
HIM 1990-2015

2012

Cuba's deepwater drilling operations United States relations, legalities, and future

Olivia Walker
University of Central Florida

 Part of the [Legal Studies Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorstheses1990-2015>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by STARS. It has been accepted for inclusion in HIM 1990-2015 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Walker, Olivia, "Cuba's deepwater drilling operations United States relations, legalities, and future" (2012). *HIM 1990-2015*. 1313.

<https://stars.library.ucf.edu/honorstheses1990-2015/1313>

CUBA'S DEEPWATER DRILLING OPERATIONS: UNITED STATES RELATIONS,
LEGALITIES, AND FUTURE

by

OLIVIA F. WALKER

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Legal Studies
in the College of Health and Public Affairs
and The Burnett Honors College
at the University of Central Florida
Orlando, Florida

Spring 2012

Thesis Chair: Dr. Gina Fromang

ABSTRACT

After the calamitous and environmentally devastating occurrence of the Deepwater Horizon Oil Spill in the Gulf of Mexico in 2010, the sobering realities of the United States' failure to successfully protect its ocean waters have caused several modifications in policy, legislation, and overall direction of the entire nation. Although there has been a general shift towards ecological safety and away from the pursuit to drill, oil-drilling explorations have continued to take place internationally. This research will focus on the future operations of Repsol YPF, S.A., a Spanish oil company stationed in Cuba, whose drilling ambitions have caused a myriad of problems for the United States.

The intent of this paper is to investigate the legalities surrounding Cuba's forthcoming deepwater oil drilling plan within the Florida Straights and how the existing relations between Cuba and the United States will shape the outcome. The majority of United States officials, senators, and policymakers are experiencing a great deal of anxiety and apprehension as Cuba's oil drilling plan continues to solidify. Recent changes in legislation and congressional opinion display the United States' overall objective to shape the manner in which the drilling operations will be carried out. This thesis will ultimately explore what progress the United States has made thus far in the sector of dialogue with Cuban officials, the various options the United States could seek in regards to taking part in the drilling operations that will soon commence in Cuba, and the current risks involved with the entirety of the drilling endeavor.

For my brilliant and accomplished sister, who has given me guidance and support in
every aspect of my life,

For my incredibly supportive parents, who have never ceased to encourage me in each
and everything I do,

And for all of my professors at the University of Central Florida who have taught me to
always strive to be the best that I can be.

ACKNOWLEDGEMENTS

I would like to thank each and every one of my professors at the University of Central Florida. Thank you to Dr. Gina Fromang, Dr. Kathy Cook, and Dr. Robert Wood for taking the time to serve on my committee and provide me with the necessary insight and encouragement throughout this experience. Thank you to Dr. Gina Fromang for accepting me as one of her first Honors in the Major Students at the University of Central Florida, and for ensuring that this project was uninterrupted and wholly successful. Thank you to Dr. Kathy Cook for igniting my interest in the topic of environmental law and the complexities of international oil drilling, and for always displaying an admiration for my work. Lastly, I would like to say thank you to Denise Crisafi and Kelly Astro for their unwavering availability, encouragement, and willingness to aid all of the Honors in the Major students throughout the directed readings and directed writings semesters.

TABLE OF CONTENTS

INTRODUCTION.....	1
HISTORY BETWEEN CUBA AND THE UNITED STATES.....	4
CUBAN OIL: CURRENT STATUS	9
THE REPSOL PROJECT.....	13
INSPECTION OF SCARABEO 9.....	14
CUBA'S FUTURE: EXPORTATION AND INVESTMENT	16
RISKS SPECIFIC TO THE REPSOL PROJECT AND SCARABEO 9	18
RISKS FOR THE GULF OF MEXICO AND THE UNITED STATES	21
UNITED STATES' PARTICIPATION.....	23
LICENSING	25
MULTILATERAL COMMUNICATION AND INVOLVEMENT	28
LEGISLATION	31
CONCLUSION	35
REFERENCES.....	39

INTRODUCTION

Cuba has not seen any true promises for its country in decades, but with the recent geological discovery of the ample amounts of oil that lie beneath its northern coast, a newfound and widespread hope has emerged. The prospects that Cuba is expecting from drilling into the pockets of oil are massive and have the potential to earn the country its economic independence. However, Cuba's upcoming plan to drill off of its coast, a mere fifty-five miles from the Florida Keys, has been described as "firing a shotgun in a crystal store" due to the precariousness and complexity of the situation (Bolstad, 2011). While legislators and members of the Obama Administration remain weary about the Spanish Company Repsol drilling a deepwater exploratory within the area of Cuba's sovereign waters, Cuban oil officials are focused on the future profits. A multitude of factors, the most obvious being the messy relationship that has existed between the two countries for decades, have caused a series of problems for the United States and its desire to monitor the manner in which Cuba executes its drilling plan. Predictions of another catastrophic environmental disaster, similar to the Deepwater Horizon Oil Spill in the Gulf of Mexico in 2010, have many United States officials doing everything in their power to keep up a consistent and rather healthy correspondence with Cuba in order to devise a dependable plan for responding to an oil spill. Another strong hope that is shared by many Americans is that Congress will eventually loosen the stringent restrictions that the 50 year-old permanent trade embargo has caused in the sector of international oil drilling. Although Cuban officials allege that they will be

sure to follow the most stringent and strictest rules and regulations when they begin to drill, there remains a great deal of skepticism and apprehension amongst many Americans. This has caused various organizations and policymakers to intervene with advice about exercising precaution and preparedness and others to completely oppose the plan without any deliberation whatsoever (Schepers, 2012).

The permanent trade embargo specifically prohibits the United States from sending any form of aid, clean up equipment, oil disbursements, technology, or expert personnel to Cuba in the case that a Cuban drilling company is faced with an oil spill mishap (Stephens & Colvin, 2011). This has become a serious predicament due to the fact that Cuba's present infrastructure and technological capacity to handle the complications that are guaranteed to accompany an oil spill do not match up to the cleanup experience and preparedness that the United States has acquired over time (Padgett, 2012). It has been recommended that Cuba completely withdraw itself from the drilling operations in order to protect not only the environmental interests of the United States, but also the welfare of the entire country of Cuba. Without consideration, Cuba has unashamedly rejected this proposal (Helman, 2011). Many Americans remain dedicated to finding a way to protect the body of water in-between Cuba and the United States, which is something that may only ensue when and if officials of both countries can separate their priorities from longstanding political beliefs. Due to the general disparity that will continue to exist between the two countries, it is imperative that the politics be set aside. Lee Hunt, president of the International Association of Drilling Contractors, commented upon this issue and stated, "This isn't about ideology. It

is about oil spills. Political attitudes have to change in order to protect the gulf.” (Krauss, 2010).

In order for Cuba to maintain its independence in deciding to choose the path of prosperity that the drilling venture will lead to, and for the United States to do what is necessary to prevent another devastating environmental disaster from impacting a multitude of already fragile ecosystems and the economy, a rational and communicative effort has been put forth by both countries thus far. However, there is still a great deal of work to be done in order to ensure that the necessary changes are made in a timely fashion. There are promising options for the United States to choose in making certain that Cuba remains dedicated to the safety guidelines and regulations that are vital to the prevention of an oil spill, but it has been left up to businesses and lawmakers to seek these opportunities. Timing becomes the center of attention for the United States throughout the entirety of this topic, as it can take a great deal of time and unremitting effort to ensure that the adjustments are made before the drilling begins. As for now, Cuba continues to demonstrate unyielding enthusiasm and devotion to the three wells that are scheduled to begin drilling in early 2012 (Allen, 2012). Overall, in regards to how the drilling may pan out in the future, timing is always of the essence for both countries involved.

HISTORY BETWEEN CUBA AND THE UNITED STATES

Although rather close in physical distance, Cuba and the United States have existed without any formal relations to one another since 1961. The relationship between the countries has been weak, muddled, and damaged for many years, which has caused their communication to steadily deteriorate over time (Hanson, 2010). To this day, Switzerland maintains a position as a mediator for the two countries in the case that they wish to talk, or better yet, *absolutely must* talk (Suddath, 2009). The history between Cuba and the United States dates back to the Spanish-American War in 1898, which marked the start of the series of quarrels. After decades of American involvement in Cuban government, commerce, and internal affairs throughout the war, Cuba had undergone drastic changes. The 1950s marked the induction of dictator Fidel Castro into power, as well as the imposition of the permanent trade embargo, which was a product of the Cold War (Schwab, 2000). The now 50-year-old trade embargo and its heavy restrictions are thwarting the United States' aspiration to aid with spill response technology and other forms of influence if an oil spill were to occur in Cuban waters during the time span of the oil drilling ("Embargo", 1999).

While examining the history of the 1959 Revolution in Cuba, which was one of the events that initiated the imposition of the permanent trade embargo, there are a great deal of transformations that occurred between Cuba and the United States to consider. When Dictator Fidel Castro and his followers entered Cuba to launch guerilla warfare against Cuba's government, the Cuban populace was quick to glorify and

encourage him. They were eager to accept his rule due to the fraudulence that so clearly depicted their dictator, Fulgencio Batista. During his regime, Batista self-righteously disregarding Cuba's economic status and corrupted the institutional normality that once defined the country, which were the main reasons for the citizens' condemnation (Bonsal, 1971, p. 22). Seeing that Castro was ready and willing to oust Batista from his current position, Cubans showered him with support. Little did they know, Fidel Castro would soon rob their country of its basic human rights and liberties, as well as cause perpetual damage to their relations with the United States (Bouvier, 2002, p.90).

The American government, which had been deeply involved in Cuban industry and political affairs for decades, also initially offered endorsement to Castro and his succession. Anticommunist criticism from the American public was frequently ignored, while a general notion of support was promoted (Bonsal, 1971, p.23). America also displayed its support for the termination of Batista's regime by imposing a weaponry embargo against his government in 1958, which punctured his power and simultaneously boosted Castro's power. The American government's participation clearly exhibited its distaste for the current political conditions in Cuba (p. 32). Although America was rather agreeable to Fidel Castro's rise toward power at the outset, a general sense of cynicism in regards to his communist tendencies was fermenting. The agreeable façade that America had exhibited for the past year eventually disappeared once Castro reached his ultimate goal of full power in 1959 (Suddath, 2009). Americans began to criticize Castro for his communist methodologies and

predispositions, one being the death trial that he held against Batista's residual supporters. Castro began to view the American criticism as a bias towards the Batista regime, as well as an intolerable interference with Cuban affairs. He expressed his anger towards America by shutting down the majority of American owned businesses and farms that were located in Cuba, confiscating privately owned land, and imposing weighty taxes upon American exports (Depalma, 2012).

After enduring the stresses and financial hardships that Castro's destructive power had caused, President Dwight D. Eisenhower decided that it was time to craft a plan to overthrow his reign. He organized the mission by dividing it into a few different plans, one being the discontinuance of sugar purchase in hopes to weaken the regime and its domination. (*Timeline: Post-Revolution Cuba*, 2004) Other actions taken by the American government included an imposition of an embargo on oil and guns, a strong issuance of propaganda, and an attack upon Cuba with the help of a large group of Cuban exiles. The main and ultimate goal of the attack was to overthrow Castro and ultimately put an end to his disparaging government. After President Eisenhower's plan had begun, Castro busily fought back by nationalizing many different private American companies and subsidiaries, including all American owned banks. On July 8, 1960, the Soviet Union agreed to buy the 700,000 tons of Sugar that the United States had placed an embargo on (Id). After countless stabs to one another's economies and governments, the relations between Cuba and America had been severely damaged. Once elected into office, President John F. Kennedy placed a permanent embargo upon Cuba, which has been in place ever since February 7, 1962. (Sullivan, 2003, p. 5)

Following the imposition of the permanent trade embargo, the American government spent a great deal of time working towards the completion of a secret mission to squash Cuba's government. The American Central Intelligence Agency (CIA) remained heavily involved with this, which only added to the heightened tensions between Cuba and the United States. The most difficult day in the history of relations between the two countries arrived on October 15, 1962, when American spies made the discovery that the Soviet Union was involved in the assembly of several missile bases in Cuba. This marked the beginning of the Cuban Missile Crisis, a painful twelve-day nuclear clash between the Soviet Union and the United States. The Cuban Missile Crisis also marked the start of the many fluctuations in the strength of the embargo that have since occurred according to the changes in the countries' political atmospheres (Suddath, 2009).

As Cuba's oil drilling plan continues to develop in present day, the United States struggles to communicate with the country due to the irreversible damages to their relationship. Dialogue has become crucial to how the United States will overcome some of the dilemmas that have emerged throughout this process. The difficulty in communication ultimately stems from the dysfunction and chaos that has continued to define the countries' connection to one another since the events in the 1960's. After years of isolating Cuba, the United States has displayed some flexibility to do what is necessary to build a channel of communication (Padgett, 2012). The United States hopes that there may be a chance of "getting through" to Cuba on the subject of how they should handle their deepwater drilling operations. Members of Congress are

realizing that whatever bad blood remains between the countries must be forgotten in order to look towards the future and what will save the countries' economies, environments, and industrial worlds (Krauss, 2010). A number of senators, environmental experts, and other involved personnel suggest that there be a discussion to remove the embargo, at least in the area of international oil drilling. This is not to say that there isn't still plenty of American opposition to relaxing the restrictions imposed in the embargo. For example, Ileana Ros-Lehtinen, the United States Representative for Florida's 18th congressional district, has been a Cuban exile since the age of eight and is one of the many people to remain in complete and total opposition to loosening or lifting the embargo. In addition to various representatives, many Florida lawmakers have showed their disapproval by fighting to completely ban oil drilling in the waters of the Gulf of Mexico. Overall, hoary tensions continue to exist, and only time will reveal what will occur between Cuba and the United States (Klimasinska, 2011).

CUBAN OIL: CURRENT STATUS

Recent research and discovery has revealed the vast amounts of oil that lie beneath the ocean floor just North of Cuba, more specifically known as the North Cuba Basin (Schenk et al, 2004). This oil supply is expected to radically alter and influence the entire country's economic status for decades to come, once the drilling is underway. Cuba has longed for its economic stability and energy independence for such a long period of time that an opportunity as grand as drilling into the 4.6 billion barrels of offshore crude oil seems to be in no way open to debate (Stephens, 2011). Cuba's journey towards uncovering these oil reserves, determining their potential profit, and engaging in contract agreements with foreign companies is, and continues to be, a very extensive and complex process. Many foreign companies fear that there is too much of a risk of entering into a contract with Cuba due to the uncertainty surrounding the amount of oil that the reserves actually hold, while other investors have paraded their interests (Ravsberg, 2012). The struggle also extends to the United States, who remains in a state of constant inquiry about what actions may be taken considering the high wall of restrictions that the embargo has created. To the United States' pleasant surprise, Cuba has been rather cooperative and responsive to the United States in order to facilitate the process (Padgett, 2012).

While looking into the history of Cuban oil and how it could affect what may come of the future, it must be noted that Cuba has been dependant upon Venezuela for its oil supply since the collapse of the Soviet Union. After 1991, Cuba found it to be

increasingly difficult to gain access to oil and petroleum. The country struggled with the depletion in quality of life, as well as the continuous burden of the rise in price of oil imports (Schepers, 2011). Cuba now receives close to two-thirds of its daily oil supply from Venezuela in order to maintain its economic and energy stability (Frank, 2010). Cuba offers reimbursement for the oil in the form of a bartering system by sending medical support and educational services to Venezuela (Nerurkar, Sullivan, 2011, p. 6). One of the main reasons why Cuba is willing to discontinue its dependence on Venezuelan oil is that there is no way to predict what exactly will arise between the two countries in the future. If anything were to occur that might damage or destroy their commercial ties, Cuba would surely face an economic crisis without the support that it is currently receiving. Jorge Piñon, oil expert at the University of Texas, commented on the insecurity of the oil dependency arrangement with Venezuela and stated, "The political risk and strategic risk to Cuba and the United States is huge. What if Chavez loses an election, or loses power, or if Venezuela disconnects Cuba from oil for some other reason? That risk is not in the best interests of the United States or Cuba." (Stephens, 2011). Ultimately, Cuba views the North Cuban Basin oil supply as a way to escape from this shackle of dependency.

An additional reason for Cuba seeking sovereignty is that its main goals relating to energy development have shifted in recent times. Cuba has struggled to cope with the collapse of the sugar industry for the past two years. The worst harvesting season of the century occurred in 2010, which immediately sparked a search for foreign investment. One of the most burdensome obstacles for Cuba during this predicament

has been the United States' Helms-Burton law. Joaquin Roy, author of *The Helms-Burton Law: Development, consequences, and Legacy for Inter-American and European-US Relations* and international studies professor at the University of Miami, describes the main objective of the Helms-Burton law in her book as follows: "To discourage foreign investment in Cuba through the threat of lawsuits and the imposition of travel restrictions. More fundamentally, it seeks to generate a deeper economic deterioration in order to accelerate the fall of the current Cuban regime." (p. 3). The Helms-Burton law has deflected the interests of the United States government away from the sugar trade, regardless of the fact that it has been openly accepting direct foreign investments for over ten years (Frank, 2010). For this very reason, along with other various factors, more emphasis has been placed upon amplifying the oil industry in Cuba. This shift can be seen in the increase of Cuban oil exports and the decrease in oil imports. Overall, trends throughout history confirm that investment and development in Cuba will continue to grow from this point forward (Yaffe, 2011).

If Cuba's refineries turn out to be as profitable as they are expected to, Cuban oil could be exported internationally. The United States Geological Survey (USGS) has predicted there to be approximately 941 million barrels of recoverable oil within the area surrounding the island, a number that has captured the attention of other countries, such as China. In comparison to this large number, Saudia Arabia, the world's leader in oil production, possesses 267 billion barrels of oil (Fahey, 2012). The USGS has also made the discovery that Cuba could have billions of feet of natural gas near its offshore region. The chance for Cuba to build and preserve the status of a successful

international oil leader seems as though it is enough of a reason to take the risks that the United States believe to be unworthy of environmental compromise (Bertrand, 2012). The United States has perceived this as a serious risk, in that Cuba may not be utilizing the safest or most stringent restrictions to govern its drilling project because of its eagerness to begin the exploration. Although Cuba has shown cooperation in following certain standards, Cuba has also publicized its dedication to ensuring that nothing gets in the way of its drilling operations.

THE REPSOL PROJECT

Repsol YPF, S.A., a major Spanish oil and gas company in Cuba, has leased a Chinese built oilrig from an Italian company that will be used in the waters just off of Cuba's coast. The derrick, which is named Scarabeo-9, was constructed in Yantai, Shandong province, China and has already been used for various drilling ventures around the Singapore area. The Scarabeo-9 is being utilized for the Repsol project, which will take place in the exclusive economic zone (EEZ) in the Gulf of Mexico (Nerurkar & Sullivan, 2011). Due to the embargo's mandatory decree to use less than ten percent of American made parts to build their oilrig, Repsol hired a foreign company to lease Scarabeo-9 from. This restriction is just one of the many in place under the wide umbrella of the trade embargo. The one chief American made part that the rig does possess, however, is the blowout preventer. Ironically, the blowout preventer was the part that failed in preventing the surge of oil during the Deepwater Horizon Spill in the Gulf of Mexico in 2010 (Wallis, 2011). In comparing the BP well to Scarabeo-9, there are a variety of similarities that have accentuated the United States' fears.

Scarabeo-9 is classified as an "ultra deepwater 6th generation semi submersible drilling rig" by the Italian engineering firm Saipem (*Scarabeo 9*, 2010). It has a water depth of 12,000 feet, a drilling depth of 15,000 meters, and a deck load capacity of 8,900 tons. It also has two cranes, four mud pumps, two rotary tables, two top drives, and a platform that is 118 feet high (Id). The \$750 million dollar Scarabeo-9 oilrig rests on four gigantic floating buttresses, along with an abundance of air-conditioned living

space for the oilrig workers who will take part in the execution of the Repsol project. Similar to the depth of the drilling in the Gulf, Scarabeo-9 will be drilling approximately 6,500 feet into a sliver of land called the Havana-Matanazas. (Helman, 2011). The Italian company Saipem has had extensive background experience in many different parts of the world, including Africa, Europe, and the Americas. It has drilled over 7,100 wells throughout international waters and prides itself on being a prestigious engineering firm with state of the art equipment and extremely qualified personnel (*Drilling*, 2010).

INSPECTION OF SCARABEO 9

To the United States' surprise, Cuban drilling officials have shown enthusiasm in regards to discussing the safety regulations that will be implemented throughout the future drilling operations. This compliance has been publicized in various ways, including an open invitation from Cuba for the United States to tour and inspect the rig. Cuba's willingness to share their plans with the United States says a great deal about their general intentions to communicate and alleviate some of the stress and anxiety surrounding the drilling project. The United States was certainly pleased by this invitation and agreed to take the opportunity to travel to see the rig (Goodhue, 2012). The directors of Repsol, as well as other involved Cuban officials, were ready and willing to discuss information pertaining to the platform, its future operations, and many other subjects while it was being inspected.

Constituents of the United States Coast Guard and members of the Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) inspected the rig. It was rather relieving for the American inspectors to learn that Scarabeo-9 met the stringent safety requirements belonging to the United States. A report by the Coast Guard stated, "While aboard the Scarabeo 9, personnel reviewed vessel construction, drilling equipment, and safety systems – including lifesaving and firefighting equipment, emergency generators, dynamic positioning systems, machinery spaces, and the blowout preventer." The review of the oilrig was not only compared to the standards of the United States, but also other existing international standards, and it successfully matched up with both sets (*BSEE, Coast Guard Complete Review of Repsol Rig*, 2012). The inspection was enormously helpful to the Coast Guard and BSEE in gaining a better understanding of how drilling operations will be administered, the company's regulatory and safety standards, and the overall organization of the workforce. The valuable information that was acquired throughout the inspection has undoubtedly furthered the United States' mission to promote collaboration, cooperation, and preparedness in responding to an oil spill accident.

The visit also revealed what Cuba is doing to better prepare themselves for their project. An article written by William Reilley, co-chairman on the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, and energy expert Megan Reilley Cayten uncovered Cuba's involvement in future oil spill preparation. It was discovered that Cuba has consulted with Norwegian officials in order to seek advice and possible oil spill response help, if it is needed in the future. Cuba has also thoroughly

studied reports surrounding the Deepwater Horizon Oil Spill, in order to gain a better idea of what to expect and what changes need to be made before the drilling is underway. Cuba has gained a wide array of knowledge by studying the 2010 Oil Spill and is dedicated to working towards ultimate preparation (Reilley & Cayten, 2012). This discovery helped to ease the minds of some involved United States officials, in that they were able to gain a more in depth understanding of Cuba's procedures, as well as its commitment to preparing for possible accidents and unexpected problems.

CUBA'S FUTURE: EXPORTATION AND INVESTMENT

Only the commencement of the Repsol project will reveal what the future holds for Cuba and its oil reserves. However, there have been several predictions in regards to the actions that Cuba will need to take in order to fulfill their hopes for oil production. According to several authorities, including oil expert Jorge Piñon, Cuba will have to spend a few years building and strengthening its oil industry before production can successfully begin (Piñon, 2011). One reason for this is that Cuba's longstanding dependency upon Venezuelan oil has not allowed for much opportunity to develop any sort of oil production capacity for itself. There has been additional speculation that Cuba will run into a barricade of problems and setbacks before oil production can excel, including possible sanctions from the United States. These sanctions may arise from the trade embargo, which forbids the use of American equipment and involvement of American companies that exceeds a fixed amount. (Nerurkar & Sullivan, 2011). It is the

underdevelopment of Cuban technology that could lead to the most severe problems involved in the event of an oil spill.

On the other hand, there is a very real possibility for Cuba to advance into a worldly oil exporter. There are various interests and investments that continue to emerge from foreign countries and international oil drilling companies that could help this prediction prove to be true. Venezuelan oil companies have aided Cuba in strengthening its capacity to handle oil production. *Petroelios de Venezuela S.A.*, a state-owned oil company in Venezuela, has offered its services to Cuba in helping with the necessary advancements that must be made if oil production is going to successfully develop (Id). On the whole, Cuba has directed its efforts towards building the oil exportation industry and has certainly been acknowledged internationally. Cuba has negotiated lease agreements with several different countries, including Norway, India, Malaysia, Vietnam, Brazil, Venezuela, Angola, and China and its government is very hopeful about the future (Padgett, 2012). With the interests of several different countries, Cuba has the potential to rise to a position of a lucrative worldly exporter.

RISKS SPECIFIC TO THE REPSOL PROJECT AND SCARABEO 9

Just as the Deepwater Horizon Spill took an enormous toll on the gulf waters, Florida ecosystems, and the economy, an error in the Repsol project could negatively impact miles of surrounding waters and shoreline, being that the drilling will take place only fifty-five to sixty miles from the Florida Keys. For this reason, the United States feels very weary about the course of the project. In addition to the issue of distance and location, there is a concern regarding the lack of experience in the area of oil drilling on Cuba's part. In fact, the Repsol Project is just the second drilling project to take place within the area of the exclusive economic zone (EEZ). Due to the fact that there has been minimal drilling activity in Cuban territory thus far, safety and environmental regulations are in dire need of revision and renovation (Nerurkar & Sullivan, 2011, p. 10). Regulations that were once valid and sufficient years ago are likely to not suffice in present times. Not only is there an issue of outdated regulations, but there is also the fear that international waters will not be as stringently regulated as United States' waters. While the United States may possess statutes and policies to protect the environment, such as the Clean Air Act and the Oil Pollution Act, Cuba may not occupy analogous parameters. Although Cuba has made an effort to ensure the United States that necessary changes will be made and environmental safety requirements will be met, there is an issue of timing. Dan Whittle, an attorney of the Environmental Defense Fund, commented about his fear regarding timing. He stated, "We're shooting ourselves in the foot by not working together," in regards to some of the hesitation of the

United States (Bacon, 2011). Another frightening risk is that there is always the possibility for the regulations, even while in place, to fail at what they were created to do.

Due to the many factors that surround the Repsol project, determining the probability of an oil spill is not easily attainable. The Scarabeo-9 oilrig has been proven to pass all of the Norwegian safety standards and has also received a passing grade from the United States after undergoing thorough inspection (*BSEE, Coast Guard Complete Review of Repsol Rig*, 2012). There have been some reported instances of accidental oil spills that the Spanish company Repsol has encountered in past years, but this does not necessarily influence or enhance the probability of an oil spill. It is important to consider the experience that Repsol has had in the past, including some experience in the Gulf of Mexico, in order to formulate a better idea of the oil company's proficiency (Roberts, 2010).

There are various risks involved with the type of rig that Scarabeo-9 is classified as, as well as the kind of drilling that it will be performing. The Scarabeo-9 oilrig will be executing exploratory drilling, which is a type of drilling that does not have as many reported accidents as do other types of oil wells. However, two of the largest oil spill disasters in international history occurred from an accidental "blow out" of their exploratory wells, one of which was the Deepwater Horizon Oil Spill in 2010 (Nerurkar & Sullivan, 2011, p. 11). An acknowledgement of the possible risks involved with drilling at an exploratory well is extremely important to the entirety of this issue. In addition to recognizing the potential hazards of drilling at an exploratory well, the causes of the oil

spills should be thoroughly analyzed, in view of the fact that there are many similarities in structure, function, parts, and procedures between Scarabeo-9 and other oil wells. A thorough study of past oil spills would be wise and helpful option in further assessing the risks of the Repsol project.

RISKS FOR THE GULF OF MEXICO AND THE UNITED STATES

The risks that the Repsol project poses for the Gulf of Mexico are immediate. This means that as soon as the well is drilled, the risks will surface and they will continue to proliferate for the remainder of the operation. The notion that the oil drilling could spoil Florida's pristine beaches and its multibillion-dollar tourism industry is petrifying to the United States, but what is even more tragic is the possibility for the delicate coral reefs, endangered marine species, and struggling ecosystems to be completely abolished. After enduring the agonizing and extensive occurrence of the Deepwater Horizon Oil Spill, the United States is overwhelmed with the possibility of a reoccurrence. The United States hopes that this fear is shared by Cuba and that the necessary precautions will be taken in administering the Repsol project.

Fisheries, which are one of the largest and most widespread industries in coastal states like Alabama and Mississippi, have struggled to cope with the devastating effects of the Deepwater Horizon Oil Spill. Two years after the colossal oil spill, fishermen are still struggling to offset the damages. After the BP oil spill, a considerable amount of the fishing waters were closed off to ensure public safety. This devastated Louisiana's fishing industry, being that it supplies close to 40 percent of the entire United States with seafood (*Factbox: Gulf oil spill impacts fisheries, wildlife, tourism*, 2010). In addition to the potential damage to fisheries, it is feared that Florida's tourism industry will be greatly harmed. Reports from the Environmental Defense Fund (EDF) stated "Florida's \$60 billion tourism and fishing industries-as well as the Dry Tortugas marine sanctuary

and deepwater corals in the Southeast Atlantic-are at stake” (*EarthTalk: What effect will Cuban drilling have on the environment*, 2012). In addition to fishery and tourism risks are the dangers posed for wildlife, coral reefs, endangered ecosystems, national reserves, sanctuaries, habitats, feeding grounds, mangroves, swamps, and many other marine entities.

Scientifically, the Florida current that flows throughout the gulf waters and the Florida Straights would most likely carry spilled oil to the most southern part of Florida, as well as the eastern coast of Florida (*Florida Current*, 2012). However, these currents change with the surrounding weather conditions including wind, hurricanes, water temperatures, and undercurrents. The possibility of the currents carrying oil to the coastline of Florida also depends on how large the spill is, how long of a period it took for clean up to begin, and a variety of other factors (Allaby, 2004). Despite the uncertainty surrounding the water currents, the sheer possibility of the oil reaching Florida is both bloodcurdling and upsetting to the United States.

UNITED STATES' PARTICIPATION

Analyzing and understanding the political complications that define the relationship between the United States and Cuba is a daunting task, but it has been recognized as being one of the only ways to open communication and alter the uncomfortable atmosphere. The initiation of communication has been the first step towards successfully shifting interests from unilateralism to bilateralism. Reaching a mutual and compatible agreement will surely assist both countries in the sector of oil drilling and the complications that it can entail. The main suggestion that has been made to the Obama Administration is to open dialogue with Cuba in order to address issues regarding environmental safety, travel, commerce, and security. United States lawmakers and officials are hopeful that the trade of ideas with Cuba will help in forming agreements related to oil spill relief and response (Sadowski, 2011).

William Reilly, co-head director of President Obama's National Commission on the Deepwater Horizon Oil Spill and Oil Drilling, has shown unwavering dedication and motivation in regards to sparking communication with Cuba. He traveled to Cuba in September of 2011, in hopes that he would be able to aid the country in assessing their drilling plan. Reilly believes that communication is key in the entirety of this situation because an increased level of interaction will likely lead to the sharing of ideas and regulations. The central hope is for the United States to lead Cuba towards its own ideals and safety concerns. In general, there has been a continuous flow of suggestions made to the Obama administration in regards to conversing with Cuba to

create a surefire plan for how to react when and if a spill does occur (Reilley, W., & Cayten, M. R, 2012).

Florida lawmakers are much less open to communication and discussion with Cuba in reaching a happy medium. Senator Bill Nelson is one of the many Floridians who believes that the issue should be handled by fighting to completely ban any sort of drilling operations in the gulf waters. Senator Marco Rubio has joined Nelson in his efforts to oppose drilling in the Gulf of Mexico. He has also displayed his support for an upcoming bill, which would force foreign companies who are involved with the Repsol drilling project to pay for any and all damages incurred by the United States, Florida's coastline in particular, without a limitation on the amount of liability (Klimasinska, 2011). These ideas and efforts undoubtedly exhibit the seriousness of many Americans when it comes to the possibility of another drilling disaster. It seems as though some United States officials have decided to convey their positions on the issue by remaining obstinate, rather than attempting to communicate or form an agreement.

The United States' participation and commitment to encouraging environmental protection has been plentiful thus far. Various conferences related to the protection of marine ecosystems, coral reefs, and overall environmental health are taking place both locally and internationally. The United States hopes to continue the enhancement of these environmental values. A range of different oil companies and corporations have requested licenses to intervene with different forms of aid in Cuban waters in the case of a spill. There are countless organizations that have initiated their involvement with Cuba, including the Environmental Defense Fund (EDF), International Association of

Drilling Contractors (IADC), International Maritime Organization (IMO) and the Center for Democracy in the Americas (CDA). Multilateral participation efforts have been made, and some of them have made quite an impact on increasing the level of awareness and cooperation thus far. Legislation has also been proposed in the 111th and 112th Congresses, and other legislative insights are currently circulating (Nerurkar & Sullivan, 2011).

LICENSING

One question that is repeatedly asked is how the Office of Foreign Assets Control (OFAC) will evaluate and grant requests from various United States corporate firms and companies in regards to doing business with Cuba, as well as how many licenses it will actually bequest before the commencement of the Repsol project. The Cuban Assets Control Regulations of the OFAC bar the United States from sending any technological help to Cuba in the case of an oil spill, and various companies are searching for ways around the restrictions. This is extremely uncomfortable for the United States' in that there is such a limitation on what they could legally offer to Cuba in response of an oil spill if the licenses are not granted. Florida, along with other coastal states and the entire United States economy, would experience the inevitable damage of another accident. A number of businesses, as well as members of the government, have been pondering ways for the OFAC to shift, alter, or even loosen its

stringent policies that govern the ability for the United States to respond to a spill (Stephens, 2011).

Progress has been made in the past, however, in regards to the attainment of licenses from the OFAC. Repsol YPF drilled its first exploratory off Cuba's shore in 2003. The Clean Caribbean and Americas cooperative, a circle of companies involved in oil drilling in Florida, earned a license from the OFAC to take part in an oil spill response plan belonging to Cuba. The Clean Caribbean and Americas cooperative possesses many different types of machines, chemicals, dispersants, and other devices that may be used in responding to an oil spill. It is this cooperative that would likely be the first to respond to a Cuban oil spill (Allen, 2012).

The United States Department of State has continuously encouraged oil clean up companies to apply for similar licenses to aid Cuban drilling operations. Timing is critical throughout the entirety of this situation, which is why Washington is so adamant about encouraging oil spill clean up companies to apply for licenses as soon possible. Oil expert Jorge Piñon commented on the urgency surrounding the licenses, "You never know what piece of equipment you are going to need from whom. In the event of a blowout, you don't have the time to go through a tedious exercise of going over a list of 'licensed' suppliers. It should be an industry-wide license." In the case that a spill did occur, it would not be possible for Cuba to simply pick up a phone and call Washington for help. As Piñon mentioned, the licensing process is extensive. If companies wait to apply for the licenses, it will soon be too late (Orsi, 2012).

In addition to it being a lengthy process, obtaining licenses can also be very complex. Thus far, few American companies have been granted licenses. There are two American companies that have been given licenses to send out capping stacks, which are especially important pieces of equipment in sealing a gushing oil well (*Cuba leased oil rig arrives*, 2012). Other than those two companies, there have been no major licenses granted to United States companies in the areas of transportation or expert personnel recruitment. This is a serious problem because although there are licenses for the equipment, there would be no experts or workers readily available to perform the installation. Lee Hunt, president of the International Association of Drilling Contractors, commented on the issue: "So what you have is a great big intelligent piece of iron without a crew," he said. 'You can't just drop it on the hole and hope (the spill) will stop. It's not a cork.'" In other words, there are gaps and holes that must be filled if the United States wishes to put forth their expertise and help in the case of a spill (Id.).

One particular association has spent a remarkable amount of time poking and prodding the OFAC in regards to licensing. This association is the International Association of Drilling Contractors (IADC), an alliance based out of Houston, Texas. After a relentless effort to receive permission from the OFAC to visit Cuba in hopes to reveal its policies on drilling, the IADC was eventually granted a license to do so. It was reported that the trip to Cuba was remarkably eye opening to all members of the IADC, allowing them to relay valuable information back to the United States. The reason the IADC is so obstinate in encouraging exceptions in United States policy is that although Cuba is willing to follow the proper precautions, they do not possess sufficient clean up

equipment. The IADC views the situation as urgent and impossible to ignore. It has been suggested that the OFAC make some necessary alterations, such as creating emergency based licenses and encouraging United States Coast Guard involvement, in order to ensure that Americans can feel safe and secure about the Repsol project. Of the many suggestions and concerns that have been put forth by the IADC, lifting the embargo has not been encouraged. (Ferrari Legal, P.C., 2011).

MULTILATERAL COMMUNICATION AND INVOLVEMENT

The United States is beginning to grasp just how important communication is to creating a reliable response plan to an oil spill. There has already been multiparty communication between the United States, Mexico, and the Bahamas in regards to the possibility of oil spills, and this collaboration has recently included Cuba. Before 2011, the United States and Cuba had not taken part in any sort of discussion in regards to oil drilling or spill response plans. However, both countries recently attended a joint meeting that was designed for the purpose of discussing safety regulations and how to prepare for the occurrence of an oil spill. This meeting took place in the Bahamas and included Cuban officials, United States officials, members of the Coast Guard, Environmental Protection Agency, and the Bureau of Safety and Environmental Enforcement. The conference opened new doors for both countries, in terms of presenting individual thoughts and future plans, which allowed for productive dialogue

between the participants. It also lead to an agreement amongst participants to further discuss drilling operations and response plans in upcoming years (Gibson, 2011).

The United States and Cuba are not currently a part of a bilateral agreement in regards to oil spills. However, they are both are parties to an assortment of combined multilateral agreements that guide countries in regards to how to respond and cooperate in the case of an oil spill. The agreements include the International Convention on Oil Pollution, Preparedness, Response, and Cooperation (OPRC), which was adopted under the International Maritime Organization (IMO) in 1995 (U.S. Congress, Senate, 1991). In addition to the commitments to the OPRC, the United States and Cuba are both constituents to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. What is interesting about this particular convention is that it recommends exchange and co-cooperation of all of its parties in regards to oil spill response plans. It actually creates an obligation for its members to assist each other in times of crisis. The main purpose of the organization is to ensure that its parties are working together in an agreement to battle the injurious effects that can result from an oil spill. The membership to organizations and associations, such as these, promote a mutual understanding and preparedness (U.S. Department of State, 1991).

What is most important about both countries' affiliations and commitments to the agreements is that they could provide a method of cooperation for both to follow in response to spills. Both countries share an affiliation to the agreements and all of their provisions, which shows that there is potential for Cuba and the United States to work

towards the creation of established protocols designed to respond to an oil spill. In a way, the agreements act as an outlet to the harsh restrictions of the embargo. Essentially, it is assumed that if both countries share the same values and methods in regards to drilling procedures, there will be more preparedness and cooperation involved. One example of how the International Maritime Organization (IMO) has initiated preparedness amongst Cuban companies was the 2010 technical mission that was held in Cuba. This mission was to evaluate the vigilance and capacity to respond to the Deepwater Horizon Oil Spill. It revealed various areas that Cuba needed to improve in, as well as ways to increase its cooperation. The IMO also holds various international seminars for the purpose of allowing various countries to learn about their neighbor's spill response methods, plans, and rules. The IMO believes that each invitee has a great deal to learn about their fellow countries' emergency plans and that this can be extremely beneficial in increasing their awareness ("Introduction to the IMO," 2011). One particular seminar, which was held in December of 2011 in the Bahamas, was sponsored by the IMO. The seminar related to offshore exploration and the pollution problems associated with it. Both Cuba and the United States were invited to the seminar, which was one step toward the main goal of cooperation between the two countries (Nerukar & Sullivan, 2011).

Another example of how Cuba and the United States have been multilaterally involved with one another was the marine conference held in Sarasota, Florida. This particular conference was held after the occurrence of the Deepwater Horizon Oil Spill and involved a discussion of an international plan to protect marine wildlife, coral reefs,

and other endangered and damaged species in the future. Twenty Cuban delegates were invited to attend this conference, with the main goal being to seek a mutual agreement between the countries in regards to protecting shared bodies of water (Clark & Kennedy, 2010).

Overall, progress has been made towards guaranteeing that an acceptable agreement is made before the commencement of the Repsol project. Communication has allowed for significant changes to take place. A noteworthy advancement that recently transpired was Cuba's agreement to use chemical dispersants to break up oil if a spill does occur. In addition to this agreement, Cuba has consented to other suggestions made by the United States, including the utilization of burning techniques to reduce the spreading oil (Allen, 2012). Cuba's cooperation in listening to suggestions made by the United States shows its concern for the environment and also increases the trust that is shared between the two countries.

LEGISLATION

In addition to the encouragement of licenses and multilaterally collaboration, new legislation is currently circulating throughout Congress. The different types of bills, if passed, would collectively exclude parts of the oil-drilling sector from the harsh restrictions that accompany the embargo. This legislation would be a step in the right direction for the United States, who has been in an anxious and panicked state for quite

some time. The legislation would allow the United States to do whatever is necessary to help Cuba in the case of an oil spill occurrence.

One influential legislative venture that is recent and currently undergoing congressional assessment is the “Western Hemisphere Energy Security Act of 2012.” This bill was proposed by Jeff Flake, a Republican legislator in Arizona, to allow the United States to participate in exporting essential drilling equipment to Cuba. If passed, this bill would also allow for the importation of gas and oil from Cuba into the United States. The most critical aspect of this bill is that it would allow companies and businesses to send equipment overseas with the permission under what would be known as a “general license.” In other words, the lengthy and complex process of applying for a specified license in order to legally export drilling machinery would not apply in this case (Senate and House Representatives of the U.S. Congress, 2012). This bill has been filed and referred to a committee, but has not yet been passed along to the House or Senate.

Other legislative initiatives that have been made include various bills introduced to the 111th Congress and the 112th Congress. The 111th Congress was comprised of two different approaches, one being the approval for United States to partake in the Cuba's offshore oil drilling development and the other being the infliction of sanctions upon any foreign investment company who has supported Cuba in its efforts to develop its oil resources (Nerurkar & Sullivan, 2011). In more simple terms, the first approach would have ultimately allowed the United States to initiate involvement and investment

into the division of Cuban energy. The 111th Congress proposals did not receive any commendable consideration or comprehensive review, and therefore it did not pass.

On the other hand, the 112th Congress is more recent and still underway. The 112th Congress, while still related to the United States' interest in Cuban offshore expansion, is concentrated on the sector of oil drilling. There are three different legislative initiatives that will be presented, one by Senator Vern Buchanan, another from Senator Bill Nelson, and the last by Senator Illeana Ros-Lehtinen. Senator Buchanan's bill has been introduced "To amend the Outer Continental Shelf Lands Act to authorize the Secretary of the Interior to deny an oil and gas lease... to any person that has engaged in activities with the government of a foreign country subject to a U.S. sanction..." (*H.R. 372*, 2011). The overall goal of this bill is to deflect foreign investors and other companies from contributing to the overall development of Cuba's oil industry. Senator Bill Nelson's bill is called the Gulf Stream Protection Act of 2011. Its official bill summary is as follows:

Amends the Outer Continental Shelf Lands Act (OCSLA) to prohibit the Secretary of the Interior from granting an oil or gas lease to a bidder conducting oil and gas operations off the coast of Cuba unless the bidder submits to the Secretary: (1) a Cuban oil spill response plan, which includes worst-case-scenario oil discharge plans; and (2) evidence that the bidder has sufficient financial and other resources necessary for a cleanup effort to respond to a worst case scenario oil discharge in Cuba that occurs in, or would impact, the waters of the United States.

This bill was introduced to Congress on February 17, 2011, and has not yet been referred along to a committee. One of the purposes of this bill was to draw in the attention of foreign investors and make sure that they are aware of their obligation to financially contribute to the clean up costs of a possible oil spill. Senator Nelson's main hope is to deflect the companies from doing business with Cuba. Senator Ros-Lehtinen's proposed the Caribbean Coral Reef Protection Act of 2011, which has been introduced into the House. This bill would sanction foreign investors, in the form of visa denial, who have participated in aiding the growth of the Cuban oil sector (112th Congress, 2011).

Overall, the most recent bills that have been proposed during the 112th Congress certainly display an overall trend towards inhibiting the expansion of Cuba's energy and oil industry. There has certainly been a collective approach by members of Congress, and efforts have been made from several different angles.

CONCLUSION

The reality of Cuba's drilling operations is intensifying with each and every passing day; in fact, the drilling operations have begun as of February 2012. It is not likely that the tensions or concerns will completely subside, although some progress has been made thus far. Cuba will continue to march its way through to completion of the project, while the United States will prolong its fight to make changes. Relentless efforts by the United States will persist, including supplementary legislative initiatives, policy alterations, and license agreements. By and large, there has been a gradual shift in United States opinion regarding the entirety of Cuba's oil drilling goals. Instead of continuing to play the offense for what is to emerge from the Repsol project, the United States appears to have adopted a defensive role. The cruel truth is that the United States has no real power over what Cuba chooses to do with its own drilling operations, other than the internal changes may take place within the United States. This has been difficult for many policymakers, legislators, and members of Congress to accept. However, the most painful reality is that Florida's coastline and coastal waters simply cannot afford to endure yet another oil spill catastrophe. The anticipation of the project has not only consumed the United States, but also those involved with the oil drilling industry in Cuba, being that the project could boost the country to a position of a leading oil exporter.

An obvious and recurring theme of this paper was the concern for and importance of timing. Preparing for exploratory oil drilling practices take an abundance

of time and effort, due to the myriad of responsibilities that arise, including a response plan, a web of rules and regulations, and overall preparedness. The embargo is the reason for the many difficulties that have arisen in the communication between Cuba and the United States, as well as the almost impossible issue of timing. Unfortunately, Cuba cannot simply pick up a telephone to discuss the exportation of drilling equipment and aid from the United States when and if a spill did occur. Although this luxury can be wished upon, it is not an option at this time, which is why it has become a general goal for companies, legislators, citizens, policymakers, and other involved parties to seek transformations before it is too late. Constructive communication has taken place thus far, in terms of agreements, suggestions, and influences, because both countries are realizing the realities of the project.

Although ostensibly well designed, the United States remains apprehensive about the Repsol project. One promising aspect about the Scarabeo-9 oilrig, however, is that it has passed the United States' safety regulations "test," which has certainly relieved some of the angst. Cuban oil officials have also displayed their openness to the United States in their overall willingness to include them in whatever the embargo will allow. The initiation of dialogue and communication will continue to open more doors for both countries; however, each country must display efforts to do so. If attempts to communicate are not initiated, objectives will not be met.

The risks that the project poses are very real and quite frightening after the excruciating occurrence of the Deepwater Horizon Oil Spill just two years ago, along with additional catastrophic oil spill disasters in previous times. Not only are there fears

that Cuba's safety regulations may not be tight or strong enough for United States' standards, but there is the worry that regardless of the type of restrictions that are in place, these restrictions do not always perform the job that they are intended to perform. Furthermore, nature itself can cause risks to heighten.

After a full assessment of Cuba's future drilling operations in the North Cuba Basin, it would be in the best interest of both Cuba and the United States to continue to take a proactive approach to the current project, as well as any future drilling operations that could affect the United States. This includes granting commercial licenses to corporations to allow the exportation of drilling equipment, expert personnel, and other forms of aid. The preapproval of these licenses is essential in ensuring that oil spill clean ups would be handled in a timely fashion. In addition to licensing, Cuba should be kept up to date with technology, as well as current regulations and safety restrictions. This will enable the United States to remain on the same wavelength as Cuba, in terms of oil drilling preparations and procedures and also allow for the countries to communicate with ease in forming a mutual understanding. President Barak Obama and the remainder of his administration have been encouraged to utilize their executive power to introduce the changes that must be made if communication and cooperation is going to be successful.

The emergence and development of the Repsol project has been a difficult challenge for the United States. However, it has brought about significant changes that will prove to be useful in the future. The United States has engaged in conversations with Cuba that would never have taken place if it were not for the overall concerns for

the drilling project. The two countries have learned to put aside some political disagreements in order to give priority to the handling of the drilling operation. This will prove to be beneficial in the future because of the fact that some of the tension has subsided. Not only has this arduous process helped the United States in learning ways to communicate, cooperate, and work in partnership with Cuba in regards to oil drilling, but it has also trained the United States how to address problems that may arise with other foreign countries in the future.

REFERENCES

- 112th Congress, (2011). *Caribbean coral reef protection act of 2011*. Retrieved from website: <http://www.govtrack.us/congress/bills/112/hr2047>
- 112th Congress, (2011). *S. 405 gulf stream protection act of 2011*. Retrieved from website: <http://www.govtrack.us/congress/bills/112/s405>
- 112th Congress, (2011). *H.R. 372*. Retrieved from website: <http://www.govtrack.us/congress/bills/112/hr372>
- Allaby, M. (2004) Florida Current. A Dictionary of Ecology. Retrieved March 24, 2012 from Encyclopedia.com: <http://www.encyclopedia.com/doc/1O14-FloridaCurrent.html>
- Allen, G. (Writer) (2012). U.s. watches closely as oil drilling begins off cuba [Web series episode]. In *All Things Considered*. Washington, D.C.: National Public Radio.
- Bacon, J. (2011, September 19). Uneasy floridians brace for cuban oil drilling to begin. *USA Today*.
- Bertrand, P. (2012, February 14). How much oil does cuba have?. *International Business Times*. Retrieved from <http://www.ibtimes.com/articles/298581/20120214/cuba-oil-natural-gas-offshore-usgs-deposits.htm>
- Bonsal, P. W. (1971). Cuba, castro and the united states. (p. 23). Pittsburg, PA: University of Pittsburg Press.

Bolstad, E. (2011, October 18). Oil spill from drilling in Cuban waters could have limited u.s. response read more: *Miami Herald*. Retrieved from <http://www.miamiherald.com/2011/10/18/2460013/oil-spill-from-drilling-in-cuban.html>

Bouvier, V. M. (2002). *The globalization of u.s.-latin american relations*. (New ed., Vol. 1, p. 90). Praeger Publishers.

BSEE , Coast Guard Complete Review of Repsol Rig (2012, January 9). Retrieved from <http://www.bsee.gov/BSEE-Newsroom/Press-Releases/2012/press01092012.aspx>

Clark, L., & Kennedy, S. (2010, September 30). Cuba ready to drill for oil deeper than BP. *Palm Beach Post*, Retrieved from <http://www.palmbeachpost.com/news/world/cuba-ready-to-drill-for-oil-deeper-than-946069.html?printArticle=y>.

Cuba leased oil rig arrives. (2012, January 23). *The Namibian Sun*. Retrieved from <http://www.namibiansun.com/content/business/cuba-leased-oil-rig-arrives>

Depalma, A. (2012). 1959: The cuban revolution. *The New York Times Upfront*, Retrieved from <http://teacher.scholastic.com/scholasticnews/indepth/upfront/features>

DuBois, S. (2010, May 19). 6 big oil spills and what they cost: Deepwater horizon, Retrieved from http://money.cnn.com/galleries/2010/fortune/1005/gallery.expensive_oil_spills.fortune/index.html

Earthtalk: What effect will cuban drilling have on the environment? (2012, March 19).

The Environmental Magazine, Retrieved from

<http://www.kentucky.com/2012/03/19/2117206/earthtalk-what-effect-will-cuban.html>

"Embargo." Gale Encyclopedia of U.S. Economic History. 1999. Retrieved November

16, 2011 from Encyclopedia.com: <http://www.encyclopedia.com/doc/1G2-3406400280.html>

Factbox: Gulf oil spill impacts fisheries, wildlife, tourism. (2010, May 30). *Reuters*,

Retrieved from <http://www.reuters.com/article/2010/05/30/oil-rig-impact-idUSN3020363620100530>

Fahey, J. (2012, March 6). Saudi Arabia expects to find 100B barrels of oil. *Yahoo*

Finance, Retrieved from <http://finance.yahoo.com/news/saudi-arabia-expects-100b-barrels-180321955.html>

Ferrari Legal, P.C. The OFAC, (2011). *How will the ofac address a cuban oil spill?*.

Retrieved from website: <http://ofaclicenses.com/2011/06/14/how-will-ofac-address-a-cuban-oil-spill/>

Florida Current. (2012). In *Encyclopædia Britannica*.

Frank, M. (2010, August 29). Oil exploration in cuba expected to go ahead. *The*

Financial Times. Retrieved from <http://www.ft.com/cms/s/0/63317958-b3af-11df-81aa-00144feabdc0.html>

Frank, M. (2010, March 25). Cuba eyes foreign investment to halt sugar decline.

Reuters. Retrieved from <http://www.reuters.com/article/2010/03/25/cuba-sugar-investment-idUSN2415938820100325>

Gibson, W. (2011, December 13). U.s. and cuba meet and move slowly toward oil spill plan. *Sun Sentinel*. Retrieved from http://articles.sun-sentinel.com/2011-12-13/news/fl-cuba-drilling-inspection-talks-20111213_1_oil-spill-plan-exploratory-oil-drilling-bahamas

Goodhue, D. (2012, January 13). Oil rig could be off key west in two weeks. *The Miami Herald*. Retrieved from <http://www.miamiherald.com/2012/01/13/2587909/oil-rig-could-be-off-key-west.html>

Hanson, S. Council on Foreign Relations, Publications. (2010). *U.s.-cuba relations*. Retrieved from website: <http://www.cfr.org/cuba/us-cuba-relations/p11113>

Helman, C. (2011, December 12). U.s. should drop cuba embargo for oil exploration. *Forbes Magazine*, Retrieved from <http://www.forbes.com/sites/christopherhelman/2011/12/12/u-s-should-drop-cuba-embargo-for-oil-exploration/>

Klimasinska, K. (2011, October 18). Repsol to Let U.S. Check Rig Before Cuba Oil Drilling. *Bloomberg News*, Retrieved from <http://mobile.bloomberg.com/news/2011-10-18/repsol-to-let-u-s-check-rig-before-cuba-oil-drilling-1->

Krauss, C. (2010, September 29). Drilling plans off cuba stir fears of impact on gulf. *New York Times*.

- Nerurkar, N., & Sullivan, M. P. Congressional Research Service (2011). *Cuba's offshore oil development: Background and u.s. policy considerations* (7-5700)
- Orsi, P. (2012, January 9). Us: Oil rig bound for cuba meets int'l standards. *Bloomberg Businessweek*, Retrieved from <http://www.businessweek.com/ap/financialnews/D9S5NL4G0.htm>
- Padgett, T. (2012, January 27). The oil off cuba: Washington and havana dance at arms length over spill prevention. *Time World Magazine*, Retrieved from <http://www.time.com/time/world/article/0,8599,2105598,00.html>
- Pinon, J. (2006). *Cuba's energy crisis: Part iii*. Unpublished raw data, Institute for Cuba and Cuban American Studies, University of Miami, Miami, FL. Retrieved from http://ctp.iccas.miami.edu/FOCUS_Web/Issue72.htm
- Ravsberg, F. (2012, January 20). Cuba plans to drill as oil rig arrives. *Havana Times*. Retrieved from <http://www.havanatimes.org/?p=60134>
- Reilley, W., & Cayten, M. R. (2012, February 17). Why the u.s. should work with cuba on oil drilling. *Washington Post*. Retrieved from http://www.washingtonpost.com/opinions/why-the-us-should-work-with-cuba-on-oil-drilling/2012/02/14/gIQAGLFiKR_story.html
- Roberts, M. (2010, July 03). Spain court probes repsol oil spillage report. *Reuters*.
- Sadowski, R. (2011). Cuban Offshore Drilling: Preparation and Prevention within the Framework of the United States' Embargo. *Sustainable Development Law and Policy*.

Saipem S.p.A. (2010). *Drilling* . Retrieved from

<http://www.saipem.com/site/Home/Activities/Drilling.html>

Saipem S.p.A. (2010). *Scarabeo 9*. Retrieved from

<http://www.saipem.com/site/article.jsp?idArticle=5430&instance=2&node=2012&channel=2&ext=template/37DueColonne&int=article/1DefaultArticolo>

Schenk, C. J., Ahlbrandt, T. S., Charpentier, R. R., Henry, M. E., Klett, T. R., Pollastro, R. M., & Weaver, J. N. U.S. Department of the Interior, U.S. Geological Survey. (2004). *Assessment of undiscovered oil and gas resources of the north cuba basin, cuba (fs-2005-3009)*

Schepers, E. (2011). Cuba's oil prospect poses dilemmas for the u.s. *People's World*, Retrieved from <http://peoplesworld.org/cuba-s-oil-prospects-pose-dilemma-for-us/>

Schwab, P. (2000). Cuba: Confronting the u.s. embargo. (p. 54). Palgrave Macmillan.

Stephens, S. Center for Democracy in the Americas, (2011). *As cuba plans to drill, u.s. policy puts our national interest at risk*. Washington, D.C.

Stephens, S., & Colvin, J. (2011, September 29). [Web log message]. Retrieved from <http://thehill.com/blogs/congress-blog/foreign-policy/184661-us-cuba-policy-and-the-race-for-oil-drilling>

Suddath, C. (2009, April 15). A brief history of u.s.-cuba relations. *Time U.S. Magazine*, Retrieved from <http://www.time.com/time/nation/article/0,8599,1891359,00.htm>

Sullivan, M. P. Library of Congress. (2003). *Cuba: U.S. restrictions on travel and legislative initiatives* Congressional Research Service.

- Timeline: Post-revolution cuba [Web series episode]. (2004). In *The American Experience*. Public Broadcasting Service. Retrieved from <http://www.pbs.org/wgbh/amex/castro/timeline/index.html>
- U.S. Congress, Senate. (1991). *International convention on oil pollution preparedness, response, and co-operation, 1990*. Washington: GPO.
- U.S. Dept. of State. (1991). *Marine pollution wider caribbean region : convention between the united states of america and other governments, done at cartagena march 24, 1983 with protocol*. (National Government Publication ed.).
- Wallis, D. (2011, May 17). Cuban oil rig set to cause waves in washington. *Reuters*. Retrieved from <http://www.reuters.com/article/2011/05/18/us-cuba-usa-rig-idUSTRE74H0L220110518>
- Yaffe, H. (2011, December). [Web log message]. Retrieved from <http://realcuba.wordpress.com/2011/12/30/cuban-oil-exploration-the-revolution-digs-deep/>