

AFFIDAVIT

My name is Lorrie Williams. I am submitting this statement without any threats, inducements or coercion, to Shanna Devine, who has identified herself to me as an investigator with the Government Accountability Project. My boyfriend and I work in the crabbing industry and live in Ocean Springs, Mississippi. Since the oil spill we have stopped crabbing due to concerns with the chemical contamination of the crabs resulting from the oil spill, as well as the dramatic decline in the catch. Our catch fell by more than 50 percent from 2009 to 2011, and the price for crabs per pound fell by more than half from 2009 to 2011. Since the spill my family and I have had to refocus our attention on our health, because we are experiencing severe health effects associated with exposure to the chemicals from the oil and dispersant.

1. BEACH UNPROTECTED

Our beach, Lake Mars Gulf Park Estates (Lake Mars) in Ocean Springs, was one of the first affected. We live two blocks north from the Mississippi Sound ("Sound"), which spans from Louisiana to Alabama. The Sound is separated from the Gulf of Mexico by a series of narrow islands and sand bars, and it receives Gulf water through several passes. We had put our crab pots out on April 16, which was the beginning of the crabbing season. On April 30 the media reported that all crabbers needed to remove crab pots from Mississippi waters, because the city was going to deploy boom – the tarp used to skim, isolate and collect spilled oil. They did not close the crabbing until July 1, three days after the oil arrived. They were closing it in sections, so in one 20 foot stretch it was closed and 20 feet on the other side it was opened. No boom was deployed, and the oil hit shore on June 26, 2010.

Through local news I learned that on June 24 Gene Taylor, our congressman at the time, was conducting an aerial view and he saw the oil coming on shore. It was coming through Dog Keys Pass - a cut in between two islands – but he couldn't get a hold of anyone to deploy any boom. Also, there were very rough seas when the oil arrived, which made it difficult to deploy boom. A week after the oil hit, only 200 feet of donated boom was deployed over two miles of beach. For a week in August 2010 the beach was lined with thousands of baby dead crabs that looked like they had been soaked in bleach.

2. IMPACT ON SEAFOOD INDUSTRY

I have lived here in the same location for 20 years. My boyfriend, Bubba, has lived in Ocean Springs his whole life and he is 47. He has worked in the seafood industry since he was four years old, and he is 47. I have worked in the industry since 2007. In the Gulf crabbing industry, about 75 % of the catch is shipped to the East Coast and West Coast; however, most Gulf crabs go to the East Coast. We sell the Blue "Jimmy" Crabs to Maryland and they are sold as Maryland Blue Crabs. The largest amount of Gulf crabs and seafood is supplied to the East Coast in the summer months, when tourism is big in Ocean City, Maryland and the New Jersey and

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Delaware shores. This raises serious questions as to whether contaminated Gulf crabs are currently being shipped to the East Coast and other parts of the country.

Crabbing was the last seafood to reopen for catch, on August 24, 2010. Crabbers went back out, but the catch was not good and everyone we knew couldn't find a buyer. The FDA was reporting that it was safe to crab, but when you have a sharp decline in catch it is clear that something is wrong. You can crab year round, but usually our crabbing season lasts from mid June through the second week of October. That is when all of the Gulf crabs come into the Sound to go into estuaries and start laying their eggs. The Gulf crabs are a beautiful blue color; however, we didn't see the Gulf crabs in 2011 and that is our most lucrative crab. The crabs that we did catch were from the Sound, and they were in bad shape (detailed below). I believe that all the crabs that got killed from the spill in 2010 and all the babies that washed up on shore should have been our season in 2011.

During the summer of 2009 we were catching 800 to 1,200 pounds of crabs a day. We made approximately \$1.00 per pound, and our net profit for July, August and September in 2009 was \$14,000. After the oil spill, we returned to crabbing in May 2011 and our catch was never more than 400 pounds a day. Louisiana and Mississippi couldn't supply enough crabs to the buyers in Alabama, so they cut us off. In 2011 Bubba and I were one of 11 crabbers supplying for a seafood processor in Bayou La Batre, located Mobile County, Alabama. We were all put on shutdown because we could not supply enough crabs, and in September 2011 the table switched and the processor began buying crab from North Carolina. It is devastating, because before the oil spill September was one of our busiest months for crabbing. We stopped crabbing in September 2011 all together, because we were losing money. The price of Mississippi crabs per pound dropped from \$0.95 in 2009 to \$0.35 in 2011, and by the time we paid for bait and gas to transport the crabs we were in the hole.

This predicament is widespread throughout the Gulf seafood industry. Riki Ott, a toxicologist who researched the health and environmental impact of the Exxon Valdez oil spill, predicted that the impact to seafood would be seen within three to five years. Within a year and a half we are already seeing huge declines in catch across the seafood industry. In 2010 during the oyster season the Mississippi Department of Marine Resources (DMR) released that 89% of oysters were dead due to the oil spill. Shrimpers are also barely catching anything. At one point Alabama crabbers came to Mississippi to crab because their catch was low, and they couldn't get anything. For one week between July and August, 2011 our whole catch was dead. It wasn't just crabs; there were dozens of dead fish floating to the surface, including flounder, black drum and stingrays.

In 2011 we reported a total of three dead sea turtles and a dead dolphin; Bubba has been crabbing his whole life and he has only seen dead sea turtles once or twice, before the spill. In August we found a dead sea turtle at Lake Mars for the first time. We reported to the Mississippi Department of Marine Resources (DMR) and they responded that it was caused by low oxygen

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in the water and some kind of mysterious algae bloom. Normally when there is oxygen depletion in the water, also known as red tide, it is reported on the news. That did not happen in this case. In addition, we were speaking with crabbers along the coast pulling up dead crabs, and red tide does not take place throughout the whole coast at the same time.

3. CRABS WITH PARASITES AND BLACK LUNGS

From May through September 2011 we crabbed for about 90 days. In October and November 2011 we crabbed for 10 days as consultants for local attorneys. In the years before the spill we could put our crabs in a box all day and they would not die. In 2011, we had mortalities within 45 minutes of taking the crabs out of the picking tray, putting them in an iced box and taking them to the processor. We can't sell the crabs if they are dead. I have a crabbing license for our crabbing boat and we sell to processors. Some of the crabs would have black thick stuff on them.

When they reopened crabbing we pulled a few crabs and brought them home. We wanted to know what the conditions of the crabs were. Our attorney told us to open them, see what is inside and video tape it. When we did, we smelled petroleum and there were hundreds tiny pink two headed creatures eating crab lungs from inside of the crab's body out.¹ Since then we have opened several oiled crabs with parasites. We never saw parasites in our crabs before the spill, but some crabbers from Louisiana told me that even before the spill, they would sometimes find parasites in crabs that were in a dirty environment. In 100 pound box, 10% of our catch was visibly in poor form.

When crabbing was re-opened in 2010 we would not crab, because we had too many food safety questions. Mississippi Governor Barber was adamant that everything was fine, and a public panic was not necessary. His stance throughout the spill was that the spill won't be harmful to the environment or seafood. In June 2010 the University of Southern Mississippi Gulf Coast Research Laboratory (GCRL), which is located in Ocean Springs, tested baby crab larvae. The head of the research lab announced that the crab larvae contained oil droplets.² Since then, no one has said what happened to the crab larvae; did they die or live? When I pose that question or other food safety concerns to the DMR at public meetings, I can't get a clear response.

In the summer of 2010 when crabbing was closed, I approached DMR Director Bill Walker about crabs with black lungs. He tried to convince me that the black lungs were normal, because they came from mud. I told him they came off of Barrier Islands which are all white sand. We kept going back and forth and I finally told him, "If you have any more questions for me, talk to my attorney." He responded, "Who are you suing, us or BP?" I just replied "Talk to my attorney." On September 10, 2010 during a public meeting for fishermen, I asked Mr. Walker

¹ LorrieofOceanspring. "Blood Beach Blue Crab Covered in Oil and Parasites." YouTube. Sept. 6, 2010. <http://www.youtube.com/watch?v=J7cpYf8MsEY>.

² Geoff Pender, *Oil Found in Gulf Crabs Raises New Food Chain Fears*, McClatchy Newspapers, July 1, 2010, <http://www.mcclatchydc.com/2010/07/01/96909/oil-found-in-gulf-crabs-raising.html>.



about the prospect of our catch being chemically contaminated from the dispersant Corexit. He explained that they were not testing for dispersants in the seafood. This greatly concerns me, because people are still pulling out crabs with orange brown substances. It is normal for crabs to have mud on them, but this is something different. When I was crabbing I could scrape this substance off the shell. When I tried with a hot knife it scraped off like wax.

It was depressing to go out and work for six to eight hours, not make any money and witness the devastation of the crabbing industry. Crabbing mentally destroyed me, because Bubba and I were not going to eat the crabs, yet we were crabbing to sell them to the public. We were seeing the crabs with oil and parasites in them, yet we had the FDA, NOAA and DMR telling us they were perfectly safe to sell and consume. How can the government and BP deem the seafood safe after crabbing was re-opened within six weeks of when the Macondo well was plugged? How can they announce it is safe for human consumption if we don't yet know what the effects of the chemicals are?

The only reason I began crabbing in 2011 was because I had to prove to BP that our catch had declined. In order to get BP compensation under the Gulf Coast Claims Fund (GCCF) for loss in revenue (detailed below), I had to show taxes prior to the spill and records from 2010 and 2011. We also returned to work in order to pay our medical bills. My two sons, Bubba and I fell sick within months of the spill (detailed below).

4. GCCF NIGHTMARE

The GCCF filed my crabbing boat as an individual, for my business claim to demonstrate loss of income. They would not let Bubba file a claim, because he worked on my boat and we lived together. In August, 2011 I turned in paper work to the GCCF that showed BP owed me \$78,000 for September 2010 through August 2011. I had received a check from BP \$11,600 to cover my losses from April, 2010 through August 2010. I felt that first compensation was just. Then they switched to the GCCF, and it was a very difficult process to file a claim. I went into the GCCF office and did everything the representative told me to do; I added the cost of bait, fuel, profit, and then I broke down my losses for each month. It took me weeks to put it all together, I turned it into GCCF and the representative offered me \$5,000 based on what I provided. I was stunned by how low it was, and I did not accept it. Then he explained that the problem was that the GCCF mistakenly filed my claim as personal, not business. I gave him additional paperwork and he changed the claim to business.

Several days later a different GCCF representative called me back and said that they needed to process my claim in a different way from how I was initially instructed. When it changed from personal to business I had to write a hardship letter, which is included in this affidavit as Exhibit 1. In the letter I explained that Bubba and I run our household, and we are losing our home. I explained I don't have time to continue to wait for my claim to be processed because due to our loss in income, we could not meet our mortgage payments and we were going to lose our house.



I feel that they saw I was between a rock and a hard place. The GCCF representative told me that a \$25,000 payment could come in a week, and I took it. I regret taking it now, because it cannot fill the vacuum left by the spill; there is no seafood, there are no crabs to catch. This is the reality throughout the Gulf now.

5. COREXIT SPRAYING

We have been gulf residents for years and never saw C130s flying around here before the oil spill. Throughout the summer of 2010 it smelled like petrochemicals whenever we walked outside. The federal government and BP announced that they stopped spraying in July 2010. However, throughout the spill and continuing to this day, C130 planes that are used to spray dispersant fly over our house at low levels. On October 13, 2010 I was sitting in front of my house and I heard a horrible noise, then I realized it was C130s flying over us. I ran to my truck and I could see a fine mist hitting the windshield. The plane went toward Lake Mars and circled the Sound at low levels.

Bubba, my then 10 year old son Noah and I tried to follow the planes and videotape them in order to get evidence if they were still spraying. We were sitting in the back of the truck and the mist covered Noah's eye glasses. In the video you can hear Noah say, "It is on my glasses."³ I believe they were spraying Corexit. An investigative journalist came to our home a few days after in mid October 2010. Whatever they were spraying had hardened on the truck's window, however, the journalist took samples from our pond. He also took samples from the beach at Pass Christian, Mississippi. The lab results of the samples came back positive for the chemicals found in Corexit. The lab results are included in this affidavit as Exhibit 3.

6. HEALTH IMPACT

Noah, Bubba, my older son Dustin and I were noticeably sick by July 2010. However, until August 2010 we didn't realize that our health effects could be attributed to exposure to the chemicals in Corexit. I wanted to know why we were suddenly developing the similar health problems. I began researching the health symptoms associated with the chemicals from the oil and dispersant and they mirrored what we have experienced (detailed below). Through the support of chemist Dr. Wilma Subra and the Louisiana Environmental Action Network, we got our blood tested. On December 6, 2010 Noah, Bubba and I took a Volatile Solvent Profile test, which is used to identify and measure chemicals in the blood. We had to drive to Destin, Florida to see a physician who would draw our blood for the test. Our lab results are included in this affidavit as Exhibit 4. I was told by Dr. Subra that Noah tested higher than 300 adults for chemical levels in his blood. Bubba's results were lower than mine and Noah's, but still outside the range of chemicals that should be found in his blood.

³ LorrieofOceanspring. "Plane That Went Over Our Home." YouTube. Oct. 13, 2010.
<http://www.youtube.com/watch?v=jgFUiliRhno>.

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Before the spill took place, we would go to the beach on a daily basis. It was only two blocks from our house and it provided our livelihood. After the spill that all changed. I still went out there to document the spill, but we stopped going from recreational use. From May 2010 through August 2010 when I walked out my back door it smelled like I was putting my head in a used oil can; the oil smell was that pungent. After residents started asking officials and the media questions about the safety of the spill, because everyone along the coast smelled petrochemicals, the local news station announced, "If you have any respiratory problems or compromised health, you need to stay inside." The closer the oil came to hitting the shore, the worse our health symptoms got. I had been on the beach almost every day taking photos of the oil before my health got too poor.

Noah stopped going to the beach in July 2010, after he woke up one morning and his nose was gushing with blood. He won't go outside anymore; he says when he does, it makes him sick. It is a horrible way for a kid to live, but we live on a corner so the side road is a direct shot to Lake Mars. There is nothing to obstruct the chemical smell. I have learned that one of the symptoms from Corexit exposure is brain fog, when the short term memory is affected. When Noah returned to school in the fall of 2010 he had a very difficult time. He kept saying he couldn't remember what he was learning. I took him to a child psychologist's office and they put him on medication for Attention Deficit Disorder, which did help him focus. However, Noah did not have those difficulties in school the prior year. After the oil spill we both had difficulty remembering things. I call it "Corexit Brain." We would get disoriented and our brains would go into a fog like state. Sometimes I still experience this.

Bubba developed sinus infections and a bad cough, big white scabs all over his arms as well as boils behind his ear, but he does not have health insurance. The boils start out as bumps, and when you pinch them puss comes out. Currently he has eight of them from the back of his ear down to his jaw bone. I have them all over my chest. When I bump or scratch myself now, I end up with blood spots.

My daughter had a baby, Avereigh, on June 7, 2010. Before I realized how dangerous the air was and that young people with compromised immune systems shouldn't be outside, we would take her on the porch with us every morning. Since Avereigh was born, she has been to the pediatrician at least two to three times a month. She has hand-foot-and-mouth disease, a respiratory condition known as croup, upper respiratory infections and sinus infections, ear and eye infections, and yeast infections in her mouth and private parts. They moved to St. Augustine, Florida for two months and her infections cleared. They returned in March 2012 and Avereigh's problems have returned. When they were in Florida, Noah, Bubba, Dustin and I visited them for six days, and during that time we all felt better. We had our life force back. Then when we returned to the Gulf our health symptoms began to repeat themselves.

Noah and I both have asthma but it got worse after the Deepwater Horizon explosion. By the second week of May 2010 we had to go on additional breathing support, and the doctor has

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doubled Noah's asthma medication. We have always had a nebulizer available. If Noah had a cold we would give him breathing treatments for a few hours every few days and he would be ok. During the spill we were both doing breathing treatments every four hours. It lasted from May through the summer for Noah, and the two weeks in May for me. Since this began, we have been on antibiotics and steroids back and forth and I believe it compromised our immune systems.

We have stopped even walking on the beach because it tends to exacerbate our symptoms. However, in March 2012 we took a journalist to the beach. Immediately after going out there, Bubba was sick for three days, I got sores in my mouth and my throat was sore. It used to be that if you had a head cold and went to the beach, the salt water would clear up your sinuses. Now it doesn't do that, had opposite effect.

7. HOSPITAL RESPONSE

Noah and I have Medicaid but it only pays for 12 visits in a year and renews each July. From mid May to the end of June 2010 we used all of our visits. My son Dustin was our deckhand when we were crabbing and he went on the boat with us several times after the spill. We took him to the Emergency Room (ER) in July 2011 because he got a hard cough and started coughing up logs of bright red blood, as if his throat had been cut up. The ER said they couldn't find anything wrong and he needed to see a lung specialist, but he doesn't have insurance. He also got a horrible urinary tract infection that lingered for three months in the summer of 2011, which the doctor said is very rare for males to develop. In November 2011 he was raced back to the ER because he was coughing up blood again. During his first visit they gave him antibiotics, and they put him on antibiotics again.

My nurse practitioner has seen my health decline and she believes it is from the spill. There isn't a day that goes by that I feel good. I was perfectly healthy before the spill and now I feel as if I am withering away to nothing. I was 179 pound in February, 2010. As of December, 2011 I weighed 126 pounds. My 9 year old golden retriever, Cajun, lost a lot of weight too. Within a month he went from 100 pounds to approximately 50 pounds. The veterinarian said that he had no bladder by the time we put him down. She said normally it would be a progression before he passed, that you don't lose a dog to cancer in six weeks. I would have had an autopsy done if we had the money.

In October 2010 I started having really bad pain in my lungs. I was feeling poorly and coughing up a thick yellow puss-like substance, and my mouth was raw with sores. On December 21, 2010 I went to the ER at Ocean Springs Hospital and they told me I had ammonia. A week later I went to my doctor, who put me on antibiotics and steroids. My doctor started giving me Avelox, which is a very strong antibiotic. You take it for seven days. However, whatever infection I had kept coming back. Bubba took me back to the ER and the doctor looked at my lungs from based on my medical records from March 2011 to December 2010. He then told me that no ammonia

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would last that long. He explained that I had a mass in my lung, which had grown from the size of a golf ball to a softball, and my lung had collapsed in a location very unusual for infections and masses. He told me to stop taking steroids, because they would make me weaker. He gave me a CAT scan and referred me to a lung doctor.

I picked up the CAT scan disk at the hospital, and the receptionist gave me a copy of the written diagnosis. My liver was mildly fatty. In February 2011 I took it to a lung specialist, Dr. Rotenberg in Ocean Springs. He looked at the disk I gave him, listened to my lung and told me my lung had collapsed, there was a mass in it and I needed a biopsy. I said "Sir, I think it is caused from chemicals in oil spill." I said, "I have very high levels of the Volatile Organic Compounds in my body." At that point it seemed like he understood my concern; the expression on his face led me to believe that I wasn't the first to identify chemical exposure from the spill. He took a sample from my lung for testing, and I had a biopsy done.

Two weeks later Dr. Rotenberg called and said that the results were in. When I went to his office he said there was no infection, there was no mass and my lung was not collapsed. He even told me that I don't have breathing problems. I was stunned; I responded, "I can barely get out of bed in the morning" When I saw my nurse practitioner the following month, she listened to my lungs and said something in my left lung is still have problems.

Seven months ago I started having a burning pain in my stomach, which continues to this day. It feels like someone took a hot pipe and jammed it into the right side of my stomach through my back. I got scanned and was told it is acute pancreatitis. It comes on gradually, or suddenly hits me. Sometimes I will go from sitting normal to being doubled over. I can't eat normally. When I have an attack I can't consume any food for 24 to 48 hours. The pancreas is used to break your food down, and when it does it regulates the insulin in your body. In general I have low blood sugar. However, now it is constantly fluctuating and is high before attacks. I have to take enzymes before I eat to regulate my insulin and help me to digest the food; if I don't then I can barely eat. I will have to have a throat and a lower gastrointestinal endoscopy. Living this way is miserable.

I am trying to get all of my medical records gathered for a medical claim. From what I understand, anyone who lives south of Interstate 10 will be able to file a health claim through the settlement between BP and the plaintiffs' attorneys. My concern is that, like the GCCF, this will be a new BP compensation system that does not account for the people most affected by the oil spill. At the beginning of the spill BP gave money to everyone, from Walmart to Wafflehouse employees, but the seafood businesses that were most affected have been starved out. At this point we are most concerned about our health.

8. CENSORING

Mississippi announced on July 2, 2010 that all beaches were open to the public. For tradition, on July 4, 2010 we drove to a local recreational beach. There had been cleanup workers on the

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beach earlier in the day scrubbing oil off of the rocks. When we arrived, two West Jackson County Sheriff's Department officers were blocking off the entrance and said that we couldn't enter because it was closed for BP. I got out of my car with my camera and one of the policemen told me to get back in my car, that I was not allowed by the water. I called the sheriff's department, and the dispatcher informed me that the officers I spoke with were getting paid by BP. I responded that they shouldn't be wearing county uniforms. At that point I started paying closer attention to the security presence at our beaches.

A few days after that incident, I went to Rock Jetty at Lake Mars to take pictures of oil. It was a thick nasty orange and brown rainbow colored oil. Everything it touched it killed. I have been walking this beach for 20 years and I have never seen anything like it. I was approached by BP and Coast Guard officials. The BP representative approached me and asked what I was doing. I told her I was documenting the oil spill and she asked, "Are you finding anything?" I said, "Yes, there is oil all over the place." She left to speak to a Jackson County worker in a truck. Within minutes an officer with the Jackson County Sheriff's Department told me that was told that it was closed and I couldn't be there. It always seemed like when I took photos either the Mississippi Department of Environmental Quality (DEQ), the Coast Guard, BP or the sheriff's department showed up. There were a lot of families on the beach that day and everyone had to leave.

I called the mayor's office in August 2010 to report oil that I spotted. They asked where I saw it and I said "You can come over and I will show you thousands of photos that document the oil." Two guys from DEQ came to my house and I started going through photos with them. Neither said much, then they got into their vehicle and left. Several days later I was at the beach and I spoke with a different DEQ representative. I raised concerns with him about oil that I continued to see. He explained that it was just deteriorating plant matter; DEQ stated that repeatedly after the oil spill when residents raised concerns about oil. When he said that, I mentioned that I had documented the oil, and two other DEQ representatives had come to my house to view them. He responded that they would not have visited my home. I said, "They came in a DEQ truck with DEQ shirts. How are you going to tell me that they were not DEQ representatives?" He brushed it off. However, two days later this same DEQ representative who I spoke with at the beach began circling my block daily. He stopped driving around my neighborhood around the same time that we had to put our dog down.

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I have read the foregoing nine page statement, and declare that it is true, accurate and complete to the best of my knowledge and belief.

Executed on April 12, 2012.

Gerie Anderson

Subscribed and sworn to before me
this 24 day of April, 2012

Michelle Dupree

Notary Public



My Commission expires on: Jan 4, 2013

AFFIDAVIT

My name is Michael Robichaux. I am submitting this statement, without any threats, inducements or coercion, to Shanna Devine, who has identified herself to me as an investigator with the Government Accountability Project. I am a 67 year old Ear, Nose and Throat (ENT) physician. My practice is located in Raceland, Louisiana. Raceland is approximately 60 miles from the Gulf of Mexico. Since the summer of 2010, I have been treating scores of patients, from Florida, Alabama, Mississippi and the Louisiana coast, who are the victims of exposure to chemicals produced by the Deepwater Horizon tragedy. Most of the individuals I have treated do not have health insurance and the majority of my initial work was done pro bono, as many of these victims were too ill to work and without the resources to obtain medical care otherwise.

One of the truly amazing observations I made after seeing an ever-increasing number of patients was that the symptoms being described were different from anything I had ever observed in over 40 years as a physician. Throughout that span I have seen the consequences from many oil spills. Something was different here. Another readily apparent observation was that the patients from Florida, Alabama, Mississippi and Louisiana all had remarkably similar symptoms. After seeing firsthand the tragedies that have resulted from exposure to the waste products of the spill, I feel it is my duty as both a physician and citizen of our state and nation to alert the public to the horrendous health problems I have been observing.

1. BACKGROUND

I have been in practice as an ENT physician in Raceland, Louisiana since 1975. Before me, my father was a physician in our community for over 30 years. I attended Louisiana State University (LSU), and then LSU Medical School. I have been a community activist for decades, fighting for stronger public health and environmental policies. My wife was the principal chief of a 17,000 member Native American tribe, the United Houma Nation, for 13 years. She was still Chief when the Deepwater Horizon debacle occurred. She has since retired from this position. When my wife became principal chief in 1995, I ran for the Louisiana State Senate. I was a senator for a term and a half. Trying to maintain a medical practice and serving as a public official took a terrible toll on our finances, and I was forced to resign during my second term in office.

Following Hurricanes Katrina and Rita, storms that left approximately half of the population of the United Houma Nation homeless for months, my wife and I opened a resource center at our home, and we had as many as 80 people staying with us at a time for approximately eight months.

During the first months following my awakening to the health crisis being experienced by many of the people in our community who were exposed to chemicals associated with the Deepwater Horizon tragedy, I was able to supply little more than band aid therapy and moral support for the myriad of serious symptoms being experienced by a group of very ill patients. The bottom floor of our home served as a makeshift clinic for the majority of these health-related visits.

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In the summer of 2011, I partnered with Marylee Orr, Director of the Louisiana Environmental Action Network (LEAN), and Jim Woodworth, former director of the New York Workers Restoration Project, to create the Gulf Coast Detoxification Project (detox clinic) for sick workers and residents. It was modeled after a treatment plan used for first responders from the September 11 attack, and it is working remarkably well. I am the physician consultant, and I have been present nearly every day since it opened (detailed below).

I have a history in public service, largely in efforts to prevent these public health threats from occurring in the first place. During my time as state senator, I was active at both the local and federal level, and I attempted to remedy an exemption in the law that involved the management of oilfield waste. In 1976, the Environmental Protection Agency (EPA) was given the mandate to regulate the handling, transportation and storage of hazardous waste materials. In the early 1980's, the federal government, bowing to the pressures of the oil and gas industry, provided an exemption to the toxic designation of substances created by the exploration and production of petroleum products. Known as NOW, or Non-hazardous Oilfield Waste, it is a soup of anything and everything found in the oilfield. When an EPA-funded study acknowledged that some oilfield waste was toxic, the original study was suppressed and an edited report was presented to Congress. Under this guise, hazardous materials such as benzene, hydrogen sulfide, lead and cadmium were exempt from the stringent standards required for all other industries in the handling, transportation and storage of these materials.

In 1997, CBS produced "Ed Bradley on Assignment: Town Under Siege." This one hour program examined the damage caused by the NOW exemption, in a small Louisiana town named Grand Bois.¹

In 1984, the state of Louisiana employed the NOW exception to provide permission for a corporation to dispose of oilfield waste in open pits at a site adjacent to the largely Native American community of Grand Bois, which is about 50 miles from the coast. Carol Browner, head of the EPA at that time, stated in an interview with Mr. Bradley, "The big oil companies got a sweetheart deal," referring to the NOW exemption.² From 2009 through 2011 Ms. Browner was the White House director of the Office of the Energy and Climate Change Policy in the Obama administration. At the beginning of the oil spill I hoped to revive this issue and shine some light on it, because the oil spill waste falls under the NOW exemption. Unfortunately, I was not able to make any headway with her office."³

This exemption has greatly impacted the health of our communities, now compounded by their exposure to waste from the spill. There are several Louisiana coastal communities involved in the oil spill. Grand Isle, Port Fourchon and Venice are three such communities that share proximity to the spill, a large number of citizens with exposure, and economies that incorporate the multiple aspects of the oilfield and fishing industries.

¹ Walter Goodman, *It Smells, But Does it Also Kill?*, New York Times, Dec. 23, 1997, available at <http://www.nytimes.com/1997/12/23/arts/television-review-it-smells-but-does-it-also-kill.html>

² *Id.*

³ Details of this issue can be obtained in a Senate report I prepared. See Michael Robichaux, Report of State Senator Mike Robichaux to the State Committee on Oilfield Waste (1998) available at <http://senate.legis.state.la.us/senators/Archives/1999/Robichaux/topics/oilfield.pdf>

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The vast majority of the deep offshore drilling in the Gulf of Mexico originates out of Port Fourchon. Port Fourchon is located at the mouth of Bayou Lafourche and is the epicenter of the most active energy corridor in the United States. There is an additional port, the Louisiana Offshore Oil Port (also known as LOOP), located 18 miles south of Grand Isle that can accommodate the largest supertankers in the world. These huge tankers can download their oil safely offshore, avoiding any possible collisions with other vessels and near shore structures. The oil is then sent through pipelines to onshore salt domes, and transported through additional pipelines to refineries throughout the United States.

Following the Deepwater Horizon tragedy, the entire coastal fishing industry was unable to function. BP, in an effort to clean up the horrible environmental crisis it had created, hired many of the fishermen and utilized their boats to clean up the oil that was attacking the Louisiana coast. The program was called the Vessel of Opportunity or "VoO" Program.

Initially, LEAN – the oldest and largest environmental group in the state of Louisiana – purchased boots, gloves, Tyvek suits and respirators to be worn by individuals working the spill. Amazingly, BP company policy resulted in the boat owners and workers being threatened with loss of their jobs should they wear respirators while working for the company. Even BP employees working the oil spill site were denied the usage of these protective devices. This was shared with me on several occasions by my patients.

As a populist who has lived on the bayou all of his life and whose patients are mostly from the southern part of the parish, I know thousands of fishermen and oilfields workers who were involved in cleaning up the oil spill residue. In November 2010, long after the spill was contained, Marylee asked me to draw blood for a commercial diver from Mississippi who had fallen ill since diving in the oil plume in the Gulf of Mexico. I agreed to do so, and met with this gentleman and several others referred by Marylee at my office in Raceland.

2. THRONGS OF SICK PATIENTS

Although I was still skeptical that their health problems were related to toxic waste exposure from the spill, I drew blood on several sick individuals to see if there were any patterns between chemical levels found in their blood and their health problems. What was interesting at the time was that none of these patients were from the community that I normally serve; they came from throughout the Gulf Coast. Additionally, every one of these patients had very convincing stories to tell, and when I was able to sit down with them and get a comprehensive history, their stories became quite compelling.

I was particularly concerned with the plight of a three year old child. In June 2010 he and his family went on vacation to Orange Beach, Alabama. He had been swimming in an outside pool that was beachside, while workers were cleaning oil soaked booms on the beach. When he returned home he became violently ill, and was rushed to a hospital in Baton Rouge. The doctors at first believed that he was suffering from a severe urinary tract infection, and they even performed surgery on this three year old when they suspected he had kidney stones. After a week or so in the hospital, his father asked the doctors if they would draw blood to see if his trip

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to Orange Beach might not have exposed him to chemical compounds resulting in his illness. They flatly refused to do so, and abruptly discharged him without a final conclusive diagnosis. Even with this history, I was not convinced that the child was ill from this exposure, and I recall being a bit impatient with his father when I was trying to work my way through the throng of people who had come to my office. After seeing several other sick workers and residents exposed to similar conditions, I later realized that this poor infant actually was ill from his exposure. I was soon drawing blood from patients from Florida, Alabama, Mississippi and the entire Louisiana coast.

I quickly began to learn the symptoms that these individuals were experiencing and, amazingly, the symptoms were almost identical for everyone from Florida, Alabama, Mississippi and Louisiana. Some of the information regarding exposure was undeniable, while others had only scant evidence that their illnesses resulted from products of the oil spill. What brought all of these individuals into the same pool was the fact that their symptoms were almost identical, and were different from anything that I had ever observed in my 40 plus years as a physician. Interestingly, other workers and residents who worked or lived side by side with these ill workers and were exposed to the same chemicals had little or no problems.⁴

As I observed these patterns in my patients I was also able to see a positive correlation between their symptoms and blood test results that I had been obtaining through the generosity of LEAN. At this point my feelings went from being skeptical to being extremely alarmed, and I began seeing these patients in a somewhat different light. I learned what questions to ask so that I might obtain information that they wouldn't necessarily associate with their illnesses.

The initial symptoms that many of the victims experienced included coughs, respiratory problems and congestion, along with skin rashes. However, many of these same individuals soon began developing headaches, memory loss, irritability, fatigue and fatigability. Some patients had dizziness and many exhibited blood sugar abnormalities with hypoglycemia. Acid reflux disease, which can produce heartburn, regurgitation and stomach discomfort, as well as other abdominal pains, was also relatively common. Some of these symptoms, such as the chronic coughing that was present initially, cleared up spontaneously for most patients.

Several patients also had a unique neurological disorder that one victim coined, "Stuck Stupid." This "condition" consisted of the patient being cognizant of his or her surroundings, but unable to move or to speak. My first encounter with this phenomenon was in the summer of 2011, when a patient described sitting on his porch while facing his truck. The truck door was open and the motor was running. He could not walk, talk or otherwise move. He described this episode as

⁴ A government report that examined why some veterans became ill and others did not following the 1991 Gulf War explains this phenomenon: "It is well established that some people are more vulnerable to adverse effects of certain chemicals than others, due to variability in biological processes that neutralize those chemicals, and clear them from the body. The enzyme paraoxonase (PON1) circulates in the blood and hydrolyzes organophosphate compounds such as pesticides and nerve agents, converting them to relatively harmless chemicals that are then excreted. Individuals who produce different types and amounts of PON1 differ, sometimes dramatically, in their ability to neutralize different organophosphate compounds." See Research Advisory Committee on Gulf War Veterans' Illnesses, Gulf War Illness and the Health of Gulf War Veterans: Scientific Findings and Recommendations (U.S. Government Printing Office 2008) p. 13 – 14.

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lasting for about two hours. His memory of the entire event was quite vivid. He later experienced similar problems in different settings.

Another patient, who lives in Bay St. Louis, Mississippi, described similar experiences. He lived on the coast and near a landfill created to dispose of waste from the spill. He also took his boat into the Gulf periodically after the spill. It was not uncommon for his wife to return home from work to find her husband lying on the floor, unable to move or talk. This gentleman has been unable to pursue his profession as a cabinetmaker due to his illness, and has no medical insurance. He avoids going to the hospital or even to see a physician, as he is unable to pay his medical bills and does not want to lose his home due to medical debts. Probably the most frustrating part of his problem is having a complex symptom that no one understands and an illness that few feel any sympathy or compassion in treating, especially since the treating physicians aren't certain that such a disorder actually exists.

With much urging, I was able to get this patient to prepare a video of his symptoms, as a few months later he went from being "Stuck Stupid" to having full-blown seizures. I have a copy of a video he made while he slept on his recliner.⁵ Within a few hours of falling asleep, he experienced a full-blown seizure. This video is a remarkable illustration of the problems that have occurred as the result of exposure to the chemicals associated with the Deepwater Horizon crisis.

In addition to this gentleman's seizure disorder, he also has developed multiple chemical sensitivities (MCS), a condition in which a large number of chemicals can cause exaggerated and severe symptoms in response to their exposure. This disorder is well recognized in individuals who have experienced contact with toxic chemicals. People with MCS are often hypersensitive to household cleaning products and many other materials that contain even small amounts of aromatic chemicals. Additionally, these patients often have adverse reactions to products they commonly used prior to their toxic exposure, such as scented soaps or common household cleaning products like Windex.

In November 2010, my wife and I were visiting with a close friend whose husband had been using his fishing vessel to clean up the oil spilled in the region immediately west of the bayou that ends at Port Fourchon. Our friend stated that she had been quite ill, and doctors at a local charity hospital thought that she had leukemia. Her husband is a fisherman who worked the VoO program. I asked her when her symptoms began. It was immediately apparent that she had been washing her husband's work clothing and was exposed to toxic chemicals through this route. On one occasion his clothes were so soaked with chemicals that she had to throw them out, rather than trying to clean them. Interestingly, while he had worked for 95 days with his boat, his location had little oil present. He actually skimmed oil for less than a week and the oil was heavy for only about three days. However, he explained that he saw planes releasing dispersant throughout the time that he worked on the VoO program.

I obtained a comprehensive history on our close friend, which indicated that she had far more symptoms than she had first indicated. Her husband had never considered himself to be ill. However, I also met with him, and his answers to my questions indicated that he was also

⁵ This video is on file with the Government Accountability Project.

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severely affected by his own exposure. Their symptoms included irritability, memory loss, headaches and excessive fatigue. Both have since been through the detoxification treatment program that I oversee, and they have done amazingly well since that time; the memory loss, headaches and fatigue have subsided noticeably, and the irritability is no longer present.

In a nutshell, common symptoms experienced by my patients include impotence both in young and older men, memory loss, headaches, extreme fatigue, irritability, abdominal cramps, seizures, and a trance like state that many patients and their family members have observed. These symptoms are quite common among workers and even some residents who live along the Gulf. However, until people are educated about the symptoms associated with exposure to toxic waste from the spill, we cannot assume they will make the connection. I continue to witness this disconnect and these symptoms on a daily basis.

In September 2011, Dr. Kaye Kilburn, an 80 year old physician and scientist, came to Golden Meadow, Louisiana and conducted studies on 14 people who had a history of exposure to BP's toxins. Dr. Kilburn is a distinguished physician and scientist, and since 1982 he has investigated chemicals and the human brain. He has published over 250 scientific papers and three books. When he left to return to his home in California, he said, "Mike, I have been doing this my entire professional career, and this is the greatest public health crisis I've encountered in my lifetime."

Since that time Dr. Kilburn, LEAN chemist Dr. Wilma Subra, and I have been attempting to obtain funds to perform objective studies on the victims of the spill and to document the success of various treatment endeavors. One of Dr. Kilburn's proposals is included in this affidavit as Exhibit 1. While our studies would cost a pittance of the amount of money already appropriate for medical issues, we have, to date, been unable to obtain any funds to carry out these studies (detailed below).

3. THE GULF COAST'S "GULF WAR SYNDROME"

The post oil spill syndrome (which I refer to as "BP Syndrome") is extraordinarily similar to the symptoms experienced by the soldiers who returned from the 1990 to 1991 Gulf War in the Middle East. Their illness was dubbed "Gulf War Syndrome," and it affected over 175,000 veterans returning from this conflict. Gulf War syndrome is a chronic multi-symptom disorder that has been affecting veterans and civilians since the Gulf War. Its effects were not only experienced by American troops, but also by troops from all of the allied nations that served in the conflict. As was the situation with Agent Orange in Vietnam, many of these veterans were labeled as malingerers, and were denied both assistance and the credibility they deserved after serving their country in a foreign war.

Gulf War Syndrome, and the government's response to this disorder, has proven to be painfully similar to the BP debacle. In both instances, evidence suggests that the illnesses are the result of the ingestion, inhalation or contact with various chemicals to which the soldiers and workers were exposed. The pattern of denial and the efforts to suppress information on "Gulf War Syndrome" and "BP Syndrome" also have been very similar.

In 2008, 17 years after the war had ended, a Congressionally-mandated Research Advisory

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Committee on Gulf War Veterans' Illnesses reported that "Federal Gulf War research programs have not been effective in addressing issues related to Gulf War illnesses."⁶ Furthermore, it found that federal research methods were ineffective in addressing the health problems of Gulf War veterans. It concludes, "Substantial federal Gulf War research funding has been used for studies that have little or no relevance to the health of Gulf War veterans, and for research on stress and psychiatric illness."⁷

Like the Gulf War experience, large sums of money have been reserved to perform studies on residents and workers who were possibly exposed to chemicals. None of these studies will have any effect on the health of those individuals who are truly ill at this time, and not a single penny from BP or the government has been made available to actually *treat* patients, many of whom are extremely ill, and some of whom may yet die, from this tragic event. At best, they will be guinea pigs for future lessons learned about exposures that never should have happened in the first place.

4. TREATMENT FACILITY

In January 2012, LEAN, Jim Woodward, my wife Brenda and I began the Gulf Coast Detoxification Program in my family home in Raceland. The purpose of the program was to treat cleanup workers and residents who had become ill since the spill. Mr. Woodworth had managed detoxification programs for many years, including a program to treat the first responders following the September 11, attacks in New York City. My introduction to him began in late 2010 when Marylee Orr gave me a call and shared that there was a foundation interested in treating people who had become ill as the result of their exposure to chemicals from the Deepwater Horizon debacle.


Mr. Woodworth's story was too good to be true, but the documentation of the effects of the program he ran in New York for the 9/11 victims was impressive. Since I was at a loss to be able to do much more than practice band aid treatment for illnesses that I did not understand and for which there was little I could do, I decided to look into the program and see if there were any benefits from its treatment protocol. The patients I had been working with were as desperate as me, and we agreed to work with Mr. Woodworth on this project as we felt that nothing ventured, nothing gained.

One of LEAN's qualifications in partnering with Mr. Woodworth was that we would not have to charge for the treatment; sick individuals are already knee deep in medical bills, and they would not be able to participate otherwise. It costs approximately \$4,000 a person for them to complete the program, and Mr. Woodworth obtained enough money for the treatment of 100 people. We have not charged BP or anyone else a nickel for our services.

My initial skepticism about a program that used nothing more than vitamins, minerals, plant oils, exercise and sweating in a sauna to treat problems that neither myself nor any other physicians were able to treat effectively using conventional medicines was quickly replaced with

⁶ Research Advisory Committee on Gulf War Veterans' Illnesses, Gulf War Illness and the Health of Gulf War Veterans: Scientific Findings and Recommendations (U.S. Government Printing Office 2008).

⁷ *Id.* at 4



enthusiastic optimism over the results of treatment for the initial wave of patients who entered the program.

The basic concept of treatment used in this program begins with an understanding that many of the toxins that are present in our bodies are attached to fatty tissues. Experience has shown that these toxins can be mobilized by a combination of exercise and the use of progressive dosages of Niacin (Vitamin B3). The Niacin dilates our blood vessels, often causing flushing of the skin, and it assists in shearing toxins from our body's fatty tissues. Following exercise and the ingestion of progressively increasing dosages of Niacin, the patient spends from one to five hours daily in a moderate temperature sauna. Hydration and ingestion of adequate amounts of Sodium, Potassium and other minerals, along with some nut oils, completes the daily nutritional program. Each patient is weighed daily and has blood pressure readings recorded.


Some patients begin emitting odors related to the chemicals that have accumulated in their bodies. This is not uncommon, and is an excellent indicator that the program is working. Manifestations are incidences when the chemicals being eliminated from the body are released into the blood stream, causing some of the same symptoms from when they were first encountered. Once again, these are desirable events, and run parallel to the improvements experienced by our patients.

No prescription medicines are administered during the program, and only a few prescription drugs are allowed during treatment. The most difficult aspect of our treatment protocol is that it requires the participants to be present for treatment on consecutive days for up to a month, and each day requires up to five hours of exercise and treatment in a sauna. Everyone involved in administering this program is required to participate in the program personally. I spent 25 days in treatment and became the program's first graduate.

For the next eight months I was present in the detox facility every day (seven days a week, holidays included), and I had the pleasure of watching miracles unfold. The results of our treatment far exceeded anything I had anticipated, and we made major improvements in the lives of most of our patients. To date we have managed approximately 100 individuals at our clinic, and I have treated probably 50 or so additional people who did not receive detox treatment. It has become apparent that while our accomplishments have been remarkable, there is still much to learn from this disorder and much more that needs to be done to help the victims of this tragedy.

To spend much time discussing our lack of complete remission of symptoms in some patients would not do justice to the amazing improvements we have witnessed. However, there are those individuals who, although much improved, still suffer with significant problems from long term medical damages that are difficult to treat and equally difficult to understand. Additionally, many of our patients have had to return to contaminated environments, and are experiencing problems in those settings. One female boat captain can no longer work on her boat, and her husband and fishing partner must now run their vessel alone.

On the successful side has been the observation that memory loss, headaches, irritability and fatigue experienced by a large percentage of our patients have improved amazingly. Having



been a physician since 1971, I never have had a patient tell me that my treatment made them "Happy." Yet, one of the most common descriptions of well-being that our patients have expressed to us is that by the time they complete their treatment they are genuinely happy. Speaking to family members has confirmed great improvement in irritability, memory, energy levels and overall disposition.

One of our most amazing experiences involved a patient with multiple sclerosis (MS), who was exposed to the toxins through her job supervising the feeding of hundreds of workers assigned to clean contaminated boats. When she first began the program, she could barely walk into the detox facility, and she had to rest immediately upon entering the room. Her first few days of exercise involved being led, hand in hand, by one of the program administrators. However, when she finished the program she was on the treadmill and walking fast for over 35 minutes. Her recovery was nothing short of amazing. And while she revels in her own recovery, she loves to tell the story of her brother, another family member who underwent treatment, and who also had an equally amazing recovery.

As an individual who has been a physician for over 40 years, I haven't seen miracles very often. However, the detoxification program has provided health improvements that have been truly amazing. Some of our more affluent patients, those with insurance and other resources, have described seeing ten or more physicians in their quest to obtain relief from their illnesses. The time and money spent in these quests have been as impressive as the predictable failures of their treatments. Few physicians, myself included, understand the mechanisms of toxic exposure and the manner in which we become ill from these disorders. Even more alien to our conventional thinking is the manner in which people with toxic disorders are treated. Few, if any, groups have seen and treated as many individuals as we have at our modest detoxification clinic in Raceland.

As an Ear, Nose and Throat physician, I have no experience in toxicology or in the treatment of people with chemical poisoning. Yet, three years after the spill occurred, where are the studies being performed to elucidate the true scope of the illnesses being experienced by our friends and neighbors? Who is leading the charge to study the people who are actually sick, as opposed to long term inconclusive studies designed to dilute out the susceptible individuals who have become ill with the overall population who have not suffered by exposure to these toxins? Who is their champion outside of our small circle of donors and the handful of activists who are working feverishly to save the lives and protect the health of these victims?

We have not had any assistance from any of our local, state and federal officials in treating patients impacted from the oil spill. At one congressional hearing held in Houma, Louisiana, Congressmen Charles Boustany and Jeff Landry were in attendance, and they represented many of the victims of the spill. Neither of them bothered to even feign interest by asking any questions of my wife when she discussed what was undoubtedly the most important issue on their agenda - the health of their constituents. They spent most of their time discussing what a wonderful job the Gulf Coast Claims Fund administrator at the time, Kenneth Feinberg, was doing in distributing BP funds to deserving individuals. Their opinions and the observations of these congressmen were not shared by many, if any, of the individuals attending the session.

In Louisiana we have not received any assistance from our Governor. Neither of our U.S.

senators has assisted us. Only one U.S. congressman, Representative Cedric Richmond, has voiced concern over our plight in regard to the health impact resulting from the spill by holding public meetings in underserved Vietnamese communities. The result of our public officials' tolerance of BP's arrogance is that this foreign corporation has planted a chemical weapon in our environment and they have poisoned our waters and our wetlands in a manner that will, in all likelihood, haunt us for generations to come. The ability of our congressional delegation to be able to assist their constituents and to support the people of their respective districts in their battle with a foreign corporation is enormous. Yet, with the exception of Congressman Richmond, they have done nothing to help the victims of this crisis who they allegedly represent.

I would assume that every day these illnesses remain untreated, further physical, neurological and psychological damages will befall the victims of this tragedy. Does no one else see the urgency of our situation? We have been treating individuals who were rendered ill by a foreign corporation - a corporation that refuses to acknowledge the existence of their worker's illnesses and has refused to take responsibility for destroying the lives of many innocent American citizens.

5. CLASS ACTION LAWSUIT

(The following discussion is that of a non-attorney's understanding of some of the legal proceedings that have accompanied this lawsuit.)

During the legal wrangling that occurred following the Deepwater Horizon debacle, a federal judge, Carl Barbier, was given the assignment of coordinating the legal aspects of any "Class Action" lawsuit that arose from the incident. Judge Barbier, in fulfilling the mandate of that position, appointed a group of attorneys to what is known as the Plaintiff Steering Committee or PSC. My understanding of the arrangement is that the PSC members were required to obtain an agreement with the defendant (BP) to set up guidelines to be used to assign damages to the individuals who were affected by the spill.

I have been personally overwhelmed in trying to maintain my medical practice while working full time on this project. However, I now find myself needing to address the legal interests of my patients. While I am woefully unqualified to address these complex legal issues, my understanding of the settlement between BP and the PSC is that it leaves many deserving victims of this tragedy without any legal remedy or financial compensation for illnesses I know they are experiencing. With this in mind, I wrote to Judge Barbier on three different occasions (detailed below) and I believe him to be an honest and sincere individual. I also submitted a declaration to Judge Barbier on September 7, 2012 detailing my concerns with the medical settlement. The declaration is included in this affidavit as Exhibit 2.

There are two sections of this Class Action Lawsuit. The first involves compensation for losses experienced by individuals and business that were adversely affected by the oil spill. The second involves the medical aspects of this tragedy. While I know little concerning the guidelines agreed to by the PSC and BP for business losses, I have very strong opinions on the medical settlement. From my perspective, there were three glaring discrepancies in the medical aspect of

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the BP settlement.⁸

The first problem involves the Zones designated to recognize non-workers who were exposed to noxious materials and became ill. The second involves the actual long-term (chronic) symptoms being suffered by the victims of the spill. Both zones exclude thousands of individuals who should have qualified for the Medical Settlement. To qualify as a non-worker entitled to compensation, two major zones of residence were established. The first zone, "Zone A," was defined as "certain beachfront areas in Louisiana, Mississippi, Alabama, and the Florida Panhandle within at least 1/2 mile of the water."⁹ Out of the estimated 105,000 people who qualified under this designation,¹⁰ only 1,600 were from Louisiana, or approximately 1.6% of the qualified population. This is the approximate population of Grand Isle, the only community in the state where people live within 1/2 miles of the shoreline.

Although Louisiana suffered the greatest impact of any other location from the spill and a majority of cleanup workers coming from this state, only 1.6% of the people qualifying for this designation came from Louisiana, with the majority of the remaining 103,400 residents coming from Florida, Alabama and Mississippi. It appears that the Zone B is equally absurd. Zone B's parameters are unclearly defined as "certain wetlands within at least 1 mile of the water."¹¹ It will be interesting to see how many individuals qualify under this designation.

The second travesty in the settlement involves the definition of chronic illnesses associated with relevant chemical exposure. The list of chronic systems that qualify for this more significant designation concerns me because, while there is some overlap, it is not representative of the symptoms that I have repeatedly observed with my patients impacted by the spill.

That list is as follows: Ocular: Sequela of chemical splash to eye, including damage to cornea; Respiratory: Chronic Rhinosinusitis, Reactive Airways Dysfunction Syndrome; and Dermal: Contact Dermatitis, Eczematous reaction.¹²

My personal experiences with these "Conditions/Symptoms" are as follows:

Ocular: To the best of my recollection, I know of only one patient who had any long term problems with his eyes and he has never been a patient of mine. Other patients had eye complaints, but I don't recall anyone who entered the program who had any major problems with his/her eyes or vision.

Respiratory: Chronic Rhinosinusitis: This problem is extremely common in our area and it makes up a large part of my medical practice. Few of my patients undergoing detox treatment complained of nasal and sinus problems and I don't recall many of them asking for medicines to

⁸ Deepwater Horizon Oil Spill Medical Benefits Settlement: Detailed Notice, Aug. 28, 2012, *available at* <http://www.deepwaterhorizonsettlements.com/Documents/Medical%20Detailed%20Notice.pdf>.

⁹ *Id.* at 6

¹⁰ Medical Settlement FAQ, Mar. 2, 2012, *available at* <http://www.marylandinjurylawyersblog.com/Medical%20Settlement%20FAQ%203-2-2012%20%282%29.pdf>.

¹¹ Deepwater Horizon Oil Spill Medical Benefits Settlement: Detailed Notice, *supra* note 8 at 6.

¹² Deepwater Horizon Oil Spill Medical Benefits Settlement: Detailed Notice, *supra* note 8 at 28, 29.

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treat these disorders.

Respiratory: Reactive Airway Dysfunction Syndrome: Some of my patients mentioned that they had coughs early on in the course of their illnesses. However, few maintained these coughs and respiratory symptoms by the time they came in for treatment in our detox center. In none of the cases I treated do I recall pulmonary problems being a major consideration.

Dermal: Contact Dermatitis and Eczematous reaction: Quite a few patients described rashes that developed while working on the oil spill. Most of these rashes improved with time. While participating in our detox program, a large number of individuals developed eruptions of raised, red bumps, especially on their backs and trunks, or torsos. These areas generally improved when the treatment was completed. Some skin eruptions continue to occur after treatment was completed.

In summary, the above-mentioned problems, with the exception of skin disorders, were not among the major problems experienced by the more than 100 patients that I saw during the course of our treatment program. Nor were these problems frequent in the 100 or so other patients who I questioned following the oil spill.

Many of the problems experienced by my patients prevented them from working at their regular jobs, or made their work extremely difficult to perform. The major problems we saw, and the problems that continue to plague many of our patients, were fatigue, memory loss, irritability, headaches, muscular pains, joint pains, insomnia, vertigo, acid reflux, hypoglycemia and abdominal pains were the more common symptoms. As mentioned previously, skin rashes were also commonly experienced. Amazingly, only the skin disorders were included in the chronic conditions/symptoms in the settlement.

The next question that begs an answer is how does an individual qualify for the benefits included in the medical settlement? With reference to the "Chronic Conditions" category the claimant must submit -- "A declaration under penalty of perjury setting forth the condition and the location and time of exposure; *AND* medical records supporting the claim and ongoing care for the asserted condition" (emphasis added).¹³ Since a large portion of the people adversely affected by the oil spill have no medical insurance, they also have few, if any, medical records to qualify in this area.

The above symptoms and qualifications are an absurdity, because they have little to nothing in common with the actual significant symptoms being experienced by the people who were exposed to these chemicals.

Why would the PSC and BP settle on these criteria? One reason would appear to be that this designation does provide some major benefits to BP. By avoiding recognition of the actual long-term consequences of these toxic exposures and by minimizing the significance of the illnesses actually being experienced, BP gets to avoid taking responsibility for the far more significant symptoms that truly exist in a chronic setting, such as memory loss, fatigue and severe headaches. In other words, if the actual long-term symptoms were included in this category, BP

¹³ Medical Settlement FAQ, *supra* note 10 at 3, 4.





would have to acknowledge that these problems actually existed. Understandably they were unwilling to do so. Additionally, these chronic symptoms would certainly qualify for more compensation to the victims of this crisis.

The last aspect of the medical settlement with which I take issue is the provision for the "Gulf Coast Region Health Outreach Program." Over \$100 million dollars is being put aside for research and clinics, supposedly to study and treat the general population of the Gulf States. However, to my knowledge, not a nickel of that money is designated to either study or treat the people who were rendered ill by exposure to the gumbo of chemicals resulting from the spill. Workers and residents impacted by the spill require health clinics that specialize in chemical exposure. However, the outreach program focuses on primary care, which is a fine service for the general population but does not address the victims of this spill. By not treating these individuals directly, BP is unwilling to admit that these victims actually exist.

BP's oil spill has (probably) resulted in the death of some individuals in our communities, and has permanently damaged the health of many more. BP's reckless disregard toward regulations has devastated our environment and, for many, their ability to make a living. To add insult to injury, during this tragedy BP arrogantly refused to cease using the chemical dispersant Corexit, the chemical that is suspected of causing the illnesses we have been experiencing, in spite of being directed to do so by the EPA in the early stages of the spill.¹⁴ BP continued the usage of toxic chemicals that are not permitted for use in Great Britain. To date, BP has refused to take the responsibility for the resulting illnesses that it has created.

I would like to make the following comments with regard to individuals we have been treating at our detox facility. Because many of individuals are quite ill, this patient population would represent a subset for any study group that was looking for illnesses that were truly being experienced by victims of this calamity. There is an enormous need for us to be able to use this tragedy to obtain information on the cause and treatment of the health problems we have been observing. I have written to Judge Barbier on three different occasions, and he has responded indirectly to each of my requests. I have received calls from members of the PSC twice, and I met with two representatives of the group on one occasion.

My last request to Judge Barbier was for assistance in obtaining funding to enable us to perform some objective studies on the health effects of victims of the oil spill. My letter resulted in me receiving a call from a PSC member and arrangements were initiated to meet with one of the groups receiving funding for studies to see if we could do a series of studies on the people who were actually ill from these chemical exposures. I deferred the meeting arrangements to Dr. (Kaye) Kilburn, who was the chief design architect of our study group. On my last conversation with Dr. Kilburn, he stated that his contact person with the PSC stopped taking his calls and did not return the calls made to him.

The settlement does not account for the more serious medical symptoms associated with the oil spill, and the government has failed to recognize any medical impact. In response to a letter I wrote the Center for Disease Control (CDC) about health problems associated with the spill, the

¹⁴ Directive from EPA to BP on using less toxic and more effective dispersants (May 20, 2010), *available at* <http://www.epa.gov/bpspill/dispersants/directive-addendum2.pdf>.



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CDC wrote back on June 15, 2011 that there are no trends in illness identified by the multiple surveillance systems used, and that there have been no approved dispersant applications since the summer of 2010. These assertions need to be supported with facts. My letter to the CDC and the CDC's response are included in this affidavit as Exhibit 3 and Exhibit 4. Once again, we have a public document that defies all reality and underlies the intentions of both our government and the private sector to avoid admitting that there are actually people who were rendered ill by this tragic experience.

In speaking to Dr. Riki Ott, a veteran of the Alaska Valdez oil spill, the use of the dispersant Corexit that was used in response to the Deepwater Horizon oil spill is approved in virtually all of the oil spill management plans of all of the companies working in the Gulf. This would provide a simple, and perhaps legal, excuse for the continued use of this chemical in our environment.

While I am skeptical about the claim by BP and the government that there were no approved applications of Corexit for spraying since July 2010, with the exception of one incident in September 2010, I have no scientific proof that this was an inaccurate or intentionally false statement. Anecdotally, however, I have studied repeated reports by concerned workers and residents that spraying continued, and I have spoken to numerous individuals who claim that the spraying of dispersants continued for long after 2010. The experiences they described have been identical to the prior, conceded instances of confirmed spraying. However, I have no proof that those comments are correct.

Unfortunately, and under any circumstances, the illnesses being experienced by the victims of this tragedy suggest that there is a continued presence of toxic materials causing problems that we have not experienced at this magnitude previously in the Gulf.

6. WHAT CAUSED BP SYNDROME

I have lived on the Louisiana coast for 67 years, and spent a considerable amount of time on Grand Isle and in the waterway now named Port Fourchon. The earliest offshore drilling for oil occurred off the coast of Louisiana. At that time, the oil companies couldn't have cared less about spilling oil into the environment. Those of us who frequented the beach at Grand Isle came home with brown feet and stained swim suits due to the oil present on the beaches where we swam and fished. I do not recall a single incidence in which anyone became ill as the result to exposure to either the oil or to the tar balls and tar "rafts" that were present on the beaches.

It is obvious that there is something different about this recent spill. BP insisted, even after the EPA requested an alternative, less toxic, dispersant than Corexit, that they could and should use this chemical to hide the oil that was pouring into the Gulf. It is beyond credible doubt that this decision was the new factor, and that Corexit is the prime suspect for the illnesses ruining the lives of so many neighbors and friends today. It is probably also responsible for the death of our dolphins, and the bizarre appearance of the crabs and shrimp that are harvested from the waters where these chemicals were used. BP's defiance in this situation is similar to its arrogance in ignoring safety guidelines that resulted in the original explosion of the Deepwater Horizon

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drilling rig.¹⁵

I recently had an opportunity to visit with representatives of BP at its U.S. office in Houston, Texas. The purpose of our visit was to attempt to get a commitment from BP to stop using Corexit for any future oil spill activities in the United States. The two individuals who negotiated with the PSC over the medical aspects of the settlement were present, and I expressed my disappointment with both the designation of zones that eliminated the majority of people from Louisiana from consideration for benefits, and the inclusion of absurd criteria for long term (chronic) illnesses.

By the time we left the meeting, BP asserted that unless ordered by the government, they would not consider discontinuing the use of Corexit as a dispersant in future oilfield spills. They also refused to commit immediately to informing the public when they use these dispersants in the future, but said they would consider action to stop blindsiding the public. Their position was that as long as Corexit was approved by U.S. regulations, they had the right to use the chemical in responding to an oil spill.

Upon leaving the meeting in Houston with representatives of BP, my wife was quiet and obviously disturbed. With tears in her eyes she muttered repeatedly that “[t]hey really don’t care,” and that “[n]othing is going to be done about our requests!” Brenda understands all too well that we cannot expect these wealthy corporations to concede anything remotely resembling honesty or fairness, if it is not in their best interest to do so. That means accepting responsibility and accountability for their actions, instead of doing or saying anything to avoid liability. She also realizes that our elected officials, who allegedly represent our interest, will never defy their wealthy benefactors and provide justice to those who they have pledged to represent.

7. CONCLUSION

We currently have the opportunity to take action on health problems that have defied identification and treatment for over 50 years. We squandered our opportunity to do objective studies on the “Agent Orange” fiasco that characterized the Vietnam War. I can vividly recall the controversy surrounding the illnesses experienced from exposure to the toxic brew of chemicals used to defoliate the jungles of Vietnam. We mistreated and misdiagnosed our heroes of that conflict and it was years before our nation finally acknowledged what was already known about these chemicals and the illnesses they caused.

Over 20 years ago we had another foreign conflict and once again our troops returned home ill, with over 175,000 of them being affected with a condition that became known as Gulf War Syndrome. Once again, these heroes were labeled as malingers and malcontents and were shoved into the background and ignored. Seventeen years later, Congressional studies indicated that these soldiers were definitely ill, and their problems were finally acknowledged.

Shortly after the 1991 war, a retired Colonel from California named David Root testified in a Congressional hearing that he had treated several veterans who were suffering from Gulf War

¹⁵ Jad Mouawad, *For BP, A History of Spills and Safety Lapses*, The New York Times, May 8, 2010, available at <http://www.nytimes.com/2010/05/09/business/09bp.html?pagewanted=all>.

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Syndrome and they all responded very well to his treatment.¹⁶ There was no follow-up assessment of his testimony and there was no support at the time of Dr. Root's treatment experiences. Ten years later, Dr. Root was the physician who supervised the successful treatment of about 1,000 victims of the 9/11 crises in New York City. The techniques used by Dr. Root to treat the Gulf War Veterans were the same techniques used to treat the victims of the 9/11 attack and they are the identical techniques used to treat the victims of BP Syndrome in Raceland, Louisiana.

If all of these statements are correct, and if successful methods have been established for the diagnosis and treatment of these disorders, why have these techniques not been studied, written about and taught to physicians in anticipation of there being future generations of doctors who can truly understand these problems and are qualified to treat these disorders? The answer to that question is contained in the above affidavit. In our current crisis, a large, multi-national corporation has decided that they do not wish to acknowledge that the chemicals they insisted on using, and which are outlawed in their country of origin, have harmed anyone, anywhere at any time.

¹⁶ *Public Hearing Before the Presidential Special Oversight Board for Department of Defense Investigations of Gulf War Chemical and Biological Incidents* (1998) (statement of Dr. David E. Root, M.D., , M.P.H., F.A.C.O.M. Colonel, USAF, M.C., Ret.), available at <http://www.detoxacademy.org/pdfs/testimony.pdf>.



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I have read the foregoing 16 page statement, and declare that it is true, accurate and complete to the best of my knowledge and belief.

Executed on October 11, 2012.

Michael R. [Signature]

Subscribed and sworn to before me
this 11th day of October, 2012

Susan E. Mathenne
Notary Public
My Commission expires on: at death

SUSAN E. MATHERNE
NOTARY PUBLIC, LARUE, MISSOURI, LA
MY COM. EXPIRES: AT DEATH
NOTARY PUBLIC LICENSE #2257



AFFIDAVIT

My name is Scott Porter. I am submitting this statement without any threats, inducements or coercion, to Shanna Devine, who has identified herself to me as an investigator with the Government Accountability Project. I am a coral and oyster biologist, and I've been diving in the Gulf for over 20 years. After the BP oil spill (spill), a small dive team and I took water and coral reef samples close to the Macondo well (a.k.a MC 252 or the Deepwater Horizon site) for the Natural Resource Damage Assessment (NRDA) process, which is housed under the National Oceanic Atmospheric Administration (NOAA). NOAA assured us that it was safe to dive; however, after it obtained our samples, it backed out of our agreement to share the test results with us and to compensate us for our dives. Furthermore, since diving I have become sick, and chemicals from the crude oil and Corexit have shown up in my blood in high levels. My main complaint throughout the spill response is how closely NOAA has worked with BP and has neglected to present sound science to the public. I am providing this statement in order to educate the public on what has taken place. There are no restrictions on this statement's use.

1. EXPERTISE

In 1986 I went to Louisiana Technical College, for biomedical engineering. I realized I didn't want to be a doctor and switched to computer engineering in 1987. I took some classes at the Louisiana Universities Marine Consortium (LUMCON) on marine biology. For a short period I worked as an environmental biologist and chemist. I worked for two different environmental laboratories in the late 1980s at their bioassay department, where I would set up bioassays of wastewater and analyze the wet chemistry involved therein. A bioassay, or biological assessment, employs standard methods for measuring toxicity of a compound on aquatic organisms. In 1989, I worked at Lee & Ro Environmental Laboratories in Westlake Village, California. Given my experience, I was in charge of the bioassay program. In 1991 I realized the importance of aquaculture and went into Marine biology at Nicholls State University, located in Thibodaux, Louisiana. I graduated in 1997 with a Bachelors of Science in marine biology.

In 1991 I was hired as a diver for an oyster biologist. As a scuba diver and biologist myself, it behooved me to begin my own company rather than work for the biologist periodically. I opened my own company, EcoLogic Environmental Consulting, in March 1992. It is an oil field consulting and diving company, and I primarily work as an oyster biologist consultant between the state of Louisiana, oyster fishermen and oil companies. Prior to the spill, over 90 percent of my work was for the oil industry. While I still receive 70% of my earnings from the oil field, my income is only at 10 to 30 percent of what it was prior to the spill, because the Gulf oil spill moratorium reduced the typical demand for my service.

Over the past 25 years I have seen myself as a forensic investigator, and I have performed over 6,000 dives. If there is any damage or potential damage to an area, my clients contact me to try to figure out what happened or may happen. My first questions in examining the scene are: what

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conditions exist in these oysters or coral reefs, are they normal or abnormal, and why do they exist that way. Then I try to determine if the implications are good or bad for the normal environment.

As a consultant, I work with oyster fisherman and oil companies when they are required to perform an environmental survey prior to bringing the equipment in to work. However, the environmental survey requirement is like slapping the oil industry with an empty glove. There are no fines associated if they don't perform the assessment, but if they do perform the assessment and there is damage documented then it reflects poorly on the company. Along with these surveys, I also document passage of oilfield equipment through the marsh, and give it a Global Positioning System (GPS) trail of speed and direction. The companies that act as environmental stewards take the risk and do what they can to address any problems that the assessments and rig move reports reveal, but the majority do not perform the assessment.

2. ECORIGS AND PLATFORMS

Since 2006 I have also worked for EcoRigs, a nonprofit organization that is trying to preserve the platforms of offshore rigs for the ecological oasis that they represent. EcoRigs' primary concern is the preservation and research of coral reef communities. I have been studying coral reefs on platforms offshore of south Louisiana for 14 years. These reef habitats occupy most of the continental shelf and all of the continental slope. The continental slope has platforms with unique footholds on it in order to exist in their specific environments. We want to preserve some of the more pristine coral reef habitat that exists on these structures, because there are potentially hundreds of species with the potential for natural biomedical properties that we may discover. Photos of EcoRigs staff and me working with coral are included in this affidavit as Exhibit 1.

For at least the past 20 years the Bureau of Oceanic and Energy Management, Regulation and Enforcement (BOEMRE), formerly the Mineral Management Service (MMS), was open to examining platforms for living corals. Prior to the spill I was excited about leading them under the platforms for an investigation into *Tubastraea micranthus*, an invasive coral species I recently discovered in the northern Gulf. However, since the spill my oil field consulting and this coral research has dramatically declined; there has been practically no work the past couple of years to produce corals on the commercial market.

Another reason to save many of the offshore platform structures is because we have the technology to put sensors on the bottom of the platforms to determine if the plugged and abandoned wells ever leak. This is the big monitoring tool that most oil companies do not want. If a well ever leaks and the Coast Guard detects the oil, the company will be liable for the cleanup and a fine. Oil companies prefer to keep doing what they have historically done, which is to plug and abandon the well, remove the platform and stop all liability. It would be helpful to have one of these sensors on the Macondo well. Other divers and I were worried about oil leaking from there because, even after the well was capped, we continued to see fresh oil coming

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up and fresh plumes in the vicinity of the Macondo well and within an approximate 40 mile radius of the Macondo well. In September 2011 and October 2012 it was confirmed that fresh oil was coming from the location of the Macondo well, and it was identified as BP MC 252 oil.¹ Photos of fresh oil within the vicinity of the Macondo well are included in this affidavit at Exhibit 2.

The Gulf waters east of the Mississippi River (the river) used to have areas with relatively consistent clear, blue water because there is an offshore current in the Gulf that flows east to west across the face of Louisiana, and the current typically pushes the river water away from northeast of the river. The current typically pushes most of the sediment load from the river south and west across the Louisiana coastal zones and leaves portions of the northeast side of the river clean, clear and blue. The spill happened in the worst place, because east of the river is where most of the oil came inshore and damaged some of the most pristine reefs. Then it happened in deep water where oil and dispersed oil is virtually impossible to recapture and could potentially destroy living creatures from 5,000 feet down and up.

Prior to the spill, if we ever had a film crew that had to get shots underwater, we would normally bring them to the northeast side of the river to Main Pass (MP) 311, which is located about 40 miles northwest of the Macondo well. Before the spill, the water was typically cobalt blue and some of the most pristine reefs were located there. When we dove, we could see all kinds of living organisms, such as sea turtles, manta rays, angelfish and sharks. After the spill the water became pastel green or brown, like a tan tint color. We have video that compares that location in 2008 to after the spill in 2010 through April 2011.² The contrast is shocking. By August 2010 I was noticing an absence of damselfish, blennies, and gobies near the surface during our Louisiana dives. Photos demonstrating the changes in MP 311 are included in this affidavit as Exhibit 3.

After the spill, I dove numerous times with a small team, including members of EcoRigs, to collect water and coral reef samples in the vicinity of the Macondo well. We wanted to examine the environmental effects from the spill, so we dove at MP 311. The ridge that we dove in is 200 to 220 feet deep of water; however, when you move closer to the Macondo well it drops to 5,000 feet. When the spill occurred, these offshore reefs were the first organisms to come in contact with the dispersed oil. Fish can swim away, coral reefs can't. In effect, the oil that was dispersed at the surface around the Macondo well moved into the first line of major reefs, which were located on the continental slope, such as MP 311. The first reefs to be affected were the corals

¹ *Fresh Oil Sheen at Deepwater Horizon Site*, The Maritime Executive, Oct. 11, 2012, <http://www.maritime-executive.com/article/fresh-oil-sheen-at-deepwater-horizon-site>.

² Video footage of MP 311 before the BP oil spill is on file with Government Accountability Project and available upon request. Associated Press. "AP Exclusive: Scuba Diving in the Gulf Oil Spill." YouTube. Jun. 9, 2010. http://www.youtube.com/watch?v=FGX7krQYI_4; Scott A. Porter. "EcoRigs MP 311 coral sample 1 at 20m." YouTube. Jun. 10, 2010. http://www.youtube.com/watch?v=_hoIYshYVNE; Scott A. Porter. "40 miles North of Deepwater Horizon sets MP 311 SCUBA samples at 15m June 7 2010." YouTube. Sept. 30, 2010. <http://www.youtube.com/watch?v=G4W7pTHJcCs>.

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and oysters on the platforms scattered across the continental slope and shelf (detailed below) respectively. Ultimately the dispersed oil made its way into the inshore oyster reefs in the coastal zones.

Before the spill the only university and government entities that expressed interest in receiving EcoRigs' coral reef samples were the curator at the Smithsonian and the University of Southern Florida (USF). We sent them representative samples of typical reef organisms. The Smithsonian requested samples of the coral skeletons which will be kept on file, and the coral skeletal structure will be studied. We were told by our contact at USF that they lost the fresh coral reef samples that we froze and shared with them in 2009. Photos of these coral reef samples are included in this affidavit as Exhibit 4.


My greatest critique with how the federal government has responded to the spill is that agencies are not examining the reefs in the locations that were first and worst hit by the dispersed oil. Even if they were looking at these organisms, they would need us to explain what they should be looking for and what organisms are no longer there in the aftermath of the spill. To the best of my knowledge, NOAA has to date refused to acknowledge organisms located on the oil platforms. In my experience since the spill, NOAA has been dismissive of these coral reefs and ignored the valuable database that they represent.

1. CORAL SIGNIFICANCE

The artificial coral reefs represented a touchy issue of what was growing on offshore platforms. Before the spill, EcoRigs and NOAA were as two ships passing in the night. We were trying to get NOAA to acknowledge the organisms around the platforms and the offshore reefs that we have been researching for the last decade. There are over 4,000 offshore oil and gas platforms in the northern gulf. However, at the end of the life of a well, under a directive by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), formerly the Mineral Management Service (MMS), the whole platform is removed. This is unfortunate because 80 to 90 percent of these platforms have some form of coral living on them. Also, there are 10 times more fish around these platforms than around an acre in the marine banks in the same area. If you want to fish or find reef samples, you go to a platform.

BOEMRE claims that the platforms can over time turn into a navigational hazard. However, we are not advocating that the platforms remain up permanently. We argue that for a designated period of time after they are no longer producing, we should have access to the platforms for ecological advancements.

NOAA has taken the position that these coral reefs are not protected under the Endangered Species Act (ESA), claiming it is not required to include the coral reefs found on oil and gas platforms. Corals are protected almost everywhere else in the United States coastal waters under the ESA; however, corals on platforms fall outside these protections because they are categorized as artificial reefs, as opposed to natural reefs. On the flip side, the Magnusson Stevens Act



protects all endangered habitat, including coral reef on artificial structures. I think it is a political matter; NOAA supports the removal of platforms, and if they applied the Magnusson Stevens Act then they would have to require the oil companies to scrape the reef off the platform before they can pull the platform out. This process will cost the companies millions of dollars and hold up the removal of the platforms.


Over the last ten years my company concentrated on the artificial reef in a specific zone along the continental slope. The reefs beyond 10 to 20 miles offshore contain the more exotic reef forming organisms, including large, stony coral. Before the spill, my company was holding off on selling coral until Dr. Paul Sammarco of LUMCON and I could get our report published on this new invasive coral, *Tubastraea micranthus*. It was important for it to be published, because the organism that we were working with had never been collected in the region; it was new and thriving. In fact, it was the first time it had been found in the whole Atlantic basin. It comes from Indonesia, and it probably came over in the ballast waters of a ship right after Hurricane Katrina. Our paper was published in April 2010 through the scientific journal *Aquatic Invasions*.³ Shortly thereafter, the Deepwater Horizon exploded.

The Macondo well is located in a deepwater basin 5,000 feet deep called the Mississippi Canyon (MC). The MP and MC blocks of platforms represent the most substantial reefs in the direct path of the oil. In turn, their reef communities are affected first and the worst by the dispersed oil plumes. Near the northern edge of the canyon, where it comes up 1,000 feet, is where the bottom of the MC 194 (aka COGNAC) platform sits. Their essential fish habitats, reefs, are at the edge of where the oil would begin to surface from underneath or float in from the dispersed oil in the subsurface waters. The MC 280A (aka LENA) platform sits across from MC 194, on the southern edge of the canyon. It also serves as essential fish habitat, where the oil would begin to surface or float in as dispersed oil clouds in the subsurface waters. Maps of these locations and MC 252 and MP 311 are included in this affidavit at Exhibit 5.

1. SCIENCE IGNORES COREXIT; OIL OUT OF SITE BUT NOT GONE

When the spill occurred, most of the local Gulf scientists were employed by universities and had limited scientific freedom, because their findings needed to be approved by their institutions. At EcoRigs we wanted to study reef samples, sponges, oysters, barnacles, but NOAA did not express interest. To date, NOAA has not looked at the damage in the Gulf closely. The oil and dispersants are comprised of Polycyclic Aromatic Hydrocarbons (PAHs), which are known carcinogens. If NOAA doesn't want to know what has been killed from the spill already, it should at least sample the reefs now so it knows the reefs' PAH concentrations.

³ Paul W. Sammarco, Scott A. Porter & Stephen D. Cairns, *A new coral species introduced into the Atlantic Ocean - Tubastraea micranthus (Ehrenberg 1834) (Cnidaria, Anthozoa, Scleractinia): An invasive threat?*, 5(2) *Aquatic Invasions* 131 (2010), available at http://www.aquaticinvasions.net/2010/AI_2010_5_2_Sammarco_etal.pdf.




Government and media reports on the science of the spill have not addressed external factors that increase the public health and environmental dangers, in particular, the use of the dispersant Corexit to treat the oil. When the government and BP would say “the oil disperses” I would ask, “what happens to these chemical compounds; if they disappear, do they just no longer exist?” (detailed below). BP and NOAA officials argue that when oil is at the surface of the water, some of the volatiles can just evaporate and no longer pose a health risk. Unfortunately, that’s not what happens when they spray Corexit onto fresh oil, which is a huge wrinkle.

Total Petroleum Hydrocarbons (TPHs) have a long list of compounds associated with crude oil. The volatile compounds, PAHs, are some of the most dangerous compounds because they have the lowest toxicity thresholds. The lowest toxicity threshold is a technical way of saying that it takes less of the compounds to cause damage or be poisonous. Furthermore, they evaporate easily and are easy to inhale – especially the uppermost or lightest of the aromatics containing benzenes. When controlled burns take place, TPHs and volatile compounds become airborne in large quantities and therefore are dispersed into the atmosphere. There is little doubt that burning fresh crude oil at the surface releases toxic compounds into the environment, but TPHs and PAHs become even more dangerous when you put dispersants on them.

Notwithstanding the highly toxic nature of dispersed oil, the oil industry now depends primarily on the use of dispersants in the event of a spill. Like any good magician, the oil industry has learned that if you can’t see something that was there, it must have ‘disappeared.’ The industry has known for decades that if someone doesn’t or can’t see an oil spill then it’s hard to prove the magnitude of the spill or that it ever existed. Oil companies have also learned that, in the public mind, “out of sight equals out of mind”. Therefore, they have chosen crude oil dispersants as the primary tool for handling large, marine oil spills.

Using Corexit in the Gulf made it more difficult to identify BP MC 252 oil. As a dispersant, Corexit breaks down very fast in the environment, and it is supposed to erase the oil signature by breaking down the “fingerprint” of the oil. The fingerprint contains organic hydrocarbons that can be traced, and we have tools to help determine if the oil came from the Macondo well or a different spill. An analysis known as a gas chromatograph provides an interpretation of the oil fingerprint. It can often be difficult to get a 100% guarantee reading that it is a specific type of oil depending on the age of the oil in the environment, but this is the standard and most reliable method available to identify the oil. We can also use a biomarker test to analyze the level of exposure to the dispersants and oil but these tests are not considered as reliable by some specialists. More discussion on analysis protocol is desperately needed.

The dispersant breaks down crude oil into micro-droplets, small enough pieces which can then be dissolved into or suspended into the water column; that is what makes the dispersed oil plume. When oil and dispersant are mixed they break down the long carbon chain, which is crude oil. This process facilitates the release of the PAHs from the TPHs - heavier compounds that then sink. The heavier components of crude oil, such as asphalt, easily sink to the seafloor as



crude oil breaks down. Oil also sinks when "marine snow", or suspended sediment coated with dispersed oil, eventually descends to the seafloor. However, the aromatics - arguably the most dangerous and some known carcinogens - do not sink so easily. The aromatics typically have a lower specific gravity than seawater, which means that they tend to float near the water's surface. Whether on the bottom of the seafloor, in the water column or at the water's surface, these compounds (i.e. benzene, toluene, styrene and xylene) enter the food chain and then bioaccumulate in seafood over time.


2. SEAFOOD CONCERNS, CHEMICALS BIOACCUMULATE

An important question, which has been absent from government discourse on Gulf seafood safety, is "How are organic compounds biologically accumulative?" As an organism ingests organic compounds they will lock up primarily in the lipids or fat cells of the body and then accumulate with exposure. For instance, algae first eat the oil and then have organic compounds in their cells. Algae are then eaten by zooplankton, which are microscopic water bugs. Other "grazer" organisms, such as crabs and shrimp, eat a wide variety of organic material that they find on the reef, including algae and potentially oil micro-droplets. Crustaceans, or shellfish, eat the zooplankton and plankton. If or when the shellfish is eaten by the fish, all that the shellfish previously consumed begins to bioaccumulate in the fish. This is the organic compounds' typical route into the food web.

Several of the oyster, water and coral samples that we collected matched the Macondo fingerprint, BP MC 252 oil. Oysters are big water filters, so whatever they pick up can remain in their shells and skeletons. In September 2011, I collected oysters 30 to 40 miles north of MP 311, or approximately 80 miles north of the Macondo well. We sent the tissue in for the testing and it came back high in TPH at 260 parts per million (ppm). The test results are included in this affidavit at Exhibit 6. Of those TPHs, 31ppm was diesel. An LC 50 (lethal concentration which kills 50% of the test organisms within two to four days) is a way we begin to describe these concentrations. The LC 50 for the dangerous aromatics (PAHs such as diesel) typically ranges from two ppm to just under 20ppm.

After we received some of the results back from our samples, in August 2011 during a meeting with the Gulf Coast Claims Fund (GCCF) I tried discussing our findings. The first thing that GCCF Administrator Kenneth Feinberg said was, "How do you know it was Macondo oil?" When we showed Feinberg videos of the underwater clouds of dispersed oil he responded that NOAA was not reporting those results to him. He asked a group of seafood lawyers in the meeting why the state would spend \$250 million dollars on its seafood program if the seafood was not safe?

Since the spill, EcoRigs and other scientists and commercial fishermen have asked NOAA to analyze the presence of TPHs and PAHs in seafood frequently consumed by the public, such as the offshore fish like red snapper and amberjack, as well as, oysters, shrimp and crabs. NOAA



would respond that the seafood was being tested daily; however, this was not reassuring because NOAA and the Food and Drug Administration (FDA) relied on sensory testing – or a sniff test – to support its position that Gulf seafood is safe for consumption. As an oyster biologist and forensic scientist, I know that a sniff test means you don't want to find any contamination in tissue sample. The aromatics are what you would be able to smell through a sniff test, and the human nose is only supposed to be able to detect the presence of these gaseous molecules in the triple digit parts per million range and above. Therefore, the lower concentrations of aromatics, even though still chronically dangerous, are extremely difficult to detect with the smell test. Even people trained to smell for these chemicals cannot detect them at low levels.


The aromatics may evaporate and dissipate rather quickly in air, but when ingested they tend to get stored in fatty tissues and biologically accumulate. Even if the levels of contamination are too low to detect by a sniff test, the danger is that as you eat the seafood, the toxins bioaccumulate in the body. PAHs and TPHs are dangerous down to 10 parts per billion (ppb); however, you can only even smell the chemicals at 100 ppm or milligrams per kilogram (mg/kg), which is still 10 times greater than the testing average lethal concentration. This means that if you can smell it, it is already ten times the lethal concentration that kills 50% of test organisms in two to four days. However, to my knowledge these were not the samples being tested by BP or the government. NOAA seemed to only be sampling the organisms that were healthiest and still living, and even those could have unsafe contamination levels that would pass the government's primary testing method.

3. TESTING CONCERNS

Of public concern is the fact that NOAA allowed BP to choose where the samples would be taken from and then allowed BP to hire a laboratory on a contractual agreement to test the samples. Throughout the spill, Vessels of Opportunity (VoO) captains would take scientists to collect samples for BP. Several of the VoO captains informed me and other scientists that BP instructed them away from the oil to take the samples, and in turn they rarely encountered fresh oil. Captains told us that this happened frequently from Louisiana through Mississippi. Later, a FOIA request by Greenpeace found that BP was trying to control where independent research funded by BP would take place, including potentially where the vessels went.⁴

In the 1980's when I worked in a lab, we would get samples in the lab that would not pass Environmental Protection Agency (EPA) requirements and the laboratory director would tell us to run the sample again. At times we were instructed to dilute the samples in order to achieve the desired results. It was a practice that I did not agree with, but there was no tolerance for dissent. It was that way in the late 1980s and this spill has raised the question of whether this practice is still taking place. Similar to the 1980's, competition between labs is still high, and to my knowledge there are no regulations enforced to prevent this practice.

⁴ *BP Internal Meeting Notes*, The Guardian, Apr. 15, 2011, <http://www.guardian.co.uk/environment/interactive/2011/apr/15/bp-internal-meeting-notes>.




There are greater questions of scientific integrity in the handling of the spill, because to a degree BP is able to control where the samples are taken from and what the public sees. There have been cases where we know we have sent independent labs samples with oil, because we could see and smell the oil at the surface, and the labs still didn't identify oil traces. When that happened my first question was, "How did they test the samples, what were the protocols?" By fall of 2010, several environmental scientists, including myself, were discussing the accuracy of the tests that labs were running and whether they were processing the samples appropriately. We are now looking at their protocols for analysis and raising the concern that their testing methods may be outdated and insufficient to accurately analyze PAHs and TPHs.

As an environmental scientist, I look at the way the government and BP are handling, describing and discussing the spill. A bioassay, or biological assessment, employs standard methods for measuring toxicity of a compound. Further, it is the only way to determine the spill's effect on Gulf organisms. The 48 to 96-hour acute test determines the LC50. A lower LC50 indicates a higher toxicity. This is just the beginning of a discussion from the laboratory standpoint. Based on the LC50, the parameters of the chronic analysis are designed to study the sub-lethal effects. The sub-lethal effects are determined by studying organisms cultivated in variable dilutions of the LC50 until the concentrations are established at which growth rates and reproduction rates are significantly affected and not affected.

The chronic analysis is used for a seven-day test, which is typically standard across the board for any aquatic biological assessment. At the end of seven days you don't want all of your organisms to die; you need them to live in the test water so that you can determine the biological effect that a compound has on an organism, such as growth rates, metabolism (appetite), reproduction, or whether cells form correctly. The goal is for the scientist to find the lowest concentration that does have an effect, and/or the highest concentration that does not have an effect. As consultants, it is the magic number that we can tell our clients how much they need to dilute a chemical, such as wastewater or a dispersant, before releasing it into the water.

Our government has been screening at 100 mg/L or 100 ppm, which is 10,000 times higher than the concentration that can still have sub-lethal effects. We know that Corexit by itself has an LC50 of around 20 mg/L after 48 hours; it will kill 50 percent of the organisms living in a solution of 20mg/L after two days. Crude oil alone has an LC50 of 10 mg/L. Corexit and crude oil create an LC50 at 2 mg/L, which makes the dispersed oil more toxic than the oil or dispersant alone. Despite these additional threats, the government did not account for the increased toxicity of the combined oil and Corexit; its statements were based on the LC50 of Corexit alone and not the dispersed oil seawater solution. Further, it did not test the sub-lethal concentration of the crude oil and Corexit mixture.

The government wouldn't allow for a company to disregard bioassays in other private industry liquid waste and wastewater effluent; they are standard for an industry or municipality. For example, the chemical industry and treatment plants that produce wastewater have to have a



bioassay done on water before it can go in a sewer or bayou or natural stream. However, within the context of the spill, NOAA is not discussing the bioassay of the compounds associated with dispersed oil and what is happening to them in the environment. They won't tell us what the significant dilutions of Corexit are. Why won't NOAA tell us how long Corexit and or dispersed oil remain in the water column? I do not believe that they know the answers to these questions!

There are compounds in the makeup of Corexit that resemble glycol. You can't empty a radiator of antifreeze into the street. Yet we are using Corexit, which contains a type of glycol, in unprecedented amounts in the Gulf, and the public doesn't know how much glycol or how much of the other highly toxic chemicals comprise Corexit. Further, dispersant flight information is not available to the public. That concerns me and other divers, because we continue to encounter and sample what seems to be large patches of fresh, dispersed oil slicks 80 to 100 miles apart in Louisiana in similar patterns, though not as heavy, to what we saw in 2010, and we still do not know if they are spraying these slicks with dispersants. We know that the government entities do not admit to any spraying after July 17, 2010, but we have sampled many fresh, aromatic oil slicks below Louisiana throughout 2011 that appeared to be hit with dispersants.

4. DIVES, NOAA

About three weeks after the spill, the oil plume was 10 feet thick. Other divers from EcoRigs and I were 12 miles south of the Mississippi River on MC 194, the deepest installed structure in the Gulf of Mexico. In early May 2010 we took Jeff Corwin from CBS News in Venice, Louisiana and went diving 12 miles south of South Pass at this same rig. We took video of the conditions and it was relatively clear, but there was a slight greenish tan haze. We experienced a cloud of micro-droplets of dispersed oil at 10 feet thick from the surface.⁵ We went back to the same area four and six weeks later with Discovery Channel Canada and the plume was over 30 feet thick. At that point my outlook had changed from "this is something we can handle," to "we actually have an environmental disaster of unprecedented magnitude." The plume had magnified itself to three times the amount of dispersed oil, and it was thicker, more viscous. Not only was it thirty feet deep but the turbidity or murkiness was much heavier. Turbidity is caused by particles suspended and/or dissolved in the water column.

On June 7, 2010 we went diving at MP 311. That day we took out Rich Matthews of the Associated Press (AP) and documented 30 to 40 foot clouds of dispersed oil, which we later began to call dispersed oil plumes. A photo of the dispersed oil from that dive trip is included in this affidavit as Exhibit 7. We dove to 80 feet that day and took samples from 60 feet below the water surface. After that dive, I was ill for several days. It felt like I had chemical pneumonia. I had burning in my chest, a pounding headache and diarrhea. We were just beginning to see the

⁵ Scott A. Porter. "EcoRigs J Corwin underwater." YouTube. Jun. 10, 2010. <http://www.youtube.com/watch?v=LiDYnq2P2Nk>.

thicker dispersed oil at that time. We didn't know the health threat posed by the dispersants then, so we were not heavily alarmed. Rather, we were curious. At 60 feet deep we witnessed six-foot long mucus like strands of what appeared to be oil that was not completely dispersed. I've never seen anything like it, and I've been diving in the gulf for 20 years. We proceeded to film them.⁶ Due to a shortage of funds, we were unable to test the samples from that dive.

Our EcoRigs dive videos began going public in May 2010 through CBS Evening News. By June 2010 NOAA wanted us to bring them water samples from the sites covered in our videos. During the talks with NOAA, we explained, "We are reef biologists, let us bring you reef samples because they hold information about what compounds are absorbed and suspended in the water column. As filter feeders, they are like a library in that they are biological databases for hydrocarbons that may have been present in the water column." Our contacts at NOAA made it clear that they wanted water samples; however, they asked us to write a proposal to sample reefs. In exchange, we could use VoO boats to take samples from the locations that we identified as significant. We put together a two year proposal for reef, water, fish and tissue samples to profile the water column and organisms from 100 different locations.

For approximately six weeks from July to September 2010, we continued to discuss dive safety and I brought several of our water samples to the BP Incident Command Center in Houma, Louisiana where NOAA was housed. When I delivered the samples I would ask what they found in the previous samples that we provided. In the early stages of our work for NOAA they would tell us that they were still waiting on the lab results. Throughout this time they continued to tell us that they liked our proposals, and they wanted to get EcoRigs funded for five years in order to continue providing samples.

Between July and August 2010, Arkansas State University (ASU) offered to help us analyze our samples as well. We went to Grand Isle, Louisiana and Barateria Bay, Louisiana on three to four different occasions with ASU, and they found high levels of TPHs in the water and reef samples. Test results from those samples are included in this affidavit as Exhibit 8. When I went to the BP Incident Command Center in August 2010 to drop off more samples, I asked one of our NOAA contacts if they found any oil in the last samples. He said that the samples came back negative for oil. I pressed him on it further, and asked if they found any hydrocarbons or contamination in the samples. He replied that they did not find anything; the samples came back clean. I explained to him that was surprising, because we had sent samples from the same diving trip to ASU and they found contamination. He responded, "Oh, you're having them analyzed by a second source?" Shortly thereafter, NOAA didn't want to work with us.

We later learned that through NRDA, BP paid Louisiana State University (LSU), NOAA and an underwater ROV company \$4.3 million dollars to conduct a significantly scaled down report

⁶ Scott A. Porter. "MP 311 susp anom at 15m June 7 2010." YouTube. Sept. 30, 2010.
<http://www.youtube.com/watch?v=Vig4ufCsM84>