

CLAIM SUMMARY / DETERMINATION FORM

Claim Number	: N04080-001
Claimant	: Shell Pipeline Company LP
Type of Claimant	: Corporate (US)
Type of Claim	: Affirmative Defense
Claim Manager	: [REDACTED]
Amount Requested	: \$12,383,613.98

INITIAL CLAIM AND DETERMINATION

Shell Pipeline Company LP (“Shell” or the “Claimant”) is the owner of a pipeline facility which discharged approximately 7,500 barrels of crude oil into navigable waters,¹ on or about September 15, 2004, when Hurricane Ivan passed through the Gulf of Mexico and over Shell’s pipeline infrastructure. Shell, the responsible party under the Oil Pollution Act of 1990, 33 U.S.C. § 2701 et seq., (“OPA”), is liable for the removal costs incurred from the resulting discharge. Shell submitted a formal claim to the Oil Spill Liability Trust Fund (“OSLTF”) on December 7, 2006, seeking reimbursement of removal costs in the amount of \$12,383,613.98.² Shell asserts that it is not liable for the removal costs because the discharge of oil was caused solely by Hurricane Ivan; an act of God.³ Shell asserts that Ivan’s hurricane forces were exceptional, extreme and solely caused the damage to Shell’s pipeline. Shell further argues that the effects of Hurricane Ivan were unanticipated because the storm surge was historically higher than any hurricane.⁴

Facts⁵

Hurricane Ivan reached Category 5 intensity three separate times as it crossed the Caribbean Sea before entering the Gulf of Mexico early on September 14, 2004 at Category 4 strength.⁶ Hurricane Ivan was a Category 3-4 storm as it passed through the offshore oil and gas infrastructure southeast of Louisiana.⁷ By the time the hurricane made landfall at approximately 1:50 a.m. CDT on September 16, the eye diameter had increased to 40-50 nautical miles⁸ and storm surges resulting from Ivan were reported at approximately 10-15 feet and wave heights of 41-43 feet were reported at locations where the pipelines were damaged.⁹

¹ Shell’s revised formal claim letter, dated December 7, 2006 and the presentation summarizing industry damages on CD ROM, Exhibit “P.”

² Shell’s revised formal claim letter, dated December 7, 2006 and Shell letter request for reconsideration, dated December 31, 2008.

³ Shell’s revised formal claim letter, dated December 7, 2006 and Shell letter request for reconsideration, dated December 31, 2008.

⁴ Shell letter request for reconsideration, dated December 31, 2008.

⁵ See USCG Claim N04080-001 Determination for a complete statement of the facts.

⁶ Robert Wang & Michael Manausa, “Hurricane Ivan Characteristics and Storm Tide Evaluation” (April 2005), available at <http://bcs.dep.state.fl.us/reports/strmtide/ivan.pdf>.

⁷ Hurricane Readiness and Recovery Conference dated October 2005, “Final Conference Summary Report Prepared for Minerals Management Service (“MMS”) under the MMS/OTCR (“Offshore Technical Cooperative Research”) Agreement” at 4.

⁸ Robert Wang & Michael Manausa, “Hurricane Ivan Characteristics and Storm Tide Evaluation” (April 2005), available at <http://bcs.dep.state.fl.us/reports/strmtide/ivan.pdf>.

⁹ Shell’s revised formal claim letter, dated December 7, 2006, report of impact weather, Exhibit “H”.

The water depth at Shell's locations of the more significant pipeline damages as indicated on a website of the U.S. Department of Interior, Minerals Management Service ("MMS") was 200 feet or less: Main Pass ("MP") Block -151 water depth was 200 feet; MP69 – water depth was 52 feet – (this section contains a pipeline crossing); MP70 – water depth was 58 feet and SP70/60 – water depth was 185 feet.¹⁰ Mudslides, storm surges, and currents caused a pipeline crack on the Nakika 18" pipeline located in MP-69 and severed an "S" shaped spool on the Nakika 18" pipeline in MP-151¹¹ which together with damage to a 20" pipeline in MP-69 resulted in the discharge of approximately 7,500 barrels of crude oil.¹²

The National Pollution Funds Center ("NPFC"), which administers the OSLTF, denied the defense and underlying claim on December 6, 2008 (the original determination or determination).¹³ The NPFC determined that while arguably Ivan may have been grave, irresistible or inevitable it was not an act of God under OPA because it was not "exceptional" or "unanticipated" as those terms are used in the OPA definition of "act of God"; and it was not the sole cause of the discharge. Further, Shell failed to meet the burden of showing that the effects of the hurricane and pollution incident could not have been prevented or avoided by the exercise of due care or foresight,¹⁴ such as by implementing shut-in procedures or other measures to minimize or eliminate the foreseeable risk of an oil discharge from its pipelines and facilities.

RECONSIDERATION REQUEST

By letter dated December 31, 2008 and received by the NPFC on January 9, 2009, Shell timely requested reconsideration of the determination to deny the act of God defense and thus the claim.

Shell's primary argument is that Hurricane Ivan was an exceptional storm with unanticipated consequences and the sole cause of the damage to Shell's pipeline facilities. Specifically, Shell asserts that Ivan's extreme magnitude, unanticipated strength and intensity caused longer than usual wave periods, resulting in substantial, unforeseeable and unpreventable damage.¹⁵ Shell also argues the severity and strength of Ivan is what prevents Shell from providing information of what factors precipitated or caused the crack in the Nakika 18" at the Block MP-69 pipeline crossing.¹⁶

Shell's secondary argument is that Shell exercised due care, followed industry standards, including applicable regulatory requirements, and yet still experienced unpreventable and unexplained damages.¹⁷ Specifically, Shell asserts the Nakika 18" pipeline was properly constructed and maintained in accordance with applicable regulatory requirements and that all permit applications and use permits were approved by the authorities without comment or change from other federal and state agencies.¹⁸ Lastly, Shell argues that Shell is being held to some potentially heightened design standard developed in hindsight referencing the MMS report that recommended that its pipeline design criteria be reevaluated.¹⁹

¹⁰ Oil Spills, Gulf Region – 2004 Hurricane Ivan at the MMS website: www.mms.gov/incidents/SigPoll2004HurricaneIvan.htm.

¹¹ Shell's revised formal claim letter, dated December 7, 2006, photographs of severed spool, Exhibit "D."

¹² Shell's revised formal claim letter, dated December 7, 2006, Oil Spill Summary, Exhibit "F."

¹³ USCG Claim N04080-001 Determination.

¹⁴ See *id.*

¹⁵ Mr. A.H. Mousselli, Ph.D., P.E. "Technical Evaluation of Shell's Hurricane Ivan Pipeline Spill Claim Relating to USCG original claim determination", dated December 29, 2008. Also, see, Shell letter request for reconsideration, dated December 31, 2008 at 2.

¹⁶ Shell letter request for reconsideration, dated December 31, 2008 at 2-3.

¹⁷ See, *id.* at 3-4.

¹⁸ *Id.*

¹⁹ *Id.* at 2-4.

Claimant's Submittals on Reconsideration²⁰

On reconsideration, the Claimant submitted Offshore Technology Conference ("OTC") reports and MMS Cooperative research to support its assertions of Ivan's "exceptional" character and "unanticipated consequences". Additionally, Shell hired [REDACTED] Ph.D., P.E. to perform a "Technical Evaluation of Shell's Hurricane Ivan Pipeline Spill Claim Relating to USCG original claim determination." [REDACTED]'s report provides a conclusion in summary that the severity and impact of Hurricane Ivan was exceptional and unanticipated as evidenced by the number of pipeline damages. And the incident was caused by a natural disaster with exceptional and unanticipated magnitude and consequences. He further posits that Shell exercised due care and employed prudent design and operational procedures commonly practiced in the Industry.²¹

The OTC reports, MMS Cooperative research and [REDACTED] Ph.D., P.E. evaluation highlight data and observations about Hurricane Ivan. Noteworthy observations are that the waves generated by Ivan had an estimated return period of 2,500 years, with a peak and current return period of 700 years. Further, sea bottom movements were large and beyond past experience, and "Ivan's extreme winds and waves exceeded the 100-year storm design criteria of offshore facilities."²²

In his report, Mr. [REDACTED] Ph.D., P.E. asserts that the storm's consequences were not predicted by historical data and characterizes historical examinations of pipeline damages during hurricanes for pipelines of a larger diameter as the Nakika 18", as minimal and rare²³ and unique, because the pipeline broke in two locations and forced seawater into the break located on the deep end, forcing oil out of the line via the breach on the shallow end discharging a greater quantity of crude. He, therefore, concludes that Shell had no reason to anticipate that the Nakika 18" pipeline would experience the substantial damage incurred.²⁴

NPFC ANALYSIS ON RECONSIDERATION

Claimant's arguments and supplemental submissions on reconsideration are addressed:

1. The Exceptional and Extreme Intensity of Hurricane Ivan.

Shell asserts that it had no reason to anticipate that the Nakika 18' pipeline would experience the substantial damage it incurred from Hurricane Ivan because Ivan was an exceptional natural

²⁰ Shell letter request for reconsideration, dated December 31, 2008 references and enclosures.

²¹ Shell included a copy of its Pipeline Design Criteria dated August 2001 not previously provided. Neither this particular document nor any other document provided either originally or on reconsideration tells us anything about Shell's procedures to prevent or avoid an oil spill incident when a hurricane is predicted or supports Claimant's arguments that Hurricane Ivan was the sole cause of the damage to Shell's pipeline and facilities and resulting oil spill.

²² The wave conditions exceeded the API Recommended Practice 2A design wave height of 72 feet. See, OTC 17736 – *Hindcast Study of Winds, Waves, and Currents in Northern Gulf of Mexico in Hurricane Ivan (2004)*. See, also, Shell, S. Mirza et al., "Hurricane Ivan – Pipeline Damage, Integrity Assessment, and On-Bottom Stability Observations," Offshore Technology Conference, OTC 18183 (2006), Shell goes on to imply in their reconsideration request that because of the reference quoted statement, it has caused many to deem Ivan "statistically unexpected" when in fact it was asked at the OTC conference presentation if Ivan was statistically 'unexpected' "and therefore changes the implied meaning of the statement made by Shell in its reconsideration request.

²³ Shell's Reconsideration request at 2.

²⁴ Mr. A. H. Mousselli, Ph.D., P.E. "Technical Evaluation of Shell's Hurricane Ivan Pipeline Spill Claim Relating to USCG original claim determination", dated December 29, 2008.

phenomenon of historic proportions and its extreme magnitude, unanticipated strength and intensity caused longer than usual wave periods, resulting in substantial and unforeseeable damage.²⁵ Similarly, Shell asserts the severity and strength of Ivan is what prevents Shell from providing information of what factors precipitated or caused the crack in the Nakika 18" at the Block MP-69 pipeline crossing.

Shell's assertions cannot prevail. The OPA expressly provides that a responsible party is not liable for removal costs or damages...if the responsible party establishes, by a preponderance of the evidence, that the discharge or substantial threat of a discharge of oil and the resulting damages or removal costs were caused solely by an *act of God*. An *act of God* means an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character the effects of which could not have been prevented or avoided by the exercise of due care or foresight."²⁶

In respect to the "exceptional natural phenomena" the burden of proof is much more onerous than under traditional or common law concepts. The *act of God* defense is more nebulous, and many occurrences asserted as *acts of God* would not qualify as 'exceptional natural phenomenon.' For example, a major hurricane may be an *act of God* but in an area (and at a time) where a hurricane should not be unexpected; it would not qualify as a 'phenomenon of exceptional character.'²⁷

Shell submitted several documents to support its argument that Ivan was an exceptional natural phenomenon. All of these documents were technical reports dated in 2005, one to two years after Ivan. None of these documents are persuasive or support of Shell's assertions that the Ivan was a hurricane of "exceptional natural phenomenon."²⁸

Major hurricanes in the Gulf of Mexico/Atlantic Basin, especially from August through October, the peak hurricane season, are *foreseeable* given the vast amounts of public information about the many hurricanes that have historically hit the Gulf Coast region of the United States. By Shell's own submissions it acknowledges that the accuracy of real time hurricane track and intensity forecasting has improved hurricane forecasting activity in the Atlantic Basin (including the Gulf of Mexico) over the past two

²⁵ Shell's Reconsideration request. See also, Mr. A. H. Mousselli, Ph.D., P.E. "Technical Evaluation of Shell's Hurricane Ivan Pipeline Spill Claim Relating to USCG original claim determination", dated December 29, 2008.

²⁶ 33 USC §2701(1)

²⁷ In, Apex Oil Company, Inc. v. United States, 208 F.Supp.2d 642 (E.D. La. 2002) the Court relied on the CERCLA definition, as it is identical to the one in the Oil Pollution Act, and then looked at the legislative history of CERCLA. "Liability under OPA and CERCLA is strict, and the absence of fault, or the exercise of due care is not a defense." *Id.* at 652. The Court determined that: "These ("act of God") defenses are to be narrowly construed, and only in the situation where the discharge was totally beyond the control of the discharging vessel would the responsible party be excused from liability. *Id.* at 654. The Court concluded that flood conditions which contributed to a discharge of oil from several barges on the Mississippi River were not an "act of God" as the conditions were anticipated and predicted, a contributing cause to the incident was the use of an underpowered tug in the powerful river currents.

²⁸ Shell's revised formal claim letter, dated December 7, 2006 and Shell letter request for reconsideration, dated December 31, 2008 and all attachments.

decades.²⁹ Additionally, Ivan became a hurricane on September 5, 2004, and continued to strengthen. It reached Category 5 intensity three separate times as it crossed the Caribbean Sea before entering the Gulf of Mexico on September 14, 2004 at Category 4 strength. It was heavily broadcasted; predictions and updates were given by television channels and the National Weather Service. *United States v. M/V Santa Clara I.* 887 F. Supp. 825, 843 (D.S.C. 1995) (Inclement weather predicted by the National Weather Service defeats the Act of God Defense). Accordingly, Shell has not demonstrated that the hurricane was “exceptional” or “unanticipated” as those terms are used in the OPA definition of *act of God*.

It must also be noted that even if Ivan was an *act of God* under OPA, and the NPFC does not agree that it was, Shell has not established that the hurricane was the *sole* cause of the discharge of oil from Shell’s pipelines. The Nakika 18” in Block MP-151 and the Odyssey 12” in Block MP-70, were constructed in areas of known risks of mudslide. Further, the pipelines were located in water depths less than 200 feet depths at which pipelines are more susceptible to wave action and seafloor movements, both of which are common effects from hurricanes, than pipelines laid in deeper waters.³⁰ Also, the affected pipelines were located at pipeline crossings with other pipelines. According to one of Shell’s technical reports there were nineteen pipeline crossings and one umbilical crossing along the pipeline route.³¹ Ten of the crossings were in water that was less than 200 feet deep. And, shallow water pipeline installations appear to have “consistently been impacted” by hurricane forces to a greater degree than those pipelines in waters exceeding depths of 200 feet.³² With heavy wave action and seafloor movement the pipelines move and are more easily cracked or damaged than single pipelines.³³

Finally, Shell acknowledges that it did not shut in or pig the pipeline before the hurricane hit the pipelines. Shell asserts that “(f)looding the pipeline every time a storm is expected in the Gulf of Mexico is not feasible or practical and emptying oil from the pipeline and filling it with water creates an oil and water mixture ... that must be disposed of through an expensive process.”³⁴ For all the reasons above Shell has not demonstrated that they were not a contributing cause of the discharge or that Hurricane Ivan was the *sole* cause of the incident.

2. Shell argues it exercised due care, followed industry practices, complied with regulations yet still experienced unpreventable and unexplained damages.

Shell argues it exhibited due care: that it complied with regulations and industry standards in the construction and maintenance of the pipelines. Specifically, Shell asserts the Nakika 18” pipeline was properly constructed and maintained in accordance with applicable regulatory requirements.³⁵ And that all permit applications and use permits were approved by the authorities without comment or change from other federal and state agencies. Shell asserts it complied with regulations and industry standards in the construction and maintenance of the pipelines, therefore, it implies it exercised due care. Courts have held that compliance with regulations alone does not establish entitlement to a sole fault defense. A statutory standard is no more than a minimum, and it does not necessarily

²⁹ See Hurricane Readiness and Recovery Conference, dated October 2005, “Final Conference summary Report Prepared for the Minerals Management Service under the MMS/OTCR Agreement”, at 5.

³⁰ , DNV “*Pipeline Damage Assessment from Hurricane Ivan in the Gulf of Mexico*”, Technical Report, Report No. 440 38570 (Rev. No.2), MMS (May 15, 2006), at 29, Exhibit 2.

³¹ *Id.*

³² See, *id.* at 33. Hurricane Andrew and Ivan damages were similar in the fact that there was damage to pipelines in shallow water that would not be expected to move, if they were buried, or had adequate cover.

³³ DNV “*Pipeline Damage Assessment from Hurricane Ivan in the Gulf of Mexico*”, Technical Report, Report No. 440 38570 (Rev. No.2), MMS (May 15, 2006), at 23 and 62.

³⁴ See, Mr. A.H. Mousselli, Ph.D., P.E., “*Technical Evaluation of Shell’s Hurricane Ivan Pipeline Spill Claim Relating to USCG original claim determination*”, dated December 29, 2008 at 4.

preclude a finding that the actor did not exercise due care or take precautions. Tidewater Marine, Inc. v. Sanco Intern, Inc., 113 F. Supp. 2d 987, 998 (E.D. La. 2000). (A duty of care may be derived not only from statutory standards, but also from the dictates of reasonableness under the given circumstances in a case). See Santa Clara I., 887 F. Supp. at 843 (noting that ship sailed into path of storm after receiving warning of hazard); *see also*, United States v. Alcan Aluminum Corp., 892 F. Supp. at 658 (stating that manufacturer did not exercise reasonable foresight or due care when it dumped waste into a borehole linked to the Susquehanna River); Apex Oil, 208 F. Supp. 2d at 657 (finding that oil company did not meet due care standard when it pushed barges into an area known to be affected by floods with an underpowered tug).

Similarly, conformity to custom is not in itself, the exercise of due care. Roberie v. Sinclair Refining Co., 252 So.2d 488, 493 (La App. 1971). While custom may be considered in determining whether sufficient care has been exercised, it is not conclusive or controlling of that determination since the customary manner of doing things may well involve negligence, and to follow custom to control the outcome could create a false standard of care.³⁶

Shell further argues that no amount of prudence or care on their part could have prevented the damages to their pipeline infrastructure and the subsequent discharge of oil. The court in Sabine Towing & Transportation Co., Inc., v. United States, 666 F.2d 561 (Ct. Cl. 1981) addressed an act of God defense under, the Water Quality Improvement Act of 1970 liability regime, OPA's predecessor. In that case, Plaintiff's vessel transiting the Hudson River struck an underwater object, which resulted in rupturing one of the vessel's oil tanks, discharging oil into the Hudson River. At the time the vessel was moving upriver there was a freshet condition in the Hudson River, an increased rate of flow due to rain and spring runoff of melted snow. Freshets raise the level of the river and also wash down sediment, gravel, logs, rocks and other debris. Plaintiff argued that the discharge was caused by the freshet and the freshet was unanticipated and therefore was an act of God under 33 U.S.C. § 1321. The court discounted this argument, stating that freshet conditions are well known to those who navigate the Hudson River and are not unanticipated. Plaintiff then argued that it could not have avoided the accident without suspending its operations when freshets are known to occur and Congress could not have intended that shippers stop using the Hudson River whenever there was a danger from freshets.

The Sabine court, noted that section 1321 provided for strict liability, stated that it would be inconsistent for "unanticipated" to allow the section to cover regular and frequent conditions, like freshets, where the dangers are expected and where the losses are normally worked into the cost of doing business.

"If shippers have established a general practice not to interrupt normal navigation during freshets and, presumably, to absorb in their operating costs any damages to their ships from freshets-related incidents, then it does not seem harsh for Congress to require shippers to also absorb the costs of cleaning-up any oil that is spilled when accidents occur. It would be inconsistent with the strictness with which the conference committee recommended that "unanticipated" for the purpose of section 1321 to be read, to allow the section to cover regular and frequent conditions, like freshets, where the dangers are expected and where the losses are normally worked into the cost of doing business."

Sabine, 666 F. 2d at 565.

³⁶ See, Pennington v. Justiss-Mears Oil Co., 123 So. 2d 625,632 (La. App. 1961) By the great weight of modern American authority a custom (defined as "a fairly well defined and regular usage...among a group of people such as a trade, calling or profession) either to take or omit a precaution is generally admissible as bearing on what is proper conduct under the circumstances, but is not conclusive.)

In this case Shell placed its pipelines in the Gulf of Mexico, an area where hurricanes are common and where the dangers are well known. The pipelines were laid in shallow water and in areas susceptible to mudslides. It knew that placing pipelines in crossing with other pipelines could increase the chances of pipeline damages during hurricanes or heavy storms. Shell made a business decision to locate its pipelines in these areas, presumably knowing that any discharges from these pipelines and the resulting removal costs and damages would be absorbed in its operating costs and were a cost of doing business. Shell's argument that the scope of its pipeline damages was unanticipated is unsupported and does not establish an *act of God* defense under OPA.

CONCLUSION

Shell has not established entitlement to an *act of God* defense under section 2703(a)(1). Therefore, the Fund is not available to pay Shell's claim pursuant to 33 USC § 2708.

Claim Supervisor 

Date of Supervisor's review: 3/4/13

Supervisor Action: *Denial on reconsideration approved*