

NO. D-1-GV-09-000921

STATE OF TEXAS,
Plaintiff

v.

BP PRODUCTS NORTH AMERICA
INC.,
Defendant

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THE DISTRICT COURT OF

TRAVIS COUNTY, TEXAS

201ST JUDICIAL DISTRICT

**PLAINTIFF'S FIFTH AMENDED PETITION AND
APPLICATION FOR PERMANENT INJUNCTION**

The State of Texas files this Fifth Amended Petition and Application for Permanent Injunction. This suit seeks civil penalties, injunctive relief, and attorneys' fees for violations of environmental laws at a facility owned and operated by BP Products North America Inc. in Texas City, Texas.

1. DISCOVERY

1.1 The State of Texas will conduct discovery under a Level 3 Discovery Control Plan. Tex. R. Civ. P. 190.

2. PARTIES

2.1 Plaintiff is the State of Texas (State). The Attorney General of Texas, at the request of the Texas Commission on Environmental Quality (TCEQ), is authorized to file suit in the name of the State for injunctive relief and civil penalties for violations of the Texas Clean Air Act, Texas Health & Safety Code Chapter 382 (TCAA); Chapter 7 of the Texas Water Code; and TCEQ rules and orders promulgated under these statutes. Tex. Water Code § 7.105(a).

2.2 Defendant BP Products North America Inc. (BP) is a foreign for-profit corporation. BP has been served with process and has already appeared and answered in this action.

3. JURISDICTION AND VENUE

3.1 This Court has jurisdiction and venue is proper in Travis County, Texas because this is an action to recover civil penalties and injunctive relief for violations of statutes, rules, orders, and permits within the TCEQ's jurisdiction. Tex. Water Code § 7.105(c).

4. APPLICABLE LAW

4.1 "Except as authorized by a [TCEQ] rule or order, a person may not cause, suffer, allow, or permit the emission of any air contaminant or the performance of any activity that causes or contributes to, or that will cause or contribute to, air pollution." TCAA § 382.085(a).

4.2 "A person may not cause, suffer, allow, or permit the emission of any air contaminant or the performance of any activity in violation of this chapter or of any commission rule or order." TCAA § 382.085(b).

A. Emissions Events

4.3 An "Emissions Event" is an unauthorized emission of air contaminants from one or more emission points resulting from an upset event, unscheduled maintenance, startup, or shutdown activity. 30 Tex. Admin. Code (TAC) § 101.1(28).

4.4 A “Reportable Emissions Event” is an Emissions Event that within any 24 hour period emits unauthorized emissions from any emissions point equal to or greater than a specified reportable quantity. 30 TAC § 101.1(87). The reportable quantity varies based on the type of air contaminant. 30 TAC § 101.1(88).

4.5 Within 24 hours of a Reportable Emissions Event, the owner or operator of a regulated facility must notify the TCEQ of the event. 30 TAC § 101.201(a)(1)(B).

4.6 The owner or operator of a facility experiencing an Emissions Event must create a final report of the event as “soon as practicable, but no later than two weeks after the end” of the Emissions Event. 30 TAC § 101.201(b). Among other things, the final report of a Reportable Emissions Event shall:

- A. identify, for all emission points involved in the Emissions Event, a list of all of the compounds released, 30 TAC § 101.201(b)(1)(G);
- B. identify the authorization number or permit for the emissions, 30 TAC § 101.201(b)(1)(H); and
- C. for each of the contaminants released, list the estimated total amount released for each of the compounds or mixtures of compounds. 30 TAC § 101.201(b)(1)(H).

4.7 Within sixty days of a request from the TCEQ, the owner or operator of a facility experiencing an Emissions Event must submit to the TCEQ a written technical evaluation of the Emissions Event. 30 TAC § 101.201(f). The owner or operator of the facility must also provide a written response to any request from the TCEQ for additional

information regarding the Emissions Event within the time frame specified in the request.

Id.

B. Excessive Emissions Events

4.8 The TCEQ reviews Emissions Events to determine if the event was excessive. 30 TAC § 101.222(a). An “Excessive Emissions Event” determination reviews the following: “(1) the frequency of the facility’s emissions events; (2) the cause of the emissions event; (3) the quantity and impact on human health or the environment of the emissions event; (4) the duration of the emissions event; (5) the percentage of a facility’s total annual operating hours during which emissions events occur; and (6) the need for startup, shutdown and maintenance activities.” *Id.*

4.9 When the TCEQ determines that an Emissions Event is excessive, the owner or operator of a facility must take action to reduce emissions by filing either a Corrective Action Plan (CAP) or a letter of intent to seek authorization for the emissions. 30 TAC § 101.223(a). When a CAP is appropriate, the facility owner or operator must submit the CAP to the TCEQ within 60 days of receiving notification from the TCEQ that the event is considered excessive. 30 TAC § 101.223(a)(1).

C. Sampling

4.10 Upon request of the TCEQ, a source emitting air contaminants shall conduct sampling to determine the “opacity, rate, composition, and/or concentration of such emissions.” 30 TAC § 101.8.

D. Civil Enforcement

4.11 Any person “who causes, suffers, allows, or permits a violation of a statute, rule, order, or permit relating to any other matter within the [TCEQ’s] jurisdiction . . . shall be assessed for each violation a civil penalty not less than \$50 nor greater than \$25,000 for each day of each violation as the court or jury considers proper. Each day of a continuing violation is a separate violation.” Tex. Water Code § 7.102.

4.12 The Attorney General, at the request of the TCEQ, is authorized to file suit in the name of the State for injunctive relief and civil penalties for violations of the Health and Safety Code, the Texas Water Code, and TCEQ rules, permits, and orders promulgated thereunder. Tex. Water Code §§ 7.105(a), 7.032(b).

4.13 The Attorney General may seek an injunction to restrain a violation or threat of violation of a TCEQ rule, order, or permit when it appears that “a violation or threat of violation of a statute within the [TCEQ]’s jurisdiction or a rule adopted or an order or a permit issued under such a statute has occurred or is about to occur.” Tex. Water Code § 7.032(b). “[T]he court may grant . . . any prohibitory or mandatory injunction the facts may warrant, including a temporary restraining order and, after notice and hearing, a temporary injunction or permanent injunction.” Tex. Water Code § 7.032(d).

4.14 The State is not required to pay a filing fee or other security for costs and is not required to pay a bond prior to the Court’s granting an injunction. Tex. Civ. Prac. & Rem. Code § 6.001; Tex. Water Code § 7.032(d).

4.15 If the State prevails, it is entitled to recover its reasonable attorney's fees, court costs, and investigative costs. Tex. Water Code § 7.108.

5. GENERAL BACKGROUND

5.1 BP operates a petroleum refinery at 2401 5th Avenue South, Texas City, Texas (the Refinery). It is the largest refinery in the "Family" of companies that includes BP and numerous corporate parents and affiliates worldwide. The Refinery has a feed capacity of approximately 460,000 barrels of crude oil per day. The Refinery's process units produce a wide range of petroleum products, including gasoline, distillates, heavy fuel oil, sulfuric acid, petroleum coke, and petrochemical feedstocks.

5.2 The Refinery emits air contaminants consisting primarily of volatile organic compounds (VOCs), hydrogen sulfide (H₂S), carbon monoxide (CO), oxides of nitrogen (NO_x), and sulfur dioxide (SO₂).

A. BP's Air Permits

5.3 TCEQ Air Flexible Permit No. 47256 (Permit 47256) regulates air emissions from the normal operation and startup, shut down, and maintenance of most of the Refinery's process units. Special Condition No. 15 of Permit 47256 prohibits (1) emissions of air contaminants from normal operations and startup, shut down, and maintenance in excess of the limits on the Emissions Caps and Individual Emissions Limitations Table in the permit and (2) emissions of any amount of air contaminants resulting from Emissions Events.

5.4 TCEQ Air Permit 3170 (Permit 3170) regulated air emissions from the Refinery's Isomerization Unit until July 13, 2005. Permit 3170 prohibited emissions of air contaminants from a portion of the Isomerization Unit except for emissions from the emission points and amounts listed in the Maximum Allowable Emission Rate Table attached to the permit.

5.5 Several of the emissions at issue in this suit involve Fluid Catalytic Cracker Units (FCCUs). Special Condition No. 38 of Permit 47256 prohibits emissions from the FCCUs from exceeding twenty percent opacity averaged over a six-minute period.

5.6 TCEQ Air Permit 2231 (Permit 2231) prohibits the emission of air contaminants from certain tanks in the Refinery's tank farm in excess of the amounts listed in the Maximum Allowable Emission Rate Table attached to the permit.

5.7 TCEQ Air Permit 2612 (Permit 2612) prohibits the emission of air contaminants from certain emission points in Aromatics Unit No. 2 in excess of the amounts listed in the Maximum Allowable Emission Rate Table attached to the permit.

B. Past TCEQ Administrative Enforcement

5.8 The recent historical record at the BP Refinery reveals a pattern of unnecessary and unlawful Emissions Events. BP's poor operation and maintenance of the Refinery are the primary cause of these Emissions Events. Between 2000 and 2007 alone, the TCEQ entered fifteen enforcement orders against BP for violations related to at least

thirty-nine Emissions Events at the Refinery.¹ In addition to a history of repeated violations of the law related to unauthorized air emissions, many of these orders show a pattern of failing to properly report Emissions Events to the TCEQ.

5.9 On May 31, 2006, the TCEQ entered an agreed enforcement order against BP in TCEQ Docket No. 2005-0224-AIR-E (the 2006 Order). The 2006 Order is final and unappealable. Among other provisions, Ordering Provision 4.a.ii of the 2006 Order requires BP to submit a Flaring Root Cause Report to the TCEQ for Flaring Events involving certain listed combustion devices that release over 500 pounds of SO₂ in a period of 24 hours. In each Flaring Root Cause Report, the 2006 Order requires BP to prepare a detailed analysis that sets forth:

[T]he root cause and all significant contributing causes of that Acid Gas Flaring Event, to the extent determinable, and undertakes an analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of the incident resulting from the same root cause or significant contributing causes in the future. If two or more reasonable alternatives exist to address the root cause, the analysis shall discuss the alternatives, if any, that are available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation and maintenance changes shall be evaluated. If BP Products concludes that corrective action(s) is (are) required, the flaring root cause report shall include a description of the action(s) and, if not already completed, a schedule of its (their) implementation, including proposed commencement and completion dates. If BP Products concludes corrective action is not required, then the flaring root cause report shall explain the basis for that conclusion.

¹See TCEQ Orders in Docket Nos. 1999-0068-AIR-E, 1999-1278-AIR-E, 2001-0329-AIR-E, 2004-1532-AIR-E, 2005-0284-AIR-E, 2005-0818-AIR-E, 2005-0706-AIR-E, 2005-0224-AIR-E, 2005-1027-AIR-E, 2006-0196-AIR-E, 2006-0262-AIR-E, 2006-0310-AIR-E, 2006-0400-AIR-E, 2006-0099-AIR-E, 2005-1839-AIR-E.

The 2006 Order requires BP to submit these Flaring Root Cause Reports within 30 days of a qualifying Flaring Event. In Ordering Provision 2 of the 2006 Order, BP agreed to a stipulated penalty of \$10,000 per day for each day that BP exceeded a deadline in Ordering Provision No. 4.

5.10 These administrative orders show that BP's poor operating and maintenance practices have resulted in an egregious amount of Emissions Events in the past few years. BP continues to have Emissions Events, several of which form the basis of this lawsuit.

6. CLAIM NO. 1: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON MARCH 23, 2005, THE ISOMERIZATION UNIT EXPLOSION

A. Emissions from ISOM Unit

6.1 According to reports BP submitted to the TCEQ, on March 23, 2005, an explosion occurred in the Refinery's Isomerization (ISOM) unit killing fifteen and injuring over 170 workers. BP reported that the explosion occurred when plant personnel were restarting the ISOM unit's Raffinate Splitter. During this startup, BP over-filled and over-heated the Raffinate Splitter. To relieve pressure on the Raffinate Splitter, overhead relief valves opened and fed liquid and vapor hydrocarbons to the ISOM unit's F-20 Blowdown Drum. Vapor and liquid flowed out of the F-20 Blowdown Drum and eventually ignited. After the explosion, BP reported that emissions from the ISOM Unit continued from a bleeder valve on the Unit.

6.2 BP admitted to releasing air contaminants from the ISOM Unit as a result of the explosion for at least 164 hours and 40 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	1.00
CO	336.00
NO _x	45.00
VOCs	30,236.00

6.3 The event was avoidable as it resulted from poor operation practices. The TCEQ also determined that this was an Excessive Emissions Event because, among other factors, the event was avoidable, caused by poor operation practices, and impacted human health. The TCEQ received a CAP from BP on November 22, 2005; the TCEQ approved the CAP on May 31, 2006.

6.4 BP violated TCAA § 382.085 and Permit 3170 by emitting the air contaminants listed in paragraph 6.2 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 6.2.

B. Emissions from Tank 108

6.5 BP also admitted to additional emissions resulting from the March 23, 2005, explosion in the ISOM Unit, which damaged the floating roof on Tank 108 and caused benzene in the tank to accumulate on the roof and vaporize. BP admitted that Tank 108 emitted at least 2,752 pounds of benzene over at least a 672-hour period. Permit 2231 limits emissions of VOCs, which include benzene, from Tank 108 to 0.34 pounds per hour. The event was avoidable as it resulted from poor operation practices.

6.6 BP violated TCAA § 382.085 and Permit 2231 by exceeding the permit limit for emissions of benzene. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each violation for the unauthorized release of benzene from Tank 108.

7. CLAIM NO. 2: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON JULY 28-29, 2005, IN THE RESID HYDROTREATING UNIT

7.1 According to reports BP submitted to the TCEQ, on July 28, 2005, an elbow failed in the high pressure hydrogen exchanger in the Resid Hydrotreating Unit (RHU) and resulted in an explosion, fire, and the release of air contaminants from the RHU and the CRPII Flare. BP admitted to the release of air contaminants to the atmosphere for at least 14 hours, including at least the following:

Air Contaminant	RHU Fugitives Quantity in lbs.	CRPII Flare Quantity in lbs.
CO	2,308.00	2,615.00
NO _x	252.00	276.00
SO ₂	13,840.00	26,556.00
H ₂ S	1,755.00	0.00
VOCs	36,759.00	4,416.00
Residual Oil	11,250.00	0.00

7.2 According to BP, an elbow on the outlet of a high pressure hydrogen exchanger catastrophically failed. BP reported that it installed the failed carbon steel elbow where a 1.25 percent chrome elbow had been specified. This allowed a high temperature hydrogen attack on the carbon steel elbow and its subsequent failure. The TCEQ also

determined that this was an Excessive Emissions Event. The TCEQ received a CAP from BP for this event on April 4, 2008. The TCEQ approved the CAP on May 21, 2008.

7.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 7.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 7.1.

8. CLAIM NO. 3: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON JULY 29, 2005, IN THE SULFUR RECOVERY UNIT

8.1 According to reports BP submitted to the TCEQ, on July 29, 2005, a pressure controller failed to close on the Sulfur Recovery Unit (SRU) and routed gas to a flare instead of the sulfur trains for processing. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 37 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	1.00
NO _x	25.00
SO ₂	142,834.00
H ₂ S	1,518.00

8.2 According to BP, BP failed to prevent a pressure controller malfunction at the SRU and the resulting flaring. The TCEQ also determined that this was an Excessive Emissions Event. The TCEQ received a CAP from BP for this event on August 22, 2007. The TCEQ approved the CAP on October 24, 2007.

8.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 8.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 8.1.

9. CLAIM NO. 4: CIVIL PENALTIES FOR EMISSIONS EVENT ON JULY 23-24, 2006, IN PIPESTILL NO. 3A

9.1 According to reports BP submitted to the TCEQ, on July 23, 2006, a power failure at the Pipestill No. 3A Compressor resulted in materials being released to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 13 hours and 25 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	506.00
NO _x	47.20
SO ₂	4,681.00
VOCs	758.00

9.2 According to BP, a lightning strike caused a power failure at the Pipestill No. 3A Compressor and the flaring of materials to Flare No. 1. On September 19, 2006, the TCEQ requested additional information from BP about the event including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field monitoring results, and a comprehensive compliance plan. The TCEQ

requested the information be submitted on or before September 29, 2006. To date, BP has not submitted all of the requested information to the TCEQ.

9.3 On August 22, 2006, September 27, 2006, and October 2, 2008, BP sent a Flaring Root Cause Report for this event to the TCEQ. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

9.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 9.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 9.1.

9.5 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before September 29, 2006. To date, BP has not submitted all of the requested information to the TCEQ. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

9.6 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ

by August 23, 2006. BP submitted a Flaring Root Cause Report to the TCEQ on August 22, 2006, September 27, 2006, and October 2, 2008. The documents submitted by BP were insufficient as they did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

10. CLAIM NO. 5: CIVIL PENALTIES FOR EMISSIONS EVENT ON SEPTEMBER 1-2, 2006, AT THE REFINERY GRADE PROPYLENE PIPELINE

10.1 According to reports BP submitted to the TCEQ, on September 1, 2006, a pipeline company damaged the Refinery Grade Propylene (RGP) Pipeline. BP then routed the RGP to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 13 hours and 36 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	3,327.00
NO _x	653.00
SO ₂	12.00
VOCs	4,128.30

10.2 According to BP, a pipeline company vehicle damaged the RGP Pipeline, and BP diverted the RGP to the fuel gas system and then to Flare No. 3. On December 1, 2006, the TCEQ requested additional information from BP about the event including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field monitoring results, and a comprehensive compliance plan. The TCEQ requested the information be submitted on or before December 8, 2006. To date, BP has not submitted the requested information to the TCEQ.

10.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 10.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 10.1.

10.4 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before December 8, 2006. To date, BP has not submitted the requested information. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

**11. CLAIM NO. 6: CIVIL PENALTIES FOR EMISSIONS EVENT ON
SEPTEMBER 1-15, 2006, IN FCCU NO. 3**

11.1 According to reports BP submitted to the TCEQ, from September 1, 2006, to September 15, 2006, the 510CA exchanger in the FCCU No. 3 Cooling Tower leaked air contaminants. BP admitted to the release of air contaminants to the atmosphere for at least 347 hours and 15 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	5.00
VOCs	6,147.40

11.2 According to BP, the 510CA Exchanger on the FCCU No. 3 cooling tower was leaking from September 1, 2006, to September 15, 2006. On December 1, 2006, the TCEQ requested additional information from BP about the event including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field monitoring results, and a comprehensive compliance plan. The TCEQ requested the information be submitted on or before December 8, 2006. On January 19, 2007, BP submitted some of the requested information, however, to date, BP has not submitted all of the requested information.

11.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 11.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 11.1.

11.4 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested that BP submit additional information on or before December 8, 2006. To date, BP has not submitted all of the requested information. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

12. CLAIM NO. 7: CIVIL PENALTIES FOR EMISSIONS EVENT ON OCTOBER 6-10, 2006, IN THE VAPOR RECOVERY UNIT DEPROPANIZER IN FCCU NO. 3

12.1 According to reports BP submitted to the TCEQ, on October 6, 2006, a bypass valve on the overhead portion of the Vapor Recovery Unit (VRU) Depropanizer in FCCU No. 3 began leaking to Flare No. 5. BP admitted to the release of air contaminants to the atmosphere for at least 97 hours and 37 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
NO _x	581.00
SO ₂	28,609.00
H ₂ S	315.00
VOCs	1,822.00

12.2 According to BP, a bypass valve on the overhead portion of the VRU Depropanizer in FCCU No. 3 leaked to Flare No. 5. On December 1, 2006, the TCEQ

requested additional information regarding the event including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field monitoring results, and a comprehensive compliance plan. The TCEQ requested the information be submitted on or before December 8, 2006. To date, BP has not submitted all of the requested information to the TCEQ.

12.3 BP discovered the emissions event on or before October 9, 2006, at 6:00 a.m. The initial notification of the Emissions Event was not submitted to the TCEQ until October 10, 2006, at 3:43 p.m. BP reported that the Emissions Event ended on October 10, 2006, at 5:00 p.m. BP submitted its final notification to the TCEQ on October 27, 2006, at 3:10 p.m.

12.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 12.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 12.1.

12.5 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before December 8, 2006. To date, BP has not submitted all of the requested information to the TCEQ. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

12.6 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. BP discovered the event on or before October 9, 2006, at 6:00 a.m. The initial notification of the Emissions Event was not submitted to the TCEQ until October 10, 2006, at 3:43 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

12.7 BP also violated 30 TAC § 101.201(b) by failing to submit its final report of an Emissions Event no later than fourteen days after the end of the event. BP reported that the Emissions Event ended on October 10, 2006, at 5:00 p.m. BP submitted its final notification to the TCEQ on October 27, 2006, at 3:10 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b).

12.8 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 5 (EPN FLR-5), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by November 9, 2006. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering

Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

13. CLAIM NO. 8: CIVIL PENALTIES FOR EMISSIONS EVENT ON OCTOBER 18-20, 2006, IN FCCU NO. 3

13.1 According to reports BP submitted to the TCEQ, on October 18, 2006, a computer system failure at FCCU No. 3 caused materials to be routed to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 44 hours, including at least the following:

Air Contaminant	Quantity in Lbs.
CO	9,022.83
NO _x	1,200.54
SO ₂	2,261.69
VOCs	14,401.44

13.2 According to BP, a computer system failure caused a power loss at FCCU No. 3. BP reported that the Critical Corrective Action System at FCCU No. 3 tripped because of a plug valve differential pressure, which routed materials to Flare No. 3. On December 1, 2006, the TCEQ requested additional information regarding the event

including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field results, and a comprehensive compliance plan. The TCEQ requested that BP submit this information by December 8, 2006. BP sent additional information on the event to the TCEQ on December 5, 2006, however, the information was insufficient. To date, BP has not submitted all of the requested information to the TCEQ.

13.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 13.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 13.1.

13.4 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before November 30, 2006. To date, BP has not submitted all of the requested information to the TCEQ. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

13.5 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ

by November 18, 2006. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**14. CLAIM NO. 9: CIVIL PENALTIES FOR EMISSIONS EVENT ON
OCTOBER 20-21, 2006, IN FCCU NO. 3**

14.1 According to reports BP submitted to the TCEQ, on October 20, 2006, BP restarted FCCU No. 3 and circulated torch oil causing emissions in addition to normal startup emissions. BP reported emissions from three separate emissions points: Flare No. 3, Flare No. 5, and the FCCU No. 3 Regenerator Stack. BP admitted to exceeding the permitted opacity and releasing air contaminants to the atmosphere for at least 24 hours and 26 minutes, including at least the following:

Air Contaminant	FCCU No. 3 Regenerator Stack Quantity in lbs.	Flare No. 3 Quantity in lbs.	Flare No. 5 Quantity in lbs.
CO	18,956.44	6,079.07	0.00
NO _x	0.00	809.27	0.00
SO ₂	0.00	2,723.18	568.00
VOCs	0.00	2,840.89	0.00

14.2 BP also reported an 80 percent opacity from the FCCU No. 3 Regenerator Stack.

14.3 According to BP, upon restart of FCCU No. 3, actual emissions exceeded those provided by BP in its initial notification for at least one air contaminant. Therefore, this incident is an Emissions Event pursuant to 30 TAC § 101.211(a).

14.4 On February 9, 2007, the TCEQ requested additional information from BP about the event. The TCEQ requested the information be submitted on or before February 23, 2007. To date, BP has not submitted all of the requested information.

14.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 14.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 14.1.

14.6 BP also violated TCAA § 382.085 and Permit 47256 by exceeding the permitted opacity limit of 20 percent averaged over a six-minute period. BP reported an

opacity of 80 percent. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each opacity violation.

14.7 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before February 23, 2007. To date, BP has not submitted all of the requested information. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

14.8 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321) and Flare No. 5 (EPN FLR-5), devices listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by November 19, 2006. BP submitted a Flaring Root Cause Report to the TCEQ on May 22, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause

Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

15. CLAIM NO. 10: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON NOVEMBER 13-28, 2006, FROM PIPESTILL NO. 3A

15.1 According to reports BP submitted to the TCEQ, on November 13, 2006, BP routed a vent gas line from Pipestill No. 3A to Flare No. 2. BP admitted to the release of air contaminants to the atmosphere for at least 349 hours and 23 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	2,068.00
NO _x	275.00
SO ₂	56,324.00
VOCs	3,410.00

15.2 According to BP, BP installed a new vent gas line flow meter on Flare No. 2 on November 13, 2006. BP reported that it eventually traced high flow readings at the meter to a vent gas line from Pipestill No. 3A that BP routed to Flare No. 2 during startup.

15.3 BP discovered the emissions event on or before November 13, 2006, at 3:37 p.m. The initial notification of the Emissions Event was not submitted to the TCEQ until November 27, 2006, at 8:57 p.m. On February 6, 2007, the TCEQ requested that BP send it air dispersion modeling for the event by March 1, 2007. To date, BP has not provided the modeling.

15.4 The TCEQ determined that this was an Excessive Emissions Event. The TCEQ received a CAP from BP for this event on August 27, 2007. The TCEQ approved the CAP on November 16, 2007.

15.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 15.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 15.1.

15.6 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. The event began on or before November 13, 2006; BP submitted its initial report of the event to the TCEQ on November 27, 2006. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

15.7 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before March 1, 2007. To date, BP has not submitted the information. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

15.8 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24

hours from Flare No. 2 (EPN 311), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by December 28, 2006. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**16. CLAIM NO. 11: CIVIL PENALTIES FOR EMISSIONS EVENT ON
DECEMBER 7-12, 2006, IN THE ULTRACRACKER**

16.1 According to reports BP submitted to the TCEQ, on December 7, 2006, BP started the Ultracracker (ULC) Unit after an extended turnaround. BP reported that during startup, the ULC developed a steam leak, which caused the shutdown of Ultraformer No. 4. BP admitted to the release of air contaminants to the atmosphere for at least 123 hours, including at least the following:

Air Contaminant	Quantity in lbs.
CO	6,154.80
NO _x	850.90
SO ₂	56,829.20
H ₂ S	378.20
VOCs	2,821.30

16.2 According to BP, a steam leak developed in the ULC during a startup. BP reported that it subsequently shutdown Ultraformer No. 4 and released contaminants through Temporary Flare FS-48. The emissions on the final report for the event were greater than the emissions in the initial startup notification for at least one contaminant. This event is, therefore, an Emissions Event pursuant to 30 TAC § 101.211(a).

16.3 BP discovered that the startup developed into an Emissions Event on or before December 12, 2006. BP failed to notify the TCEQ within 24 hours of its discovery that the startup became an Emissions Event. To date, BP has not submitted an initial report for the emissions event.

16.4 BP failed to submit a final report of the event to the TCEQ within two weeks of the end of the event. The event ended on December 12, 2006, however, BP submitted its final report on the Emissions Event to the TCEQ on February 28, 2007.

16.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 16.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 16.1.

16.6 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. BP discovered that the startup developed into an Emissions Event on or before December 12, 2006. To date, BP has not submitted an initial report for the Emissions Event. BP submitted a final report on February 28, 2007. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

16.7 BP also violated 30 TAC § 101.201(b) by failing to submit its final notification of an Emissions Event within two weeks of the end of the event. The event ended on December 12, 2006, however, BP submitted its final report to the TCEQ on February 28, 2007. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b).

**17. CLAIM NO. 12: CIVIL PENALTIES FOR EMISSIONS EVENT ON
DECEMBER 21, 2006, AT FLARE NO. 1**

17.1 According to reports BP submitted to the TCEQ, on December 21, 2006, several pieces of equipment shut down causing a release to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 3 hours and 30 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	2,300.00

17.2 According to BP, a power dip shut down several pieces of equipment. BP reported it released gases to Flare No. 1. On February 26, 2007, the TCEQ requested additional information from BP about the event including emissions calculations, root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, metallurgical test results, routine field results, and a comprehensive compliance plan. The TCEQ requested the information be submitted on or before March 12, 2007. BP submitted information to the TCEQ on April 19, 2007, however, the response did not include all of the information requested. To date, BP has not submitted all of the information requested by the TCEQ.

17.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 17.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 17.1.

17.4 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. On February 26, 2007, the TCEQ requested that BP submit additional information about the event on or before March 12, 2007. To date, BP has not submitted all of the information

requested by the TCEQ. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

17.5 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by January 20, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on December 19, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**18. CLAIM NO. 13: CIVIL PENALTIES FOR EMISSIONS EVENT ON
APRIL 10-11, 2007, AT FCCU NO. 3**

18.1 According to reports BP submitted to the TCEQ, on April 10, 2007, an electrical failure caused pieces of equipment at FCCU No. 3 to shut down. BP reported a subsequent opacity exceedance and a release of contaminants from the Electrostatic Precipitator (ESP), as well as a release of contaminants from Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 24 hours and 27 minutes, including at least the following:

Air Contaminant	ESP Fugitives Quantity in Lbs	Flare No. 3 Quantity in lbs.
SO ₂	0.00	2,294.00
NO _x	0.00	214.00
VOCs	0.00	118.00
aluminum silicate	800.00	0.00

18.2 BP also reported a 94 percent opacity from the ESP.

18.3 BP reported to the TCEQ that an electrical failure caused by a power outage in the utilities section led to a temporary interruption in FCCU No. 3. BP reported that a power loss at Switch House No. 3 caused multiple trips of FCCU No. 3 equipment, including loss of multiple pumps.

18.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 18.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 18.1.

18.5 BP also violated TCAA § 382.085 and Permit 47256 by exceeding the permitted opacity limit of 20 percent averaged over a six-minute period. BP reported an opacity of 94 percent. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each opacity violation.

18.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by May 11, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**19. CLAIM NO. 14: CIVIL PENALTIES FOR EMISSIONS EVENT ON
APRIL 11-12, 2007, AT FCCU NO. 3**

19.1 According to reports BP submitted to the TCEQ, on April 11, 2007, a relief device on the Depropanizer in FCCU No. 3 malfunctioned. BP reported that it routed emissions from the Depropanizer to Flare No. 3 and Flare No. 5. This resulted in an opacity exceedance and release of contaminants from the ESP, as well as the release of contaminants from Flare No. 3 and Flare No. 5. BP admitted to the release of air contaminants to the atmosphere for at least 17 hours and 43 minutes, including at least the following:

Air Contaminant	ESP Fugitives Quantity in lbs.	Flare No. 3 Quantity in lbs.	Flare No. 5 Quantity in lbs.
SO ₂	0.00	1,927.00	1,757.00
NO _x	0.00	0.00	679.00
VOCs	0.00	925.00	821.00
aluminum silicate	800.00	0.00	0.00

19.2 BP also reported a 51 percent opacity from the ESP.

19.3 According to BP, a relief valve on the Depropanizer tripped. BP reported it routed emissions to Flare No. 3 and Flare No. 5. This caused an interruption at the FCCU No. 3 ESP, causing an exceedance of its permitted opacity. On June 27, 2007, the TCEQ requested additional information concerning the event including emissions calculations,

root cause analysis, chronology of the event, Emissions Event history for the process unit, maintenance history for the malfunctioning component, routine field monitoring results, and a comprehensive compliance plan to resolve the mechanical issues. The TCEQ requested the information be submitted on or before July 11, 2007. On July 12, 2007, BP submitted an incomplete response. To date, BP has not provided all of the information requested.

19.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 19.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 19.1.

19.5 BP also violated TCAA § 382.085 and Permit 47256 by exceeding the permitted opacity limit of 20 percent averaged over a six-minute period. BP reported an opacity of 51 percent. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each opacity violation.

19.6 BP also violated 30 TAC § 101.201(f) by failing to provide requested information regarding the Emissions Event within the time set forth in the request. The TCEQ requested the information be submitted on or before July 11, 2007. To date, BP has not submitted all of the information requested by the TCEQ. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(f).

19.7 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321) and Flare No. 5 (EPN FLR-5), devices listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by May 12, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on May 22, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**20. CLAIM NO. 15: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 15-18, 2007, AT THE CAT FEED HYDROTREATING UNIT**

20.1 According to reports BP submitted to the TCEQ, on May 15, 2007, a pressure relief valve on the Cat Feed Hydrotreating Unit (CFHU) vented to CFHU Flare No. 1. BP

admitted to the release of air contaminants to the atmosphere for at least 59 hours, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	5,428.00
NO _x	340.00

20.2 According to BP, a pressure relief valve on the 101/102 Compressor in the CFHU tripped, which caused materials to route to CFHU Flare No. 1.

20.3 BP discovered the emissions event on or before May 15, 2007, at 5 p.m. The initial notification of the Emissions Event was not submitted to the TCEQ until May 25, 2007, at 3:41 p.m. BP reported that the Emissions Event ended on May 18, 2007, at 4 a.m. BP submitted its final notification to the TCEQ on June 8, 2007, at 1:09 p.m.

20.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 20.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 20.1.

20.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. BP discovered the event on or before May 15, 2007, at 5 p.m. The initial notification of the Emissions Event was not submitted to the TCEQ until May 25, 2007, at 3:41 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

20.6 BP also violated 30 TAC § 101.201(b) by failing to submit its final report of an Emissions Event no later than fourteen days after the end of the event. BP reported that the Emissions Event ended on May 18, 2007, at 4 a.m. BP submitted its final notification to the TCEQ on June 8, 2007, at 1:09 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b).

20.7 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from CFHU Flare No. 1 (EPN 501), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by June 17, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

21. CLAIM NO. 16: CIVIL PENALTIES FOR EMISSIONS EVENT ON JUNE 3-7, 2007, IN PIPESTILL NO. 3A

21.1 According to reports BP submitted to the TCEQ, on June 3, 2007, the J-457 Compressor in Pipestill No. 3A tripped resulting in a flow of fuel gas to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 91 hours and 35 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	9,769.00
NO _x	462.00
CO	1,400.00
H ₂ S	106.00
VOCs	2,117.00

21.2 As in Claims 17 and 31, the J-457 Compressor tripped and fuel gas flowed to Flare No. 1.

21.3 BP's final report, submitted to the TCEQ on June 19, 2007, did not identify and list all of the reportable and non-reportable emissions of released air contaminants and also did not provide total quantities of the air contaminants released for each released contaminant.

21.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 21.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 21.1.

21.5 BP also violated 30 TAC § 101.201(b)(1)(G) by failing to include a list of the reportable and non-reportable individual air contaminants released in its final report of this Emissions Event, which was due on June 21, 2007. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b)(1)(G).

21.6 BP also violated 30 TAC § 101.201(b)(1)(H) by failing to include the estimated total quantities for those listed air contaminants in its final report of this Emissions Event, which was due on June 21, 2007. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b)(1)(H).

21.7 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by July 7, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision

2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

22. CLAIM NO. 17: CIVIL PENALTIES FOR EMISSIONS EVENT ON JUNE 8-9, 2007, AT PIPESTILL NO. 3A

22.1 According to reports BP submitted to the TCEQ, on June 8, 2007, the J-457 Vent Gas Compressor in Pipestill No. 3A tripped again resulting in a flow of fuel gas to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 13 hours and 5 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	2,277.00
NO _x	104.04
CO	263.99
H ₂ S	24.71
VOCs	333.08

22.2 As in Claims 16 and 31, the J-457 Compressor tripped and fuel gas flowed to Flare No. 1.

22.3 BP's final report, submitted to the TCEQ on June 21, 2007, did not identify and list all of the reportable and non-reportable emissions of released air contaminants. To date, BP has not submitted a final report containing the required information.

22.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 22.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 22.1.

22.5 BP also violated 30 TAC § 101.201(b)(1)(G) by failing to include all the reportable and non-reportable emissions of individually-listed air contaminants in its final report of this Emissions Event. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(b)(1)(G) between June 23, 2007, and the present.

22.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by July 9, 2007. BP submitted a Flaring Root Cause Report to the TCEQ on December 19, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision

2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

23. CLAIM NO. 18: CIVIL PENALTIES FOR EMISSIONS EVENT ON JUNE 18-27, 2007, AT THE OIL MOVEMENT CENTER

23.1 According to reports BP submitted to the TCEQ, on June 18, 2007, part of the roof of Tank 90 at the Oil Movement Center (OMC) disintegrated when a worker stepped on it. BP admitted to the release of air contaminants to the atmosphere for at least 205 hours, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	104.00
VOCs	2,683.00

23.2 According to BP, a contract worker stepped through the floating roof deck of Tank 90 at the OMC while walking on a corroded area of the deck.

23.3 The event began on or before June 18, 2007, at 3:10 p.m. BP submitted its initial report of the event to the TCEQ on June 26, 2007, at 1:23 p.m.

23.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 23.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 23.1.

23.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. The event began on or before June 18, 2007, at 3:10 p.m.; BP submitted its initial report of the event to the TCEQ on June 26, 2007, at 1:23 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

**24. CLAIM NO. 19: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JULY 10, 2007, AT THE ULC**

24.1 According to reports BP submitted to the TCEQ, on July 10, 2007, the 101-JA Recycle Gas Compressor tripped in the ULC causing temperatures in the 100-D Reactor to rise thereby leading to several leaks in flanges in the ULC. BP also reported a release from the ULC Flare. BP admitted to the release of air contaminants to the atmosphere for at least 3 hours, including at least the following:

Air Contaminant	ULC Fugitives Quantity in lbs.	ULC Flare Quantity in lbs.
SO ₂	0.00	469.00
H ₂ S	9.00	5.00
CO	0.00	108.00
benzene	16.00	0.00
NO _x	0.00	46.00
VOCs	1,034.00	124.00

24.2 According to BP, the 101-JA Recycle Gas Compressor shut down during testing of the high level critical alarm associated with the 101-F High Pressure Separator. BP reported that this shut down caused temperatures to rise in the 100-D Reactor, which caused a leak in the Reactor's flange. BP also reported that it released product through the flanges and the ULC Flare.

24.3 The event began on or before July 10, 2007, at 2:10 p.m. BP submitted its initial report of the event to the TCEQ on July 11, 2007, at 4:15 p.m.

24.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 24.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 24.1.

24.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. The event began on or before July 10, 2007, at 2:10 p.m.; BP submitted its initial report of the event to

the TCEQ on July 11, 2007, at 4:15 p.m. BP's violation of 30 TAC § 101.201(a)(1)(B) for part of one day is treated as a violation of one day. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day that BP violated 30 TAC § 101.201(a)(1)(B).

25. CLAIM NO. 20: CIVIL PENALTIES FOR EMISSIONS EVENT ON JULY 18, 2007, AT THE ULC

25.1 According to reports BP submitted to the TCEQ, on July 18, 2007, during a startup of the ULC, the Refinery's vent gas system over-pressured to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 7 hours, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	668.00
NO _x	9.00
CO	64.00
benzene	1.00
VOCs	133.00

25.2 According to BP, BP changed the Refinery's configuration of Coker C operation ratios, which increased the amount of gas being sent to the vent gas system. BP reported that it operated only one of the two utilities compressors at the time of the event. It also reported that the startup of the ULC increased the amount of gas in the system, causing it to over-pressure and vent to Flare No. 1.

25.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 25.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 25.1.

25.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by August 17, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**26. CLAIM NO. 21: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JULY 31, 2007, AT THE ULC**

26.1 According to reports BP submitted to the TCEQ, on July 31, 2007, the ULC 100-JD Makeup Compressor tripped causing the vent gas system to over-pressure and release to Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 13 hours, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	973.00
NO _x	24.00
CO	163.00
H ₂ S	11.00
VOCs	332.00

26.2 According to BP, the ULC 100-JD Makeup Compressor tripped after a lube oil system problem. BP reported that when the Compressor tripped, it caused the low pressure vent gas system to over-pressure, resulting in a release to Flare No. 1.

26.3 The event began on or before July 31, 2007, at 8:00 a.m. BP submitted its initial report on August 1, 2007, at 9:45 a.m.

26.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 26.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 26.1.

26.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. As stated above, the event began on or before July 31, 2007, at 8:00 a.m.; BP submitted its initial report on August 1, 2007, at 9:45 a.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day that BP violated 30 TAC § 101.201(a)(1)(B).

26.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by August 30, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

27. CLAIM NO. 22: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON AUGUST 4-5, 2007, AT ULTRAFORMER NO. 4

27.1 According to reports BP submitted to the TCEQ, on August 4, 2007, a heat exchanger tube leaked butane into the condensate system at the C-432 Depropanizer Reboiler in Ultraformer No. 4. BP reported a release from the F-417 Deaerator and, during repair of a heat exchanger, a release to a temporary flare. BP admitted to the release of an air contaminant to the atmosphere for at least 25 hours and 20 minutes, including at least the following:

Air Contaminant	Deaerator Vent Fugitives Quantity in lbs.	Temporary Flare Quantity in lbs.
VOCs	24,952.00	919.00

27.2 According to BP, the exchanger tube leak caused the pressure in the condensate system to increase. BP reported that the pressure increase adversely affected the pressure in a deaerator fed by the condensate system. As a result, BP reported that it released hydrocarbons from a drum vent on top of the F-417 Deaerator. During the maintenance activity to repair the ruptured exchanger tube, BP reported that it failed to prevent an exchanger relief valve from over-pressuring and relieving to a temporary flare.

27.3 The event began on or before August 4, 2007, at 10:50 a.m. BP submitted its initial report of the event to the TCEQ on August 17, 2007, at 2:20 p.m.

27.4 The TCEQ determined that this was an Excessive Emissions Event. On April 24, 2008, the TCEQ sent notification to BP that the Emissions Event was excessive and that BP had to submit a CAP to the TCEQ within 60 days of receipt of the notification. BP received this Excessive Emissions Event notification on April 26, 2008. The TCEQ received a CAP from BP on October 28, 2008. On December 18, 2008, the TCEQ notified BP that the CAP was deficient and requested additional information by January 2, 2009. BP submitted the additional information on January 21, 2009. The TCEQ approved the CAP on March 20, 2009.

27.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 27.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 27.1.

27.6 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. The event began on or before August 4, 2007, at 10:50 a.m. BP submitted its initial report of the event to the TCEQ on August 17, 2007, at 2:20 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

27.7 BP also violated 30 TAC § 101.223(a)(1) by failing to submit a CAP within 60 days of receiving the TCEQ's Excessive Emissions Event notification. BP received this

notification on April 26, 2008, and submitted an incomplete CAP to the TCEQ on October 28, 2008. BP also violated 30 TAC § 101.223(a)(2) by failing to provide the TCEQ a response to its questions within the time specified by the TCEQ. TCEQ requested BP submit the information necessary to complete the CAP by January 2, 2009; BP did not submit the information until January 21, 2009. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.223(a)(1) and (2).

28. CLAIM NO. 23: CIVIL PENALTIES FOR EMISSIONS EVENT ON SEPTEMBER 7-8, 2007, AT THE CAT FEED HYDROTREATING UNIT

28.1 According to reports BP submitted to the TCEQ, on September 8, 2007, a valve in the CFHU failed resulting in a release to CFHU Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 8 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	16,858.00
NO _x	86.00
CO	260.00
H ₂ S	183.00
VOCs	102.00

28.2 According to BP, a motor-operated valve at the CFHU failed in the open position. BP reported that the valve failure resulted in the shutdown of the Unit. Upon investigation, BP reported that it found water in the valve wiring junction box.

28.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 28.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 28.1.

28.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from CFHU Flare No. 1 (EPN 501), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by October 8, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

29. CLAIM NO. 24: CIVIL PENALTIES FOR EMISSIONS EVENT ON OCTOBER 18-19, 2007, AT THE ULTRACRACKER

29.1 According to reports BP submitted to the TCEQ, on October 18, 2007, a lube oil turbine in the ULC tripped. BP reported that this eventually caused a shutdown of the ULC and air contaminants from the ULC went to the ULC Flare. BP admitted to the release of air contaminants to the atmosphere for at least 11 hours and 33 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	1,576.00
NO _x	19.00
CO	95.00
H ₂ S	17.00
VOCs	153.00

29.2 According to BP, the 104-J lube oil turbine tripped causing the ULC to become unstable, which caused the 101-D Reactor wall temperature to increase above safe operating levels and required a unit shut down. BP reported that depressurization of the system led to a release through the ULC Flare.

29.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 29.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 29.1.

29.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from the ULC Flare (EPN 351A), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by November 18, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

30. CLAIM NO. 25: CIVIL PENALTIES FOR EMISSIONS EVENT ON NOVEMBER 18-20, 2007, AT THE CAT FEED HYDROTREATING UNIT

30.1 According to reports BP submitted to the TCEQ, on November 18, 2007, during a startup of the CFHU, air contaminants vented to CFHU Flare No. 1. BP admitted

to the release of air contaminants to the atmosphere for at least 46 hours and 30 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	4,096.00
NO _x	340.00
CO	1,733.00
H ₂ S	44.00
VOCs	407.00

30.2 According to BP, during startup the pressure in the CFHU increased above what BP anticipated. BP reported that the increased pressure occurred during the catalyst reaction phase when the gas in the system expanded, increasing the pressure, which caused extended venting to CFHU Flare No. 1.

30.3 The event began on or before November 18, 2007, at 4:00 a.m. BP submitted its initial report of the event to the TCEQ on November 27, 2007, at 5:36 p.m.

30.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 30.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 30.1.

30.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. The event began on or before November 18, 2007, at 4:00 a.m.; BP submitted its initial report of the

event to the TCEQ on November 27, 2007, at 5:36 p.m. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

30.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from CFHU Flare No. 1 (EPN 501), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by December 20, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**31. CLAIM NO. 26: CIVIL PENALTIES FOR EMISSIONS EVENT ON
NOVEMBER 19 - DECEMBER 7, 2007, AT FCCU NO. 1**

31.1 According to reports BP submitted to the TCEQ, on November 19, 2007, BP began startup procedures at FCCU No. 1. BP reported that the startup stage lasted longer than anticipated because of a power outage, electrical issues, and a leaking tube. BP admitted to exceeding permitted opacity limits and releasing air contaminants to the atmosphere for at least 455 hours and 59 minutes, including at least the following:

Air Contaminant	Electrostatic Precipitator Stack Quantity in lbs.	Refinery Flare No. 3 Quantity in lbs.	Refinery Flare No. 4 Quantity in lbs.
CO	112,147.00	581.00	15,039.00
aluminum silicate	955.00	0.00	0.00
SO ₂	0.00	42.00	5,698.00
H ₂ S	0.00	0.5	62.00
NO _x	0.00	114.00	2,951.00
VOCs	0.00	909.00	14,735.00

31.2 BP also reported a 94 percent opacity from the ESP.

31.3 According to BP, BP began the startup of FCCU No. 1 after the Unit was idle for two years. BP reported that the startup was set to begin on November 16, 2007, but electrical problems, a power outage, and a tubing leak delayed the startup. According to BP, it started the repairs while continuing the startup, instead of shutting down and restarting. BP also reported that each of the factors identified above required the torch oil to be circulated longer, extending the startup time and increasing emissions. The emissions

on the final report for the event were greater than the emissions in the initial startup notification for at least one contaminant. The event is, therefore, an Emissions Event pursuant to 30 TAC § 101.211(a).

31.4 BP discovered that the startup developed into an Emissions Event on or before November 19, 2007. BP failed to notify the TCEQ within 24 hours of its discovery that the startup became an Emissions Event. To date, BP has not submitted an initial report for the emissions event.

31.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 31.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 31.1.

31.6 BP also violated TCAA § 382.085 and Permit 47256 by exceeding the permitted opacity limit of 20 percent averaged over a six-minute period. BP reported an opacity of 94 percent. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each opacity violation.

31.7 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after discovery. BP discovered that the startup developed into an Emissions Event on or before November 19, 2007. To date, BP has not submitted an initial report for the Emissions Event. BP submitted a final report on December 18, 2007. Pursuant to Texas Water Code § 7.102, the State requests a

civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

31.8 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Refinery Flare No. 4 (EPN 331), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by January 6, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on May 22, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**32. CLAIM NO. 27: CIVIL PENALTIES FOR EMISSIONS EVENT ON
DECEMBER 2, 2007, AT POWER AREA 2**

32.1 According to reports BP submitted to the TCEQ, on December 2, 2007, the J-425 Vent Gas Compressor shut down in Power Area 2, resulting in flaring of low pressure vent gas from Flare No. 1. BP admitted to the release of air contaminants to the atmosphere for at least 11 hours and 29 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	205.97
H ₂ S	32.76
NO _x	67.82
SO ₂	3,018.90
VOCs	304.07

32.2 According to BP, the J-425 Vent Gas Compressor tripped, resulting in low-pressure vent gas which flared through the low pressure system to Flare No. 1. BP reported that it shut down the Vent Gas Compressor to prevent damage to the Compressor. According to BP, it discovered that a cylinder lubricating pump on the Compressor failed because of water in the modular lube oil pump and system lines.

32.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 32.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 32.1.

32.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by January 1, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

33. CLAIM NO. 28: CIVIL PENALTIES FOR EMISSIONS EVENT ON JANUARY 18 - FEBRUARY 22, 2008, AT TANK 501 AND FCCU NO. 1

33.1 According to reports BP submitted to the TCEQ, on January 18, 2008, BP found a layer of gasoline floating on the top of Tank 501. BP reported that the gasoline vented to the atmosphere and that it found gasoline in the sewer system at FCCU No. 1. BP

admitted to the release of air contaminants to the atmosphere for at least 840 hours and 30 minutes, including at least the following:

Air Contaminant	FCCU No. 1 Fugitives Quantity in lbs.	Tank 501 Fugitives Quantity in lbs.	Tank 241 Fugitives Quantity in lbs.
benzene	203.96	4.41	1109
VOCs	10,599.82	975.37	44,702

33.2 According to BP, the gasoline layer found on Tank 501 was caused by a failure of the pump internal suction and discharge ball checks as well as a failure of the discharge check valve. BP reported that the failure of the pump allowed reverse flow through the pump, which allowed gasoline to flow into Tank 501. According to BP, it also discovered gasoline in the on-site sewer system near FCCU No. 1; and it later found this to be caused by a valve and line discharging below the ground.

33.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 33.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 33.1.

**34. CLAIM NO. 29: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 30 - FEBRUARY 1, 2008, AT FCCU NO. 3**

34.1 According to reports BP submitted to the TCEQ, on January 30, 2008, during startup of FCCU No. 3 actual emissions exceeded the estimated quantities for the startup.

BP admitted to the release of air contaminants to the atmosphere for at least 43 hours and 40 minutes, including at least the following:

Air Contaminant	Flare No. 3 Quantity in lbs.	Flare No. 5 Quantity in lbs.	Wet Gas Scrubber Quantity in lbs.
CO	843.00	56.00	32,438.00
H ₂ S	12.00	0.00	0.00
NO _x	177.00	30.00	0.00
SO ₂	1,088.00	0.00	0.00
VOCs	1,292.00	122.00	0.00

34.2 According to BP, during a routine startup of FCCU No. 3, BP staff failed to estimate accurately the amount of emissions anticipated for the startup. The emissions on the final report for the event were greater than the emissions in the initial startup notification for at least one contaminant. This event is, therefore, an Emissions Event pursuant to 30 TAC § 101.211(a).

34.3 BP discovered that the startup developed into an Emissions Event on or before January 30, 2008. BP failed to notify the TCEQ within 24 hours of its discovery that the startup became an Emissions Event. To date, BP has not submitted an initial report for the Emissions Event. BP submitted a final report on February 19, 2009.

34.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 34.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 34.1.

34.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. BP discovered that the startup developed into an Emissions Event on or before January 30, 2008. BP did not submit an initial report, but submitted a final report on February 19, 2009. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

34.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by March 2, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on December 19, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**35. CLAIM NO. 30: CIVIL PENALTIES FOR EMISSIONS EVENT ON
FEBRUARY 26, 2008, AT THE COKER COMPLEX**

35.1 According to reports BP submitted to the TCEQ, on February 26, 2008, during startup of the Coker B Unit in the Coker Complex, the Unit vented to the flare header system and Flare No. 2. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 25 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	60.00
H ₂ S	11.00
NO _x	12.00
SO ₂	1,025.00
VOCs	68.00

35.2 According to BP, BP directed both Coker B and C Units to the three pound vent system when the gas pressure from the Coker C Unit caused the valve from the Coker B Unit to open and vent to the flare header system and Flare No. 2. According to BP, the operator failed to control the gas pressure from the Coker C Unit.

35.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 35.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 35.1.

35.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 2 (EPN 311), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by March 27, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**36. CLAIM NO. 31: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MARCH 20-21, 2008, AT POWER STATION 2**

36.1 According to reports BP submitted to the TCEQ, on March 20, 2008, at the Power Station No. 2, a vent gas compressor tripped, causing a release to Flare No. 1. BP

admitted to the release of air contaminants to the atmosphere for at least 3 hours and 30 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	918.62
CO	51.33
H ₂ S	9.97
NO _x	10.07
VOCs	77.53

36.2 According to BP, J-457 Vent Gas Compressor in Pipestill No. 3 tripped when the liquid level in the wet gas knockout drum rose above a trip point. BP reported that the high liquid level in the knockout drum was caused by overflow of the overhead product drum into the wet gas knockout drum. According to BP, this over-pressured the three pound fuel gas system, tripping off the J-425 Compressor in Power Station 2, which resulted in the emissions. As in Claims 16 and 17, the J-457 Compressor tripped and fuel gas flowed to Flare No. 1.

36.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 36.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 36.1.

36.4 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this

Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by April 20, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

37. CLAIM NO. 32: CIVIL PENALTIES FOR FAILURE TO SUBMIT REPORT FOR FLARING EVENT ON MARCH 21, 2008 AT PIPESTILL NO. 3B

37.1 According to reports BP submitted to the TCEQ, on March 21, 2008, while Pipestill No. 3B was starting up, liquid overflowed to the fuel gas system increasing the pressure in the system, which shutdown the J-425 Compressor. The relief valve on the J-425 Compressor opened to relieve the excess pressure. When the J-425 Compressor restarted, the relief valve did not reseat properly, sending materials to Flare No. 2. BP

admitted to the release of air contaminants to the atmosphere for at least 19 hours, including at least the following:

Air Contaminant	Quantity in lbs.
CO	124.10
H ₂ S	8.30
NO _x	24.30
SO ₂	762.30
VOCs	209.10

37.2 BP stated in its reports regarding the event that the relief valve on the J-425 Compressor failed to reseal properly for unknown reasons. BP asserts that it regularly inspects the relief valve as part of its preventative maintenance program, and it inspected the valve on August 2, 2007. BP reseated the relief valve manually when staff discovered an unknown emissions stream flowing to Flare No. 2. BP traced the cause back to the relief valve. During the event, Flare No. 2 released several air contaminants, among them, 762.30 pounds of SO₂.

37.3 BP violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 2 (EPN 311), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by April 20, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on October 2,

2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

38. CLAIM NO. 33: CIVIL PENALTIES FOR EMISSIONS EVENT ON MARCH 25, 2008, AT FCCU NO. 1

38.1 According to reports BP submitted to the TCEQ, on March 25, 2008, the FCCU No. 1 Debutanizer Reflux Pump developed a leak in its tubing. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 25 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	8.04
VOCs	4,465.51

38.2 According to BP, a leak in the stainless steel tubing at the Debutanizer Reflux Pump J-470 was caused by external-chloride-induced stress. BP reported that the elevated chloride levels were likely caused by the fire water deluge system.

38.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 38.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 38.1.

**39. CLAIM NO. 34: CIVIL PENALTIES FOR EMISSIONS EVENT ON
APRIL 24, 2008, AT COKER B**

39.1 According to reports BP submitted to the TCEQ, on April 24, 2008, the Coker B North Drum over-pressured and its relief valve released to the atmosphere. BP admitted to the release of air contaminants to the atmosphere for at least 3 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	103.00
CO	5.00
VOCs	13,656.00

39.2 According to BP, as operations switched from one coke drum to another, transfer line temperature and synchronization were improper, which caused the pressure in the system to increase and the relief valve opened in order to prevent catastrophic failure.

39.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 39.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 39.1.

**40. CLAIM NO. 35: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 9-12, 2008, AT FCCU NO. 3**

40.1 According to reports BP submitted to the TCEQ, on May 9, 2008, a leak occurred in tubing on a pressure transmitter at FCCU No. 3's 506-E Tower. BP admitted to the release of air contaminants to the atmosphere for at least 72 hours and 48 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	45.00
VOCs	2,224.00

40.2 According to BP, an odor was detected by contractors working on the 506-E Tower. BP reported that its maintenance staff determined that the leak was coming from a deformed tubing connection.

40.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 40.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 40.1.

41. CLAIM NO. 36: CIVIL PENALTIES FOR EMISSIONS EVENT ON MAY 16-18, 2008, AT AROMATICS UNIT COOLING TOWER

41.1 According to reports BP submitted to the TCEQ, on May 16, 2008, the Aromatics Unit 2 Cooling Tower water exchanger developed a leak, which resulted in material entering the cooling water. BP admitted to the release of air contaminants to the atmosphere for at least 48 hours, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	844.74
VOCs	284.20

41.2 According to BP, the water exchanger in the Aromatics Unit 2 Cooling Tower developed a leak. The event began on or before May 16, 2008, at 3:50 p.m. BP submitted its initial report of the event to the TCEQ on May 20, 2008, at 2:15 p.m.

41.3 BP violated TCAA § 382.085 and Permit 2612 by emitting the air contaminants listed in paragraph 41.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 41.1.

41.4 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. The event began on or before May 16, 2008, at 3:50 p.m.; BP submitted its initial report of the event to the TCEQ on May 20, 2008, at 2:15 p.m. Pursuant to Texas Water Code § 7.102, the

State requests a civil penalty within the statutory range for each day and partial day that BP violated 30 TAC § 101.201(a)(1)(B).

**42. CLAIM NO. 37: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JUNE 19, 2008, AT ULTRAFORMER NO. 4**

42.1 According to reports BP submitted to the TCEQ, on June 19, 2008, the 3 Phase Separator project excavation filled with liquid from an open-ended 4-inch oil water separator line. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 15 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	13.49
VOCs	1,335.18

42.2 According to BP, a BP operator was cleaning pump screens and left a drain valve open to the Oil Water Separator Sewer. BP reported that flow meters showed no flow in the lines and other process equipment failed to activate to stop the release to the Oil Water Separator Sewer. Contractors working on the excavation at the 3 Phase Separator project continued demolishing the sewer line, unaware that materials were in the line.

42.3 BP violated TCAA § 382.085 and Permit 6488 by emitting the air contaminants listed in paragraph 42.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 42.1.

**43. CLAIM NO. 38: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JUNE 22, 2008, AT FCCU NO. 1**

43.1 According to reports BP submitted to the TCEQ, on June 22, 2008, the tubing on the J-470 Debutanizer Reflux Pump within FCCU 1 failed. BP admitted to the release of air contaminants to the atmosphere for at least 30 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	4.00
VOCs	1,816.00

43.2 According to BP, the casing flush tubing on J-470 Debutanizer Reflux Pump failed. BP reported that the tubing failure allowed light hydrocarbons to leak to the atmosphere.

43.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 43.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 43.1.

**44. CLAIM NO. 39: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JULY 1, 2008, AT CFHU FLARE NO. 2**

44.1 According to reports BP submitted to the TCEQ, on July 1, 2008, pressure inside a drum in the RHU increased, which caused the relief valve on the drum to vent materials to CFHU Flare No. 2. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 10 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	688.00
H ₂ S	52.00
NO _x	135.00
SO ₂	4,809.00
VOCs	715.00

44.2 According to BP, a blocked vapor outlet on Drum 206-F at the RHU caused pressure inside the Drum to increase. BP reported that the increased pressure then caused the relief valve on the Drum to open and vent materials to CFHU Flare No. 2.

44.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 44.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 44.1.

45. CLAIM NO. 40: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON JULY 25, 2008, AT PIPESTILL NO. 3A

45.1 According to reports BP submitted to the TCEQ, on July 25, 2008, the tubing on the relief valve piping on a drum in Pipestill No. 3A failed, which caused materials to leak from the piping. BP admitted to the release of air contaminants to the atmosphere for at least 41 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	109.00
VOCs	9,196.00

45.2 According to BP, the tubing failed on the relief valve piping of Drum 379-F in Pipestill No. 3A. BP reported that the failed tubing released material directly to the atmosphere.

45.3 BP violated TCAA § 382.085 and Permit 19599 by emitting the air contaminants listed in paragraph 45.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 45.1.

46. CLAIM NO. 41: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON JULY 26, 2008, AT THE SRU

46.1 According to reports BP submitted to the TCEQ, on July 26, 2008, as a result of several simultaneous equipment and procedural failures, boiler water level in the Claus Waste Heat Boilers was low, which triggered the shutdown of the Claus Units. Low steam level also caused the SRU to trip, reducing process efficiency and sending materials to the flare and incinerators. BP admitted to the release of air contaminants to the atmosphere for at least 4 hours and 38 minutes, including at least the following:

Air Contaminant	SRU Flare Quantity in lbs.	SRU Incinerator C and D Quantity in lbs.
Ammonia	8,649.00	0.00
H ₂ S	17,361.00	0.00
CO	0.00	3.00
NO _x	0.00	0.30
SO ₂	0.00	2,510.00
VOCs	0.00	5.00

46.2 According to BP, several pieces of equipment and processes, as well as operations personnel, failed to operate properly. BP reported that personnel and equipment allowed the boiler water level in the Claus Waste Heat Boilers to get below proper operating level, which triggered the automatic shut-down of the Claus Units, which in turn affected other equipment and sections. According to BP, this caused a decrease in the boiler feed water header pressure on the steam drum at the SRU. BP reported that this low steam level caused the SRU to trip and as SRU efficiency decreased, BP sent materials to the flare.

46.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 46.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 46.1.

47. CLAIM NO. 42: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON AUGUST 9–12, 2008, AT THE CFHU

47.1 According to reports BP submitted to the TCEQ, on August 9, 2008, a gasket on a fin fan at the CFHU began leaking. As a result of the leak, BP shut down the Unit and sent materials to the CFHU Flare. BP admitted to the release of air contaminants to the atmosphere for at least 59 hours and 14 minutes, including at least the following:

Air Contaminant	CFHU Flare Quantity in lbs.	CFHU Fugitives Quantity in lbs.
H ₂ S	48.00	68.00
CO	152.00	0.00
NO _x	30.00	0.00
SO ₂	4,423.00	0.00
VOCs	230.20	0.00

47.2 According to BP, the gasket on a plug on the C-108 Fin Fan began leaking. BP reported that the gasket leaked because BP installed two carbon steel gaskets on the incoloy plug, thereby sandwiching two different materials. According to BP, this caused corrosion which led to the leak. BP also reported that after it located the leak, it replaced the incorrect carbon steel gaskets with a compatible gasket.

47.3 Although BP reported no emissions from a listed device during this event, BP submitted a Flaring Root Cause Report for this event to the TCEQ on October 2, 2008.

47.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 47.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 47.1.

**48. CLAIM NO. 43: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON
AUGUST 20, 2008, AT THE SRU**

48.1 According to reports BP submitted to the TCEQ, on August 20, 2008, a plugged tap on a flow transmitter in the SRU led to materials being sent to the SRU

Incinerator. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 7 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	1.00
NO _x	0.12
SO ₂	1,032.00

48.2 According to BP, a flow indicator on the D Sulfur Train began giving inaccurate readings. BP reported that the inaccurate readings caused the control valves on the D Sulfur Train to cycle between air-rich and air-deficient, which eventually led to the release of materials to the SRU Incinerator. According to BP, a plugged tap on the flow transmitter caused the inaccurate flow indicator readings.

48.3 Although BP reported no emissions from a listed device during this event, BP submitted a Flaring Root Cause Report for this event to the TCEQ on October 2, 2008.

48.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 48.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 48.1.

49. CLAIM NO. 44: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON SEPTEMBER 5, 2008, AT THE RHU

49.1 According to reports BP submitted to the TCEQ, on September 5, 2008, a blocked vapor outlet from a drum to the VRU caused the pressure inside the drum to

increase. The pressure increase caused the relief valve to open and vent materials to the CFHU Flare. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 50 minutes, including at least the following:

Air Contaminants	Quantity in lbs.
CO	1,060.00
H ₂ S	122.00
NO _x	208.00
SO ₂	11,237.00
VOCs	876.00

49.2 According to BP, a blockage in the mechanical control valve on the outlet of Drum 306-F to the VRU caused the pressure inside Drum 306-F to increase. BP reported that this increased pressure caused the relief valve to lift and vent materials to the CFHU Flare. According to BP, the blockage in the control valve was caused by a buildup of sludge and scale in the valve.

49.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 49.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 49.1.

50. CLAIM NO. 45: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON SEPTEMBER 7, 2008, AT PIPESTILL NO. 3A

50.1 According to reports BP submitted to the TCEQ, on September 7, 2008, while Pipestill No. 3A was in the process of a routine shutdown of the VRU, a rapid

temperature decrease caused the system to over-pressure. In order to relieve the pressure, BP vented materials to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 45 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	97.40
H ₂ S	30.00
NO _x	19.00
SO ₂	2,726.00
VOCs	162.50

50.2 According to BP, during a routine shutdown of the VRU in Pipestill No. 3A, the temperature within the VRU rapidly decreased. BP reported that the rapid temperature decrease caused the system to over-pressure. According to BP, in an effort to depressurize the system, BP vented materials to Flare No. 3. BP reported that the rapid temperature decrease in the VRU was caused by BP's attempt to switch the reboiler feed from heavy virgin gas to diesel and that no diesel was available for the VRU at the time.

50.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on November 5, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

50.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 50.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 50.1.

50.5 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by October 7, 2008. BP submitted a Flaring Root Cause Report to the TCEQ on November 5, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

51. CLAIM NO. 46: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON SEPTEMBER 7, 2008, AT THE TANK FARM

51.1 According to reports BP submitted to the TCEQ, on September 7, 2008, the floating roof of Tank 561 failed when BP diverted materials with higher vapor pressure to Tank 561 during the upset event at Pipestill No. 3A, described in section 50 above. BP admitted to the release of air contaminants to the atmosphere for at least 6 hours, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	4,239.70
VOCs	13,138.66

51.2 According to BP, during the event described in section 50 above, BP diverted materials from Pipestill No. 3A to the Tank Farm. BP reported that the appropriate tanks for receiving materials such as those diverted were both unavailable, leaving Tank 561 as the only recipient tank. According to BP, Tank 561 is not intended to store materials with a vapor pressure of 15 psi, such as those sent to it from Pipestill No. 3A. BP reported that the pressure within Tank 561 exceeded the capabilities of its floating roof and air contaminants escaped through the seal area.

51.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 51.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 51.1.

52. CLAIM NO. 47: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON JANUARY 5-11, 2009, AT FCCU NO. 3

52.1 According to reports BP submitted to the TCEQ, during startup of FCCU No. 3 after a planned turnaround, actual emissions exceeded the estimated amounts. BP admitted to the release of air contaminants to the atmosphere for at least 144 hours, including at least the following:

Air Contaminant	Quantity in lbs.
CO	11,344.30
H ₂ S	50.06
SO ₂	4,612.89
VOCs	33,212.01
NO _x	3,735.74

52.2 According to BP, during startup of FCCU No. 3, actual emissions exceeded the amounts estimated by BP. According to a report of the event submitted by BP, the start up began on January 5, 2009. BP estimated that any gas not used during startup would be routed to the fuel gas system. However, on or before January 9, 2009, the fuel gas system filled to capacity and the excess gas was routed to Flare No. 3.

52.3 As stated above, BP reported that on or before January 9, 2009, the emissions to Flare No. 3 increased beyond estimated amounts. BP discovered that the startup developed into an Emissions Event on or before January 9, 2009, when BP found that actual emissions exceeded those estimated in the initial notification. BP submitted the initial notification of the Emissions Event on January 23, 2009.

52.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 52.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 52.1.

52.5 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. According to a report submitted by BP, the event began on or before January 9, 2009, when the actual startup emissions exceeded the original estimated emissions. BP submitted its initial report of the event to the TCEQ on January 23, 2009. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

52.6 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 10, 2009. To date, BP has not submitted a Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a Flaring Root Cause

Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a Flaring Root Cause Report for this event.

53. CLAIM NO. 48: CIVIL PENALTIES FOR THE EMISSIONS EVENT ON JANUARY 12, 2009, AT FCCU NO. 3

53.1 According to reports BP submitted to the TCEQ, on January 12, 2009, a pump in FCCU No. 3, went out of service. BP operations eventually started the spare pump, but not before the unit sent material to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 14 hours and 5 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	3,205.73
VOCs	850.18

53.2 According to BP, during start up of FCCU No. 3, a wear ring in Pump 534-JA broke, putting it out of service. BP reported that it attempted to start the spare pump, however it failed to start because of sediment in the pump. According to BP, it eventually started the spare pump, but not before a relief valve opened to vent material to Flare No. 3. BP reported that the spare pump then had to be shut down because of a seal failure.

53.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on February 11, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

53.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 53.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 53.1.

53.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 11, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on February 11, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**54. CLAIM NO. 49: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 13, 2009, AT FCCU NO. 3**

54.1 According to reports BP submitted to the TCEQ, on January 13, 2009, low liquid level in Drum 508-F caused higher than normal vibration in Pump 534-JA, which caused a pipe nipple on the suction line of the pump to crack. BP operations shut down the pump and relieved materials to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 8 hours and 40 minutes, including at least the following:

Air Contaminant	Flare No. 3 Quantity in lbs.	FCCU No. 3 Fugitives Quantity in lbs.
VOCs	11,300.38	8.30
H ₂ S	174.35	0.20
CO	5,248.31	0.00
NO _x	1,029.97	0.00
SO ₂	16,065.09	0.00

54.2 According to BP, following the failure of Pump 534-JA described in paragraph 53.2 above, BP repaired the pump and returned it to service on January 13, 2009. BP reported that low liquid levels in Drum 508-F caused cavitations and higher than normal vibrations in Pump 534-JA. According to BP, the vibrations caused a pipe nipple on the suction line of Pump 534-JA to crack. BP reported that the cracked nipple caused Pump 534-JA to shut down and materials released to Flare No. 3.

54.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on February 11, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

54.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 54.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 54.1.

54.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 12, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on February 11, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**55. CLAIM NO. 50: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 16, 2009, AT PIPESTILL NO. 3A**

55.1 According to reports BP submitted to the TCEQ, on January 16, 2009, holes in steam ejectors in a vacuum tower at Pipestill No. 3A caused a loss of vacuum in the system, leading to an increase in pressure and a release of materials to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 9 hours, including at least the following:

Air Contaminant	Quantity in lbs.
VOCs	269.50
CO	137.00
H ₂ S	49.00
NO _x	27.00
SO ₂	4,505.00

55.2 According to BP, steam ejectors in a vacuum tower developed holes in them. BP reported that the steam ejectors use high-pressure steam to compress vapors or gases and to create a vacuum within the chamber. According to BP, the holes in the ejectors caused a loss of vacuum, which led to increased pressure within the chamber and a release of materials to Flare No. 3.

55.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on February 16, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

55.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 55.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 55.1.

55.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 15, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on February 16, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**56. CLAIM NO. 51: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 18, 2009, AT THE SRU**

56.1 According to reports BP submitted to the TCEQ, on January 18, 2009, the SRU received a surge of H₂S, which caused H₂S flow to the incinerator to increase and consequently led to an increase in SO₂ emissions. BP admitted to the release of air contaminants to the atmosphere for at least 3 hours and 24 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	1.00
NO _x	0.10
SO ₂	4,884.00

56.2 According to BP, a plugged baffle in a drum at the RHU caused a surge of H₂S to the SRU SCOT Absorber. BP reported that the plugging allowed hydrocarbons into the amine system. This prevented the Absorber from absorbing the H₂S, which, in turn, caused an increase in the flow of H₂S to the SRU Incinerator and emissions of SO₂. According to BP, the plugged baffle in the drum at the RHU was caused by infrequent use of the drum.

56.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 56.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 56.1.

**57. CLAIM NO. 52: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 29, 2009, AT THE SRU**

57.1 According to reports BP submitted to the TCEQ, on January 29, 2009, an isolation valve closed, causing the C and D Sulfur Trains to shut down. BP then routed material to the SRU Flare. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 3 minutes, including at least the following:

Air Contaminant	SRU Flare Quantity in lbs.	SRU Incinerator Quantity in lbs.
H ₂ S	452.06	0.00
NO _x	7.00	0.00
SO ₂	41,822.42	127.00

57.2 According to BP, BP incorrectly installed air lines on an isolation valve actuator. BP reported that the incorrectly installed air lines caused the isolation valve to close, which caused the C and D Sulfur Trains to trip on the high pressure.

57.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on February 27, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

57.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 57.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 57.1.

57.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from the SRU Flare (EPN 383), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 28, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on February 27, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**58. CLAIM NO. 53: CIVIL PENALTIES FOR EMISSIONS EVENT ON
FEBRUARY 4, 2009, AT THE SRU**

58.1 According to reports BP submitted to the TCEQ, on February 4, 2009, the SRU Incinerator began experiencing high SO₂ levels which led the unit to lose process ratio control causing a release of materials through the Incinerator. BP admitted to the release of air contaminants to the atmosphere for at least 7 hours and 45 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	1.00
NO _x	0.10
SO ₂	3,240.12

58.2 According to BP, the SRU Incinerator began emitting high levels of SO₂. High levels of hydrocarbon contamination, caused by internal plugging, reduced incinerator efficiency by consuming more oxygen, thereby causing the increased level of SO₂. According to BP, a plugged vapor recovery accumulator in the RHU caused the oil level in the accumulator to become too high. BP reported that the high level of oil hindered separation of the oil, and the hydrocarbons then fed into the incinerator at a level at which it could not operate efficiently.

58.3 Although BP reported no emissions from a listed device during this event, BP submitted a Flaring Root Cause Report for this event to the TCEQ on March 6, 2009.

58.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 58.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 58.1.

59. CLAIM NO. 54: CIVIL PENALTIES FOR EMISSIONS EVENT ON FEBRUARY 27, 2009, AT THE SRU

59.1 According to reports BP submitted to the TCEQ, on February 27, 2009, the D Sulfur Train shut down which sent material to the SRU Incinerator. BP admitted to the release of air contaminants into the atmosphere for at least 2 hours and 25 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	1,568.00
CO	0.50
NO _x	0.10

59.2 According to BP, the D Sulfur Train shut down because of high pressure at the front of the process. BP reported that a build-up of material in the last sulfur condenser from a lack of drainage caused the high pressure. According to BP, the sulfur condenser should remove elemental sulfur from the process, however, a tubing failure prevented the removal of sulfur and caused the increase in pressure in the process.

59.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 59.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 59.1.

60. CLAIM NO. 55: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON MARCH 2-7, 2009, AT THE SRU

60.1 According to reports BP submitted to the TCEQ, as a result of the events on February 27, 2009, (described in paragraph 59.2), abnormal amounts of gas caused D SCOT to be bypassed, resulting in flaring for several days. BP admitted to the release of air contaminants to the atmosphere for at least 129 hours, including at least the following:

Air Contaminant	Quantity in lbs.
CO	95.00
NO _x	11.00
SO ₂	103,602.00

60.2 According to BP, the shut down of the D Sulfur Train (described in paragraph 59.2 above) caused BP to bypass the D SCOT unit. According to BP reports, BP blocked in the D Sulfur Train to troubleshoot the cause of the sulfur build up in the Train. BP failed to identify a tube leak in the process leading to D SCOT, a tail gas treater, which caused a build up of water and extinguished the burner flame on D SCOT. BP personnel attempted to bypass D SCOT, however, process gases continued to flow to D SCOT. The abnormal levels of gas in D SCOT led to plugging and the eventual bypassing of D SCOT, which sent gas to the SRU incinerator for several days.

60.3 The TCEQ determined that this was an Excessive Emissions Event. The TCEQ received a CAP from BP for this event on November 16, 2009. The TCEQ approved the CAP on March 17, 2010.

60.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 60.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 60.1.

61. CLAIM NO. 56: CIVIL PENALTIES FOR EMISSIONS EVENT ON MARCH 7-8, 2009, AT FCCU NO. 3

61.1 According to reports BP submitted to the TCEQ, on March 7, 2009, BP restarted FCCU No. 3 after a shut down in response to an upset at the SRU. BP admitted to the release of air contaminants to the atmosphere for at least 45 hours and 50 minutes, including at least the following:

Air Contaminant	Flare No. 3 Emissions Quantity in lbs.	Wet Gas Scrubber Emissions Quantity in lbs.
CO	1,801.87	65,457.00
H ₂ S	128.47	0.00
SO ₂	11,837.70	0.00
NO _x	593.36	0.00
VOCs	4,117.04	0.00

61.2 According to BP, during the start up of FCCU No. 3, actual emissions exceeded the estimated emissions. According to BP reports, during normal FCCU No. 3

startup operations, propane treated with amine to reduce emissions is fed to the FCCU No. 3. In this instance, BP personnel at the FCCU No. 3 were not aware of a decreased amount of amine available in the SRU (the typical source of amine). Consequently not enough amine was fed to FCCU No. 3 and emissions were higher than estimated.

61.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on June 16, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

61.4 BP discovered that the startup developed into an Emissions Event on or before March 8, 2009, when BP found that actual emissions exceeded those estimated in the startup notification. BP has not submitted an initial notification for this Emissions Event. A final report was submitted on March 20, 2009.

61.5 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 61.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 61.1.

61.6 BP also violated 30 TAC § 101.201(a)(1)(B) by failing to submit its initial notification of an Emissions Event no later than 24 hours after its discovery. The event began on or before March 7, 2009, when the actual startup emissions exceeded the original estimated emissions. BP did not submit an initial notification for the Emissions Event to the TCEQ. BP submitted a final report on March 20, 2009. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day BP violated 30 TAC § 101.201(a)(1)(B).

61.7 BP also violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by April 7, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on June 16, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**62. CLAIM NO. 57: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 8-11, 2009, AT ULTRAFORMER NO. 4**

62.1 According to reports BP submitted to the TCEQ, on May 8, 2009, the fuel gas system at the UU4 defaulted to an emergency shut down, which resulted in the discharge of fuel gas to several flares. BP admitted to the release of air contaminants to the atmosphere for at least 32 hours, including at least the following:

Air Contaminant	Flare No. 1 Emissions Quantity in lbs.	Flare No. 3 Emissions Quantity in lbs.	Ultra Cracker Flare Emissions Quantity in lbs.
CO	6.74	4,063.90	639.21
NO _x	1.32	797.53	125.40
VOCs	6.34	5,670.51	413.54
H ₂ S	0.00	0.23	1.40
SO ₂	0.00	21.27	129.33
benzene	0.00	0.00	3.70

62.2 According to BP, BP personnel noticed that a feed meter in the UU4 misread the unit feed flow and defaulted to shut off the fuel gas flow to several unit furnaces. BP personnel sent the excess fuel gas to the fuel gas system, which filled to capacity, resulting in shut down of the fuel gas system. Excess fuel gas was released to the Ultra Cracker Flare, Flare No. 3, and Flare No. 1. Flaring continued until May 10, 2009.

62.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 62.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 62.1.

**63. CLAIM NO. 58: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 6-11, 2009, AT TANK 30**

63.1 According to reports BP submitted to the TCEQ, on May 9, 2009, BP operations discovered that the floating roof of Tank 30 was emitting high levels of benzene. BP admitted to the release of air contaminants to the atmosphere for at least 51 hours, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	753.10
VOCs	453.69
ethane	2,649.99

63.2 BP's fence-line monitors began showing elevated levels of benzene on May 6, 2009. By using an infrared camera, on May 9, 2009, BP personnel determined that a high level of hydrocarbon vapor was emanating from the floating roof of Tank 30. After investigation, BP determined that material containing ethane was introduced to the tank. The tank and its seals are used to hold aromatic additives, which are heavy hydrocarbons. Ethane, a light hydrocarbon, slipped past the seals, carrying some benzene with it.

63.3 BP violated TCAA § 382.085 and Permit 2231 by emitting the air contaminants listed in paragraph 63.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each

release of each contaminant listed in paragraph 63.1. Permit 2231, which applies to Tank 30, does not allow emissions of benzene or ethane in any amount.

**64. CLAIM NO. 59: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 11, 2009, AT THE ULC**

64.1 According to reports BP submitted to the TCEQ, on May 11, 2009, BP personnel shut down the ULC because of a leak in the cooling water system. BP admitted to the release of air contaminants to the atmosphere for at least 8 hours, including at least the following:

Air Contaminant	Flare No. 3 Emissions Quantity in lbs.	ULC Flare Emissions Quantity in lbs.
CO	757.87	212.70
H ₂ S	0.51	8.44
NO _x	148.73	47.21
SO ₂	46.71	778.88
VOCs	1,285.66	182.23

64.2 According to BP, BP shut down the ULC because of a rapid loss of cooling tower water. According to BP, a tube leak in a high pressure hydrogen exchanger caused the cooling tower header to fail on the header inlet. The cooling tower return header also failed when BP was diverting return water. This caused the water level in the cooling tower to decrease rapidly and the ULC was shut down. The ULC was depressurized and gas was vented to the refinery fuel gas system, however, the fuel gas system was full and excess gas was routed to Flare No. 3.

64.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on June 10, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

64.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 64.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 64.1.

64.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by June 10, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on June 10, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests

a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**65. CLAIM NO. 60: CIVIL PENALTIES FOR EMISSIONS EVENT ON
MAY 26 - JUNE 8, 2009, AT THE CFHU**

65.1 According to reports BP submitted to the TCEQ, on May 26, 2009, BP discovered hydrocarbons in the CFHU cooling tower water. BP admitted to the release of air contaminants to the atmosphere for at least 312 hours, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	1,077.00
H ₂ S	9,570.00
VOCs	53,993.00
carbon disulfide	25.00
chloroform	5.00
methylene chloride	22.00
vinyl chloride	4,637.00
ethanol	1.00

65.2 According to BP, on May 26, 2009, BP tested and confirmed the presence of hydrocarbons in the CFHU cooling tower water system. BP reported that it last tested the cooling tower water for hydrocarbons on April 17, 2009. Throughout May 2009, BP did not conduct weekly inspections of the cooling system as required by BP's Standard Operating Instructions for the CFHU cooling tower. After inspection, isolation, and testing

by BP, BP determined that several heat exchangers were leaking into the cooling tower water system.

65.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 65.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 65.1.

66. CLAIM NO. 61: CIVIL PENALTIES FOR EMISSIONS EVENT ON JUNE 6, 2009, AT FCCU NO. 3

66.1 According to reports BP submitted to the TCEQ, on June 6, 2009, a relief valve in the FCCU No. 3 opened and discharged material to Flare No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 5 hours and 25 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
CO	319.08
H ₂ S	22.17
NO _x	62.62
SO ₂	2,043.16
VOCs	1,211.34

66.2 According to BP, fluctuations in readings from an improperly installed pressure transmitter caused the 404-E overhead control valve to close. This eventually caused a relief valve to open and release to Flare No. 3. Because of corrosion in the relief valve, it did not reseal fully causing continuous flow to the flare. BP reported that the

pressure transmitter was reading incorrectly because it was located in a low point where liquid buildup occurred. After the event, BP relocated the transmitter to a location where liquid buildup was less likely to occur.

66.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on July 6, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

66.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 66.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 66.1.

66.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by July 6, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on July 6, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas

Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

67. CLAIM NO. 62: CIVIL PENALTIES FOR EMISSIONS EVENT ON JUNE 23-25, 2009, AT FCCU NO. 3

67.1 According to reports BP submitted to the TCEQ, on June 22, 2009, BP noticed an increased flow of material through Flare No. 3. The increased flaring continued for several days, while BP attempted to discover the source of the increased flow. BP admitted to the release of air contaminants to the atmosphere for at least 43 hours and 50 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
H ₂ S	27.13
NO _x	40.65
SO ₂	2,499.61
VOCs	678.57
CO	207.16

67.2 According to BP, on June 22, 2009, BP began to notice an increase in the flow of materials to Flare No. 3. BP began checking possible sources for the intermittent increase of materials to the flare. On June 28, 2009, BP discovered that a manual relief valve was not closing completely because of a calibration error. This caused a leak which

appeared only during daytime temperatures. The leaking valve sent additional materials to the flare. Because the leak was intermittent, BP only released reportable quantities of air contaminants from June 24 through June 25, 2009.

67.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on July 23, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

67.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 67.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 67.1.

67.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 3 (EPN 321), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by July 25, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on July 23, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative,

pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

68. CLAIM NO. 63: CIVIL PENALTIES FOR EMISSIONS EVENT ON AUGUST 18, 2009, AT THE SRU

68.1 According to reports BP submitted to the TCEQ, on August 18, 2009, the SRU unexpectedly shut down causing the Amine Trains to over-pressure and vent to the flare and incinerator. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 46 minutes, including at least the following:

Air Contaminant	SRU C/D Flare Emissions Quantity in lbs.	SRU Incinerator Emissions Quantity in lbs.
H ₂ S	224.00	0.00
SO ₂	20,639.00	1,679.00
CO	0.00	1.00
NO _x	0.00	0.10

68.2 According to BP, an upgrade of a safety shut down system at the SRU erroneously caused the SRU trains and units to shut down. This caused the gas from the Amine Trains to over-pressure and vent material to the SRU Flare and Incinerator. BP was upgrading a safety shut down system operated by a Programmable Logic Controller (PLC). The system is designed to shut down the SRU safely in the event of an emergency. During

the upgrading procedure, the primary controller received the update, while the secondary controller did not. BP reported that when both controllers were restarted, the conflicting programming confused the PLC and caused the SRU to shut down.

68.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on September 17, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

68.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 68.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 68.1.

68.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from the SRU Flare (EPN 383), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by September 17, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on September 17, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the

alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

**69. CLAIM NO. 64: CIVIL PENALTIES FOR EMISSIONS EVENT ON
SEPTEMBER 15-16, 2009, AT FCCU NO. 3**

69.1 According to reports BP submitted to the TCEQ, on September 15, 2009, a leak developed in the 512-C1A heat exchanger in FCCU No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 17 hours, including at least the following:

Air Contaminant	Quantity in lbs.
VOCs	980.70

69.2 According to BP, a leak in the 512-C1A exchanger in FCCU No. 3 caused the release of contaminants from the FCCU No. 3 cooling tower. After the FCCU No. 3 cooling tower analyzer indicated increased flow, BP confirmed the increased flow as well as the presence of hydrocarbons in the cooling tower water. BP located the leak in the 512-C1A exchanger, isolated the exchanger, and removed it from service. There was at least one prior leak in this same exchanger. Just six months prior to this Event, on March 8, 2009, a leak occurred in 512-C1A.

69.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 69.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 69.1.

**70. CLAIM NO. 65: CIVIL PENALTIES FOR EMISSIONS EVENT ON
OCTOBER 10, 2009, AT FCCU NO. 3**

70.1 According to reports BP submitted to the TCEQ, on October 10, 2009, a leak developed in the 512-C2A heat exchanger in FCCU No. 3. BP admitted to the release of air contaminants to the atmosphere for at least 11 hours, including at least the following:

Air Contaminant	Quantity in lbs.
VOCs	2,687.69
benzene	44.86
carbon disulfide	30.85
methylene chloride	106.06

70.2 According to BP, a leak in the 512-C2A exchanger in FCCU No. 3 caused the release of contaminants from the FCCU No. 3 cooling tower. After the FCCU No. 3 cooling tower analyzer indicated increased flow, BP confirmed the increased flow as well as the presence of hydrocarbons in the cooling tower water. BP located the leak in the 512-C2A exchanger, isolated the exchanger, and removed it from service. There have been at least two prior leaks in the FCCU No. 3 cooling water exchangers. On March 8, 2009, and September 15, 2009, leaks occurred in exchanger 512-C1A.

70.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 70.1 without authorization. Pursuant to Texas Water Code

§ 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 70.1.

71. CLAIM NO. 66: CIVIL PENALTIES FOR EXCESSIVE EMISSIONS EVENT ON OCTOBER 26-27, 2009, AT THE SRU

71.1 According to reports BP submitted to the TCEQ, on October 26, 2009, a BP operator ignored a high level alarm on the D-amine stripper tower in the SRU. This failure to react to process conditions eventually resulted in the shut down of the B, C, and D Sulfur Trains and the release of materials to the SRU Flare and Incinerator, as well as from many other emissions points in the Refinery. BP admitted to the release of air contaminants to the atmosphere for at least 15 hours and 6 minutes, including at least the following:

Emissions Point	Air Contaminant	Quantity in lbs.
ALK3 Isostripper Reboiler	SO ₂	393.83
AU2 B601 Heater	SO ₂	741.29
AU2 B621A Heater	SO ₂	325.83
AU2 B621B Heater	SO ₂	265.89
CFHU 101B/102B Heater	SO ₂	47.86
CFHU Flare	SO ₂	139.00
	NO _x	1.00
	H ₂ S	2.00
	CO	6.00
	VOCs	8.00

Emissions Point (cont.)	Air Contaminant (cont.)	Quantity in lbs. (cont.)
COKR B201 Heater	SO ₂	283.22
DDU 101B/102B Heater	SO ₂	221.59
DDU 201B/202B Heater	SO ₂	190.04
DDU B301 Heater	SO ₂	633.30
RHU Heater Train 200	SO ₂	70.51
RHU Heater Train 300	SO ₂	97.23
RHU Heater Train 400	SO ₂	181.32
RHU VRS Hot Oil Heater	SO ₂	354.71
SRU C/D Flare	SO ₂	63,297.00
	NO _x	13.00
	H ₂ S	686.00
SRU Incinerator	SO ₂	411.02
Flare No. 1	SO ₂	2,716.00
	NO _x	137.00
	H ₂ S	29.00
	CO	698.00
	VOCs	659.00

Emissions Point (cont.)	Air Contaminant (cont.)	Quantity in lbs. (cont.)
Flare No. 3	SO ₂	27,424.00
	NO _x	1,060.00
	H ₂ S	298.00
	CO	5,403.00
	VOCs	5,892.00
RHU Fraction Heater	SO ₂	642.53
PS3A 103B Heater	SO ₂	315.52
PS3B 401BA Heater	SO ₂	596.14
PS3B 401BB Heater	SO ₂	589.20
PS3B 401BC Heater	SO ₂	774.29
PS3B 402 Heater	SO ₂	1,077.69
RDU Heater	SO ₂	242.72
DDU B-302 Heater	SO ₂	229.22
DDU Flare	SO ₂	921.00
	NO _x	37.00
	H ₂ S	5.00
	CO	268.00
	VOCs	64.00
NDU 501 Heater	SO ₂	203.48
PS3A 101BA/BB Heater	SO ₂	1,883.08
PS3A 102BA/BB Heater	SO ₂	2,711.00
	NO _x	0.30

Emissions Point (cont.)	Air Contaminant (cont.)	Quantity in lbs. (cont.)
SRU Fugitives	H ₂ S	18,314.00
ULC-105BA	SO ₂	62.98
UU3 301 Reheat Heater	SO ₂	691.77
UU3 302 Reheat Heater	SO ₂	1,025.85
UU3 304B Regeneration Flue Gas Heater	SO ₂	152.74
UU3 305-B Hot Oil Heater	SO ₂	1,171.93
UU3 306B Preheat Heater	SO ₂	791.63
UU3 307 Desulfurizer Heater	SO ₂	230.08
UU3 308-B Process Heater	SO ₂	406.66

71.2 According to BP, a BP operator ignored a high level alarm on the D-amine stripper tower in the SRU and placed the tower's level control into manual. The D-amine stripper tower continued to fill, eventually filling the tower's reflux drum and a knockout drum with rich amine liquid. High level alarms in the tower's reflux drum and a knock-out drum led to the automatic shutdown of the C and D Sulfur Trains. High amine levels eventually triggered the shutdown of the B Sulfur Train. The shut down of the sulfur trains resulted in the release of materials from the SRU C/D Flare and the SRU Incinerator.

71.3 During this Event, the D-amine stripper tower was not treating amine causing amine with higher concentrations of H₂S than normal to be sent throughout the Refinery and resulting in reduced H₂S absorption in the Refinery fuel gas treating tower. This resulted in additional releases of materials from other Refinery flares and heaters.

71.4 In addition, rich amine feed to the D-amine stripper tower backed up into a surge drum in a sufficient amount that BP opened a drain line on the surge drum causing the additional release of materials to containment.

71.5 Because of the high amounts of SO₂ and H₂S released during this Emissions Event, the TCEQ asked BP to perform air dispersion modeling. The purpose of air dispersion modeling is to predict the ambient concentration of H₂S at the property lines of the Refinery to determine off-site impacts of the Emissions Event. BP submitted the results of the air dispersion modeling to the TCEQ on January 19, 2010. BP reported that the ambient air concentration of H₂S at the time of the Emissions Event was 18.40 parts per million (ppm) for at least one 30-minute period during this Emissions Event. TCEQ rules prohibit emissions of H₂S that result in a net ground level air concentration of 0.12 ppm averaged over any 30-minute period. 30 TAC § 112.32.

71.6 The TCEQ determined that this was an Excessive Emissions Event. On April 23, 2010, the TCEQ sent notification to BP that the Emissions Event was excessive and that BP must submit a CAP to the TCEQ within 60 days of receipt of the notification.

71.7 BP submitted a Flaring Root Cause Report for this event to the TCEQ on November 25, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

71.8 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 71.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 71.1.

71.9 BP violated 30 TAC § 112.32 by emitting H₂S in such amount and concentration as to exceed the limits set forth therein. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each time that H₂S concentrations exceeded 0.12 ppm over any 30-minute period during this Emissions Event.

71.10 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from the SRU Flare (EPN 383), Flare No. 1 (EPN 301), Flare No. 3 (EPN 321), and the DDU Flare (EPN 396), devices listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by November 26, 2009. BP submitted a Flaring Root Cause Report to the TCEQ on November 25, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering

Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

72. CLAIM NO. 67: CIVIL PENALTIES FOR EMISSIONS EVENT ON NOVEMBER 20, 2009, AT THE SRU

72.1 According to reports BP submitted to the TCEQ, on November 20, 2009, BP introduced too much air into the D Sulfur Train feed which eventually caused the release of excess SO₂ from the SRU Incinerator. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 19 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	2,205.00
NO _x	0.10
CO	1.00

72.2 According to BP, a faulty flow transmitter lead BP to introduce too much air into the D Sulfur Train feed. This caused increased amounts of SO₂ to be sent throughout the process, eventually leading to the release of excess SO₂ from the SRU Incinerator. BP

reported that ammonia salts plugged the orifice taps on the gas flow transmitter in the Sour Water Stripper causing it to send incorrect flow readings to the control system.

72.3 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 72.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 72.1.

73. CLAIM NO. 68: CIVIL PENALTIES FOR EMISSIONS EVENT ON JANUARY 11, 2010, AT THE OIL MOVEMENTS CONTROL CENTER

73.1 According to reports BP submitted to the TCEQ, on January 11, 2010, a break in a benzene feed line in the Oil Movements Control Center released benzene to the atmosphere. BP admitted to the release of air contaminants to the atmosphere for at least 2 hours and 11 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
benzene	1,338.00

73.2 According to BP, benzene in a customer feed line froze and resulted in a release from a broken check valve. BP reported that the benzene line was not insulated, even though it had been insulated at one time.

73.3 BP violated TCAA § 382.085 and Permit 47256 by emitting each contaminant listed in paragraph 73.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 73.1.

**74. CLAIM NO. 69: CIVIL PENALTIES FOR EMISSIONS EVENT ON
JANUARY 18-19, 2010, AT THE ULC**

74.1 According to reports BP submitted to the TCEQ, on January 18, 2010, the ULC temporarily lost feed and experienced an emergency shutdown. BP admitted to the release of air contaminants to the atmosphere for at least 20 hours and 20 minutes, including at least the following:

Air Contaminant	Refinery Flare No. 1 Emissions Quantity in lbs.	Refinery Flare No. 3 Emissions Quantity in lbs.	ULC Flare Emissions Quantity in lbs.
SO ₂	8.20	47.17	1,490.38
NO _x	10.79	424.23	58.80
H ₂ S	0.09	0.51	16.18
CO	54.98	2,161.71	299.61
VOCs	53.11	1,939.75	275.69

74.2 According to BP, the ULC reactor overheated and shut down after the primary feed pump to the unit shut down. BP reported that the pump shutdown when BP engaged a safety instrument system. BP traced the problem to an incorrectly-wired, motor-operated valve. BP did not explain why the wiring on the valve had not been tested before it was put into service.

74.3 BP submitted a Flaring Root Cause Report for this event to the TCEQ on February 17, 2010. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order.

74.4 BP violated TCAA § 382.085 and Permit 47256 by emitting the air contaminants listed in paragraph 74.1 without authorization. Pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day of each release of each contaminant listed in paragraph 74.1.

74.5 BP also violated the 2006 Order by failing to submit a sufficient Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Emissions Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from the ULC Flare (EPN 351A), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by February 18, 2010. BP submitted a Flaring Root Cause Report to the TCEQ on February 17, 2010. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

75. CLAIM NO. 70: CIVIL PENALTIES FOR FAILURE TO SUBMIT REPORT FOR FLARING EVENT ON SEPTEMBER 7, 2007, AT POWER UNIT 2

75.1 According to reports BP submitted to the TCEQ, on September 2, 2007, the J-425 Compressor shut down and caused the emission of air contaminants. BP admitted to the release of air contaminants to the atmosphere for a period of at least 3 hours and 55 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	2,539.00
H ₂ S	28.00
CO	252.00
NO _x	30.00
VOCs	331.00

75.2 BP stated in its reports regarding the event that a nearby lightning strike caused a relay to trip and the J-425 Compressor lost power. BP maintenance crews replaced the relay and the compressor was restarted.

75.3 BP violated the 2006 Order by failing to timely submit a Flaring Root Cause Report for this Event. The 2006 Order required BP to submit a Flaring Root Cause Report for this Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by October 2, 2007. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the

requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

76. CLAIM NO. 71: CIVIL PENALTIES FOR FAILURE TO SUBMIT REPORT FOR FLARING INCIDENT ON DECEMBER 2, 2007, AT POWER UNIT 2

76.1 According to reports BP submitted to the TCEQ, on December 2, 2007, four Refinery process units shut down because of a power loss. BP admitted to the release of air contaminants to the atmosphere for at least 1 hour and 20 minutes, including at least the following:

Air Contaminant	Quantity in lbs.
SO ₂	877.13
H ₂ S	9.52
CO	66.61
NO _x	21.93
VOCs	94.63

76.2 BP stated in its reports regarding the event that an equipment failure at the Freeway Park electrical substation caused a power loss to four Refinery process units. Among the units that went off-line was Power 2, which caused the J-425 Compressor to trip and vent gasses were sent to Flare No. 1.

76.3 BP violated the 2006 Order by failing to timely submit a Flaring Root Cause Report for this Event. The 2006 Order required BP to submit a Flaring Root Cause Report for this Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 1 (EPN 301), a device listed in the 2006 Order. Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by January 2, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on October 2, 2008. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

77. CLAIM NO. 72: CIVIL PENALTIES FOR FAILURE TO SUBMIT REPORT FOR FLARING EVENT ON SEPTEMBER 10-13, 2008, DURING THE REFINERY-WIDE SHUTDOWN

77.1 According to reports BP submitted to the TCEQ, on September 10, 2008, BP shut down the Refinery in preparation for the landfall of Hurricane Ike. BP admitted to the release of air contaminants to the atmosphere for a period of at least 53 hours and 12 minutes, including at least the following:

Air Contaminant	ULC Flare Emissions Quantity in lbs.	Flare No. 4 Emissions Quantity in lbs.
SO ₂	505.30	553.80
H ₂ S	6.20	6.00
benzene	7.50	0.00
NO _x	249.60	106.80
CO	469.90	544.00
VOCs	410.20	1,041.26

77.2 BP stated in its reports regarding the event that beginning September 10, 2008, BP would initiate a refinery-wide shutdown in anticipation of the landfall of Hurricane Ike. BP reported that it shut down all 24 processing units of the Refinery almost simultaneously, which resulted in SO₂ flaring from seven emissions points.

77.3 BP violated the 2006 Order by failing to timely submit a Flaring Root Cause Report. The 2006 Order required BP to submit a Flaring Root Cause Report for this Event because it involved the release of over 500 lbs. of SO₂ in a period of 24 hours from Flare No. 4 (EPN 331) and the ULC Flare (EPN 351A), devices listed in the 2006 Order.

Ordering Provision 4.a.ii of the 2006 Order required BP to submit the Flaring Root Cause Report to the TCEQ by October 10, 2008. BP submitted the Flaring Root Cause Report to the TCEQ on June 16, 2009. The document submitted by BP was insufficient as it did not meet all of the requirements for a Flaring Root Cause Report in the 2006 Order. To date, BP has not submitted a sufficient Flaring Root Cause Report. In accordance with Ordering Provision 2 of the 2006 Order, the State requests the stipulated penalty of \$10,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. In the alternative, pursuant to Texas Water Code § 7.102, the State requests the maximum civil penalty of \$25,000 for each day BP failed to submit a sufficient Flaring Root Cause Report for this event. Further in the alternative, pursuant to Texas Water Code § 7.102, the State requests a civil penalty within the statutory range for each day BP failed to submit a sufficient Flaring Root Cause Report for this event.

78. CLAIM NO. 73: REQUEST FOR PERMANENT INJUNCTIVE RELIEF

78.1 On June 29, 2009, the Court entered an Agreed Temporary Injunction. The Agreed Temporary Injunction remains in full force and effect. The State requests a permanent injunction ordering BP to comply with any and all provisions of the Agreed Temporary Injunction that BP has not completed as of the final trial on the merits including but not limited to the provisions set forth below. The State also requests additional injunctive relief not contained in the Agreed Temporary Injunction. The State requests a permanent injunction as follows:

Emissions Event Reporting

78.2 BP shall be immediately enjoined from violating 30 TAC § 101.201(a)(1)(B), 30 TAC § 101.201(f), 30 TAC § 101.201(b), 30 TAC § 101.211(a), and 30 TAC § 101.211(b).

78.3 On August 26, 2009, BP sent the TCEQ Executive Director a written proposal (the “Reporting Proposal”) outlining in detail the steps and procedures BP has implemented at the Refinery to ensure that it will timely and properly submit required Emissions Event, Startup, Shut-down and Maintenance Reports and to ensure that it will respond timely to the TCEQ’s requests for information. At TCEQ’s request, on October 9, 2009, BP submitted a Revised Reporting Proposal. On November 4, 2009, the TCEQ approved BP’s Revised Reporting Proposal.

78.4 BP shall continue to implement the Revised Reporting Proposal as approved by the TCEQ on November 4, 2009.

Emissions Event Review

78.5 BP shall continue to implement all practicable measures necessary to minimize the likelihood of Emissions Events at the Refinery including but not limited to the emission of air contaminants not authorized by TCEQ Air Permit 47256, Permit 2231, and Permit 2612 or in excess of emissions limits specified in these permits.

78.6 On March 25, 2010, BP submitted to the TCEQ a final Emissions Event review report (“EE Review Report”) in accordance with the schedule in an EE Review

Proposal approved by the TCEQ. The TCEQ may require, and BP shall provide no later than 10 days after any request, additional information which the TCEQ deems necessary for the evaluation of the EE Review Report.

78.7 No later than 30 days after the TCEQ Executive Director's approval of the EE Review Report, BP shall begin implementation of the approved recommendations contained in the EE Review Report. No later than 60 days after the implementation of each recommendation commences, BP shall make written certification to the TCEQ that the subject recommendation has been or is being implemented. BP shall maintain records sufficient to document compliance with the requirements of this paragraph onsite at the Refinery.

78.8 Reportable Emissions Event Investigation and Prevention:

A. In response to any Reportable Emissions Event, BP, as expeditiously as practicable, shall take such interim and long-term corrective actions as are reasonable and consistent with good engineering practice to minimize the likelihood of a recurrence of the root cause of that incident.

B. BP shall submit a quarterly report to TCEQ with a detailed investigation report for each Reportable Emissions Event containing the following information:

1. A detailed explanation of the Reportable Emissions Event and associated causes;
2. Corrective actions to rectify failures to report or respond to requests for information concerning the Reportable Emissions Event, if needed;

3. Immediate actions to rectify or mitigate the consequences of the event, if possible;
4. A list of recommendations for corrective actions needed to address the root cause of the Reportable Emissions Event and to prevent a recurrence of the Reportable Emissions Event;
5. A list of recommendations stemming from the event for which the report is prepared that should be applied to other areas of the Refinery; and
6. A fault tree diagram graphically describing the causes leading to the event.

However, if the Reportable Emission Event occurs within 30 days of the end of a reporting period, BP Products may defer the detailed investigation report to the next reporting period.

Air Monitoring

78.9 On August 27, 2009, BP sent to the TCEQ Executive Director for approval a written Monitoring Program Plan. On September 29, 2009, the TCEQ requested modifications to the Monitoring Program Plan. BP sent a Revised Monitoring Program Plan to the TCEQ on October 9, 2009. The TCEQ approved the Revised Monitoring Program Plan on November 4, 2009.

78.10 BP shall continue its implementation of the TCEQ-approved revised Monitoring Program and perform its requirements on the approved schedule. BP shall have all elements of the Revised Monitoring Program fully operational as soon as practicable but

no later than 365 days after the TCEQ Executive Director's approval of the Monitoring Program Plan. BP shall preserve and retain at the Refinery all reports required by the Monitoring Program.

78.11 BP shall keep all components of the Monitoring Program operational to the extent practicable through regular maintenance, repair, and replacement.

Off-site monitors

78.12 No later than 60 days after the entry of a permanent injunction, BP shall submit to the TCEQ Executive Director for approval a written Off-Site Monitoring Program Proposal. The Off-Site Monitoring Program Proposal shall include:

- A. A detailed description of how each element of the Off-Site Monitoring Program set forth in paragraph 78.14 below will be performed;
- B. A detailed schedule demonstrating how BP will have the Off-Site Monitoring Program fully operational on or before the deadline in paragraph 78.15;
- C. A Quality Assurance Project Plan ("QAPP") in EPA QA/R-5 format which shall establish data quality objectives, site locations, monitoring hardware, configuration, calibration, operation, maintenance, acceptance criteria, corrective action measures, data processing, reporting, and validation protocols as well as all audit activities. A minimum data completeness of 85 percent shall be required in the QAPP for all parameters for each month at each site; and

D. A detailed schedule and process for setting the approval notification trigger levels described in paragraph 78.14.B below, and the investigation trigger levels described in paragraph 78.14.C below.

78.13 The TCEQ may require, and BP shall provide no later than 10 days after any request, additional information which the TCEQ deems necessary for the evaluation of the Off-Site Monitoring Program Proposal.

78.14 This Off-Site Monitoring Program shall include but not be limited to:

A. Monitors at a minimum of two off-site monitoring locations as follows:

1. At the first location (“Off-Site One”), BP shall install, operate, and maintain equipment capable of monitoring speciated C2 through C12 VOCs (including but not limited to pentane, benzene, acetylene, ethylene, propylene, 1,3-butadiene, butenes, isopentane, toluene, xylenes, and hexane) on an hourly basis and monitoring for wind speed, wind direction, temperature, PM_{2.5}, SO₂, and NO_x on a continuous basis. These monitors shall be located at the existing monitor station at 2516 ½ Texas Ave., Texas City, Texas, or an alternative location within the predominant downwind direction. BP shall electronically report to the TCEQ the data from this equipment in accordance with paragraph 78.14.D.1.

2. At the second location, BP shall install, operate, and maintain equipment capable of monitoring ozone, wind speed, wind direction and temperature on a continuous basis. The location shall be predominantly

downwind of the Refinery and where there are no major NO_x sources between the monitoring location and the Refinery. This site should be in or around Dickinson, Texas. Resultant wind direction, resultant wind speed, wind speed average, standard deviation of wind direction, and maximum wind gust shall be calculated from on-site measurements. BP shall electronically report to the TCEQ the data from this equipment in accordance with paragraph 78.14.D.1.

3. Once every six months beginning six months after the date the first monitor is operational, BP shall perform and report to the TCEQ the results of a biannual audit of all off-site monitors for the prior six months. The biannual audit report shall include findings, a review of corrective measures taken or proposed to be taken to correct any problems identified by the audit, implementation dates for corrective action, and the impact on reported data of problems cited in the audit. BP shall submit the biannual audit report to the TCEQ in accordance with paragraph 78.14.D.3 following 45 days after each deadline to perform the audit.

4. All off-site monitoring locations must be pre-approved by the TCEQ.

B. For the monitors at Off-Site One, BP shall install, maintain, and operate an automatic notification system capable of producing an automatic electronic notification to BP at the Refinery every time a monitored contaminant from any air monitor exceeds a predetermined trigger level. BP shall propose for TCEQ

Executive Director approval notification trigger levels for all of the contaminants monitored at Off-Site One. BP may thereafter propose for TCEQ Executive Director approval alternative notification trigger levels based upon the results of ongoing monitoring. BP shall include a list of the exceedances for the reporting period and corrective actions taken or planned by BP to address each exceedance in the next report submitted to the TCEQ pursuant to paragraph 78.14.D.3.

C. For the monitors at Off-Site One, BP shall perform a follow-up and probable cause investigation every time a monitored contaminant from any air monitor exceeds a predetermined investigation trigger level. BP shall propose, for TCEQ Executive Director approval, investigation trigger levels for all of the contaminants monitored. BP shall include a report of the exceedance, the investigation into its cause, and corrective actions taken or planned by BP to address each exceedance in the next report following the exceedance submitted to the TCEQ pursuant to paragraph 78.14.D.3. However, if the exceedance occurs within 30 days of the end of a reporting period, BP may defer the report of planned corrective actions to the next reporting period. If more than one contemporaneous exceedance of the investigation trigger results from a single cause, then BP may address that contemporaneous group of exceedances with a single investigation and report.

D. Monitoring Program reporting to the TCEQ as follows:

1. BP shall electronically report all monitoring data from the off-site monitors into TCEQ's electronic data acquisition system within 15 minutes

after initial data collection. BP shall conduct a validation review of the data. Upon conclusion of its review and if necessary to qualify data, BP shall reload and enter validation notes into TCEQ's electronic data acquisition system within 30 days of the initial acquisition of data.

2. BP shall submit a Monitoring Program Report to the TCEQ on the 15th day of each month beginning the first full month following the TCEQ's approval of the Off-site Monitoring Program Proposal until all of the equipment to implement the Off-site Monitoring Program is in place and functional. The Off-site Monitoring Program Report shall describe all actions taken during the previous month to implement the Off-site Monitoring Program.

3. After one or more components of the Off-site Monitoring Program are operational BP shall submit to TCEQ quarterly, 45 days after the end of a calendar quarter beginning with the first full calendar quarter after the program is operational, an Off-site Monitoring Program Report that shall include (for the components of the Off-site Monitoring Program that are operational):

- (a) the status of all monitoring equipment listing any downtime and maintenance;
- (b) quality assurance data as set forth in the approved QAPP. At a minimum the quality assurance data shall include information

regarding instrument calibrations, daily calibration checks, second source standard challenges, zero or blank checks, audits, data limitations, and an explanation of any data BP has invalidated;

- (c) audit results for the off-site monitors as set forth in paragraph 78.14.A.3;
- (d) a list of all exceedances of automatic notification trigger levels results as described in paragraph 78.14.B; and
- (e) a report of the exceedance and the investigation into the cause for all exceedances of investigation trigger levels results as described in paragraph 78.14.C.

78.15 No later than 14 days after the TCEQ Executive Director's approval of the Off-site Monitoring Program Plan, BP shall begin implementation of the Off-site Monitoring Program and perform its requirements on the approved schedule. BP shall have all elements of the Off-site Monitoring Program fully operational as soon as practicable but no later than 365 days after the TCEQ Executive Director's approval of the Off-site Monitoring Program Plan. BP shall preserve and retain at the Refinery all reports required by the Monitoring Program.

78.16 BP shall keep all components of the Monitoring Program operational to the extent practicable through regular maintenance, repair, and replacement.

Flaring Root Cause Reports

78.17 No later than 30 days after the entry of a permanent injunction, for each Emissions Event that the Court finds that BP failed to submit a sufficient Flaring Root Cause Report, BP shall submit to the TCEQ Executive Director a Flaring Root Cause Report that fully complies with Ordering Provision 4.a.ii of the 2006 Order.

79. CLAIM NO. 74: ATTORNEY'S FEES AND COSTS

79.1 Pursuant to Texas Water Code § 7.108, the State asks this Court to award the State its reasonable attorney's fees, court costs and reasonable investigative costs incurred in relation to this proceeding. If there is an appeal to the Court of Appeals or to the Supreme Court, the State seeks its additional reasonable attorney's fees and court costs on behalf of the State.

PRAYER

Accordingly, upon final trial of this action, the State of Texas requests the following relief against BP Products North America Inc.:

1. that upon final trial of this cause, the State have a money judgment against BP Products North America Inc. for civil penalties, as stated above, plus interest at the legal rate from the date of judgment until fully paid;
2. that permanent injunctive relief be granted as requested above;
3. that the State be awarded its reasonable attorney's fees, investigative costs, and all of its court costs incurred in this action, plus interest, at the legal rate from the date of judgment until fully paid; and

4. that the State have all other relief, general and special, at law and in equity, to which it may show itself justly entitled.

Respectfully Submitted,

GREG ABBOTT
Attorney General of Texas

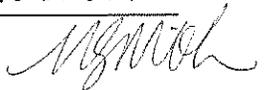
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ATTORNEYS FOR THE STATE OF TEXAS

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Plaintiff's Fifth Amended Petition and Application for Permanent Injunction has been served upon all parties in this cause by Case File Express e-file and by e-mail per parties e-service agreement, on February 18, 2011.

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