STRATEGIC MINERALS	25-Feb-86	44	NSE	VANADIUM	DAPHNIA
AR 0000680	GREAT LAKES CHEMICAL	23-Sep-86	67	73	ORGANICS ?	DAPHNIA
AR 0001236	001 BTL SPECIALTY RESINS	29-Oct-86	70	28	NH3	MINNOW
AR 0001236	001 BTL SPECIALTY RESINS	16-Mar-88	27	8	NH3	MINNOW
AR 0001678	002 USA-PINE BLUFF ARSENAL	19-Oct-87	36	46	NH3	DAPHNIA
AR 0003018	TYSON FOODS	22-Feb-88	18	56	CL2	DAPHNIA
AR 0020702	001 BATESVILLE	29-Mar-88	NSE	93	CL2	MINNOW
AR 0033278	001 FORT SMITH-P STREET	31-May-88	83	76	NH3	MINNOW
AR 0033375	001 STERLING FAUCET	22-Jul-85	NSE	56	METALS	MINNOW
AR 0033375	001 STERLING FAUCET	21-Apr-86	NSE	-100	METALS	MINNOW
AR 0033766	001 PARAGOULD	09-Sep-87	NSE	-100	NH3	MINNOW
AR 0034380	001 STUTTGART	19-Oct-87	NSE	17	NH3	MINNOW
AR 0034452	001 USA-FORT CHAFFEE	31-May-88	NSE	59	CL2/OTHERS	MINNOW
LA 0000493	001 REICHHOLD CHEMICAL	05-Dec-86	73	13	ORGANICS OR H2S	MINNOW
LA 0000841	001 EXXON CORP.	03-Dec-86	47	60	NH3	DAPHNIA
LA 0003549	005 USA-LOU. ARMY AMMO. PLT	29-Feb-88	NSE	23	?	MINNOW
LA 0003689	001 HIMONT-HERCULES	04-Mar-86	71	87	NH3/SALINITY	DAPHNIA
LA 0003735	007 LAKE CHARLES CARBON	21-Apr-86	NSE	NSE		SAME
LA 0003824	001 FIRESTONE	16-Feb-88	*	NSE	?	DAPHNIA
LA 0004154	001 COLUMBIA CHEMICAL	27-Aug-87	NSE	NSE		SAME
LA 0005258	001 GEORGIA PACIFIC	11-Aug-87	NSE	57	NH3	MINNOW
LA 0005941	003 CITGO CITIES SERVICE	04-Mar-86	81	25	NH3	MINNOW
LA 0005991	001 KAISER ALUMINUM	14-Sep-87	44	52	NH3	DAPHNIA
LA 0006041	001 TEXACO	11-Feb-86	NSE	91	?	MINNOW
LA 0007579	005 LOU. POWER & LIGHT	23-Jun-86	NSE	NSE		SAME
LA 0007684	005 STONE CONTAINER	16-Jul-86	NSE	NSE		SAME
LA 0052370	001 CALCASIEU REFINING	17-Feb-88	79	*	NH3/SALINITY	DAPHNIA
LA 0059153	001 CECOS INTERNATIONAL	20-Oct-86	NSE	NSE		SAME
OK 0000531	001 ALLIED MATERIALS	10-Jun-88	NSE	100	NH3/CL2	MINNOW
OK 0000744	001 MEYERHAUSER	08-Feb-88	79	47	NH3	MINNOW
OK 0000795	001 TYSON FOODS	19-Nov-86	68	4	NH3	MINNOW
OK 0000809	001 USAF-TINKER AFB	30-Jul-86	32	37	CL2/OTHER	DAPHNIA
OK 0000809	001 USAF-TINKER AFB	17-Aug-87	<6	30	CL2/OTHER	DAPHNIA
OK 0026701	001 CUSHING-SOUTH STP	20-Jun-88	*	NSE	?	DAPHNIA
OK 0026841	001 MIDWEST CITY-NORTHSIDE	12-Apr-88	27	25	CL2/OTHERS	MINNOW
OK 0027931	001 MOORE	17-Aug-87	9	56	CL2	DAPHNIA
OK 0029131	001 MUSKOGEE	20-Oct-87	29	36	CL2/OTHERS	DAPHNIA
OK 0030295	001 USA-FORT SILL	04-Dec-86	3	28	CL2/OTHERS	DAPHNIA
OK 0030295	001 USA-FORT SILL	29-Mar-88	<3	17	CL2	DAPHNIA
OK 0035246	001 LAWTON	29-Mar-88	21	NSE	CL2	DAPHNIA
TX 0000353	001 GENERAL DYNAMICS	10-Sep-86	3	21	NH3/CL2	DAPHNIA
TX 0000892	001 BELL HELICOPTER	18-Aug-86	12	72	COPPER	DAPHNIA
TX 0003522	001 AMOCO OIL CO.	10-Aug-87	36	20	NH3	MINNOW
TX 0004871	007 SHELL OIL CO.	30-Jul-86	NSE	NSE		SAME
TX 0006025	101 CELANESE CHEMICAL	02-Feb-87	45	NSE	METALS ?	DAPHNIA
TX 0007056	001 U.S. GYPSUM CO.	21-Jul-86	NSE	NSE		SAME
TX 0007439	001 SDS BIOTECH	29-Jun-87	93	73	?	MINNOW
TX 0007889	001 USN-CORPUS CHRISTI NAS	23-Jul-86	6	85	CL2	DAPHNIA
TX 0007889	001 USN-CORPUS CHRISTI NAS	15-Sep-87	12	69	CL2	DAPHNIA
TX 0009148	001 PHILLIPS 66 CO.	14-Oct-87	NSE	54	ORGANICS ?	MINNOW
TX 0009181	001 SID RICHARDSON	14-Oct-87	NSE	76	ORGANICS ?	MINNOW
TX 0022608	001 USAF-LAUGHLIN AFB	30-Nov-87	NSE	52	NH3	MINNOW
TX 0023001	001 VERNON	14-Sep-87	<12	30	CL2/OTHERS	DAPHNIA
TX 0024228	001 STEPHENVILLE	08-Dec-87	7	26	NH3/CL2	DAPHNIA
TX 0024368	001 JASPER	02-Mar-88	69	8	CL2/OTHERS	MINNOW
TX 0024678	001 GARLAND-DUCK CREEK	11-Sep-87	NSE	NSE		SAME
TX 0024686	001 GARLAND-ROWLETT CREEK	11-Sep-87	9	31	NH3/CL2/OTHERS	DAPHNIA
TX 0047074	001 CORPUS CHRISTI-WESTSIDE	25-Aug-87	<3	14	CL2	DAPHNIA
TX 0047082	001 CORPUS CHRISTI-ALLISON	25-Aug-87	NSE	NSE		SAME
TX 0068934	001 MOBIL CHEMICAL	30-Jun-87	NSE	*	?	MINNOW
TX 0072982	001 HOLLY FARMS	10-Feb-87	22	*	CL2	DAPHNIA
TX 0076996	001 CAIN CHEMICAL	16-Feb-88	40	52	NH3/CL2	DAPHNIA
TX 0088170	001 NEW BRAUNFELS	12-Aug-87	12	57	CL2/OTHERS	DAPHNIA
TX 0088781	001 CELANESE	14-Sep-87	NSE	*	?	MINNOW
TX 0089567	001 W.R. GRACE	26-Aug-86	NSE	NSE		SAME

NSE=NO SIGNIFICANT TOXIC EFFECT

*=SIGNIFICANT TOXIC EFFECT IN 100% OR LOWER EFFLUENT DILUTION

APPENDIX C.

Relative Toxicity of Industrial and Municipal Discharges.

APPENDIX C.1: PLASTICS MATERIALS AND RESINS (SIC CODE 2821)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES				TOTALS	
		AR	LA	OK	TX	NO.	PERCENT
Daphnia pulex 24-48h acute	NONTOXIC		1	1	8	10	67 %
	LOW	1	1			2	13 %
	MEDIUM	1	2			3	20 %
	HIGH						
Pimephales promelas 8d Chronic	NONTOXIC		1	1	3	5	50 %
	LOW		2		1	3	30 %
	MEDIUM	1				1	10 %
	HIGH	1				1	10 %
Ceriodaphnia dubia 7d Chronic	NONTOXIC		1		2	3	75 %
	LOW				1	1	25 %
	MEDIUM						
	HIGH						
Selenastrum capricornutum 96h chronic	NONTOXIC			1		1	50 %
	LOW				1	1	50 %
	MEDIUM						
	HIGH						

APPENDIX C.2: INDUSTRIAL ORGANIC CHEMICALS (SIC CODE 2869)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES				TOTALS	
		AR	LA	OK	TX	NO.	PERCENT
Daphnia pulex	NONTOXIC	3	6		3	12	46 %
24-48h acute	LOW		2		4	6	23 %
	MEDIUM				2	2	8 %
	HIGH	2	4			6	23 %
Pimephales	NONTOXIC		4		2	6	55 %
promelas 8d	LOW				4	4	36 %
Chronic	MEDIUM						
	HIGH		1			1	9 %
Selenastrum	NONTOXIC						
capricornutum	LOW		4			4	57 %
96h chronic	MEDIUM				1	1	14 %
	HIGH		1		1	2	29 %
Cyprinodon	NONTOXIC				6	6	38 %
variegatus	LOW		6		2	8	50 %
8d chronic	MEDIUM		1			1	6 %
	HIGH	1				1	6 %
Mysidopsis	NONTOXIC				1	1	17 %
bahia or almyra	LOW				2	2	33 %
48h acute	MEDIUM						
	HIGH		2		1	3	50 %

APPENDIX C.3: PETROLEUM REFINING (SIC CODE 2911)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES				TOTALS	
		AR	LA	OK	TX	NO.	PERCENT
Daphnia pulex 24-48h acute	NONTOXIC	2	6	6	5	19	72 %
	LOW		3	2		5	19 %
	MEDIUM				2	2	7 %
	HIGH				1	1	3 %
Pimephales promelas 8d Chronic	NONTOXIC	2	1		1	4	33 %
	LOW		2	1	1	4	33 %
	MEDIUM		2		1	3	25 %
	HIGH				1	1	8 %
Selenastrum capricornutum 96h chronic	NONTOXIC		1				50 %
	LOW						
	MEDIUM						
	HIGH				1		50 %

APPENDIX C.4: PLATING AND POLISHING (SIC CODE 3471)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES				TOTALS	
		AR	LA	OK	TX	NO.	PERCENT
Daphnia pulex 24-48h acute	NONTOXIC	3		2	2	7	58 %
	LOW						
	MEDIUM			1		1	8 %
	HIGH			2	2	4	33 %
Pimephales promelas 8d Chronic	NONTOXIC						
	LOW	3			2	5	63 %
	MEDIUM			2	1	3	38 %
	HIGH						
Cyprinodon variegatus 8d chronic	NONTOXIC				1	1	50 %
	LOW				1	1	50 %
	MEDIUM						
	HIGH						

APPENDIX C.5: MUNICIPAL SEWAGE TREATMENT PLANTS (SIC CODE 4952)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES					TOTALS*				
		AR	LA	NM	OK	TX	NO.	PERCENT	TAD	DNT	CND
Daphnia pulex 24-48h acute	NONTOXIC	6	3		9	7	25	30 %			
	LOW	1	2		1	2	6	7 %	1	1	1
	MEDIUM	1			2	3	6	7 %			
	HIGH	5	5	3	6	26	45	55 %	6	6	
Pimephales promelas 8d Chronic	NONTOXIC		1		3	3	7	26 %			
	LOW	4	1		2	2	9	33 %	3		4
	MEDIUM	1	1		2	3	7	26 %	5		
	HIGH	2				2	4	15 %	1	1	1
Ceriodaphnia dubia 7d chronic	NONTOXIC										
	LOW										
	MEDIUM										
	HIGH	2			1		3	100 %	1	1	
Selenastrum capricornutum 96h chronic	NONTOXIC					1	1	8 %			
	LOW		1		1		2	17 %			2
	MEDIUM	1				1	2	17 %		1	
	HIGH	1	3			3	7	58 %	3		2

*TAD=NUMBER OF EFFLUENT SAMPLES TOXIC AFTER DECHLORINATION

DNT=NUMBER OF DECHLORINATED EFFLUENT SAMPLES NOT TESTED FOR TOXICITY

CND=NUMBER OF SAMPLES WHERE TOTAL RESIDUAL CHLORINE WAS NOT DETECTED

APPENDIX C.6: FEDERAL FACILITIES (SIC CODE 9711)

TEST	RELATIVE TOXICITY	NUMBER OF SAMPLES				TOTALS*				
		AR	LA	OK	TX	NO.	PERCENT	TAD	DNT	CND
Daphnia pulex 24-48h acute	NONTOXIC	2	2		3	7	50 %			
	LOW									
	MEDIUM				1	1	7 %	1		
	HIGH					6	43 %	1		
Pimephales promelas 8d Chronic	NONTOXIC									
	LOW	1	1		3	5	63 %	2	1	2
	MEDIUM			1		1	13 %	1		
	HIGH			2		2	25 %	1		

*TAD=NUMBER OF EFFLUENT SAMPLES TOXIC AFTER DECHLORINATION

DNT=NUMBER OF DECHLORINATED EFFLUENT SAMPLES NOT TESTED FOR TOXICITY

CND=NUMBER OF SAMPLES WHERE TOTAL RESIDUAL CHLORINE WAS NOT DETECTED