

TULANE LAW SCHOOL

Tulane Environmental Law Clinic

December 4, 2003

Via Certified Mail, Return Receipt Requested

No. 7002 2410 0000 6421 9343
Dan H. Zivney
Refinery Manager
Chalmette Refining, L.L.C.
P.O. Box 1007
Chalmette, LA 70044

No. 7002 2410 0000 6421 9350
Corporation Service Company
Registered Agent
320 Somerulos St.,
Baton Rouge, LA 70802-6129

Re: Notice of Violation Pursuant to Clean Air Act § 304(b)(1)(A); the Emergency Planning and Community Right-To-Know Act § 326(d)(1); 40 C.F.R. pt. 54, and 40 C.F.R. pt. 374 (“Prior Notice of Citizen Suits”).

Dear Mr. Zivney:

On behalf of the St. Bernard Citizens for Environmental Quality (“St. Bernard Citizens”) and the Louisiana Bucket Brigade (“LABB”), this letter provides Chalmette Refining, L.L.C. with notice of violations, and prior notice of a potential citizen enforcement suit under Clean Air Act § 304(a)(1)¹ and Emergency Planning and Community Right to Know Act (“EPCRA”) § 326(a)(1)(A).² These sections authorize citizens to respond to Clean Air Act and EPCRA violations with enforcement suits for injunctive relief and civil penalties.

This Notice focuses on four categories of violations: **(1)** violations of emission limits for Sulfur Dioxide, Nitrogen Dioxide, Nitrogen Oxide, Volatile Organic Compounds, and other harmful pollutants, **(2)** violations of permitted continuous emission limits for benzene, **(3)** violations of performance standards and permit limits for flare units, and **(4)** violations of reporting requirements. Examples of these four categories of violations are provided below for illustrative purposes and not by way of limitation. Chalmette Refining, L.L.C. (“Chalmette Refining” or “the Refinery”) is the person responsible for the violations. The violations were and are located at the Chalmette Refining, L.L.C. oil refinery at 5500 W. St. Bernard Highway, Chalmette, Louisiana 70043. Although this letter cites for purposes of illustration violations that occurred on and after March 12, 2001, based on information and belief, such violations began at

¹ 42 U.S.C. § 7604(a)(1).

² 42 U.S.C. § 11046(a)(1)(A).

Chalmette Refining before that date and are ongoing. This Notice includes all violations discussed in this letter and all releases and reporting failures listed on "Attachment B" to this letter, which is incorporated by reference. A notation that a report is "not in [an agency's] records" is an allegation of a failure to file a required report.

Introduction

Chalmette Refining jeopardizes the health and well-being of Chalmette residents by illegally emitting harmful pollutants into the air, including pollutants that the EPA classifies as Extremely Hazardous Substances under EPCRA.³ These pollutants are known to cause, *inter alia*, respiratory diseases, reproductive disorders, developmental disorders, nervous system disorders, cognitive disorders, cancer, and death. (See "Attachment A," which is incorporated by reference). The illegal pollution is especially dangerous because the Refinery is within one mile of twenty schools,⁴ two hospitals,⁵ and six retirement communities.⁶ Members of St. Bernard Citizens and LABB are residents of Chalmette whose health is at risk from breathing air that Chalmette Refining has contaminated, who are at constant risk of injury from explosions and chemical emergencies at the Refinery, and whose quality of life is damaged by the odors emanating from the Refinery.

³ EPA lists Extremely Hazardous Substances at 40 C.F.R. pt. 355 app. A. The Extremely Hazardous Substance list "was established by EPA to identify chemical substances which could cause serious irreversible health effects from accidental releases." Extremely Hazardous Substances List, 68 Fed. Reg. 52,978 (Sept. 8, 2003). Chalmette Refining illegally emits Extremely Hazardous Substances including Benzene, Hydrogen Sulfide, Sulfur Dioxide, Nitrogen Dioxide, Nitrogen Oxide, Toulene, and Xylene.

⁴ E.g., Letter from Chalmette Refining to the St. Bernard Parish Emergency Planning Committee Regarding the Continuous Release of Nitrogen Oxide and Nitrogen Dioxide (June 19, 2003). (Alice M. Harte Elementary School (5/6 mile), Andrew Jackson High School (2/5 mile), Arabi Elementary School (1 mile), Archbishop Hannan Junior/High School (9/10 mile), Carolyn Park School (1 mile), C.F. Rowley Elementary School (1/5 mile), Chalmette Christian Academy (2/3 mile), Chalmette High School (1/4 mile), Chalmette Middle School (1/4 mile), Classique Montessori School (<1/10 mile), Edna Carr Magnet School (5/6 mile), Joseph Davies Elementary School (9/10 mile), Julius Rosenwald Accelerated School (2/5 mile), LaCoste Elementary School (1/4 mile), Our Lady of Prompt Succor Parish School (1/10 mile), N.P. Trist Middle School (9/10 mile), St. Andrew the Apostle School (2/3 mile), St. Claude Heights School (9/10 mile), St. Mark Catholic School (1/2 mile), St. Robert Bellarmine School (5/6 mile).

⁵ Chalmette Medical Center (7/10 mile), Jo Ellen Smith Regional Medical Center (9/10 mile)).

⁶ Id. (Chalmette Medical Center SNF Nursing Home (7/10 mile), Huntington Place Senior Community (3/5 mile), Jo Ellen Smith Convalescent Center (9/10 mile), Mary Joseph Residence for the Elderly (7/8 mile), Our Lady of Wisdom Health Care Center (7/8 mile), St. Bernard Manor Retirement Home (5/6 mile)).

Chalmette Refining emits Benzene above permitted levels. Furthermore, the equipment at Chalmette Refining breaks down and causes emissions of pollutants above permitted levels. (See “Attachment B,” which is incorporated by reference). Since March 12, 2001, Chalmette Refining has emitted over 3,000,000 pounds of harmful pollutants in excess of its permitted hourly limits due to equipment failures. *Id.* The frequency of the equipment failures at Chalmette Refining indicates that they have become a regular part of doing business at the Refinery. Based on information and belief, hourly emissions violations began at Chalmette Refinery before March 12, 2001.

Chalmette Refining emits harmful pollutants directly into the atmosphere in part because flares at the Refinery often operate without flames. When equipment fails, the Refinery diverts hazardous gases and other substances from the equipment to the Refinery’s flares. These flares are supposed to burn the pollutants and transform them into less dangerous substances.⁷ But when the flares at the Refinery do not have flames, the pollutants are not burned. Even when the flares have flames, the large quantities of pollutants sent to them often prevents the pollution from being properly burned⁸ and causes the flares to smoke.⁹ Also, diverting pollutants from the failing equipment to the flares causes emissions that exceed the flares’ permitted levels.

Further, Chalmette Refining often does not report unauthorized discharges of Extremely Hazardous Substances and other pollutants to Federal and State authorities. (See “Attachment B”). By failing to properly report the discharges, the Refinery deprives Chalmette residents of any chance they might otherwise have to protect themselves from the dangerous releases.

Background

Congress enacted the Clean Air Act “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”¹⁰ Congress enacted EPCRA in response to the 1984 chemical disaster in Bhopal, India, where several thousand people died after a release of toxic gas from a pesticide plant.¹¹ The “primary goals of EPCRA are to provide the public access to

⁷ Environmental Integrity Project, Smoking Guns, (2002), at <http://www.rffund.org/eip/docs/SmokingGuns.pdf>.

⁸ *Id.* (“After proper flare destruction, byproducts from flares should be composed entirely of relatively innocuous components such as Carbon Dioxide (CO₂) and water (H₂O). More recent studies, however, suggest that incomplete combustion from flaring could actually be producing more hazardous air pollutants including volatile organic compounds and hydrocarbons.”).

⁹ *Id.* (stating that smoking flares indicate poor combustion and uncontrolled emissions).

¹⁰ Clean Air Act § 101(b)(1), 42 U.S.C. § 7401(b)(1).

¹¹ Lori May Peters, Reloading the Arsenal In the Informational War On Pollution—Citizens as Soldiers in the Fight and How a Lack of “Actionable” Legs on which to Stand Nearly Forced a Cease-Fire, 10 Vill. Envtl. L.J. 127, 127 n.1 (1999).

information concerning hazardous chemicals present in the community and to use this information ... to adopt local emergency response plans in the event of a hazardous chemical release.”¹²

Congress created the citizen-enforcement provisions in EPCRA and the Clean Air Act to provide citizens with independent authority to enforce legal standards to protect their own health and to prod governmental agencies into more active enforcement.¹³ Under the Clean Air Act, the St. Bernard Citizens and LABB have the authority to sue for current violations as well as past violations where there is evidence that the past violations were repeated.¹⁴

The Clean Air Act and EPCRA require that the St. Bernard Citizens and LABB wait to file an enforcement action for a period of 60 days after providing this notice.¹⁵ This waiting period gives the parties a reasonable time to resolve the matter cooperatively, without litigation. If Chalmette Refining, L.L.C. is interested in exploring a cooperative resolution of this lawsuit, it should contact the attorneys for the St. Bernard Citizens and LABB at the address and phone number provided below.

Under Clean Air Act § 304(a), the St. Bernard Citizens and LABB may file suit for injunctive relief and for civil penalties of up to \$27,500 per day for each Chalmette Refining violation of any “emission standard or limitation” under the Act.¹⁶ “Emission standards or limitations” include without limitation any condition or requirement of a Clean Air Act permit,

¹² Christopher L. Bell et. al., Environmental Law Handbook 733 (Thomas F. P. Sullivan ed., 17th ed. 2003).

¹³ Baughman v. Bradford Coal Co., 592 F.2d 215, 218 (3d Cir. 1979), cert. denied, 441 U.S. 961 (1979) (“Congress intended citizen suits to both goad the responsible agencies to more vigorous enforcement of the anti-pollution standards and, if the agencies remained inert, to provide an alternate enforcement mechanism.”); S. Rep. No. 1196, 91st Cong. 2nd Sess. 36-39, reprinted in Natural Resources Defense Council v. Train, 510 F.2d 692, 723 (D.C. Cir. 1974) (“Government initiative in seeking enforcement under the Clean Air Act has been restrained. Authorizing citizens to bring suits for violations of standards should motivate governmental agencies charged with the responsibility to bring enforcement and abatement proceedings.”).

¹⁴ 42 U.S.C. § 7604(a) (authorizing suit where a polluter “is alleged to be in violation” of a standard or order or “who is alleged to have violated [a standard or order]” if “there is evidence that the alleged violation has been repeated.”).

¹⁵ CAA § 304(b)(1)(A), 42 U.S.C. § 7604(b)(1)(A); EPCRA § 326(d)(1), 42 U.S.C. § 11046(d)(1).

¹⁶ 40 C.F.R. § 19.4.

any requirement of Clean Air Act §§ 111 and 112,¹⁷ any standard, limitation, or schedule established under subchapter V of the Clean Air Act or under Louisiana's plan for implementing the Federal Clean Air Act (the "state implementation plan").¹⁸

Also, under EPCRA § 326(a), the St. Bernard Citizens and LABB may file suit for injunctive relief and for civil penalties of up to \$27,500¹⁹ per violation for each day that Chalmette Refining fails to submit a follow-up emergency notice pursuant to EPCRA § 304.²⁰

Violations of Permitted Emission Limits for Sulfur Dioxide, Nitrogen Dioxide, Nitrogen Oxide, Volatile Organic Compounds, and Other Pollutants

Chalmette Refining violates its hourly permit emission limits for Sulfur Dioxide, Hydrogen Sulfide, Carbon Monoxide, Nitrogen Oxide, Volatile Organic Compounds ("VOCs"), Nitrogen Dioxide, and other harmful pollutants. For example, between March 12, 2001 and October 24, 2003, Chalmette Refining has had over 100 unauthorized discharges.²¹ (See "Attachment B"). During this period, the Refinery has emitted millions of pounds of harmful pollutants. For purpose of example only, Chalmette Refining emitted at least **2,450,460 pounds of Sulfur Dioxide** above permitted hourly levels between March 12, 2001 and October 24, 2003. In 2003 alone, Chalmette has so far **exceeded** permitted hourly emission levels by at least:

- 882,298 pounds of Sulfur Dioxide,
- 3,365 pounds of Hydrogen Sulfide
- 13,746.5 pounds of Nitrogen Oxide
- 1,277 pounds of Nitrogen Dioxide
- 17,011 pounds of Volatile Organic Compounds
- 21,362 pounds of Benzene
- 1,321 pounds of Hydrocarbons

These unauthorized discharges result from Chalmette Refining's failure to prevent malfunctions and other improper functioning of various equipment, including but not limited to

¹⁷ 42 U.S.C. §§ 7411-7412.

¹⁸ 42 U.S.C. § 7604(f).

¹⁹ Civil Monetary Penalty Inflation Adjustment Rule, 61 Fed. Reg. 69,360, 69,364 (Dec. 31, 1996).

²⁰ 42 U.S.C. § 11004.

²¹ An "unauthorized discharge" is a "continuous, intermittent, or one-time discharge, whether intentional or unintentional, anticipated or unanticipated, from any permitted or unpermitted source which is in contravention of any provision of the Louisiana Environmental Quality Act . . . or of any applicable regulation, compliance schedule, variance, or exception of the administrative authority." LAC 33:I.3905.

Waste Gas Compressors, Hydrocracker Units, the Fluid Catalytic Cracking Unit, Cokers, the Hydrodesulfurization Unit, the Sulfur Recovery Unit, and the Alkylation Unit.

Although under some circumstances LAC 33:III.507.J provides an affirmative defense²² for discharges that are “upsets,” the defense does not excuse the excessive level of unauthorized discharges at the Refinery. An “upset” is a “situation arising from **sudden and reasonably unforeseeable events beyond the control of the owner or operator**. . . [requiring] immediate corrective action to restore normal operation and that **causes the source to exceed a technology-based emissions limitation** under the permit due to **unavoidable** increases in emissions attributable to the situation.” LAC 33:III.507.J.1 (emphasis added).

Unauthorized discharges are presumed to be preventable because in “any enforcement proceeding, the owner and operator seeking to establish the occurrence of an upset has the burden of proof.” LAC 33:III.507.J.3. The “upset” affirmative defense provision only applies “to actions for penalties, but not to actions for injunctive relief.” EPA, Memorandum on Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown, 2 (Sept. 20, 1999).

Chalmette Refining has admitted that various unauthorized discharges were caused by **preventable** malfunctions. Id. For purpose of example only, Chalmette Refining reported that the following unauthorized discharges were preventable:

- 134.32 pounds of Nitric Oxide and 14.92 pounds of Nitrogen Dioxide due to a malfunction of the Alkylation Unit on September 5, 2003.
- 309 pounds of Diesel due to a malfunction of a storage tank on January 18, 2003.
- 108 pounds of Benzene due to a malfunction of a storage tank on December 17, 2002.
- 21,511 pounds of Sulfur Dioxide and 954 pounds of Hydrogen Sulfide due to a malfunction of the Sulfur Plant on October 16, 2002.
- 359,287 pounds of Sulfur Dioxide and 954 pounds of Hydrogen Sulfide due to a malfunction at the Sulfur Recovery Unit on March 26, 2002.
- 199,061 pounds of Sulfur Dioxide and 504 pounds of Hydrogen Sulfide due to a malfunction of the Sulfur Plant on December 17 - 18, 2001.
- 44.5 pounds of Benzene due to a malfunction of piping on November 5, 2001.

²² EPA, Memorandum on Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown, 2 n.4 (Sept. 20, 1999) (“The term affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.”).

- 5,345 pounds of Sulfur Dioxide due to a malfunction of a Sulfur Recovery Unit on July 18, 2001.
- 3,092 pounds of Mixed Hydrocarbons due to a malfunction of the Fluid Catalytic Cracking Unit on July 7, 2001.
- 1,089 pounds of Benzene due to a malfunction of storage tanks on July 6 – 11, 2001.
- 621,075 pounds of Sulfur Dioxide and 1,656 pounds of Hydrogen Sulfide due to a malfunction of the Sulfur Recovery Unit on June 5 -6 2001.
- 2,415 pounds of Mixed Hydrocarbons due to a malfunction of the Alkylation Unit on June 11, 2001.

Moreover, in many of its incident reports, Chalmette Refining describes unauthorized discharges as “unpreventable” that are neither beyond the Refinery’s control nor reasonably unforeseeable. Many such emissions are caused by “**improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.**” LAC 33:III.507.J.1 (emphasis added). Therefore, these excess emissions caused by frequent “unpreventable” malfunctions at Chalmette Refining do not qualify as “upsets.” Id.

Chalmette Refining should be able to foresee and prevent many of its unauthorized discharges because there is a clear pattern of frequent malfunctions at the Refinery. (See “Attachment B”). “Frequent or reasonably preventable excess emissions would tend to indicate an underlying problem with the design, operating procedures or maintenance of a source and therefore should not be considered a malfunction.” Approval and Promulgation of State Implementation Plans; Michigan, 63 Fed. Reg. 8573, 8575 (Feb. 20, 1998). The “upset” defense is not available when the “excess emissions are . . . part of a recurring pattern indicative of inadequate design, operation, or maintenance.” EPA, Memorandum on Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown, 2 (Sept. 20, 1999).

Furthermore, the “upset” defense is not available when Chalmette violates reporting requirements for unauthorized releases:

An upset constitutes an affirmative defense [to an action for civil penalties for violating permit limitations] **provided** the owner or operator demonstrates through properly signed, contemporaneous operating logs or other relevant evidence that . . . [*inter alia*] . . . the owner or operator notified the permitting authority no later than two working days after the time emissions limitations were exceeded, using the reporting procedures outlined in LAC 33:I.ch.39.

LAC 33:III.507.J(d) (emphasis added). Chalmette Refining often violates reporting requirements for unauthorized discharges. (See **Violation of Unauthorized Discharge Reporting Requirements**, *infra*). For such discharges, Chalmette cannot invoke the affirmative defense for “upsets.” *Id.* Based on information and belief, such emissions violations began at Chalmette Refinery before March 12, 2001.

Violations of Permitted Emission Limits for Benzene

Chalmette Refining has violated permitted continuous emission limits for Benzene. Benzene emissions from storage tanks, including Tanks 200, 13001, and 13002 which store product-grade Benzene, continually and intermittently emit more Benzene into the air than the Refinery’s air permit allows. A July 17, 2003 Continuous Release Report submitted to St. Bernard Parish Emergency Planning Committee pursuant to EPCRA, 40 CFR 355.40 and CERCLA 40 CFR 302.8 indicates that Tanks 200, 13001, and 13002 emit 58 pounds per day **above** the Refinery’s permit of 68 pounds per day. This excess emission of benzene is 1.75 times the permitted limit.

Violations of Flare Performance Standards and Permit Levels

Chalmette Refining violates LAC 33:III.3003, which incorporates 40 C.F.R. pt. 60 subpt. J, “Standards of Performance for Petroleum Refineries.” Chalmette Refining recognizes that these standards currently apply to Flare Number 1 (“No. 1 Flare”) and Flare Number 2 (“No. 2 Flare”). Chalmette Refining, L.L.C., Revised Consolidated Part 70 Operating Permit Application, (Feb. 1999). But the Refinery violates these standards. For example, Chalmette Refining violates 40 C.F.R. § 60.18(c)(2), which states that flares “shall be operated with a flame present at all times.” For purpose of illustration only, between July 16, 2002 and January 15, 2003, the monitor did not detect the presence of a flame at the No. 1 Flare for 326.23 hours (13.59 days).

Chalmette also violates continuous monitoring requirements for determining whether flare units continuously have flames. 40 C.F.R. § 60.18(f)(2) states that the “presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.” 40 C.F.R. § 60.18(d) states that “Owners or operators of flares . . . shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.” For purpose of example only, between July 16, 2002 and January 15, 2003, there were 36 operating days where monitoring data for the No. 1 Flare was available for less than 75% of the time. In all, the Refinery did not have monitoring data for the No. 1 Flare for 474.2 hours (19.75 days) between July 16, 2002 and January 15, 2003.

Chalmette also violates 40 C.F.R. § 60.18(c)(1) which states that “[f]lares shall be designed for and operated with no visible emissions . . . except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.” Flares at Chalmette Refining repeatedly “smoke” in violation of the “no visible emissions” requirement.

Chalmette Refining also violates permit emission limits for the No. 1 Flare and the No. 2 Flare. These flares are each permitted to emit: 1.19 pounds per hour of particulate matter, 2.13 pounds per hour of Sulfur Dioxide, and 18.20 pounds per hour of Nitrogen Dioxide. But because

Chalmette Refining diverts large quantities of pollutants to the flares, the flares emit pollutants in excess of their permitted levels. Furthermore, malfunctions of the flare units themselves result in the emission of excess pollution in violation of the flares' permit limits.

Violation of Unauthorized Discharge Reporting Requirements, Annual Emissions Reporting Requirements, and EPCRA Reporting Requirements

Chalmette Refining violates reporting requirements for unauthorized discharges. The Refinery's permit states that if "for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Air Quality Division [with a written report] within five (5) days." Chalmette Refining Air Permit # 2500-00005-01, Louisiana Air Emission Permit General Conditions, Condition XI. The Refinery has repeatedly failed and upon information and belief will continue to fail to submit timely written reports of unauthorized discharges to the Air Quality Division.

The Refinery also violates unauthorized discharge reporting requirements contained in the Louisiana Environmental Regulatory Code.²³ The "unauthorized discharge of any air pollutant into the atmosphere shall be reported in accordance with the provisions of LAC 33:I, Chapter 39, Notification Regulations and Procedures for Unauthorized discharges." LAC 33:III.927. Chalmette Refining, L.L.C. has violated and upon information and belief will continue to violate LAC 33:III.3915, 3917, 3923, 3925, and 3927, which regulate the procedures for verbal and written notification of unauthorized discharges.

For unauthorized discharges that create an emergency condition, Chalmette Refining is required to give verbal notice to the Department of Public Safety within one hour and submit a written report to the Louisiana Department of Environmental Quality within seven calendar days of the discharge. LAC 33:I.3915, 3925. Chalmette Refining repeatedly fails to provide both verbal and written notification of unauthorized discharges that create an emergency condition.

An "emergency condition" is:

Any condition which could reasonably be expected to endanger the **health and safety of the public**, cause significant adverse impact to the land, water or **air environment**, or cause severe damage to property.

LAC 33.I.3905 (emphasis added). Between March 12, 2001 and November 1, 2003, Chalmette Refining has had over 100 emergency conditions in which it has emitted

²³ Louisiana's requirements must be at least as strict as Federal law because the Clean Air Act requires EPA to publish minimum reporting requirements for State-administered permit programs. Clean Air Act §§ 502(b)(2), 503(b)(2), 42 U.S.C §§ 7661a(b)(2), 7661b(b)(2). EPA's implementing regulations require "[p]rompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken." 40 C.F.R. § 70.6(a)(3)(iii)(B).

Extremely Hazardous Substances above the reportable quantities listed at 40 C.F.R. Part 355. Chalmette Refining repeatedly fails to submit unauthorized discharge reports for many of these incidents. Based on information and belief, Chalmette Refining committed such reporting violations well before March 12, 2001.

Chalmette Refining has also repeatedly failed to fulfill the verbal and written reporting requirements for unauthorized discharges that do *not* create an emergency condition. LAC 33:I.3917. Each unauthorized discharge at Chalmette Refining “must be evaluated individually and reported appropriately by the discharger.” LAC 33:I.3927.

Chalmette Refining also violates reporting requirements for unauthorized discharges (emergency and non-emergency) by failing to include in its incident reports all the information required by LAC 33:I.3925.B and LAC 33:I.3925.C. These omissions include, but are not limited to:

- Failure to include the time and date of verbal notification. LAC 33:I.3925.B.2.
- Failure to include “best estimate of amounts of any or all discharged pollutants, including methodology for calculations and estimates.” LAC 33:I.3925.B.5.
- Failure to include statement of actual or probable fate or disposition of the pollutant. LAC 33:I.3925.B.6.
- Failure to include a determination by Chalmette Refining of whether or not the discharge was preventable. LAC 33:I.3925.B.13.
- Failure to explain unpreventable discharges. LAC 33:I.3925.B.13.

Chalmette Refining has also failed to submit an Annual Emission Report pursuant to LAC 33:III.918 for the period of January 1, 2002 to December 31, 2002. The report is “to be submitted to the Office of Environmental Assessment, Environmental Evaluation Division by March 31st of each year.” Id.

Chalmette Refining also repeatedly violates EPCRA § 304 by failing to notify State authorities of releases of Extremely Hazardous Substances. (See “Attachment B”). Chalmette Refining is required to immediately notify the Louisiana Emergency Response Committee after the release of Extremely Hazardous Substances beyond reportable quantities. EPCRA § 304(b). The Refinery is also required to submit written follow up emergency notice “as soon as practicable after a release.” EPCRA § 304(c). Chalmette Refining frequently fails to give both verbal and written notification of releases of Extremely Hazardous Substances beyond reportable quantities.

Conclusion

If you believe that any portion of the Notice is in error or if you wish to discuss any portion of this Notice, please contact Adam Babich at the address and phone number listed below within the next 60 days.

The Persons Giving Notice and Identification of Counsel

The persons giving notice are:

St. Bernard Citizens for Environmental Quality
Kenneth Ford, President
P.O. Box 1386
Chalmette, LA 70044
Phone: (504) 271-4410

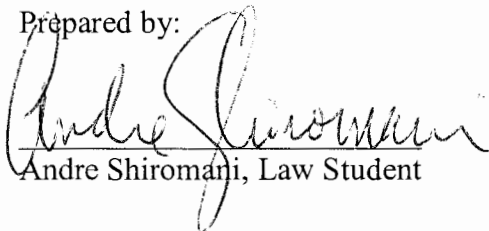
The Louisiana Bucket Brigade
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(504) 865-5789

All communications, however, should be through counsel:

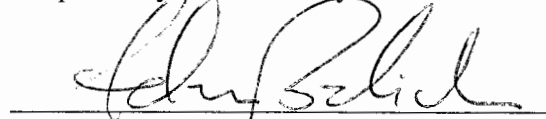
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TULANE ENVIRONMENTAL LAW CLINIC

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Enclosures

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“Attachment A”

Compiled by the Environmental Integrity Project.

By Congressional mandate, the Agency for Toxic Substances and Disease Registry (ATSDR) produces "toxicological profiles" for hazardous substances. The following information is taken from the agency's profiles.

Sulfur Dioxide: Exposure to very high levels of sulfur dioxide can be life threatening. Exposure to 100 parts of sulfur dioxide per million parts of air (100 ppm) is considered immediately dangerous to life and health. Burning of the nose and throat, breathing difficulties, and severe airway obstructions occurred in miners who breathed sulfur dioxide released as a result of an explosion in a copper mine.

Long-term exposure to persistent levels of sulfur dioxide can affect your health. Lung function changes were seen in some workers exposed to low levels of sulfur dioxide for 20 years or more. However, these workers were also exposed to other chemicals, so their health effects may not have been from sulfur dioxide alone. Asthmatics have also been shown to be sensitive to the respiratory effects of low concentrations of sulfur dioxide.

Animal studies also show respiratory effects from breathing sulfur dioxide. Animals exposed to high concentrations of sulfur dioxide showed decreased respiration, inflammation of the airways, and destruction of areas of the lung.

Children who live in or near heavily industrialized areas where sulfur dioxide occurs may experience difficulty breathing, changes in the ability to breathe deeply, and burning of the nose and throat. It is not known whether children are more vulnerable to these effects than adults. However, children may be exposed to more sulfur dioxide than adults because they breathe more air for their body weight than adults do.

Long-term studies surveying large numbers of children indicate that children who have breathed sulfur dioxide pollution may develop more breathing problems as they get older, may make more emergency room visits for treatment of wheezing fits, and may get more respiratory illnesses than other children. Children with asthma may be especially sensitive even to low concentrations of sulfur dioxide, but it is not known whether asthmatic children are more sensitive than asthmatic adults.

Hydrogen Sulfide: Hydrogen sulfide is considered a broad-spectrum poison, meaning it can poison several different systems in the body. Breathing very high levels of hydrogen sulfide can cause death within just a few breaths. There could be loss of consciousness after one or more breaths.

Exposure to lower concentrations can result in eye irritation, a sore throat and cough, shortness of breath, and fluid in the lungs. These symptoms usually go away in a few weeks. Long-term, low-level exposure may result in fatigue, loss of appetite, headaches, irritability, poor memory, and dizziness.

Because it is heavier than air, hydrogen sulfide tends to sink, and because children are shorter than adults, they may be more likely to be exposed to larger amounts than adults in the same situations.

The Occupational Safety and Health Administration (OSHA) has established an acceptable ceiling concentration of 20 parts per million (20 ppm) in the workplace, with a maximum level of 50 ppm allowed for 10 minutes if no other measurable exposure occurs.

The National Institute of Occupational Safety and Health (NIOSH) recommends a maximum exposure level of 10 ppm.

Benzene: Benzene is a colorless liquid with a sweet odor. Benzene evaporates into air very quickly and dissolves slightly in water. It is made mostly from petroleum sources. Brief exposure to very high levels of benzene in air (10,000-20,000ppm) can result in death. Lower levels (700-3,000 ppm) can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.

Benzene may produce problems related to blood. People who breathe benzene for long periods may experience harmful effects in the tissue that form blood cells, especially the bone marrow. These effects can disrupt normal blood production and cause a decrease in important blood components. A decrease in red blood cells can lead to anemia. Reduction in other components in the blood can cause excessive bleeding. Blood production may return to normal after exposure to benzene stops. Excessive exposure to benzene can be harmful to the immune system, increasing the chance for infection and perhaps lowering the body's defense against cancer.

Benzene can cause cancer of the blood-forming organs. The Department of Health and Human Services (DHHS) has determined that benzene is a known carcinogen. The International Agency for Cancer Research (IACR) has determined that benzene is a human carcinogen. Long-term exposure to relatively high levels of benzene in the air can cause cancer of the blood-forming organs. This condition is called leukemia. Exposure to benzene has been associated with development of a particular type of leukemia called acute myeloid leukemia (AML).

Exposure to benzene may be harmful to the reproductive organs. Some women workers who breathed high levels of benzene for many months had irregular menstrual periods. When examined, these women showed a decrease in the size of their ovaries. However, exact exposure levels were unknown, and the studies of these women did not prove that benzene caused these effects. It is not known what effects exposure to benzene might have on the developing fetus in pregnant women or on fertility in men. Studies with pregnant animals show that breathing benzene has harmful effects on the developing fetus. These effects include low birth weight, delayed bone formation, and bone marrow damage.

Volatile Organic Compounds (VOCs): VOCs contribute significantly to ground level ozone, a principal component of smog, which can cause significant health and environmental problems.

Examples of VOC's:

Hexane: The only people known to have been affected by exposure to n-hexane used it at work. Breathing large amounts caused numbness in the feet and hands, followed by muscle weakness in the feet and lower legs. Continued exposure led to paralysis of the arms and legs. If removed from the exposure, the workers recovered in 6 months to a year.

In laboratory studies, animals exposed to high levels of n-hexane in air had signs of nerve damage. Some animals also had lung damage. In other studies, rats exposed to very high levels of n-hexane had damage to sperm-forming cells.

Toulene: Toulene may affect the nervous system. Low to moderate levels can cause tiredness, confusion, weakness, drunken-type actions, memory loss, nausea, loss of appetite, and hearing and color vision loss. These symptoms usually disappear when exposure is stopped.

Inhaling high levels of toluene in a short time can make you feel light-headed, dizzy, or sleepy. It can also cause unconsciousness, and even death.

High levels of toluene may affect your kidneys.

Xylene: Xylene affects the brain. High levels from exposure for short periods (14 days or less) or long periods (more than 1 year) can cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Exposure of people to high levels of xylene for short periods can also cause irritation of the skin, eyes, nose, and throat; difficulty in breathing; problems with the lungs; delayed reaction time; memory difficulties; stomach discomfort; and possibly changes in the liver and kidneys. It can cause unconsciousness and even death at very high levels.

Studies of unborn animals indicate that high concentrations of xylene may cause increased numbers of deaths, and delayed growth and development. In many instances, these same concentrations also cause damage to the mothers. We do not know if xylene harms the unborn child if the mother is exposed to low levels of xylene during pregnancy.

“Attachment B”

Compiled by the Louisiana Bucket Brigade, the Environmental Integrity Project, and the Tulane Environmental Law Clinic.

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	LDEQ Incident Report
2003								(Verbal)
January								
01.14.03	Mixed Hydrocarbons	1,248	14 hours, 50 minutes	"Operations personnel found a once through heat exchanger leaking on the Hydrogen Fluoride Alkylation Unit."		Not in LEPD records.	X	
01.18.03	Diesel (Combustible Liquid)	309 lbs. (43 gallons)	Discovered 01.18.03 at 01:55 hours.	Leaking diesel line. Chalmette states: release/discharge preventable.		Not in LEPD records.	X	
01.27.03	SO2, H2S	SO2 - 500 H2S- 100	N/A	Mechanical failure in a valve in the refrigeration system at the Light Ends Plant (LEP).	"Did material go off-site?" Yes.	Not in LEPD records.	Not in LDEQ records.	X
February								
02.06.03	Gasoline range hydrocarbon	73.7 lbs. (12 gallons)	27 hours	No. 2 Dock Meter Station Pump had overflowed, releasing approximately 12 gallons onto the shoreline and into the river.		X	Not in LDEQ records.	
02.11.03	SO2	31,772	5 hours, 15 minutes	No. 2 Coker Wet Gas Compressor (K-810) tripped offline, automatically diverting the overhead gas to the No. 1 Flare.		X	Not in LDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	LDDEQ Incident Report
02.12.03	SO2	3,480	11 hours, 12 minutes	Elevated temperatures on K-406 were observed, indicative of potential imminent compressor failure.	Chalmette Refining received a variance on 02.13.03.	X	X	
02.21.03	H2S	539	1 hour, 20 minutes	* A yellow plume was seen discharging from the thermal oxidizer stack in Train II of the SRU. "	"There was no off-site impact, however, a single community complaint was received as a result of this release."	Not in LEPC records.	X	
02.22- 02.24.03	NO, NO2, SO2	NO - 3,885 NO2 - 269 SO2 - 908	70 hours, 10 minutes	A 1200-ampere breaker failed at the Waste Water Treatment Plant (WWTP), resulting in a loss of power to the north pond aerators.		Not in LEPC records.	X	
March								
03.01.03	Compressed flammable gas	3,238	22 hours	Hydrocarbon in the condensate from the Depropanizer Reboiler (E-7913 A) is possibly due to a Reboiler exchanger tube leak.		X	Not in LDDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	IDEO Incident Report
03.05 - 03.07.03	NO, NO2, SO2, H2S, VOCs	NO - 3,080 NO2 - 342 SO2 - 233,000 VOCs- 1,010 H2S- 620	Varies	Electrical power was interrupted to a large portion of the facility when a piece of switchgear at the facility failed. This affected a number of refinery units: the No. 1 Coker; the No. 1 Crude; the No. 1 Reformer; the Refrac Unit; the HDS Unit; the Sour Water Stripper (SWS); the First, Second, and Third Stage Paraxylene Units; the Sulfolane Unit; the W/WTP; and the Boilers.	Note: VOCs were not listed in IDEQ report. "There was no emergency condition; however, several community odor complaints were received as a result of this release..." "Community monitoring was conducted in the area downwind of the refinery for H2S, SO2, and VOC."	X	X	
03.06.03	NO, NO2, SO2	NO - 61 NO2 - 6.8 SO2 - 1,175.4	4 hours	First Stage Recycle Compressor shut-down on high vibration at Hydrocracker Unit. Second Stage was already down due to the power failure earlier that day.	Chalmette Refining rescinded notification for H2S.	X	X	
03.07 - 03.08.03	NO, SO2	NO - 31 SO2 - 890	Approx. 3 hours	Problems with No.4 and No.1 Gas Compressor. No. 4 overpressured, and diverted sweet-sour gas to No. 2 Flare.		X	X	
03.10- 03.15.03	NO	122.6	106 hours, 25 minutes	Contractor maintenance personnel were replacing studs on a 12 inch inlet flange on the Acid Re-Contactor (C-7917) in the Alkylation unit. The flange developed a leak.		X	X	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	IDEQ Incident Report
03.12.03	NO	31.5	35 minutes	Pressure spike was observed on the Fuel Drum (C-8701) at the Sulfolane Unit. The Fuel Drum relieved to the No. 2 Flare.		X	X	
03.17- 03.18.03	SO2	31,968	Varies	SRU Train I Auxiliary Burner and Reducing Gas Generator (RGG) tripped due to high SRU Train I system pressure.	On March 18, Train I of the MDEA System was taken off-line. On March 20, the MDEA Regenerator (C-8004) was heated to establish circulation in preparation for start-up.	X	X	
03.19- 03.20.03	SO2	4,208	1 hour, 9 minutes	Train I of the MDEA System was taken off-line following a high-pressure drop during start up of Train I of SRU.		X	X	
03.26- 03.27.03	NO, NO2, SO2	NO - 1,550 NO2 - 172 SO2 - 2,584	23.5 hours	Refinery lost portion of electrical power. Believed to have been the result of a lightning strike and/or unexpected failure of an electrical switchgear.		X	X	
03.29.03	SO2	4,223	Varies	Shut-down due to unstable SRU operation following a power failure on 03.26.03.		Not in LEPC records.	X	
April								

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	IDEQ Incident Report
04.07.03	SO2	2,370	15 hours, 50 minutes	No. 2 Coker Wet Gas Compressor (K-810) tripped on high suction temperature, automatically diverting the overhead gas to the No. 1 Flare.		Not in LEPC records.	X	
04.08.03	SO2	1,224	1 hour, 48 minutes	No. 1 Pretreater Reflux Pump (G-7504A) developed a seal leak. The spare pump could not be placed online due to a malfunction of the suction block valve.		Not in LEPC records.	X	
04.10 - 04.18.03	Benzene	20,795	Varies	allow for the non-routine emissions associated with removing tank from service for inspection and repair. While preparing to drain the tank, "the pontoons were inspected and the product was found."		Not in LEPC records.	X	
04.15 -05.1.03	Benzene	165	16 days	Benzene to Tank 52 while Tank 13002 was out of service for inspection and repairs (Variance obtained)	Report says that reportable quantity of 10 lbs was not exceeded after 4.22.03	X		
04.18.03	SO2	1,198	12 minutes	No. 2 Coker Wet Gas Compressor (K-810) tripped, automatically diverting the overhead gas to the No. 1 Flare		Not in LEPC records.	X	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPORA</u>	<u>Unauthorized Discharge Report</u>	<u>LDEQ Incident Report</u>
04.19.03	SO2	559	33 minutes	No. 1 Waste Gas Compressor (K-400) was down for repair. The No. 2 Waste Gas Compressor (K-401) tripped on high catalytic converter temperature		Not in LEPIC records.	X	
04.24.03	SO2	754	10 hours, 40 minutes	Regulator malfunction. SO2 was released to atmosphere through the Thermal Oxidizer stack of the Sulfur Recovery Unit (SRU)		X	Not In LDEQ records.	
04.25.03	Compressed flammable gas	2,772	28 minutes	Nitrogen and Ammonia used to purge the system caused the loss of the flame in No.1 Flare	The facility received a variance to allow for the "non-routine emissions" associated with depressuring the AES for inspection and repair	Not in LEPIC records.	Not in LDEQ records.	
04.28.03	SO2, NO	SO2 - 6360 NO - 22	4 hours, 22 minutes	Pressure control valve from No. 1 Prefac malfunctioned and was leaking, allowing Prefac off-gas to travel to the Waste Gas System as opposed to No. 2 Flare		X	Not in LDEQ records.	
04.29.03 May	SO2	1,123	1 hour, 42 minutes	Waste Gas Compressor tripped due to high converter temperature, automatically diverting the waste gas system to the No. 2 Flare		X	X	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPORA</u>	<u>Unauthorized Discharge Report</u>	<u>IDEQ Incident Report</u>
5.2.03	SO ₂ , NO	SO ₂ - 5,189 NO - 52	1 hour, 30 minutes	The HCU First Stage Recycle Compressor tripped due to low sea oil level. First Stage Heater Outlet Check Valve leaked and vapors ignited.	Fire	X	Not in IDEQ records.	
5.7.03	Benzene, Ethylbenzene, Hexane, Toluene, Mixed Xylenes	Benzene - 53 Ethylbenzene - 5 Hexane - 368 Toluene - 91 Mixed Xylenes - 32	2 hours, 20 minutes	Facility began filling Tank 2 following inspection and repair of the tank. Emissions during the filling were in excess of authorized emission quantities	Emissions exceeded the respective authorized quantities in the variance	X	Not in IDEQ records.	
5.12.03	NO, NO ₂ , SO ₂	NO - 184 NO ₂ - 21 SO ₂ - 2,352	5 hours, 33 minutes <u>Continuous</u>	Due to a power failure at the Fluid Catalytic Cracking Unit (FCCU), and again later that day due to emissions from the Hydrocracker Second Stage Heater (F-2302)	"Initial investigation has led Chalmette to suspect that the breaker trip was the result of a small animal traveling across the lightning arrester."	X	Not in IDEQ records.	
5.20.03	NO, NO ₂	Preliminary upper-bound emissions: NO 3432 lb/day, NO ₂ 382 lb/day. Preliminary estimate of average emissions: NO 410 lb/day, NO ₂ 45.7 lb/day	<u>Ongoing Release</u> "During normal refinery operations and certain maintenance activities, process vents and relief valves discharge flammable gases into the flare headers...NO and NO ₂ is formed as these gases are safely burned at the flare tips.	See June 19th Report		X	Not in IDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPICRA	Unauthorized Discharge Report	LDEQ Incident Report
5.22.03	NO, NO2, SO2	NO - 108 NO2 - 12 SO2 - 2,223	1 hour, 41 minutes; 1 hour	Shut down No. 4 Waste Gas Compressor (K-406) due to loose valve cover jacket. Chemicals released into atmosphere through No. 2 Flare		X	Not in LDEQ records.	
5.22.03	NO, SO2	NO - 72 SO2 - 5,940	13 minutes	Process safety valve (PSV) from Hydrocracker Unit (HGU) first Stage Stripper relieved to the No. 2 Flare		X	Not in LDEQ records.	
5.22.03	Propane/Polypropylene (PP) Mix	184	instantaneous	Tanker man was sprayed while disconnecting hose		X	Not in LDEQ records.	
5.25.03	NO, SO2	NO - 10.3 SO2 - 2,982	4 hours, 30 min	Waste Gas Compressor (K-406) was out for repairs. Sudden increase in pressure caused flare valve to open, diverting sour gas to the No. 2 Flare		X	Not in LDEQ records.	
June				Waste Gas Compressor (K-401) was shutdown for repairs. System was overpressured and automatically diverted waste gas to the No. 2 Flare	"Sweet Streams (no hydrogen sulfide) were routed to the flare to eliminate sour gas..."	X	Not in LDEQ records.	
6.4.03	NO	16	6 hours, 35 minutes	Butane loading. Back pressure to the Splitter. Vented to the No. 2 Flare (atmospheric release)		X	Not in LDEQ records.	
6.6.03	NO, NO2	NO - 135 NO2 - 15	37 minutes			X	Not in LDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	LDEQ Incident Report
6.6.03	Benzene	247	14 days	Benzene emissions were coming from the Cooling Water Towers due to an exchanger leak	"The reportable release was discovered on June 6, 2003...subsequent investigation indicates that the release event likely began on May 24, 2003."	X	Not in LDEQ records.	
6.9.03	NO, NO2, SO2	NO - 110 NO2 - 12 SO2 - 9,139	20 minutes	Process safety valve (PSV) from Hydrocracker Unit (HGU) First Stage Stripper relieved to the No. 2 Flare	See 5.22.03.	X	Not in LDEQ records.	
6.10.03	NO, SO2	NO - 23 SO2 - 4,200	Flaring last 25 minutes; Fire was extinguished within 2 hours	Fire at No. 2 Coker Unit (flaring associated with depressurization)		X	Not in LDEQ records.	
6.10.03	NO	13	2 hours, 15 minutes	Conveyor belt caught fire (did not occur during a petroleum coke transfer)	Firewater and petroleum coke released to the Mississippi River and bature area	X	Not in LDEQ records.	
6.10.03	NO, SO2	NO - < 1 SO2 - 184	15 minutes	HDS Off-gas Compressor (K-3304) was down for repair following an instrumentation problem. Spare HDS Off-gas Compressor (K-3305) tripped offline. (Released through No. 2 Flare)		X	Not in LDEQ records.	
6.23.03	Hydraulic Oil	14.7	"near-instantaneous"	Hydraulic hose suddenly ruptured. Fluid was released onto roadway		X	Not in LDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPICRA	Unauthorized Discharge Report	LDEQ Incident Report
	Blasting Sand (sandblast abrasive)	300	"near-instantaneous"	Forklift lost power	Notification made pursuant to LAC 33:V		Not in LDEQ records.	
6.30.03	NO, SO2	NO - 52 SO2 - 3,852	3 hours	Hydrocracker Unit (HCU) First Stage Recycle Compressor (K-2300) tripped off line		X	Not in LDEQ records.	
July								
7.1.03	SO2	949	1 hour, 5 minutes	No. 2 Waste Gas Compressor (K-401) tripped. Waste gas was diverted to No. 2 Flare		X	Not in LDEQ records.	
7.1 - 7.3.03	NO, NO2, SO2	NO - 1,913 NO2 - 213 SO2 - 716	49 hours, 10 minutes	1200 ampere breaker failed at the Waste Water Treatment Plant (WWTP). Rental generator was used.		X	Not in LDEQ records.	
7.5.03	NO, SO2	NO - 14 SO2 - 1,008	1 hour	The HCU First Stage Recycle Compressor (K-2300) tripped off line.		X	Not in LDEQ records.	
7.11.03	NO, NO2, SO2, Hydrogen Sulfide (H2S)	NO - 594 NO2 - 66 SO2 - 235,104 H2S - 629	6 hours, 32 minutes	Lightening storm caused Train I and Train II to trip		X	Not in LDEQ records.	
7.11.03	NO, NO2	Preliminary upper-bound emission estimates above permit. Totals will be submitted by August 10, 2003	"ongoing, continuous release as defined by the CERCLA/EPICRA regulations."	NO and NO2 were released through various diesel engines located throughout the refinery.		X	Not in LDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	IDEQ Incident Report
7.13 - 7.17.03	SO2	1,802	23 hours	SO2 released to atmosphere through the SRU Common Thermal Oxidizer (Thox) Stack.		X	Not in IDEQ records.	
7.19.03	NO, SO2	NO - 42 SO2 - 1,480	15 hours	The Hydrosulfurization (HDS) Unit Off-Gas Compressor (K-3305) shutdown, was restarted, tripped several more times.		X	Not in IDEQ records.	
7.22.03	H2S, NO, compressed flammable gas (VOC-volatile organic compound)	H2S - 123 NO - 15 VOC - 3,523	17 hours, 30 minutes	A tube leak on the HDS Reactor Effluent Fin Fan (E-3301-E) in the HDS Unit resulted in emissions.		X	Not in IDEQ records.	
7.23.03	NO, NO2, SO2	NO - 183 NO2 - 20 SO2 - 15, 664	23 minutes; 6 minutes	First Stage Recycle Compressor shutdown at Hydrocracker Unit. Process Safety Value (PSV312) began relieving to the No. 2 Flare.		X	Not in IDEQ records.	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPORA</u>	<u>Unauthorized Discharge Report</u>	<u>LDEQ Incident Report</u>
7.24.03	NO, NO2, SO2	NO - 2 NO2 - <1 SO2 - 1,470	30 minutes	HDS was shutdown due to a tube leak on the HDS Reactor Effluent Fin Fan (E-3301-E) on July 22, 2003. On July 24, PSV off of K-3304 relieved to No. 2 flare due to high discharge pressure.	Because there were several emissions within 24 hour period, NO and NO2 release had to be reported (eventhough alone, they did not exceed reporting quantities)	X	Not in LDEQ records.	
7.24.03	NO, NO2, SO2	NO - 240 NO2 - 27 SO2 - 5,942	Variance expired at 2:00 hours. Emissions due to compressor repairs lasted until 21:00 hours	Repairs and maintenance performed on No. 3 Waste Gas Compressor (K-402). Released into atmosphere from No. 2 Flare.	Exceeded 72 hour variance period	X	Not in LDEQ records.	
7.25.03	NO, NO2	NO - 9 NO2 - 1	8 minutes	Depropanizer on the Alkylation Unit began experiencing an elevation in pressure. Diverted to No. 1 Flare.	This event alone did not exceed the reportable quantities. There was a separate correspondence within 24 hour period. The combined emissions for the two events exceed reportable quantities.	X	Not in LDEQ records.	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	LDFO Incident Report
7.26.03	NO, NO2, SO2, H2S	NO - 356 NO2 - 40 SO2 - 148,000 H2S- 377	3 hours	Train I of the Sulfur Recovery Unit (SRU) tripped due to low level in the Reaction Furnace Steam Drum.		X	X	
7.27.03	SO2	986	(12 hours)	Sulfur Dioxide released into atmosphere through the SRU Common Thermal Oxidizer (Thox) Stack.		X	X	
7.29.03	NO, NO2, SO2, H2S	NO - 231 NO2 - 26 SO2 - 93,131 H2S- 239	2 hours 49 minutes; and at 19:19 hours, lasting approximately 4 hours	Train I of the Sulfur Recovery Unit (SRU) tripped due to heavy rains and lightning. A second related upset (19:19) Train I of the SRU tripped due to low Oxygen (O2) flow.		X	X	
7.30.03	NO	15	3 hours	Sweet streams were lined up to the No. 2 flare, prior to bringing the compressor (K-402) out of service/shutdown.		X	X	
August								
08.01 - 08.04.03	SO2	13,000	75 hours	Train II of the SRU was passivating the catalyst to prepare the unit for safe maintenance as part of an unplanned shutdown. During this period, sulfur dioxide was emitted from the Thox stack		Not in IERC records,	X	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	IDEQ Incident Report
08.19 - 08.21.03	H2S	338	Approx. 48 hours	SRU Train I Sulfur Pit Blower (K-8003) was taken off-line for repairs. As a result, the sulfur pit emissions bypassed the Thermal Oxidizer and diverted directly to the atmosphere.		X	X	
08.26.03	NO, NO2	NO - 11 NO2- 1	47 minutes	Dehexanizer on the Refractionation (Refract) Unit experienced an elevation in pressure.		Not in LEPC records.	X	
08.27.03	NO, SO2	NO - 12 SO2 - 1,287	5 hours, 22 minutes	No. 1 Crude Preflash Tower experienced an upset, which led to the subsequent shutdown of the No. 1 Prefract Unit.		X	X	
08.28.03	NO	1 (another incident within the prior 24 hour period resulted in RQ)		The HDS Unit tripped due to high reactor outlet temperature		Not in LEPC records.	X	
September								
09.03.03	NO, NO2	NO - 280,83 NO2 - 31,20	8 hours, 34 minutes	Liquefied Petroleum Gas (LPG) compressor tripped due to high amperage.		Not in LEPC records.	X	
09.05.03	NO, NO2	NO - 134,32 NO2 - 14,92	5 minutes	Depropanizer of the Alkylation Unit began to experience a decrease in pressure.		Not in LEPC records.	X	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPICRA</u>	<u>Unauthorized Discharge Report</u>	<u>LDEQ Incident Report</u>
09.17, 09.19.03	SO2, NO	NO-62 SO2 - 1,130	(17) 4 hours, 50 minutes; (19) 18 hours, 39 minutes	(17) No. 2 Waste Gas Compressor (K-401) experienced an unexpected shutdown; (19) Low-pressure Waste Gas Compressor (K-400). Various sweet streams were diverted to Flare.		X	Not in LDEQ records.	
09.24 - 09.27.03	H2S, SO2	H2S 128 SO2 - 746.9	(24) 5 hours, 23 minutes; (25) 10 hours, 35 minutes; (27) 3 hours, 25 minutes	Tube leak on the No. 1 Reformer Pre-Treater Stripper Overhead Fin-Fan (E7506). Unit was depressurized and isolated.		Not in LEPC records.	X	
October								
10.04.03	H2S, VOCs	H2S- 116 VOCs- 2,744	1 hour	Related to cooling/shutdown/maintenance activities on Chalmette's Cat Feed Hydrotreater (CHHT).		X	Not in LDEQ records.	
10.08.03	SO2	1,129	1 hour, 39 minutes	No. 3 (K-402) and No. 4 (K-406) Waste Gas Compressors experienced unexpected shutdowns due to a failure in the suction drum high level switch and associated alarm/interlock controls		X	Not in LDEQ records.	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPCRA</u>	<u>Unauthorized Discharge Report</u>	<u>IDEQ Incident Report</u>
10.10.03	NO, Flammable Organic Liquid, Non-Specified VOCs, Benzene, Mixed Xylenes	NO- 81 Flammable Organic Liquid- 32 barrels VOCs- 13,257 Benzene- 105 Mixed Xylenes- 875	4 hours, 13 minutes	Unplanned shutdown at Fluid Catalytic Cracking Unit (FCCU) resulted in flaring		X	Not in IDEQ records.	
10.23, 10.24.03	NO, NO2, SO2	NO - 159 NO2 - 18 SO2 - 604	Over a period of 7 hours, 33 minutes	"Light hydrocarbons and water was suddenly and unexpectedly introduced into the Fluid Catalytic Cracking Unit (FCCU) feed surge drum which caused cavitation of the FCCU charge pumps."		X	Not in IDEQ records.	
* <u>Community Complaints:</u> [From IDEQ Complaint Report]								
Mr. Lionel Baker moved his family. "He feels that the refinery is responsible for physical and mental problems affecting his house and family."								
Mr. Baker stated, "that the children in his family suffer bloody noses, frequent vomiting and fear or explosions and noise."								

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	Verbal Notice
2002								
February								
02.14.02	VOCS	26,017	7 minutes	No. 2 Crude Unit overpressured. Chalmette states: release preventable.			X	
March								
03.26.02	SO2, H2S	SO2 - 359,287 H2S- 954	9 hours	Boiler Feed Water supply pressure to SRU began to fall. The SRU Train II tripped as a result of Low Second Stage Stream Drum level, and the acid gas was diverted to No. 1 Flare.	SO2 and H2S community monitoring was performed on both sides of the Mississippi River, with no elevated readings.	X		
May								
05.21.02	Mixed Xylenes	28,784	13 minutes	N/A			X	
September								
09.24.02	SO2, H2S	SO2 - 67,823 H2S- 181	15 hours, 41 minutes	Shut-down in anticipation of Hurricane Isadore.			X	
09.27.02	H2S, SO2	SO2 - 162,000 H2S- 433	42 hours, 20 minutes	The root cause was a result of starting up the refinery after Hurricane Isadore.			X	
October								
10.14.02	SO2	500	"continuous release"					X

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	Verbal Notice
10.16.02	SO2	1,290	N/A	Emissions from stack box during the start-up of the train No. 2 Sulfur Plant.				X
10.16.02	SO2	21,511	85 minutes	Boiler feed water flow to the SRU was lost. Chalmette states: release preventable.			X	
10.25.02	SO2	8,447	17 hours, 32 minutes	"The root cause for the power loss was an animal coming into contact with the power transformer, causing an electrical short." Electrical outage led to high temperatures. Sent all waste gas streams to the No. 2 flare.			X	
10.31.02	SO2	N/A	N/A	Compressor shut-down	"This notification was rescinded because the release was SO2, which has no reportable quantity."			X
November								
11.01.02	SO2, H2S	SO2 - 36,000 H2S - 101	N/A	Train I Sulfur Plant shutdown, diverted acid gas.				X
11.05.02	N/A	N/A	N/A	Boiler upset caused flare to be larger than normal.				X

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	Verbal Notice
11.09.02	SO2	11,200	N/A	Tower overpressured, opened valve to flare to relieve the pressure.	"This is a courtesy notification. In accordance with IAC 33:1.3931 notification is not required for this incident."			X (No Follow Up Report)
11.12.02	SO2	1,560	N/A	Emergency shut-down of Train I Sulfur Plant	"This is a courtesy notification. In accordance with IAC 33:1.3931 notification is not required for this incident."			
11.20.02	Propane	N/A	N/A	Purging of propane line with nitrogen. Blew propane out a 3/4 inch bleeder on the line. Propane ignited and burned for 10 minutes.				X
11.23.02	SO2	1,785	N/A	"Started compressor...online, but starting venting out old off-gas."				X
December								
12.11-12.14.02	Benzene	385	72 hours	"Approximately 6 inches of standing product was discovered on the roof of Tank 2."			X	
12.17.02	Benzene	108	24 hours	Tank 200's main pump lost suction. Temporary pump malfunctioned.			X	
12.19 - 12.20.02	Benzene	69.4	54 hours, 28 minutes	During transfer of Tank 200 contents, work pump lost suction.			X	

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	Verbal Notice
* Community Complaints: [From IDEQ Complaint Report]								
Community Complaint: (09.12.02) Anna Perkins complained, "some kind of gassy odor is being released from plant in Chalmette area."								
Community Complaint: (10.11.02) Ms. Stephanie Bridges, a private citizen from Orleans Parish, complained of toxic odor coming from Chalmette Refining. She was concerned that the refinery "would give her no in								
Refinery called Ms. Bridges two days later and told her that the refinery had an equipment malfunction. [Note: There is no incident/upset report for October 11, 2002.]								
Community Complaint: (10.22.02) Gerttrude Baker complained, "terrible odor...making them sick."								
Community Complaint: (10.29.02) Mr. Ken Ford complained, "awful smell coming from Mobil Oil." "Affecting breathing."								

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPORA	Unauthorized Discharge Report	Verbal Notice
2001								
March								
03.12.01	SO2, Mixed Hydrocarbons, H2S	SO2 - 68,748 Mixed Hydrocarbons - 4,425 H2S - 184	8 hours, 30 minutes	Power loss due to storm.			X	
June								
06.05 - 06.06.01	SO2, H2S	SO2 - 621,075 H2S - 1,656		Shutdown of Train I of Sulfur Recovery Unit (SRU) due to high pressure. SRU feed was diverted to No. 1 Flare. Second shutdown due to failure of electronic monitors. Chalmette states: release preventable.	* Community complaint: Dorothy Montreuil describes, "there is a black soot falling from the sky. When it rains, it is worse. When it washes off of the roof, there is dark water."		X	
06.22.01	SO2	268	30 minutes	Wet Gas Compressor tripped off-line.			X	
July								
07.07.01	Mixed Hydrocarbons	3,092	Approximately 3 minutes	(PRT) at the FCC unit shutdown after the expander bypass valve failed in the open position. Chalmette states: release preventable.			X	
07.09.01	Hydrocarbon	N/A	N/A	Weld failure on a floating roof.				X

Date	Chemicals Released	Pounds	Duration	Cause of Problem	Notes	EPCRA	Unauthorized Discharge Report	Verbal Notice
07.11.01	Mixed Hydrocarbons	2,415	5 hours, 45 minutes	"Due to internal corrosion, a small leak developed on a line piped to the Propane Stripped Pressure Safety Valve (PSV) in the Alkylation Unit." Chalmette states: release preventable.			X	
07.11.01	Benzene	1,089	6 days, 23 hours	"Six small pin hole leaks in Tank 200." Repairs were slowed by electrical storm.	The company will repair holes		X	
07.18.01	SO2	5,345	22 minutes	The No. 2 Sulfur Train tripped as a result of high wash column level. The SRU then completely shutdown, gas was diverted to No. 1 Flare. Chalmette states: release preventable.			X	
September								
09.02.01	Mixed Hydrocarbons	5,717	30 minutes	"A faulty vibration probe triggered an FCC shut-down."			X	
09.27.01	SO2	2,530	N/A	"Equipment failure."				X
October								
10.22.01	Mixed Xylene	1,380	4 hours, 30 minutes	"Operations personnel discovered mixed xylene on the ground in the Hydro Desulfurization Unit."			X	
November								
11.05.01	Benzene	44.5	7 hours	Leak in Benzene rundown line (pin hole leak in the piping). Chalmette states: release preventable.			X	

<u>Date</u>	<u>Chemicals Released</u>	<u>Pounds</u>	<u>Duration</u>	<u>Cause of Problem</u>	<u>Notes</u>	<u>EPCRA</u>	<u>Unauthorized Discharge Report</u>	<u>Verbal Notice</u>
11.06- 11.07.01 December	Mixed Hydrocarbons, H2S, Natural Gas	Mixed Hydrocarbons - 4,455 H2S - 964 Natural Gas- 222,778	16 hours	Contractor service truck "willfully left the designated roadway" and consequently collided with the natural gas line. Chalmette states: release preventable.			X	
12.12.01	Hydrocarbon, SO2, H2S	Hydrocarbons - < 100 SO2 - < 500 H2S - < 100	Varies	N/A			X	
12.13.01	Mixed Hydrocarbons	145,412	19 hours	"A Treating Unit operator discovered oil at the Treating Plant pump row concrete slab. The source of oil appeared to be from a pipe under the slab." Chalmette states: release preventable.			X	
12.17.01	SO2, H2S	SO2 - 199,061 H2S - 504	16 hours, 18 minutes	"A small flange fire occurred on the No. 2 Crude Unit requiring significant refinery curtailment." This resulted in a decrease in the acid gas feeding the Sulfur Plant. Chalmette states: release preventable.			X	