Addendum Report to

"Deadly Dispersants in the Gulf: Are Public Health and Environmental Tragedies the New Norm for Oil Spill Cleanups?"



Public Comments on EPA Proposed Rule to Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan that Governs the Use of Dispersants

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> > April 22, 2015



Acknowledgements

Deep appreciation is due to all the whistleblowers and community activists who were the driving force of this addendum report. Special thanks to The ALERT Project, the Louisiana Environmental Action Network, and Ecorigs, which have been invaluable partners throughout GAPs investigation, and to Dr. Michael Robichaux, the savior for so many whistleblowers abandoned by the conventional medical community.

This report is dedicated to Rick Piltz, a devoted environmental whistleblower and founder of GAP's Climate Science Watch program. Rick passed in 2014, yet his impact on the world will continue to be felt through the future generations of activists that he has mentored to shed light on reckless government policies, including the use of toxic dispersants.

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1. Introduction

The 2010 Deepwater Horizon disaster was the largest U.S. oil spill, and second largest in world history. Even worse, evidence suggests that the use of the dispersant Corexit to "cleanup" the spill was more destructive to human health and the environment than the spill itself. On the third anniversary of the Deepwater Horizon disaster, GAP released the report "Deadly Dispersants in the Gulf, Are Public Health and Environmental Tragedies the New Norm for Oil Spill Cleanups?"¹

As we enter the fifth anniversary of the worst environmental disaster in U.S. history, this addendum provides updated evidence that has emerged over the past two years and reinforces original report findings pertaining to Corexit impacts. In the wake of the BP spill "cleanup", the oil industry has declared toxic dispersants its tool of choice for s pill response efforts. If this vision becomes reality, long-term destruction to our health and environment will expand exponentially. Widespread human tragedies documented by Gulf whistleblowers will become the norm after significant spills.

An unprecedented nearly two million gallons of Corexit were used during the BP disaster response. When this product is mixed with oil, a deadly synergy occurs that becomes 52 times more toxic than the oil alone.² The only so-called advantage of Corexit is the false impression that the oil disappears – in reality, the more toxic chemical mixture spreads throughout the environment, or settles on the seafloor.

As offshore drilling expands off U.S. coasts, it is inevitable that other incidents will occur. BP has declared it will continue to use the deadly dispersant as long as the government does not stop it. Notwithstanding grave warnings from the Exxon Valdez disaster and lessons learned from the BP spill, Corexit remains a listed dispersant on the National Contingency Plan (NCP) – the federal government's blueprint for responding to oil spills and hazardous substance releases. However, the Environmental Protection Agency (EPA) is in the process of updating outdated and inadequate dispersant regulations. GAP's report illustrates the imperative for the EPA to implement responsible dispersant regulations that limit human health and environmental impacts.

GAP's evidence comes from those whistleblowers who experienced the cleanup's effects firsthand. For its original report, GAP investigators interviewed 25 whistleblowers from Alabama, Louisiana and Mississippi, conducted extensive Freedom of Information Act requests, and off-the-record interviews with government employees. GAPs latest evidence comes from more than one dozen whistleblowers impacted by Corexit. Witnesses range from cleanup workers and fishermen, to scientists and residents. Together, their accounts produce a frighteningly consistent picture of health and ecological devastation that is starkly at odds with official BP and government statements that Corexit is no more dangerous than Dawn dishwashing soap. GAP worked closely with The ALERT Project and the Louisiana Environmental Action Network to conduct this investigation³.

The updated evidence included in this addendum is consistent with, and in some cases more severe than, the following findings documented in 2013 -

Existing Health Problems

- Coined "BP Syndrome," all GAP witnesses experienced spill-related health problems. Furthermore, 95% report that they continued to experience spill-related health problems as of April 2013, and more than 50% living in affected areas reported that their children and/or grandchildren's health has deteriorated.
- Select effects include: blood in urine; heart palpitations; kidney & liver damage; migraines; multiple chemical sensitivity, including hyper-allergies to common household cleaners; neurological damage resulting in severe IQ loss and memory loss; hyper-allergies to processed foods, causing extreme weight loss; exhaustion and loss of stamina for routine activities; respiratory system & nervous system damage; seizures; skin lesions throughout the body; and temporary paralysis.
- Victims also are extremely concerned about recognized long-term health effects from chemical exposure, such as reproductive damage and cancer.
- Blood test results from a majority of GAP interviewees showed alarmingly high levels of chemical exposure to Corexit and oil that correlated with experienced health effects. These chemicals include known carcinogens.

Failure to Protect Cleanup Workers

- Contrary to warnings in BP's own internal manual, BP and the government misrepresented known risks by asserting that Corexit was low in toxicity.
- Despite the fact that the Occupational Safety and Health Administration (OSHA) has developed a highly-lauded safety training program for cleanup workers, the workers interviewed reported that they either did not receive any training or did not receive the federally required training.
- Federally required worker resource manuals detailing Corexit health hazards (according to a confidential whistleblower) were not delivered or were removed from BP worksites early in the cleanup, as health problems began.
- BP and the federal government, through their own medical monitoring programs, each publicly denied that any significant chemical exposure to humans was occurring. 90% of workers and community residents interviewed by GAP reported contact with Corexit or Corexit based chemicals, and blood test results revealed high levels of chemical exposure.
- BP and the federal government believed that allowing workers to wear respirators would not create a positive public image. As a result, OSHA permitted BP threats and retaliation against workers who insisted on wearing this protection. Nearly half of the cleanup workers interviewed by GAP reported that they were threatened with termination when they tried to wear respirators or additional safety equipment on the job. Many received early termination notices after raising safety concerns on the job.
- All workers interviewed reported that they were provided minimal or no personal protective equipment on the job.

Ecological Problems & Food Safety Issues

- A majority of GAP witnesses reported that they found evidence of oil or oil debris after BP and the U.S. Coast Guard (USCG) announced that cleanup operations were complete.
- BP and the federal government reported that Corexit was last used in July 2010. A majority of GAP witnesses cited indications that Corexit was used after that time.
- The oil-Corexit mixture coated the Gulf seafloor and permeated the Gulf's rich ecological web. GAP witnesses have revealed underwater footage of an oil-covered barren seafloor, documenting widespread damage to coral reefs.
- The Food and Drug Administration (FDA) grossly misrepresented the results of its analysis of Gulf seafood safety. Of GAP's witnesses, a majority expressed concern over the quality of government seafood testing, and reported seeing new seafood deformities firsthand. A majority of fishermen reported that their catch has decreased significantly since the spill.

Inadequate Compensation

• BP's Gulf Coast Claims Fund denied all health claims during its 18 months of existence. Although a significant precedent, the subsequent medical class action suit excluded countless sick individuals (less than 2,000 Louisiana residents qualified), bypassed the worst health effects resulting from exposure to dispersant and oil, offered grossly inadequate maximum awards compared to medical costs, and did not include medical treatment.

2. Human Health Impacts

Five years after Corexit was used throughout the Gulf, the overwhelming majority of original and new witnesses continue to experience adverse health impacts associated with dispersant and oil exposure. The phenomenon has been coined the "BP Syndrome" or "Gulf Coast Syndrome." Consistent with initial reports, symptoms include, but are not limited to: blood in urine and rectal bleeding; seizures; hyper-allergies to processed foods; violent vomiting episodes that last for hours and result in rapid weight loss; weakness and fatigue, at times leading to depression; migraines; abdominal pain attacks; skin irritation, burning and widespread lesions; rashes; inability to withstand exposure to sun; Multiple Chemical Sensitivity, resulting in new sensitivities to everyday household cleaning products or petroleum based products (plastic water bottles); neurological damage resulting in memory loss and severe IQ drop; impotence; heart palpitations; and hypertension. Witnesses have begun reporting long-term health effects, including reproductive damage (such as genetic mutations), endocrine disruption, and cancer.

There remains a dearth of research around human health impacts resulting from dispersant exposure. However, several significant peer-reviewed studies have been released since 2013 that support initial and updated investigatory findings.⁴

A study conducted by the University Cancer and Diagnostic Centers and published in the American Journal of Medicine found Gulf spill cleanup workers are at an increased risk for blood-related disorders, including cancer, as a result of their exposure to dispersants and oil.⁵ The study acknowledged that, "COREXIT used as a dispersant is currently banned in the United Kingdom because of its potential health risks to clean-up workers."⁶ Similar to the methodology employed by LEAN, it examined the blood tests of more than 100 spill workers in Louisiana who were exposed to oil and dispersant with to the blood test results of 130 unexposed individuals. Based on high levels of chemical exposure in the test results for the former group, it concluded, "This oil spill and use of massive amounts of dispersant has the potential to affect human health" and concluded that "clean-up workers exposed to the oil spill and dispersant experienced significantly altered blood profiles, liver enzymes, and somatic symptoms."⁷

A 2015 study conducted by the University of Alabama found that Corexit can cause serious damage to human lungs as well as marine life.⁸ It found that Corexit exposure can damage tissue, and ultimately result in an "obstruction of the airways in humans with exacerbation of pre-existing respiratory diseases such as asthma."⁹ Senior author Dr. Veena Antony stated "There were some 48,000 workers involved in the cleanup operations, and it is possible that workers were exposed to Corexit via inhalation." Similarly, the study reported "Cough, shortness of breath and sputum production" among symptoms reported by spill workers.¹⁰ Dr. Antony concluded, "Unfortunately, the likelihood of another oil spill is high, and the need to use dispersal agents will remain."¹¹

Additionally, LEAN conducted an extensive sampling effort following the BP disaster. Its sampling, combined with the growing health concerns resulted in the creation of the Gulf Coast Health Alliance: Health Risks Related to the Macondo Spill (GC-HARMS). GC-HARMS is a 5 year, NIEHS funded collaborative research project utilizing community-based participatory research.¹²

Whistleblower Record

a. Health Symptoms

I have had the pleasure and frustration of working with a group of ill people who were involved with the Deepwater Horizon oil spill in 2010. I have formally treated over 100 of these victims and have advised or managed about 100 more. WITHOUT A DOUBT, there is a large number of individual who were rendered ill by chemicals involved in the spill and many of them remain ill to this day. Their illnesses were, and often continue to be, severe and different from anything I had encountered in over 40 years of being a physician. While I am not qualified to definitely identify the causes of their illnesses, it appears that the dispersant Corexit is likely responsible for the medical problems we have encountered." (Dr. Michael Robichaux, 1)

"I continue to see and treat innocent citizens who were rendered ill from the oil spill and their illnesses have continued, largely unabated, to this time. Several of these previously healthy citizens are currently on social security and more are requesting the same. Most of these individuals are young and were in excellent health at the time of the spill." (Dr. Michael Robichaux, 1)

"I heard from other residents that when a dispersant plane was flying over Perdido Key it wouldn't close its 'sprayers'. I learned this firsthand. On March 11, 2011, I was sprayed around 8:00 pm. I went to get groceries out of my car and heard a plane. It couldn't have been more than a few hundred feet above me, and the sprayer was wide open. I felt something spray onto my arm, and once it happened, I almost immediately realized what was occurring and held my breath. I ran into my home and instantly threw up ... My arm was red and sensitive as my skin was exposed. I remained sick throughout the night, and I couldn't eat or keep water down." (Lani Kaiser, 2)

"One VOO boat captain (Vessels Of Opportunity – independent boats contracted to help BP clean the oil) I know had 10 workers helping him, and a bi-plane flew over them in the summer of 2010. At the time, he was a big guy almost 300 pounds. When I first met him in 2012, he weighed 200 pounds and was really sick. You could tell from his eyes. He said he decided to work on the cleanup, but BP and the government were basically killing them by the exposure. He can no longer be a captain or swim in the Gulf of Mexico. It scared me because when I saw photos of him before the cleanup, he was a large man at six and a half feet tall, but now he looks like a walking skeleton." (Lani Kaiser, 3)

"I'm experiencing severe health problems now – problems in my blood, the weaknesses, the falling out, the respiratory problems, the nausea, the fact that I can't stand in the sun for 10 minutes. It used to take me two hours to cut all of my grass. I have to do it in days now. I cut a part of the grass and then I have to sit down for the rest of the day and go out the following day and cut some more. My weight constantly fluctuates. During the cleanup I would be in the hospital for one to two weeks and lose a lot of weight due to nausea and violent vomiting episodes." (Andre Gaines, 7)

"My whole team and I were sprayed in late June 2010. We were in a fleet of 20 vessels in a line a plane flew over us as it was spraying Corexit and went along the whole beach line spraying. The wind carried the dispersant and it blew back on us; it looked like a hundred people were smoking

cigarettes in a straight line and there was smoke in the air. I really got the brunt of it because as a supervisor, I was standing off to the side as everyone else was pulling boom out of the water on the other side. After I got sprayed, I told my crew 'This is burning, you all better move.' It felt like somebody threw some hot coffee on my arm. The burning stopped, then it started back up 20 minutes later, and then it started itching." (Andre Gaines, 7)

"[A]fter I got sprayed it all went downhill. My employer said in the beginning that the dispersants were not harmful and would not hurt you. But Corexit is banned from several countries. If it's banned in other countries why would it be OK here? I may not be the smartest person in the world, but I don't get this ... Out of the three [crew members] that I know personally, we have all had the same health problems. Three days after we were sprayed, my skin and eyes started burning, and I was coughing. In early July 2010 I had sores, and in between my fingers stuff was pussing out. I tried to figure out what was going on. The puss bumps and rashes were on my arms, my stomach, my back and the back of my legs. They looked like little tennis balls. Since we put cream on it, it looks like a whole lot of bumps. The ones on my arms looked the worse, which is why I try to cover them with tattoos." (Andre Gaines, 7)

"My weight was readily dropping every time I would go back to the dock. When I began I was muscular, and close to 230 pounds. By the end of working on the cleanup, I weighed 175 pounds. Now, if I stand in the sun too long or in the heat too long, anything I do for too long, I'm falling over weak and dizzy and I can't breathe. I don't know how to say it, but it's terrible." (Andre Gaines, 9)

"I have become intolerant of chemical smells that have never affected me before. For instance, I cannot stand the smell of perfumes, air fresheners, cleaning products or anything that comes out of aerosol cans; I have to remove myself from the smells. I can no longer wear cologne or even burn a scented candle, because anything that releases a strong smell repulses me, as if my body is rejecting it. I never had those reactions before I worked on the cleanup." (Randy Varney, 1-2)

"I have also noticed myself forgetting a lot ... I did not have memory problems before the spill, but now I have good days and bad days. I went to Ohio for a week in the summer of 2013, and I felt much better; my symptoms began to subside. When I returned home I felt the way that I had felt when I left; the symptoms began to come back ... I don't know what is wrong with me. I feel like I have been poisoned, almost as if I'm dying. It is one thing to have symptoms for a week or a month, but I have been through years of ineffective treatment. It's as if the doctors are treating me for something that I don't actually have." (Randy Varney, 1-2)

"I am not the only person who has had health problems since the spill, but it seems to affect people in different ways. When I was a captain, I had a deckhand in his mid-thirties. He would bag the oil and unload it onto other boats. Since working on the spill he has developed heart problems. People who I've known for years and were in fine health prior to the spill are now using breathing apparatuses. One of my friends now has brain cancer. One man who I used to go trolling with for years is now breathing out of his throat through a breathing tube, and the doctors don't know what is wrong with him. He never smoked." (Randy Varney, 3)

"The marina supervisors told me that I did not have to wear safety equipment because I was the

captain and therefore I was not supposed to come in contact with the oil and dispersants. However, that was not true. For instance, when my deckhands were handling the oil boom it would splash on me. I would also inhale the chemicals ... Once my deckhands became HAZWOPER trained they would wear safety equipment, such as rubber boots and tyvek suits, at times, but their faces were not covered and they did not have respiratory protection. One of the deckhands complained to me about the chemical smell, and often my workers complained of headaches and discomfort. Regularly water splashed us in the face." (Richard Russell, 2)

"I regret that no one informed me of the health risks that came with the job. Since working on the cleanup my symptoms range from a constant sore throat to nausea, difficulty breathing, violent vomiting and cramps at the same time. I have stomach problems now, and I never know when they are going to occur ... Now my bones are real sore, and I am in chronic pain. I am achy in my arms and my legs all the time. Before the spill I was in good health and I did not have any of these symptoms." (Richard Russell, 3)

"Whenever we finished for the day we put our equipment away and tried to get out of the oiled areas so that we didn't drift into the dispersant at night. Despite my best efforts, we often couldn't escape it and had to sleep over patches of oil and dispersed oil. After the frequent dispersant sprays, I developed a skin rash, blurred vision, headaches and dizziness." (David Hill, 3)

"The odor from the oil and dispersant was constant. I was the first one exposed to the fumes, because I was located in the front of the boat. The vessels are only a few feet off the water, and I could detect the odor before anyone else. The crude oil had more of a petroleum smell, whereas the dispersant had more of a sharp foul rotten type smell, similar to H2S gas. It would take our breath away and fill our lungs ... I noticed that we had stronger headaches, sickness and nausea when we stayed around the dispersed oil than when we were in the presence of un-dispersed oil." (David Hill, 5)

"In the beginning I had pneumonia-like symptoms, staph infections, and an infected lymph node in my left armpit. I was admitted me into the hospital, and the doctors removed my lymph node ... In January 2011 I was admitted again with pneumonia, and my white blood cell count plummeted to near death. It was at 100, and I had no immune system. I had an infection in my neck that swelled up to the size of a softball." (David Hill, 7)

"Currently I am experiencing chronic itching all over my body, and I have scratched myself so much that my skin is raw in some areas. I have skin blisters that randomly appear, and then they burst and heal. I deal with a tremendous amount of pain. I don't like complaining about how much I hurt, but my bones are constantly aching. It is getting increasingly difficult for me to walk because of something that is going on below my waist, as if a large horse kicked me and the pain won't go away. When I lie down in bed I feel a sharp stabbing pain, and the pain is so acute that I scream. There is no swelling or redness, but when I twist or turn a certain way it results in an unbearable pain. This is just the latest health problem ... I am on disability now." (David Hill 8-9)

"My long-term memory seems to still be intact; however, my short term memory has vanished. I have notebooks sitting beside me right now, because throughout the day I have to make a record of

my actions. Otherwise, I will not remember what I did or still need to do. I even have to refer back to my notes to remember people's names. I rely on my wife a great deal to help me remember things. I never used to have that problem. I used to pride myself on my strong memory, and now I can't even remember a conversation from a few days ago." (David Hill, 9)

"What will happen to us? Prior to the spill, my friend had cancer of the stomach but the doctors had removed it all. After the spill he developed it again and passed away. Another friend found out that he had cancer six months ago and they will bury him today. There are so many people on our bayou dying from cancer. A 40 year-old mother who is a neighbor of mine developed rare cancer of the appendix after the spill. The doctors told her that the cancer is ongoing and there is no cure. She goes into remission and then the cancer comes right back. In addition to rising cancer rates, we have so any allergy problems ... Most people in our community are also living with awful sinus problems and migraines now. These problems were not common during previous oil spills or prior to the Deepwater Horizon disaster; they became widespread in the aftermath of the BP oil spill." (Confidential Whistleblower, 3)

"We've been impacted health wise down here, me and the rest of the people here, and you still have a lot of people here because our entire community is either in the oil field or commercial fishing. The problem is that a lot of the families are in both. A lot of them will never say anything like, 'since the spill I've been sick', whether they have become diabetic or are on heart medicine because of the heart palpitations that we all dealing with. I still deal with them today. They will never point the finger at the oil spill because they are so tied to the oil industry. The oil companies don't play. You fight them, they fight back and they fight dirty. They lay everybody off." (David Arnesen, 1)

"One of my other friends died in December 2014 at 36 years old. Last year one of my other friends had to have her thyroid cut out. Another friend eight months after her had to have her thyroid cut out. My mom just fought cancer ... Before the spill it was never the situation where every weekend you have to decide which funeral to go to, because there are now two to three funerals almost every weekend. My girlfriend who died in December at age 36 has three kids. She wasn't even sick beforehand; she woke up to a heart attack and died. She didn't smoke or drink. My other friend Carla just died of a heart attack as well ... Another friend of mine shot himself after his son was diagnosed with a terminal illness. His son died a month after his suicide from brain cancer. Another friend of mine just died of cancer eight months ago, and I didn't go to his service or their sons' services. They all lived in this community. It's like waiting for the other boot to drop. Who's going to be diagnosed next?" (Kindra Arnesen, 5)

"After my health problems escalated, I finally broke down and went to the doctor in late July of 2010. My wife chose a doctor out of the phone book. My memory was really bad so I made a list of symptoms and it probably included 20-25 issues on it. My skin crawled and tingled all the time as if my hands and feet were asleep, I was extremely weak. I never needed glasses before the spill, and now I have blurred vision and I have to wear glasses. I get chills too. I developed a rash that to this day only occurs when I come in contact with certain things. Anything from soap to deodorant would set me off, and fabric softener is really bad. I can't wear cologne or aftershave, and I can't even have hairspray in the house." (Rocky Meadows, 3)

"My memory became very sketchy. I knew that I was losing my mental capabilities. I would get confused, and eventually it evolved to the point where I couldn't drive my own car. I couldn't focus and I forgot what if a red light meant stop or go. It got so bad that I couldn't use my phone to call someone when I got lost and didn't know how to get back home. I couldn't watch TV in color; I had to watch black and white shows because they were simple, and I couldn't follow stories. Mentally I was destroyed. It was the worst in November 2013; that is when I bottomed out. I was sitting on my couch and I called my wife to tell her what my final arrangements were to be. Fortunately, it hasn't come down to that." (Rocky Meadows, 3)

"I have always had migraines, however, immediately following the oil spill and Corexit spraying the intensity of my migraines became greater, my breathing suffered, and I developed severe insomnia. My lung capacity was not nearly as low before the spill. Urgent Care told me that I had bronchitis, and my oxygen level was at 96 percent. I have always had an inhaler but never used it every day. After the spill, I've had to use a breathing machine ... Now I feel like my body is constantly tired, but it comes in waves. My white blood cell count elevates every time I don't feel well, and my stomach is always upset. I never had stomach problems as severe as they are now. Every time I eat now, I must remain close to a restroom or else I am in trouble, and I have lost 40 pounds since 2010. (Lani Kaiser, 3-4)

"During the spill, my sister lived in Peninsula a resort golf club area in Gulf Shores, Alabama. It consists of nice homes and condos directly on the Gulf of Mexico and Mobile Bay. As bi-planes sprayed, dispersants were distributed along Mobile Bay. The planes would fly across the Peninsula resort, and several homes/condos were exposed. Since the spill, my sister has been very sick with severe lung problems, although she was never a smoker. She has been hospitalized several times over the past few years, and her immune system is low. Several people in Peninsula are still sick from the exposure." (Lani Kaiser, 3)

b. Vulnerable Populations

"Within days of when I began working, when I would come into the house our son would swell up immediately ... When my wife went to the doctor they asked what he was exposed to and she explained my job and they said, "That's probably the problem.' A friend of mine's son who I worked with had problems too. He would break out in hives and when he went to the hospital, they treated him for scabies. It's still bothering him. It itches and irritates him real bad." (Andre Gaines, 11)

"I would hang a lot of my clothes in my mother-in-law's room because there was space ... My mother in law died in February of 2011. My wife later discussed whether some of the chemicals that I wore home on my clothes could have affected her, so we had an autopsy done. We got her autopsy back, and they said there were chemical and breathing and respiratory problems. She already was on oxygen sometimes and had some breathing problems, but she was living well for the most part and was fine. Then instantly after I got my oil spill job she would start coughing, almost choking, and we never even thought about a possible connection. Then out of the blue she passed." (Andre Gaines, 11-12)

"The first week or so in July 2010 we had unusually strong breezes off the Coast blowing toward us. In early July 2010 I was in my front yard with another man named Carl, when we were overcome by a cloud of chemicals ... We made eye contact with each other like 'What just happened?' We both dropped immediately down to the ground. Carl remained on the ground in pain. He was holding his stomach and vomiting profusely. He forgot who he was or where he was right after that. I ran inside to my bathroom immediately and I was sick everywhere ... We eventually got Carl home, and his family carried him to the emergency room. He stayed in the hospital for four days. The doctors could not point to anything other than to say that they thought he had stomach ulcers. The man had never had ulcers on his life, however. He never fully recovered, and he eventually died. Carl was in his 70s." (Rocky Meadows, 1-2)

"My in-laws and I were located southeast toward the blowout, and we could see Corexit and oil in the water. At least it looked as if it were Corexit, because it made a brownish beige foam. [My wife's] dad didn't want to take the boat in it, so we headed back in as it was getting toward the evening. During the return, we ran over something and the boat got stuck. I had to continually dive into the water to try and unwind some metal material from around the wheels ... During the period of time that I was unraveling the boat, they were spraying the Gulf with what we believed to be Corexit. Our boat got sprayed and [my wife's] parents got sprayed ... They both got sick on the boat and had severe headaches. They told me that they were feeling nauseas and dizzy, so we had to get back as fast as possible. After we returned to the dock, my mind went blank for a few days." (Rocky Meadows, 2)

"Both of my in-laws have since passed. Within about three months of us going out on the boat, my mother-in-law began to show signs of mental impairments. Within six months she had Alzheimer's ... Her rapid deterioration surprised all of us, because she had been in good health before the spill. My father-in-law seemed to be in perfect health before the spill. He was one of those guys who never even needed to go to the dentist. He had donated a kidney to someone a few years earlier, and the only kidney he had began to shut down." (Rocky Meadows, 2)

"[My daughter] Aleena started to get sick in September of 2010. We put her through the detox program, as well as our entire family, and my headaches and sinus problems got better. Aleena seemed to get better and then it came back all over again. With my son David, almost every time I turn around he has a sinus headache and tells me 'I don't feel good'. My mom barely made it through cancer last year. I have been to eight funerals in the last six months. My concern now is what does this hold for their future? Am I going to take them into the doctor for their headaches and the doctor says, 'Well, Aleena needs a CT scan and oh, she has brain cancer or bone marrow cancer or lung cancer.' You get scared to go to the doctor. These are my fears for my children." (Kindra Arnesen, 5)

"I thank god on a daily basis for the health that my family does still have. I pray for my husband's health and I pray for us financially, but I also pray for these other kids in our area and these families that are struggling with these illnesses, some of these kids are much sicker than mine ever got. The one little girl, who is the sickest I found on the Gulf Coast who is still alive, has been sick like this for five years. She is only 10 years old, and she does not recall what it was like to be well. She does not remember what it was like not to be scared from head to toe and her hair falling out and her skin

seeping out and her body scarred from head to toe, and not being able to breathe. She does not recall what it was like to live a normal life before the spill. She lives two streets over. Her grandmother had to go on two inhalers since all of this happened, and she died in November of 2014 at age 52. She was one of my closest friends, and she was raising this little girl. The kids are back with their mom now, and the little girl's health remains bad." (Kindra Arnesen, 5)

"My two daughters have also had health impacts problems since the spill, although both of them rarely ever got sick before the spill. They are only 28 and 30 years old. My 28 year old was 23 at the time of the spill, and she was living with my wife and me. At the time her daughter was one years old, and she is often sick now as well. My younger daughter has one health problem after another. She is on medication to balance out a hormonal imbalance that developed after the spill, and she has had reproductive problems. She is also on medication to stimulate her mind, because she now experiences mental fatigue. Before the spill, she had never been on medication. My older daughter's son was born about a year after the cleanup, but he was born prematurely. Some of the doctors think that the Corexit may have impacted him. His lungs and vision were not fully developed." (Rocky Meadows, 1)

"We don't know if it's from the oil, the dispersant, or the combination of the two. But you can only fill a glass so full before it overflows, and the human body is the same way; you can't take that much chemical exposure and be ok with it ... When is it going to go from primarily the adult size casket to a kid's casket? We already have too many sick kids, with brain tumors and cancer. There is another young girl who was a published author at 13 years old, she is about to be 18 now. Right after the spill her eyes started rolling back in her head she got a brain tumor. Her mom is sick, the middle child in her household had to stop playing football because of heart problems, and the little one has nose bleeds, hair falling out, stomach aches and headaches. It's everywhere down here, but you can't convince people that it's related to anything to do with the oil field. Physicians are just diagnosing the illness and treating the illness, they aren't treating the cause." (Kindra Arnesen, 5)

c. Medical Response

"One of the things we can do to assist these individuals is to have them go through a selfdetoxification program by using a sauna with niacin and exercise. One of the fathers of a victim recently wrote back to me explaining that his son has experienced a very objective improvement with what he was doing. His son had worked the spill." (Dr. Michael Robichaux, 1)

"[After I was sprayed by Corexit] I kept throwing up, and my mom asked if I wanted to go to the hospital. However, I already knew people who were sick, and the hospital wasn't helping them. So I didn't know what to do. By that point, my sister was already sick, and each time she went to the hospital someone looked at her like she was crazy. I told my mom I would wait it out. The next day I was fairly sick, so I called 'in sick' to work. I stayed home and slept drinking lots of liquids. The area on the left side of my upper forehead would swell. It became so bad the following day that I went to a primary care doctor in Perdido Key. He said that my white blood cells were crazy. The doctor asked if I had an inflammation disease. My mom looked at him and said, 'No, last night she was exposed to Corexit' and he replied, 'Well what does that have to do anything?' ... This was almost a

year since the spraying, and the doctors still didn't believe there were any health problems associated with exposure to Corexit." (Lani Kaiser, 2-3)

"I've been to two different neurologists, and both said I have migraines with nausea and stomach issues. I found a holistic doctor in Orlando who took an MRI and found that I had four transient ischemic attacks (TIA), mini-strokes located on the left side of my head. In the beginning the left side of my forehead would swell, my left eye would twitch, and tremors would be frequent. If I take high concentrations of Niacin, B-6, B-12, and Vitamin C, they help to relax the symptoms. My migraines and stomach seem to be connected. If my head hurts then I will have nausea. Smoothies and coconut water help lower the intensity levels." (Lani Kaiser, 4)

"I saw a toxicologist in Baltimore, Maryland about three years ago when I was living in Auburn, Alabama. A friend had contacted me to explain that the toxicologist was creating a health database related to the spill. The lab where he worked is associated with John Hopkins, and they are creating a database of people involved in the spill or who have been exposed to chemicals from the spill. He wanted to track my medical symptoms about once a year. During our last call in 2012, he was direct and said that he wanted to tell me something that most doctors may not say. He warned me that in the next five to ten years things would change for me. He said he couldn't pinpoint it, but he was concerned that my health may domino or get worse. The best advice he could give me is to make as much money as I can now because I may soon be at the point of having to take disability. He told me this as my body feels worn out and tired." (Lani Kaiser, 4)

"The woman at Ocean Springs Hospital asked ... me about my breathing and listened to my lungs. She said 'Oh, it sounds like you have asthmas or bronchitis.' I've never had respiratory problems before in my life, until working on the cleanup. She asked if I smoked cigarettes and I responded that I didn't. She said 'Your lungs sound like you smoke 10 packs a day.'" (Andre Gaines, 8)

"I told [the hospital] about the conditions that I had been working in during the cleanup, and about being sprayed. They did not treat me for chemical exposure, however ... They kept saying my problem was viral and will go away tomorrow. However, it never went away the next day; it went on for weeks ... They finally took my blood and said that I had benzene poisoning in my blood in high levels." (Andre Gaines, 8, 9)

"[D]uring the one year anniversary of the Deepwater Horizon explosion, I went to DC for PowerShift, an environmental conference. I met with Lisa Jackson, the head of the EPA, Stacy Elmer of Health and Human Services, and an admiral from the Coast Guard ... I asked the HHS representative why the doctors are not treating me beyond my symptoms when I go to the hospital? ... She responded, 'No one is coming forward – the workers are not coming forward...' And I've got all of this paperwork, and I was coming forward. Then I asked the admiral toward the end of our meeting about the use of respirators ... His response to me was, 'Since the heat is so tremendous down on the Coast, they would rather not provide respirators, because you would take it on and off of your mouth and you run the risk of contaminating your digestive track with oil.' As if breathing it is ok? ... With my lungs I will continually breathe in these chemicals." (Andre Gaines, 13) "I had all types of doctors coming by my bedside to study why I could not produce white blood cells. I had a blood transfusion and a toxicologist removed bone marrow twice. He couldn't figure out what was wrong with me either ... my right leg turned red and it was incredibly painful. It looked like it had been in a deep fryer, and it has blisters all over it. I thought I was going to lose my leg. They removed my gallbladder and later did surgery on my groin and removed an infectious material from that area. They also gave me foot medication because they were concerned that I had Stevens-Johnson syndrome, which is a potentially fatal skin disorder ... I also became anemic after working on the spill." (David Hill, 7)

"National Institute of Environmental Health and Sciences contacted me about their 10-year Gulf Study. They took blood, toenail, fingernail, hair, skin and urine samples. They said they would be contacting me every three months; however, I have not heard from them. Supposedly they want to monitor me for 10 years to study what the health implications are for those of us who worked on the cleanup. However, they are not offering treatment." (David Hill, 9)

"The doctor I met with explained that my liver probably is not functioning correctly and my gullbladder needs to be removed immediately. I may also have a problem with my pancreas. My tonsils are inflamed and probably need to be removed as well. He explained that my nasals and ear cavities are inflamed. One of my tonsils is bigger than the other with bumps all over it. He said it was a possibility that I was exposed to chemicals while working on the spill. He could notice that my eyes looked drained and aged as well. I used to look and feel much healthier. It worries me because I am only 45 and I have never had a history of poor health ... I do not have a regular doctor because I cannot afford one, so I just live with my symptoms." (Richard Russell, 4)

"When we first brought Aleena to Children's Hospital we said we were from Venice, and we shared the history and our concern about being chemically exposed. Kindra said, 'We would like to have a Volatile solvent profile done so that we can see what she is exposed to.' That doctor replied that if we felt like we'd been exposed then that is where we would have to start. She wrote the prescriptions for Aleena to be tested for the Volatile Solvent Profile, and when we called the lab for the results they said the order has been cancelled by hospital administration. This was in 2011. All four of us had the blood tests done and our results were high in Benzene, Xylene and Ethylbenzene" (David Arnesen, 6)

"Before I had the blood tests done, they had that Eco Gulf Restoration Task Force meeting in Pensacola. They provided a print out that explained you could get [VOC] chemicals in your blood by pumping gas, smoking cigarettes, and so forth and I'm like, wait a second, how did my eight year old at the time get [chemicals] in her system?" (Kindra Arnesen, 6)

"Before my father-in-law passed he was in the VA hospital in Jackson, Mississippi, and his doctor was a real nice man. He asked me if my father-in-law had helped out with the spill with his boat. I explained that he didn't help with the spill, but he was down there every weekend on his boat. The doctor said, 'That's what I thought,' and that was the end of the conversation." (Rocky Meadows, 3)

"The office in Mobile did extensive blood work on me. The first time I met the specialist doctor he was reviewing my bloodwork. He said 'My god', and then he put my paperwork down and said, 'You

need a lawyer, son.' I said that I thought I needed a doctor. He said, 'You need a lawyer.' He told me that my liver is 29 percent full of chemicals and I had been exposed to something ... After a year or so of seeing the specialist, I was not getting better so he sent me to a very well known and respected forensic psychologist named Dr. Daniel Koch in Mobile, Alabama. The specialist wanted Dr. Koch to evaluate me for more than one reason." (Rocky Meadows, 3-4)

"Dr. Koch ran every test imaginable, and he reported the findings back to the specialist. He wrote a letter explaining that he believed I have health impacts from the oil spill. He had other patients like me, and some had the same chemicals in their body and symptoms as me. Dr. Koch wanted me to get a lawyer, and he wanted to offer to be an expert witness for me. He was known to fight and go to court on situations where other doctors would not want to represent you in court. One doctor explained to me, 'Whatever I was to say, BP would have 10 doctors saying that it's ignorant and I'm stupid, and I just can't go through all of that.' The specialist explained that he needed to be seeing patents, not a judge or a jury. But he knew that Dr. Koch would fight it. Unfortunately, after I began seeing Dr. Koch he had a stroke, and he can't practice anymore." (Rocky Meadows, 4)

d. Is the Gulf Toxic?

"Tomorrow is not promised to anybody, but BP is speeding up my death and thousands of others. I know people who didn't even work down there, but ... they lived by the water, and the dispersants were being sprayed over their homes ... I know a woman who had a house 50 feet from the beach. She said that she was scraping the dispersants off the top of her car with a butter knife into piles. If you look at a picture from last year of another woman I know, she was obese. You look at her this year and she is skinnier than 120 pounds. Now she has tumors and blood bleeding from her lungs and all of this kind of stuff, but BP and the government are still saying that there was nothing wrong with Corexit, just as the government said Agent Orange was ok to use." (Andre Gaines, 17)

"During the cleanup there were frequently strong winds at 25 to 30 miles per hour. I believe that we were exposed to the Corexit, because the chemicals from it became airborne or got into the water. I frequently detected a chemical detergent smell on the days that Corexit was sprayed ... To my knowledge, BP and the government were only supposed to spray Corexit offshore, not inshore, but it looked like there was dispersed oil inshore. The foamy water would spray the other workers and me in the face. I would come home with my shirt covered in brown spots from where the water splashed me. Shorty after those experiences - within the first month on the job - I started to feel abnormal, as if had a bad cold." (Randy Varney, 1-2)

"During the cleanup my eyes often burned and my nose bothered me. The chemical smell was the most difficult part of the job; it was strong and constant. My dad lives on a lagoon on Gulf Shores and to this day you can smell it from his house. I was coughing all the time and it was difficult to breathe out there because it was hot and I constantly smelled the chemicals from the spill. It smelled like something in the air was burning. I didn't think to ask for safety equipment, however. We were focused on cleaning the oil, and I was told that I did not need any protections." (Richard Russell, 3)

"I am hesitant to even come in direct contact with the Gulf water, and I know we have tourists down

here who swim in the Gulf. BP did not want to warn the public of the ongoing public health dangers resulting from the spill ... I'm concerned that people who do not know any better will swim in it and get sick and possibly get cancer later down the road. I do not go swimming unless it is in a pool." (Richard Russell, 4)

"They were spraying dispersants everywhere around us because this is what the mayor, Robert Craft, wanted. He was convinced this was the quickest way to make the oil disappear. He was a proponent of Corexit because he didn't want to see any oil in the Gulf of Mexico. I felt like it was too soon to open the water only three or four months after the spill. However, Gulf Shores and Orange Beach generate close to 50 percent of sales and lodging tax for Alabama. In 2010, we didn't visit the beach after the spill, but we had family members that did. I have a first cousin who sat on the Gulf Shores public beach the first day after it re-opened. A year later, she developed a brain tumor. It doesn't mean it's necessarily related to the spill, but we are concerned because we know she swam in the water." (Lani Kaiser, 1)

4. Ecological Impacts

The more toxic Corexit/oil mixture coated the Gulf seafloor and permeated the Gulf's rich ecological web and food chain. Whistleblower reports, empirical evidence, and peer-reviewed scientific research all have shown far greater damage than the government predicted at the time of the BP spill when it authorized unprecedented dispersant use. Moreover, rather than "cleanup" the oil, Corexit dispersed it into the water column and sunk it to the seafloor. In 2014 as much as 10 million gallons of oil were found buried in the Gulf seafloor, and dormant oil continues to be unearthed in the aftermath of storms and hurricanes.¹³ Coral, which are sensitive to environmental changes and play a central role in the Gulf ecosystem, continue to experience widespread damage and unprecedented mortality five years after the spill. Gulf fishermen, divers and coastal residents continue to witness the devastation of dispersant use on a daily basis. Corexit not only disrupted an entire ecosystem, but a way of life for coastal communities that recreate in the Gulf and survive on seafood for commercial and subsistence fishing.

A 2013 study by GAP witnesses found that polycyclic aromatic hydrocarbon (PAH) levels in Gulf seafood far exceeded EPA permissible threshold for human consumption when the fisheries were reopened. It also documented high PAH levels in Gulf sediment, seawater and biota.¹⁴ In 2013, research by the Society for Experimental Biology found, "though chemical dispersants may reduce problems for surface animals, the increased contamination under the water reduces the ability for fish and other organisms to cope with subsequent environmental challenges."¹⁵ A 2014 study found that "methane-derived carbon entered the food web through small particles" in the years following the BP spill.¹⁶ Consistent with those findings, GAP witnesses explained how marine life uptake of small dispersed oil droplets would contaminate its catch and result in oiled seafood. Whistleblower from the fishing industry reported that 2013 and 2014 have been their worst years for fin fish and crab yields.

The damage on Gulf coral is arguably the most devastating and revealing of impacts documented in the five years since the BP spill. Corals, comprised of hundreds of individual animals known as polyps, are sensitive to environmental changes and help to assess the full impact of the disaster. Moreover, deep-sea coral provide habitat for many other life forms, including fish and invertebrate communities.¹⁷ Like other marine life, coral often pray on microscopic organisms found in the water column such as the contaminated zooplankton. In addition to the 2013 report conducted by GAP witnesses that found visible signs of polyp mortality in the majority of coral colonies collected off the coast of Grand Isle, Louisiana¹⁸, a 2015 report cautioned that "[1]ittle is known about the stress response of these foundation species yet they are increasingly exposed to anthropogenic disturbance as human industrial presence expands further into the deep sea. A recent prominent example is the Deepwater Horizon oil-spill disaster and ensuing clean-up efforts that employed chemical dispersants."¹⁹ During its examination of coral, it found that higher concentrations of dispersant alone and the oil dispersant mixtures resulted in more severe health declines than exposure to the oil alone.²⁰

Whistleblower Record

a. Oil Not Gone

"Days before the fourth of July [in 2010], BP increased its cleanup crew numbers to try and make the beaches look clean in time for the holiday ... Instead of cleaning the oil, however, beach cleanup crews were instructed to survey the beaches and cover tar balls with sand ... I started dumping sand over the giant tar ball like he told me to do. He had me cover it as much as possible, but I tried to leave spots open so people could see the tar ball was there ... I thought to myself, wow, who do you tell when things like this happen?" (Andre Gaines, 4)

"It hurts me to now see the kids digging in the sand, because in many cases the beach cleanup workers covered up the oil with sand. The workers made videos of this practice and posted them online, and I also saw reports of it on the news." (Randy Varney, 4)

"Dispersing the oil into the water column was the worst thing that BP and our government could have ever done to our environment. Even when they had the boats there to pick the oil up and they had the equipment on a beautiful slick calm day, the boats would locate big patches of oil and then they would be sent away so that the planes could come to spray it with dispersant, rather than remove the oil mechanically." (Kindra Arnesen, 4)

"Our job was to find the 'workable' oil - oil that had not dispersed yet. We could not collect the oil in locations where dispersant was sprayed, because it just made a long sheen of miles of little orange and purple droplets and bubbles floating everywhere." (David Hill, 2)

"When we came back from inshore and could only find dispersed oil, we went to ground zero at the site of the Deepwater Horizon explosion. Dispersant was being injected at the wellhead, and we saw a lot of dispersed oil. When the oil was dispersed at the seafloor, it went through different currents in all different locations." (David Hill, 3)

"My sister and I are avid seafood eaters and beachgoers, but neither of us would eat the seafood, go to beach, or swim in the water after the spill. My sister is now living in Seaside, Florida. When there have been bad storms in Seaside, the beach and water become covered in oil. It only takes one good storm to wash the oil back along the shore which is strange for this area." (Lani Kaiser, 3)

"I believe the difference is that when the oil is floating on top, it's like bamboo, so it's not penetrating on the top. When you sink the oil into the roots, it kills it ... The dispersed oil came in from the Gulf and went into the vegetation. It looked like you had sprayed RoundUp into the marsh for 60 feet of our coastline. It killed Catfish Bend and Jackass Bay in the surrounding shoreline, and it has increased coastal erosion. Later we came across oil floating during hunting season from another spill. The oil was not dispersed, however. When we went back to the same area this year, the vegetation and shoreline was still there. The oil itself doesn't kill the vegetation, but when they disperse and sink it, it kills it." (David Arnesen, 1)

b. Seafood Devastation

"[S]ince 2011 we have been catching shrimp that are deformed. I have worked in these bayous and canals my whole life and I never saw shrimp like this before the spill, especially inshore where the shrimp are born and raised. Some look like they had acid dropped on their shell, or they have black gills and tar. Some of the shrimp have sores and tumors on both sides of their heads and discoloration, as if they are rotten but still alive. I only come across a few shrimp without eyes, but some shrimp have eyes that are clear and not fully developed. If you take the heads off the shrimp often look fine, but if you take the heads off and put them in a bag and let the gook ooze out then it turns your stomach." (Randy Varney, 3)

"Just like the beaches, I don't know if the shrimp are safe. The government said it has tested the public beaches and seafood for chemicals, but how am I supposed to feed the shrimp to people when I am catching deformed shrimp?" (Randy Varney, 4)

"As a tour guide I occasionally fish, but I am scared that the water is still contaminated with dispersants and oil. It is difficult not to avoid coming in contact with the water as a guide, however. At times I get small cuts on my hands and then the open wounds are exposed. I'm concerned about touching the water due to the dispersants ... Now I do not know whether or not the Gulf seafood that we catch is contaminated." (Richard Russell, 4)

"Until recently, I helped run a seafood restaurant in Louisiana. [The owner] and I decided to close the restaurant after we realized that the seafood we served was contaminated by oil. I could not bear to serve other people's children and grandchildren a product that I did not want my own children to eat. Gulf seafood is being shipped all over the world. Who is going to take care of those made ill by contaminated seafood?" (Confidential Whistleblower, 1)

"We specialized in boiled seafood, and offered boiled crabs, shrimp and seafood platters ... One night in June 2012 when we were serving boiled crabs, a patron was eating the crabs and said that she couldn't get a black substance off of her hands, even when she scrubbed it with a napkin. She showed me that when she opened the back side of the crab and squeezed it, a black oil-like substance came out of it. I asked if she would mind if I documented it, in the event that she got sick ... I proceeded to give her a wet paper towel with Dawn dish washing liquid and the black substance on her hand came off right away. She then proceeded to keep eating the crabs, at which point I panicked and said, 'Let me get you some fresh crabs.' I had never seen anything like that before the oil spill; I was shocked." (Confidential Whistleblower, 1)

"After the patrons complained about the soft shell crab we decided to stop selling them; we were scared of someone getting poisoned. Folks weren't complaining about hard shelled crabs at that time, but we started findings problems with them as well. After the first oiled crab incident we started paying closer attention and noticed more crabs that looked like they were contaminated with oil. We also started looking more closely at the shrimp; to our surprise, they frequently had no eyes and their heads contained a thick black substance. I didn't know what it was but [the owner] explained that it must be oil." (Confidential Whistleblower, 2)

"[The owner] wanted to figure out what was wrong with the crabs. He put them in a tank and

placed 10 gallons on cooking oil into the tank. Within days, the cooking oil had disappeared. I believe that the crabs were exposed to Corexit and the Corexit is responsible for this. If the Corexit is going to eat the oil that fast, what is it going to do to a person? [The owner's] processing plant was peeling crabs and he wanted to make sure they weren't contaminated. He contacted the Louisiana Department of Health and Hospitals, and it told him to get a black light to identify any contamination. [He] has photos of the crab under a black light that identifies chemicals, and the crab meat and shrimp are a neon blue color under the black light." (Confidential Whistleblower, 2)

"In 2011 we found black sludge in the fish. In 2012 we found tumors and sores in the livers and stomachs in a percentage of our catch offshore, along with holes penetrating the flesh of the fish. We saw visible signs of oil and damage to the fish in as high as 30 to 35 percent of our offshore catch at one point. As the years progressed the fish began to die off. By 2013 we saw almost a complete devastation in some species. We could find almost zero bait on the water's surface, no matter where we went in our area of the Gulf. In 2013 our mangrove snapper collapsed. In 2012, 2013 and 2014 we have seen a collapse in the king mackerel and amberjack, both of which we fish. Normally when we catch a greater amberjack it is a big fish, anywhere between 35 and 95 pounds. It's normally a head and a really big body that bows out. Now, its head is bigger than its body because they are so under weight. People don't understand that the reason the fish are under weight is because the bait source has been compromised. When you start pulling links out of a chain of life in a body of water, it has a ripple effect." (Kindra Arnesen, 3)

"Now we're not seeing the black sludge or sores that we saw before, but the population has decreased. Fishing is where I make the most money. Yet, BP paid the least amount of money to compensate for fin fish." (David Arnesen, 3)

"Our season last year and the year before were devastated. We had very few king mackerel. They are migratory fish and they won't stop if there is nothing to eat. They will keep going until they find a bait source that they can live on. That is the reason that we always had a lot of king mackerel and now we don't have them." (David Arnesen, 3)

"Here in Louisiana, our shrimp on average before the spill was about 100 million pounds a year. In 2013 Kindra called and asked the docks how many pounds they were down. On average they were about 51 percent down; that is approximately 51 million pounds of shrimp that is not being caught. That's a lot. I shrimp and I know everyone here who shrimps, and we know our catch is down by about half in pounds." (David Arnesen, 3)

"In 2012 I was fishing amberjack in January and February. We caught 10,000 to 12,000 pounds and they were full of roe. From March through May fishing was closed, and the remaining quota we have left over after the January opening then reopens in June. When we started back in June, they still had roe. When you have an entire spawning that doesn't happen then it will really impact the fish stock. The fish are having severe reproductive problems. Even in south Florida in 2012 the mullet roe did not mature, so there was a Gulf wide impact in the spawning process." (David Arnesen, 4)

"It really makes you sad looking at our government agencies and our government itself. Those are the people who are supposed to be in place to protect us and our environment. After the spill we realized that they are the people attacking us from every direction. It was just like when they told us that we had to go back to work and catch the seafood. We were worried about contamination, so we went to one of the large meetings with EPA and FDA. There are not many docks between here and Grand Isle, maybe 10. We suggested that they put mobile units on the docks. When the boat comes in, we could pull a couple shrimp out and run a chemical test. If they are good then we could sell them. If they're not good then BP should buy them. They responded that the technology and equipment was not available for them to do mobile testing. Did you see the sniff test? Come on." (David Arnesen, 6-7)

"About two years ago a friend of ours went out shrimping, and he came in with a whole bunch of shrimp that has blisters on them and no eyes and black gooey stuff and he wanted them tested. He explained that he didn't know who to call or what to say. So we sat at my table and I called the FDA on speaker phone. We asked them, 'Who do we send this product to in order to have it tested and to make sure it is safe? Do you have someone to test this product?' They responded that it is up to the boat owner and the processor and manufacturer to make sure that the product they are selling is safe. They explained that the FDA is not required to test our product." (Kindra Arnesen, 7)

"I have always been one of those people that if I wouldn't eat the fish off my boat then I'm not going to sell it. We're catching less now, so I go to the middleman now to try and get a better price to try and make the money that I was making with less fish. When I started going to these guys, they were so impressed with how well I take care of our seafood that they wanted me to do Skype videos ... They wanted to document the whole process that occurs within 24-hours, because we provide such a high quality product and that is what we strive for. When I'm catching these fish, if I could see anything wrong with them then I would throw them back. No one paid me for a third of my catch that I was throwing back. Worse off, you can't necessarily see the chemical exposure." (David Arnesen, 7)

"In 2011 when we were gutting some of our fish, their entire gut was full of the black sludge, the oil. Some had consumed so much of the oil through the bait fish that it had passed through the stomach wall, through the entire cavity through the meet, and you could see the oil under the scales. This is after the fisheries were open. Up to a third of my catch was like that. We arrive at the dock and the NOAA biologist is there. I gut the fish and we put them in a bucket, and she explains that Louisiana State University does the testing for NOAA and she would take them there. We waited and waited and waited and were eventually told that they disappeared." (David Arnesen, 8)

"We normally have two operations. Bayou Side is the live crabs and raw product. Cajun Crab is the factory that provides our boiled and cooked product. We haven't had enough crabs to operate Cajun Crab since November. That's really odd, because normally we will go until the middle or end of January before we start shutting it down. Crabs this year and last year have been two of the worst years for crab amounts that we've ever seen. It's as simple as that. Crab amounts in this area, from Morgan City all the way to the East, are the worst they have ever been. The last two years have been the worst. Everyone has been changing the way they do things around here in order to survive. They have been cutting back here, cutting back there." (Eric Blanchard, 1)

"Usually at this time a year we ship at least 30 to 40 boxes a day. Yesterday we shipped five boxes

total. Early spring is when crabs start coming, but you can see that the numbers are not there. They have huge differences in the production, from Morgan City eastward. Everyone is complaining, and the key indicator for me that something is wrong is the number of crabs. The landing data for crabs has to be off, because I see it here. The biggest concern is the lack of seafood production." (Eric Blanchard, 1)

"If BP would look at the money made by these companies that would say everything is back to normal, but it's not. Even though fishermen made some money last year, it was because the price of oysters and crabs are high. It hurts our company because we make our revenue from volume, not price. Now a number one crab, the large male crabs, is \$5 a pound. That is unheard of. The highest they got before the spill was in the \$2 range. Number two males are \$3.75. They were in the \$1 range before the spill. Females barely got above the dollar before the spill, and now they're at \$3.50. For me to buy oysters I have to pay \$45 a sack. Before the spill I would pay \$20 to \$25 for a sack. The oysters aren't doing that great. That is the situation we're in; everyone has to alter their way or doing things in order to survive. And unfortunately, we are in survival mode. "(Eric Blanchard, 1)

"I have been in business since 1980. That is when I started crabbing and started selling crabs ... I started a crab factory, and my idea was to keep growing ... The crabs here are the same color as the Chesapeake Bay blue crabs ... From Lake Charles to Venice, they all sell their crabs to Baltimore ... A lot of people don't understand that these crabs go to Baltimore and the East Coast. Most people don't know that they are eating polluted crabs. They are sold as Chesapeake Bay crabs but they're from Louisiana. The Baltimore truck was here earlier to pick them up, but they didn't come today because we didn't have enough crabs. The worst part is in Baltimore, because they steam the crab. They add the spices and people eat the crab with their hands. That's the most dangerous because the shell is contaminated and people touch it and then eat it. It's the same with the shrimp; most people don't remove the black line, but that part is the most dangerous because it is the feces. BP sank the oil to in the bottom of the ocean now, so the shrimp and crab and are eating the dispersed oil. When the seafood eats it, the people also eat it. You don't have to be a scientist to understand that." (Ollen Blanchard, 2)

"In July of 2014 we took approximately 2,000 crabs. These crabs are from Cocodrie's outside edge, but we brought them in from Chauvin. We put the crabs, I was working with a man who has a soft shell crab system ... The filters were set up and running several weeks in advance to make sure that the water chemistry was stable. We put them in and only two crabs made it in six days. I was shocked. We lost 250 pounds in the first day and then proceeded to lose about 50% a day for the next several days. I was trying to replicate my coral depuration to see what came out of them. Similarly, a brownish foam with black spec condensate came out. It was a thicker and heavier compound that came out and sat on top of the foam. As the crabs were dying I took them out and placed them in buckets of water to see if something was leeching out of them. A rainbow sheen leached out." (Scott Porter, 1)

"We are seeing those tentatively identified compounds in the test results. The benzene rings don't disappear easily, however. If there were chemicals digested or brought in by the crab, chances are that they won't look exactly the same after they have been metabolized. That is what we're trying to determine, and that is really the hard part. The government should be doing this, because they have

the money to run the analysis and see what the results are ... They did find benzene rings in the crab samples, which I understand to be an indicator of oil exposure. Benzene symptoms include reproductive damage and it can make you lethargic." (Scott Porter, 1)

5. Dispersant Reform

The government must reform dispersant policy so that we are not faced with the same public health dilemma during the next oil spill. It can take immediate action by banning the use of toxic dispersants, including Corexit. The more fundamental reform is to control and prevent future damage until the research on dispersants has been fully developed. In honor of Earth Day, Congressman Jerrold Nadler (D-NY) reintroduced the Ban Toxic Dispersants Act of 2015, which would require a temporary moratorium on the use of dispersants until rulemaking and a study to ensure their safety is complete. Rep. Nadler cautioned: "Recent studies have shown that exposure to Corexit may have been worse than the oil itself. We must follow the lead of Britain, and ban the use of dispersants that threaten the health of people, fisheries, marine mammals and their habitats."²¹ To commemorate the BP disaster's fifth anniversary, Gulf community groups declared April 15 the End Toxic Dispersant Use Day of Action.²²

After mounting public pressure, in January 2015 the EPA released a proposed rule to amend parts of the National Contingency Plan (NCP) that govern use of dispersants, other chemical and biological agents, and other spill mitigating products, when responding to oil spills in salt water and fresh water in the United States. According to the EPA, the proposed rule incorporates lessons learned from the federal government's experiences in the Gulf, as well as recommendations on agent use by the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report to the President.²³

Although the proposed rule does not ban the use of toxic dispersants, it includes several improvements to dispersant regulations to control its use, including consideration of a product's toxicity, long-term environmental impacts, endangered species protection, and human health concerns. It also strengthens controls on planning requirements for dispersant use authorization, toxicity thresholds, and advanced monitoring techniques. Yet, the EPA is receiving considerable pushback from the oil and gas industry, and the current proposal does not go far enough in many areas.

For instance, while it includes human health and environmental standards for EPA to "delist" dispersants, the EPA still has too much discretion on when it must act to remove dispersants from the NCP. Moreover, the proposed rule still relies on manufacturer science rather than independent research to evaluate product safety and efficacy. Further, the revised toxicity testing standards are still too weak to prevent the listing of dispersants and other products that may harm human health and the environment.

This section will identify strengths in the current proposal, and make additional recommendations, as they pertain to human health and the environment. Recommendations incorporate lessons learned by whistleblowers, who should be the pioneer witnesses providing a foundation for this effort. Throughout GAP's investigation whistleblowers provided clear warnings and practical solutions that could have greatly reduced the disaster's health and environmental impact. They began by warning not to treat chemicals with chemicals, a premise that was ignored.

The ALERT Project and the Prince William Sound Regional Citizen's Advisory Council have developed comprehensive technical comments.²⁴ While GAP is generally supportive, many go beyond the scope of this investigation or GAP's area of expertise. However, several recommendations that pertain to dispersants and product safety are incorporated below.

Testing Requirement

The proposed rule would "revise the toxicity testing requirements for dispersants, including the testing protocol and the use of the test results. The proposal would require acute toxicity testing for the dispersant alone, and the dispersant mixed with both oils used for efficacy testing."²⁵

The EPA adjustments to testing requirements are a step in the right direction. For instance, as demonstrated by revelations that the oil/Corexit combination becomes 52 times more toxic than the oil alone, it is significant that the proposal accounts for the <u>combined</u> toxicity of the oil and dispersants. However, the proposed requirements are not sufficiently stringent to prevent the listing of dispersants and other products that harm human health and the environment. The EPA should require maximum toxicity test standards and minimum effectiveness standards for all agents, including potential adverse endocrine, immune, or developmental effects to human populations or the environment^{26 27}

Further, the proposed rule still relies on manufacturer science for product efficacy and toxicity. At a minimum, the EPA should require a controlled sample of independent testing to verify industry science and data. Specifically, the EPA should audit or independently vet studies to ensure fairness and transparency. It should require independent science or rigorous peer review of all studies conducted by the spiller or product vendor or manufacturer.²⁸ ²⁹

Removal of a Product from the Schedule

Among other criteria, the proposed rule would clarify that the EPA can remove a product from the Schedule if there is "[m]isleading, inaccurate, or incorrect statements within the product submission to EPA or to any person or private or public entity regarding the composition or use of the product to remove or control oil discharges, including on labels, advertisements, or technical literature; or Alterations to the chemical components, concentrations, or use conditions of the product without proper notification to EPA [or];...New or previously unknown relevant information concerning the impacts or potential impacts of the product to human health or the environment."³⁰

This is a significant measure for disclosure, but not for the ensured protection of human health or the environment. The EPA should have a pro-active duty to enforce standards, not limit enforcement action to false statements. The EPA should remove all products that contain known or suspected human health hazards or proprietary or secret ingredients that would prevent public disclosure of the chemicals in the product being used. Further, the EPA should add specific criteria for product removal such as product discontinuation, monitoring studies that find unanticipated consequences to the environment and/or human health, or changes in community acceptance especially in areas where product is being or was used.³¹

Authorization of Use

The proposed rule would "clarify planning and preauthorization responsibilities, establish limitations and prohibitions on the use of certain agents, establish requirements for storage and use of agents, clarify authorities for requiring supplemental testing, monitoring and information on agents, establish requirements for agent recovery from the environment, and establish reporting requirements for agent use."³² Under the proposed rule, the scope of preauthorization plans would be increased. In areas without preauthorization plans, it would take into consideration agent use parameters, including but not limited to quantity limitations, duration of use, distance to shore, and proximity to people.³³

While it is important to clarify the scope of the preauthorization plans and to establish response measures for where there are gaps, it should include provisions to protect human health and the environment and ensure that committed decision makers are chosen accordingly. ³⁴ During the BP disaster response, USCG asserted authority over the EPA regarding the use of dispersants, and then acted collusively with BP to thwart environmental enforcement. The EPA should clarify its authority under the Clean Water Act to make the final call on any product use. Further, the proposed rule should require that OSHA and the Department of Human Health and Services (DHHS) review the Area Contingency Plans. ³⁵ Throughout the preauthorization process the EPA should prioritize consultation with scientific experts and natural resource trustees.³⁶

Monitoring the Use of Dispersants

The proposed rule would "[e]stablish monitoring requirements for dispersant use in response to major discharges and/or certain dispersant use situations," including subsurface dispersant use and dispersant use over an extended period of time. Specifically, the proposed rule would require the responsible party to monitor the environmental impacts and efficacy of the dispersant being used.³⁷

The monitoring of environmental impacts is a significant requirement. But it is only half the problem. The EPA should also require *human health* monitoring, and monitoring should take place for as long as is deemed necessary to understand a product's long-term impacts on humans and the environment.³⁸ In addition, the responsible party should not be in charge of conducting the monitoring due to an inherent conflict of interest. The natural resource trustees should conduct monitoring for wildlife and ecosystem impacts, and OSHA and DHHS should conduct monitoring for human health impacts. Monitoring should be funded by the Oil Spill Liability Trust Fund. ³⁹

Distribution of Safety Data Sheet

The proposed rule rightfully acknowledges "chemical and biological agents may contain substances that could cause harm to oil spill responders who, if unaware of the product's formula, may not wear the proper personal protective equipment." The proposed rule would require that the Safety Data Sheet (SDS) of a product be provided to both On-Scene-Coordinators and responders when authorizing and using a dispersant or other product. ⁴⁰

The requirement for greater dissemination of a product SDS is an essential lesson learned from the

BP disaster. It is a prerequisite for responders to know the health risks associated with exposure to Corexit or other toxic products. Tragically, SDS warnings were virtually absent during the BP spill response. 100 percent of GAP witnesses who worked on the cleanup reported that they were provided minimal or no personal protective equipment. They were exposed without warning. Nearly all witnesses reported that they were not aware of available safety literature on the job site. The EPA should ensure that the public has access to this information, as GAP witnesses who did not work on the cleanup frequently reported direct exposure to Corexit and dispersed oil.

Further, the EPA should require that the submitter provide all additional information on potential adverse human health effects based on the product's formula and application methods not captured in the SDS. As demonstrated by BPs failure to ensure its employees had access to Corexit SDS during the spill response, the spiller cannot be trusted to warn workers and the public of human health impacts associated with dispersants. The SDS and all additional information should be displayed prominently on the EPA, OSHA and DHHS websites. The EPA should require that it be distributed to all responders by OSHA personnel *prior* to product use, through HAZWOPER and other worker safety trainings.

Implement Public Notification Policy for Dispersant Use

There is currently no requirement for the government or oil companies to notify the public when a dispersant is used. If dispersants continue to be used, the public has a right to know when and where through public notice and warnings. Many residents and workers believe that dispersant use continues today. As long as it remains a legal option for industry, those fears are warranted. During a meeting at BP headquarters in 2012, BP stated the company will continue to consider Corexit for use, except when stopped by the government. *The proposed rule does not prevent residents from being blindsided by poison again.* This is flatly unacceptable. The public has a right to know when their families are exposed to dispersants whose health impact may range from nightmarish illnesses to death.

Whistleblower Record

a. Public Left in the Dark

"My feelings on this matter are that it would be an abomination for us to continue to allow this chemical (Corexit) to be used in light of the likelihood that is was responsible for the horrendous illnesses that have been experienced by my patients. Unfortunately, these illnesses have been cleverly hidden from public recognition and most of the suffering of my patients has been unrecognized and ignored." (Dr. Michael Robichaux, 1)

"My wife and I, along with two representatives from the GAP (the Government Accountability Project) who arranged the trip, met with BP representatives at their U.S. headquarters in Houston. We petitioned the company to discontinue using this chemical in any future oil spills because of our suspicions that it had been responsible for most of the serious illnesses we had been observing. They declined to make that commitment to us, and when we requested that they notify us before using the chemical in the future, they said they would get back to us with their decision on this matter. We have not heard from them since that time." (Dr. Michael Robichaux, 1)

"[W]e would see planes flying but I had no idea that they were spraying the dispersants in order to sink the oil. The dispersant planes would fly right over me a few times a day. It seemed like they would go from the North side of the bridge from Jack Edwards Airport out toward the Gulf where there remained a concentration of oil. Often the planes spraying the dispersant were Coast Guard planes." (Richard Russell, 3)

"Last year we accidently found this big spill. We were just trying to film the marsh and infrastructure, and I took the kids because we weren't going into the Gulf and it was a nice day. When we arrived, we accidently found this huge spill in the state wildlife reserve. The people here were never notified. They don't notify us about anything. If we don't accidently come across an oil spill or dispersant use then we don't know about it. If there is a spill and toxic chemicals within an ears shot of me then I'd like to know." (Kindra Arnesen, 1)

"The news said that they weren't going to spray Corexit at night, but they were still spraying during that time. The news was also telling us that Corexit wasn't dangerous. You could see the oil spill workers walking along the beach, and they didn't have protective clothing on, so initially we didn't think twice about it. There is a lady who lives about a mile from my home, and she tried to take a photo of the planes spraying at night. Her whole family is so sick, they are practically dead. She can't even talk anymore; she is just a vegetable." (Rocky Meadows, 2)

b. Workers Misinformed and Exposed

"We all would monitor a particular marine VHF radio channel and we could hear the airplanes that were spotting the oil ... The dispersant planes knew what channels we were monitoring, and when they were going to spray they would communicate with us through our channel and ask us to vacate the areas immediately. The closest a dispersant plane got to our vessel was three miles away. I could see it spraying dispersant. The plane was north of me and the wind was blowing from the north shore, so it drifted toward us." (David Hill, 3)

"At all of the safety and HAZWOPER meetings the instructor would say, 'Oh, the tar balls are safe once they sit in the water for 48 hours,' and that anything harmful would dissipate. It felt like anybody could run these safety meetings, because we were given such little educational material ... I didn't learn anything about chemical exposure until I started taking safety classes on my own by OSHA, paying out of my own pocket ... They didn't give out any safety training materials – not a booklet, not a pamphlet." (Andre Gaines, 2)

"In the future, oil spill cleanup workers should receive HAZMAT training and be fully informed of the potential health risks associated with the chemicals that they will be exposed to, before they begin working ... We have a right to know what we are being exposed to." (Randy Varney, 4)

"During my second job on the VoO program I became the captain of a large supply boat for about one month. I do not remember receiving any safety information or literature when I worked as a captain ... My third job on the VoO program involved pulling boom with one of my large vessels ... We were pulling boom between our boats, and my boat was regularly sitting in the dispersed oil. The dispersant looked like bubbly white foam." (Richard Russell, 1-2)

"While working on the cleanup, I received no safety training, no safety equipment, no briefings and no safety meetings. However, from training in my earlier occupations I knew that any occupation's safety regulations were required to be kept on the vessel. There was nothing in the regulations book on our vessel that warned of chemicals or hydrocarbons or dispersants." (David Hill, 1)

"I understand now that my crew and I were bound to have health problems, with inadequate protective equipment and chronic chemical exposure. However, during most of our time on the job we never had a conversation about our health; we weren't thinking about it. We were too focused on cleaning up the oil." (David Hill, 4-5)

c. After the BP Disaster Response

"Dispersant is being used a lot more I believe now than before the disaster. Apparently they deemed that it worked so well for the BP oil spill that they've chosen to put [dispersant sprayers] on the jack up barges now. They put the hose into the pipe and let it rip, and the dispersants are right there. This is occurring more inshore from what I have witnessed." (Kindra Arnesen, 1)

"We have a spill here 365 days a year, from one to three every day. Three cleanup companies down here work every day of the week ... They rigged up flat boats, jack up barges, and everything has dispersants on it now. They sprayed in the Mississippi Sound last in August, September and October of 2014. Those are the only three months I work out there. There is not more than 20 feet of water anywhere in the Sound and they have terrible spills, because that is an old [oil] field out there. There were miles of oil out there and they dispersed all of that. One man I worked with on the BP spill still works for Oil Mop now, and their flat boat had the tank and pump to spray dispersants. I said, 'Man, you all aren't wearing masks?' and he said 'That stuff's no more dangerous than Dawn dishwasher soap; it's not going to hurt you.' They're convinced that dispersants are not dangerous." (David Arnesen, 1)

"One thing that needs to change is who is in control of the cleanup when it occurs. You shouldn't have the companies that caused the spill then running and operating the cleanup; you won't get an honest outcome when they are also responsible for footing the bill of the oil that is picked up. The company should still foot the bill, but someone else has to control the operation." (Kindra Arnesen, 4)

"I personally believe that there are other dispersants that are more effective and less harmful to the environment and its human inhabitants. I also believe that using a safe and effective dispersant is preferable to allowing huge quantities of oil to saturate our coastline." (Dr. Michael Robichaux, 2)

"We should ban any and all toxic forms of dispersant. If it's banned to begin with then it can't be readily available because it won't be here. There are safe ways to disperse of the oil that cannot be mechanically collected. Let's make something readily available that is not so toxic, such as a bioremediation product. Currently there are less toxic forms of dispersants that can be used, but even those should only be used as absolute last resort. When there is a mechanical way to pick up oil, that is the way it should be done. You can't sink oil that is picked up and put it 'out of site, out of mind.'" (Kindra Arnesen, 4)

"It is critical that an objective assessment of the National Contingency Plan be undertaken. Every conceivable effort should be made to prevent the errors of judgment that resulted in the environmental disaster that we are still experiencing. BP and its cohorts have had their day and their way and the results have been devastating to our environment. It is time for honest and intelligent decisions to made by honest and intelligent individuals." (Dr. Michael Robichaux)

Five Years later", that documents ongoing health and ecological impacts reported by many of the

¹ Government Accountability Project, Deadly Dispersants in the Gulf: Are Public Health and Environmental Tragedies the New Norm for Oil Spill Cleanups? (2013), *available at* www.whistleblower.org/GulfTruth.

² Roberto Rico-Martinez et al., *Synergistic Toxicity of Macondo Crude Oil and Dispersant Corexit 9500A to the Brachionus Plicatilis Species Complex (Rotifera)*, Environmental Pollution (Feb. 2013), *available at* http://www.sciencedirect.com/science/article/pii/S0269749112004344.

³ The ALERT Project (a Project of Earth Island Institute) Home Page, http://alertproject.org/ (last visited Apr. 17, 2015); Louisiana Environmental Action Network Home Page, http://leanweb.org/ (last visited Apr. 17) ⁴ On Earth, a magazine of the Natural Resources Defense Council, has published a series, "The Gulf Disaster,

whistleblowers in GAPs investigation; OnEarth, The Gulf Disaster, Five Years Later,

http://www.onearth.org/gulf (last visited Apr. 17, 2015).

⁵ Mark A. D'Andrea and G Kasava Reddy, *Health Consequences Among Subjects Involved in Gulf Oil Spill Cleanup Activities*, The American Journal of Medicine (Sep. 2013), *available at*

http://www.amjmed.com/article/S0002-9343%2813%2900494-4/fulltext.

⁶ Id.

⁷ Id.

⁸ Fu Jun Li et al., *Heme Oxygenase-1 Protects Corexit 9500A-Induced Respiratory Epithelial Injury across Species*, PLOS ONE (Apr. 2015), *available at*

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0122275.

⁹ Id.

¹⁰ Id.

¹¹ Id.

¹² Louisiana Environmental Action Network, Five Years Since the BP Oil Disaster and We Haven't Felt the Same Since (Apr. 20, 2015), https://leanweb.org/public-health/5-years-since-the-bp-oil-disaster-and-we-havent-felt-the-same-since/?utm_source=E-Alert+List&utm_campaign=57e088f74c-

E_Alerts11_18_2014&utm_medium=email&utm_term=0_fc47f1c350-57e088f74c-257203797.

¹³ Jeffrey Chanton et al., *Using Natural Abundance Radiocarbon To Trace the Flux of Petrocarbon to the Seafloor Following the Deepwater Horizon Oil Spill*, Environmental Science and Technology (Dec. 2014), *available at* http://pubs.acs.org/doi/abs/10.1021/es5046524?journalCode=esthag.

¹⁴ Paul W. Sammarco et al., *Distribution and concentrations of petroleum hydrocarbons associated with the BP/Deepwater Horizon Oil Spill, Gulf of Mexico*, Marine Pollution Bulletin (Nov. 2013), *available at* http://www.sciencedirect.com/science/article/pii/S0025326X13002762.

¹⁵ Science Daily, Treating oil spills with chemical dispersants: Is the cure worse than the ailment? (Jul. 5, 2013),

http://www.sciencedaily.com/releases/2013/07/130705212219.htm

¹⁶ J. Cherrier et al., *Fossil Carbon in Particulate Organic Matter in the Gulf of Mexico following the Deepwater Horizon Event*, Environmental Science and Technology Letters (Dec. 2013), *available at* http://pubs.acs.org/doi/abs/10.1021/ez400149c.

¹⁷ National Oceanic and Atmospheric Administration, Ocean Exploration and Undersea Research, http://www.research.noaa.gov/oceans/t_deepseacorals.html (last visited Apr. 15, 2013).

¹⁸ Steve Kolian et al., *Depuration of Macondo (MC-252) Oil Found in Heterotrophic Scleractinian Corals (Tubastrea coccinea and Tubastrea micranthus) on Offshore Oil/Gas Platforms in the Gulf of Mexico, Gulf and Caribbean Research (Apr. 2013), available at http://www.ecorigs.org/CoralDepurationBPoil.pdf.*

¹⁹ Danielle M. DeLeo et al., *Response of deep-water corals to oil and chemical dispersant exposure*, Science Direct (Mar. 2015), *available at*

http://www.sciencedirect.com/science/article/pii/S0967064515000740. ²⁰ *Id.*

²¹ Press Release, For Earth Day, Nadler Proposes Ban on Toxic Dispersants Used in Oil Spills (Apr. 21, 2015),
²² Gulf South Rising, Gulf Coast Week of Action April 15 – 22,

https://www.facebook.com/events/1562556280663219/permalink/1567050473547133/ (last visited Apr. 20, 2015)

²³ National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

https://www.federalregister.gov/articles/2015/01/22/2015-00544/national-oil-and-hazardous-substances-pollution-contingency-plan.

²⁴ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

http://alertproject.org/ten-key-points-on-the-new-rules-for-the-national-contingency-plan/ (last visited Apr. 17, 2015).; Prince William Sound Regional Citizens Advisory Council, Summary Comments on Subpart J, *available at* http://www.pwsrcac.org/wp-

content/uploads/filebase/programs/environmental_monitoring/dispersants/Key%20Issues%20and%20Su mmary%20Comments%20on%20Subpart%20J.pdf.

²⁵ National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

https://www.federalregister.gov/articles/2015/01/22/2015-00544/national-oil-and-hazardous-substances-pollution-contingency-plan#p-261.

²⁶ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

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²⁷ Prince William Sound Regional Citizens Advisory Council, Summary Comments on Subpart J, *available at* http://www.pwsrcac.org/wp-

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²⁸ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

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²⁹ Prince William Sound Regional Citizens Advisory Council, Summary Comments on Subpart J, *available at* http://www.pwsrcac.org/wp-

content/uploads/filebase/programs/environmental_monitoring/dispersants/Key%20Issues%20and%20Su mmary%20Comments%20on%20Subpart%20J.pdf.

³⁰National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

https://www.federalregister.gov/articles/2015/01/22/2015-00544/national-oil-and-hazardous-substances-pollution-contingency-plan#p-53.

³¹ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

http://alertproject.org/ten-key-points-on-the-new-rules-for-the-national-contingency-plan/ (last visited Apr. 17, 2015)

³² National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

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substances-pollution-contingency-plan#p-53.

³³ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

http://alertproject.org/ten-key-points-on-the-new-rules-for-the-national-contingency-plan/ (last visited Apr. 17, 2015)

³⁴ Id.

³⁵ Id.

³⁶ Prince William Sound Regional Citizens Advisory Council, Summary Comments on Subpart J, *available at* http://www.pwsrcac.org/wp-

content/uploads/filebase/programs/environmental_monitoring/dispersants/Key%20Issues%20and%20Su mmary%20Comments%20on%20Subpart%20J.pdf.

³⁷ National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

https://www.federalregister.gov/articles/2015/01/22/2015-00544/national-oil-and-hazardous-substances-pollution-contingency-plan#p-amd-19.

³⁸ The ALERT Project, 10 Key Points on the New Rules for the National Contingency Plan,

http://alertproject.org/ten-key-points-on-the-new-rules-for-the-national-contingency-plan/ (last visited Apr. 17, 2015)

³⁹ Id.

⁴⁰National Oil and Hazardous Substances Pollution Contingency Plan, 80 Fed. Reg. 3379 (proposed Jan. 22, 2015) (to be codified at 40 CFR 110 and 40 CFR 300), *available at*

https://www.federalregister.gov/articles/2015/01/22/2015-00544/national-oil-and-hazardous-substances-pollution-contingency-plan#p-226.

Glossary

Boom: A temporary floating barrier used to control the spread of oil to reduce the possibility of polluting shorelines and other resources, as well as to concentrate oil in thicker surface layers, making recovery easier

C-130: A four-engine military transport aircraft, used to spray dispersants during the BP spill response

Contingency plan: A document that describes a set of procedures and guidelines for containing and cleaning up oil spills

Corexit: The chemical dispersant used during the BP spill response

Detoxification: Also known as "detox", the physiological or medicinal removal of toxic substances from the human body

Dispersant: Chemicals that are used to break down spilled oil into small droplets

DHHS: U.S. Department of Human Health and Services

EPA: U.S. Environmental Protection Agency

FDA: U.S. Food and Drug Administration

On-Scene Coordinator (OSC): Coordinates all federal containment, removal, and disposal efforts and resources during an oil or hazmat incident

HAZMAT: An abbreviation for hazardous materials

HAZWOPER: Hazardous Waste Operations and Emergency Response

Safety Data Sheet (SDS): An important component of product stewardship and occupational safety and health, it is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner

National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report to the President: A bipartisan presidential commission, established by Executive Order 13543 to examine the root causes of the Deepwater Horizon explosion and develop options to guard against, and mitigate the impact of, future oil spills associated with offshore drilling

National Contingency Plan: The federal government's blueprint for responding to both oil spills and hazardous substance releases

National Institute of Environmental Health and Sciences (NIEHS): A research institute housed under the National Institute of Health, HHS

NOAA: U.S. National Oceanic Atmospheric Administration

Oil plumes: Underwater globules of oil that do not float to the surface of the ocean. The heavy use of chemical dispersants, which breaks up surface oil, is said to have contributed to the formation of these plumes

Oil Pollution Act (OPA): A law designed to prevent oil spills, ensure cleanup if they happen, and restore natural resources injured by these spills

OSHA: U.S. Occupational Safety and Health Administration

Polycyclic aromatic hydrocarbons (PAH): A family of chemical substances that are found in many types of oil, and include known carcinogens

Personal protective equipment: Equipment worn to minimize exposure to a variety of hazards

Sediment: Loose particles of sand, clay, silt, and other substances that settle at the bottom of a water body

Sheen: A very thin layer of oil floating on the water surface

Tar balls: Dense, black sticky spheres of hydrocarbons; formed from weathered oil

Toxicity: The inherent potential or capacity of a material to cause adverse effects in a living organism

Tyvek suit: A suit used to protect people from chemical hazards and contamination

Volatile organic compounds (VOCs): Include a variety of chemicals that evaporate quickly and can cause nerve damage and behavioral abnormalities in mammals when inhaled

Volatile solvent profile: A blood test used to help identify a patient's prolonged exposure to the most commonly found volatile solvents that have been shown to cause serious health problems

Vessels of Opportunity (VoO) Program: Created to employ local boat operators during the cleanup, it extended to near shore and offshore activities such as identifying oil, working with boom and skimming.

Water column: A conceptual column of water from surface to bottom sediments

USCG: U.S. Coast Guard

Appendix

Whistleblower Witness Statements

(Presented in alphabetical order)

Whistleblower Witness List*

David Arnesen: Louisiana expert fishermanKindra Arnesen: Louisiana resident and community activistEric Blanchard: Director of Operations for Louisiana seafood processing plantsOllen Blanchard: Owner of Louisiana seafood processing plantsAndre Gaines: Supervisor during the cleanupDavid Hill: Vessels of Opportunity captainLani Kaiser: Florida residentAlton "Rocky" Meadows: Mississippi residentDr. Michael Robichaux: Louisiana physicianScott Porter: Diver, coral and oyster biologistRichard Russell: Vessels of Opportunity captainRandy Varney: Captain and cleanup worker during the cleanupConfidential Whistleblower: Partner of a former Louisiana seafood restaurant

^{*} Affidavits are included in the appendix. Statements and interviews can be provided by the Government Accountability Project upon request and with the permission of the witness.

AFFIDAVIT

My name is David Hill. 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 was born in Mobile, Alabama (AL) and raised in the fishing village Bayou La Batre. I am 53 years old. As a fourth generation fisherman in the Gulf of Mexico all my life, I was very concerned about what was happening in the aftermath of the Deepwater Horizon explosion. I wanted to do all that I could to help clean up the oil. For approximately nine months I worked as a captain on the cleanup with three different companies. There are no limitations on the use of this statement.

1. FOURTH GENERATION FISHERMAN

I am a fourth generation fisherman on both sides of my family. I began working with my father and catching shrimp at age seven. During high school and after I graduated, I worked in the fishing industry as a boat captain. I have spent at least three quarters of my life working in the fishing industry, offshore in the Gulf of Mexico. I continued in the fishing industry until I was 40 years old, and then I went to Houston Marine in New Orleans for maritime training. In 2005 I received my Coast Guard 100 ton master near coastal captain's license. I also received a 200 ton ITC international mate license. In 2007 I upgraded to a 200 ton master and 500 ton mate captain's license. I immediately went to work on a utility vessel in the offshore oil field. I spent 10 years working in that field, with different companies.

2. VOO CAPTAIN; VIOLATIONS OF MINIMAL SAFETY PRECAUTIONS

I worked in the offshore oil field until April 2010, when the BP oil spill happened. I worked on the BP Vessels of Opportunity (VoO) program from May 2010 until November 2010, when the site that I was working from in Port Fourchon closed down. I went through an agency in Mobile and was placed with BP contractor KMJ Services, Inc. I was the lead captain for a 180 foot vessel that had functioned as an offshore supply vessel. The vessel was already outfitted for the VoO program. As the boat captain on a vessel of that size, there was a lot expected of me. I took over the vessel and quickly learned how to identify oil and catch it in skimming rigs and boom.

While working on the cleanup, I received no safety training, no safety equipment, no briefings and no safety meetings. However, from training in my earlier occupations I knew that any occupation's safety regulations were required to be kept on the vessel. There was nothing in the regulations book on our vessel that warned of chemicals or hydrocarbons or dispersants. The information involved standard safety protocol, such as to stay hydrated. It was my responsibility to relay the basic safety information to the crew during our daily safety meetings. Three employees from the BP contractor Ameri-Force stayed on the deck and handled the boom and skimming. The crane operator was also an Ameri-Force employee. There were two to three Coast Guard personnel on the vessel overseeing the project.

The contractor Ameri-Force was hiring anyone who would work on the cleanup, even if they were unqualified. I was in close quarters with everyone on the boat. I worked side by side with them, ate dinner together and listened to their chatter, and ultimately I got to know my crew and their backgrounds. I also had a bird eyes view of the deck and could see a lot of them make rookie mistakes. These guys, like shoreline cleanup workers, found an avenue where they could get a job and go to work for \$300 to \$400 a day without education or extensive training.

3. OBSTACLES TO CLEANING UP DISPERED OIL

Oh

I was part of the response team Western Strike Force. We were located on the west side of the Mississippi River. The spill was on the east side of the river. As soon as it was light enough to see, we wanted to go to work. At one time the Western Strike Force had as many as 14 vessels of similar size or larger than my vessel. Our job was to find the "workable" oil - oil that had not dispersed yet. We could not collect the oil in locations where dispersant was sprayed, because it just made along sheen of miles of little orange and purple droplets and bubbles floating everywhere.

There were many different currents, so it was difficult to locate the oil. Often the current would carry the oil miles away from the wellhead before it surfaced. Our vessel's Coast Guard leader took orders from Houston on what to do and where to go to look for oil. They were using satellite imagery and airplanes to locate the oil. The Coast Guard representative would ask us to space our vessels out one mile apart; we were searching for oil collectively. When we found workable oil, he would tell us to deploy equipment and begin work at that time.

My boat on the Western Strike Force was one of the first to be outfitted. I had 1,800 barrel capacity "mud tanks," which are tanks traditionally used for drilling fluids, but in this case they were used to contain the oil. We had on-board pumps as well. When the vessel skimmed the oil, it went through the pumps. The oil was so thick that it tore the pumps. I couldn't go faster than one mile an hour or else we would lose the oil that was contained in the boom. The workers would pull the soiled oil boom in by hand and pile the nasty mess on the boat. They wore Tyvex suits that did not sufficiently cover them, because the vessel was fairly low to the water and the oil would spray all over their faces and hair from the waves and wind. When oil got inside of the boat or upper decks I would have one of the vessel crew members clean it up so that it wouldn't track onto the boat. The oil was supposed to remain in the back of the boat.

Once we got the boat loaded at full capacity, I would usually have to wait three to four days alongside the barge to offload the oil. After a long wait, I would frequently be informed that the barge was inoperative and we would proceed to offload the oil inshore. It would take 15 tractor trailer trucks to unload our product at that point. The delay in offloading the product resulted in prolonged exposure to toxic fumes from the oil, such as benzene, toluene and xylene.

Most of my time on the cleanup was spent north of the spill. In May and June, my vessel worked in the Florida straight. At one point I got as close as 40 miles from Pensacola, Florida. As the oil

drifted toward Alabama and Florida, we deployed to find it before it hit the shorelines. We wanted to be heroes and prevent the oil from reaching the Alabama and Florida beaches.

When we had foul weather we were sent inshore to a safe harbor. When the weather got better we began to look again in an area we had just left. After we went back out, I saw dispersed oil everywhere. There was no skimmable oil, nothing that my equipment would pick up. We all would monitor a particular marine VHF radio channel and we could hear the airplanes that were spotting the oil. We also could hear and see the planes that were going to spray dispersant. The dispersant planes knew what channels we were monitoring, and when they were going to spray they would communicate with us through our channel and ask us to vacate the areas immediately. The closest a dispersant plane got to our vessel was three miles away. I could see it spraying dispersant. The plane was north of me and the wind was blowing from the north shore, so it drifted toward us. On the second occasion the plane was seven miles from me and approximately 40 miles offshore from Pensacola.

We would work from sunrise to sundown. There was a lot of fatigue; it was tiresome. Whenever we finished for the day we put our equipment away and tried to get out of the oiled areas so that we didn't drift into the dispersant at night. Despite my best efforts, we often couldn't escape it and had to sleep over patches of oil and dispersed oil. After the frequent dispersant sprays, I developed a skin rash, blurred vision, headaches and dizziness.

4. CHEMICAL EXPOSURE, AIR MONITORS BROKEN

When we came back from inshore and could only find dispersed oil, we went to ground zero at the site of the Deepwater Horizon explosion. Dispersant was being injected at the wellhead, and we saw a lot of dispersed oil. When the oil was dispersed at the seafloor, it went through different currents in all different locations. We finally found oil to contain about four miles east of the rig. Workers were conducting in-situ burns in that area. They would contain the oil with two boats and then have a small boat throw a flare into the oil to light it on fire. They would continue to skim oil while the other oil was burning.

On July 10, 2010 the in-situ crews got close to our boat while burning the oil, and I was very concerned about my crew's safety. I asked them to turn around and they responded, but as they turned a huge black smoke plume from the in-situ burn engulfed my boat. It went from day to night. I had to call the Coast Guard, because one of our men – an Ameri-Force employee – passed out during that incident. He was lying on the deck and flopping like a fish, and we didn't have any medical equipment on the vessel to assist him. A nearby fast response vessel named Miss Lauren overheard what was going on. It had Coast Guard personnel and the necessary medical equipment, so its crew transferred my sick crew member from my vessel to the Miss Lauren. From there, the Coast Guard took him inshore to receive medical help. I did not receive any additional information about him or his health. However, it worried me because he was only in his late 20's and in good shape when the incident occurred.

During that incident and throughout my time on the cleanup, we did not have respirators or defibrillators on board. We also did not have anyone on our boat that was medically trained in the event of an injury. Prior to working on the cleanup, I received respirator training and was test fitted to wear a respirator. The training course emphasized that if there is a hydrogen sulfide (H2S) gas outbreak, you must leave the area immediately. Otherwise, it can be fatal. There are warning signals available that can detect H2S gas and alert you to leave the area immediately. When I worked in the offshore oil field, often our vessels were outfitted with those devices. However, none of that was provided when I worked on the cleanup, and I later learned that we were exposed to dangerous levels of chemicals.

After our crew member passed out, I was concerned about the wellbeing of the crew. My Coast Guard representative directed me to return dockside for safety protocol. I didn't get inshore until around 2:00 AM. Early in the morning I woke up and realized that my whole crew had ailments, such as coughing and headaches. I contacted BP safety.

BP evacuated the boat, but first three neurologists came on board with chemical measuring instruments. I recall that they were concerned about the measurements they took. They told me the readings were abnormally high. They first took measurements in the cook's kitchen and attributed it to the frying pork chops. Then they went into sleeping quarters and the readings were still high. At that point they evacuated the vessel, opened all the doors and ventilated it. To my knowledge, that is all they did.

We always had one to three Coast Guard representatives on the vessel. They had their own chemical monitoring equipment. However, when the neurologists were taking the readings, I overheard my vessel's primary Coast Guard representative make the comment "our air monitoring equipment doesn't work." He proceeded to explain that it wouldn't even turn on. He had failed to inform anyone or correct the problem prior to that incident, however. When I learned that, I felt that he had no concern for my crew's safety. He was from Las Vegas, and I told him I was born and raised in the Gulf and it was my life. If he wasn't concerned for our well- being then he needed to leave. I spoke with his supervisor, who removed him from my boat. As the lead captain, I still had influence over who came on my boat and who didn't.

During the time that the boat was evacuated, my whole crew and I went inshore to a BP medical tent. BP didn't want us to go inshore, because media was there. The deck supervisor instructed us to stay in the tent until the media left. The whole process was very brief. The BP representatives took our names, but they did not ask us how we were, and we did not see doctors or receive physical examinations. Then they told us that we could return to the boat, which still had 1,000 to 1,200 barrels of oil on it.

I understand now that my crew and I were bound to have health problems, with inadequate protective equipment and chronic chemical exposure. However, during most of our time on the job we never had a conversation about our health; we weren't thinking about it. We were too

focused on cleaning up the oil. Our boat probably skimmed more oil than anywhere in the Western Strike Force, up to 1,000 barrels a day. There were four mud tanks on our vessel. Once they were full, it took four to five days to get the oil off of the boat. We didn't have a site gauge to monitor how full the tanks were, so we had to take the lid off and look inside of them. Fumes would pour out, and the person who checked the tanks did not have access to a respirator or anything to prevent chemical inhalation. I checked them at times, because I wanted to make sure that our tanks were as full as possible before we unloaded them. There was likely dispersed oil in the tanks as well, because sometimes the dispersed oil floated with the un-dispersed oil and it would get skimmed or boomed when it conjoined with the thick oil.

In addition to that direct exposure, we were regularly exposed to fumes on board. When we had limited wind and it was very hot, the sun would often melt the oil from the skimming equipment onto the deck, with nothing on the deck to contain the melted oil. This let off a sharp chemical odor that remained on the deck. The oil inside of the boat was ventilating out of the tanks as well. Our tanks had six to eight inch ventilation pipes located above deck. As the tanks were being filled and then sealed back up, they would ventilate through the ventilation tube and be released back onto the deck. The other ventilation system consisted of large high speed fans that forced the air into the engine room to keep it cool. The engine room where the tanks were located got very hot, so the ventilation system would blow air to cool it down. It was blowing fumes at the same time, however. The door to check the engine is in the galley inside the boat, and the draft from the door would release the fumes into the galley. There were bunkrooms located next to the engine door.

If I would have known that the air monitoring equipment by the Coast Guard was supposed to be available, I would have used it on a regular basis. The odor from the oil and dispersant was constant. I was the first one exposed to the fumes, because I was located in the front of the boat. The vessels are only a few feet off the water, and I could detect the odor before anyone else. The crude oil had more of a petroleum smell, whereas the dispersant had more of a sharp foul rotten type smell, similar to H2S gas. It would take our breath away and fill our lungs. When we did come into contact with strong odors, I could call my crew on the radio and warn them so that any unnecessary personnel could go inside and get off of the deck, since it only requires on man to run a mechanical skimmer. There were a few times that the smell was so strong we had to leave the area. It was extremely aromatic. All of a sudden I would come down with a headache and blurred vision. Once we didn't even wait to pull the boom in. I tore the boom up, rolled it in a knot first and we vacated the area as fast as we could. I noticed that we had stronger headaches, sickness and nausea when we stayed around the dispersed oil than when we were in the presence of un-dispersed oil.

I later learned that other boats had their tanks on deck, and that they had a better ventilation system than ours. I also learned that other crews could stay offshore for 10 days, but had to go inshore for four days. That wasn't the norm for my crew and myself; we stayed offshore for

lengthy periods at a time, but we were not made aware of the risks. I stayed offshore for 40 days straight without any breaks inshore.

5. FAST RESPONSE VESSEL

The first paycheck I received on the job was very small. I heard that other men in KMJ Services, Inc. had similar problems. My second paycheck bounced, and after the first part of the summer with the company I decided to switch companies. I secured employment as lead captain with Star Fleet Marine, which operates fast response vessels. My boat was called Wateree. My main duties were to service the fleets, primarily the Western Strike Force. Due to the speed of the vessels, I was exposed to more hydrocarbons with Star Fleet Marine. Often my vessel would run through miles of dispersed oil at 18 to 20 miles an hour in order to reach other fleets. There were few if any breaks between activities. In the oil field, speed is a necessity. It's a culture of, "If you can't get the job done, we'll get someone who can get the job done." I would pick up crews with soiled clothes, and speed through the areas where in-situ burns took place, or where there were large amounts of crude oil or dispersed oil.

I would have stayed actively on the job for as long as they needed, but by September BP began to understate the amount of oil that still needed to be cleaned and explained that we were no longer needed. We stayed dockside for a month, and in October we were shut down.

In May and June 2011 I took a job with GEO Shipyard out of New Iberia, Louisiana, as the captain for a 60-foot spud barge. They would load my vessel with equipment and I would travel through the Mississippi River marsh grass in order to get to Grand Isle. It was a shallow vessel, so I was able to move it through three to four feet of water and bring workers their supplies. I also would haul dead cut and oily boom from the marshes. During that job I was exposed to terrible gasoline fumes. BP would place 2,500 gallon gasoline tanks in my vessel and send me to fill them up and then return them to the barges. The vessel could carry three of those tanks at a time. A few times they overflowed, because we had no training on how to properly fill the tanks. When we filled them with gasoline, we did not realize that the tanks were full and the gasoline overflowed onto our vessel. There were times when we would have to stop for the night and the tanks would stay on our boat. The offshore barges used portable toilets as well. Human waste releases H2S gas. Again, I was not provided H2S respirators or air quality monitors.

6. RAPID HEALTH DETERIORATION

When I went to work on the spill cleanup I had the mentality of "I am going to work hard," and I was grateful to be a part of the response effort. I always excel at my jobs, and at this job I wanted to skim more oil than anyone else. I always wanted to be a good leader. As the lead captain, I consistently pay close attention to detail. It is my job to be alert, aware of my surroundings and to keep my crew as safe as I can. If I knew then what I know now, I never would have went out there. I didn't realize the health risks that were involved for my crew members and me. I recently

reconnected with the other captain of the first vessel that I worked on, and he told me that since working on the spill his esophagus has busted.

I first got noticeably sick in November 2010. Since then, I have had surgery six times. In the beginning I had pneumonia-like symptoms, staph infections, and an infected lymph node in my left armpit. I was admitted me into the hospital, and the doctors removed my lymph node. I was dismissed after eight to ten days. In January 2011 I was admitted again with pneumonia, and my white blood cell count plummeted to near death. It was at 100, and I had no immune system. I had an infection in my neck that swelled up to the size of a softball. The doctors put me into a glass room at the intensive care unit (ICU). The hospital told my wife that if she did not bring me to the hospital when she did, she may have found me dead that morning. They did a CT scan to see if the swelling was blocking my airway. If so, they were going to give me the trait, which is a hole in the throat that you breathe through. I had 40 to 48 percent airway still open and they provided me several medicines for the swelling to go down. It finally healed, and I did not need the trait. They also gave me Neupogen shots to boost my immune system. Neupogen is often used on cancer patients.

In March 2011 I went back to the hospital with pneumonia. They were bombarding me with antibiotics. I had all types of doctors coming by my bedside to study why I could not produce white blood cells. I had a blood transfusion and a toxicologist removed bone marrow twice. He couldn't figure out what was wrong with me either.

My oncologist had me come to her office for 30 consecutive days. She was very concerned and never charged me a dime. At first she thought I had leukemia, but she later ruled it out. She wanted to give me a diagnosis of cycling neutropenia – which is a disorder when someone cannot produce white blood cells. I was told that I would be highly susceptible to illnesses, so I needed to take additional precautions and not expose myself to sick people.

During that time I went to the hospital, because my right leg turned red and it was incredibly painful. It looked like it had been in a deep fryer, and it has blisters all over it. I thought I was going to lose my leg. They removed my gallbladder and later did surgery on my groin and removed an infectious material from that area. They also gave me foot medication because they were concerned that I had Stevens-Johnson syndrome, which is a potentially fatal skin disorder. When I got home I had severe diarrhea for several months. The hospital diagnosed me with clostridium difficile, which occurs when someone consumes too many antibiotics and depletes the good cells in the body. It was highly contagious and my wife contracted it, but we took her to the hospital early enough that she was able to treat it immediately. I also became anemic after working on the spill.

In early fall of 2012 I met with my attorney and a toxicologist who named different kinds of tests that I should take. He explained that the tests were expensive, and we needed to figure out who would pay for them. I couldn't afford to pay and never received the tests. He said he understood

that there were health risks involved with the BP cleanup, and he also knew other cleanup workers with similar health problems. He explained that without taking the tests, however, he couldn't pin point my health to my chemical exposure while on the job. He wouldn't put his reputation on the line without being able to determine that my exposure was the cause of my physical decline.

It is so hard to get doctors in the Gulf to admit that there is the possibility of chemical exposure. I believe that the physicians don't want to stick their neck out on a limb and say that someone has chemical exposure, because it may put them at risk to admit it. Or they may not have the education and tools available to properly diagnose me, and unfortunately there is little incentive to receive further education on the topic. When I mention the BP oil spill as a possible reason for my health problems, doctors immediately tell me they don't want to discuss it and leave the room, or they dismiss me as a patient. This has occurred at least half a dozen times. But what other explanation makes sense for the nightmare I'm now living, after I was previously healthy all my life?

7. WHOLE LIFE IMPACTED

The fear is the worst part; I have a real fear that I'm dying. I wasn't like this before the spill. I was very active and energetic. When I gave my crew instructions I also worked with them to get the job at hand done. I had a lot of stamina, and a 16 to 18 hour day was normal for me. Now I can't make it throughout the day without taking naps. I have lost the interest and energy to do most activities. When I take short walks or perform small tasks, I get winded very quickly - to the point where I have to find a strategic area to rest until I regain my breath.

Currently I am experiencing chronic itching all over my body, and I have scratched myself so much that my skin is raw in some areas. I have skin blisters that randomly appear, and then they burst and heal. I deal with a tremendous amount of pain. I don't like complaining about how much I hurt, but my bones are constantly aching. It is getting increasingly difficult for me to walk because of something that is going on below my waist, as if a large horse kicked me and the pain won't go away. When I lie down in bed I feel a sharp stabbing pain, and the pain is so acute that I scream. There is no swelling or redness, but when I twist or turn a certain way it results in an unbearable pain. This is just the latest health problem.

Prior to working on the cleanup, I had 20/20 eyesight and I never needed reading glasses. Now I need glasses to read, especially small print. I barely go outside because the sun bothers my eyes during the day and bright lights bother them at night. My focus is hazy. For instance, when I am driving I see three green lights or three red lights, one stacked over another. When I am on a highway, I often don't see an oncoming car until it is near to me, at which point I see two cars. My depth perception is off as well; a car will often look farther away than it is. I also can't hear as well as I could prior to working on the cleanup, because there is a constant ringing noise in my ear.

My long-term memory seems to still be intact; however, my short term memory has vanished. I have notebooks sitting beside me right now, because throughout the day I have to make a record of my actions. Otherwise, I will not remember what I did or still need to do. I even have to refer back to my notes to remember people's names. I rely on my wife a great deal to help me remember things. I never used to have that problem. I used to pride myself on my strong memory, and now I can't even remember a conversation from a few days ago. I don't remember to take my medications in the morning, even if they are right in front of me. My wife has to bring them to me. She cries a lot, because she is concerned about my health.

I am on disability now. We live off of \$1,225 a month in social security and life has certainly changed. We have to plan what we are going to do when we leave the house so that we use less gasoline, because it is expensive to fill the tank. I was making up to \$400 to \$450 a day working in the offshore oil field, and I lived on a 20-acre yard with a very comfortable life style. As I lost work after getting sick, we couldn't pay for these things and began to sell our items. They deteriorated so much that we bought a motor home, and we have lived in it for two and a half years. It is very crowded and things have gone downhill. There has been a lot of crying and arguing at home.

The mental health impacts are extremely difficult. I can't put up with loud people, and I don't feel like I have the drive to do the things I used to do anymore. My health problems have destroyed me mentally, and as a result I have been in four mental health facilities for depression and anxiety. I deal with it now better than I used to, because I don't want to show weakness to my wife. She is bipolar and can be easily influenced in a positive or negative manner. You can say happy things and she is happy, or you can say sad things and she is sad. I try to control my behavior so that she can have a better day. Every night when I lay in bed 1,000 different things go through my mind, and I wonder what is wrong with me. I never had these problems or thoughts prior to my work on the cleanup.

At first I felt like no one cared about the health impacts from the spill; I wanted to go to sleep and not wake up. I made several calls to the governor's office and federal government offices, and I kept getting the runaround. Nine months ago the National Institute of Environmental Health and Sciences contacted me about their 10-year Gulf Study. They took blood, toenail, fingernail, hair, skin and urine samples. They said they would be contacting me every three months; however, I have not heard from them. Supposedly they want to monitor me for 10 years to study what the health implications are for those of us who worked on the cleanup. However, they are not offering treatment.

My attorney informed me that there is no treatment available for my health problems. It scares me, because I have deteriorating health and there are days I wonder if I am going to make it. I live in more pain than anyone should have to deal with. I cannot find proper medical treatment, and I just suffer and suffer. I don't like being tired. I love being in the oil field and working on the boats, but I can't any longer. My mind and body can't take it anymore. I am trying to

understand if I will ever get better so that I can live in happiness, pain-free and without sickness. I am most concerned about that fact that my family lives throughout the Gulf Coast. My dad is a fisher. We are all exposed to the ocean and eat Gulf seafood. What will the impacts be on their health in the years to come?

I have read the foregoing 10 page statement, and declare that it is true, accurate and complete to the best of my knowledge and belief.

Executed on July 12, 2013.

Subscribed and sworn to before me this <u>3p-n</u> day of <u>bec-enven</u>, 2013

Worny RyBLic #14013

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<u>AFFIDAVIT</u>

My name is Richard Lafayette Russell. I am 45 years old. I have lived my whole life in Gulf Shores, Alabama. Prior to the Deepwater Horizon disaster I had my own business since 2000. It was called Dolphin Express Cruises. When I was younger I ran the boat that my parents used to take people on dolphin tours. I have had my U.S. Coast Guard Master 100 ton near coastal captain license since I was 17. After I got married I bought a 40-foot pontoon boat and became certified to take dolphin tours. We would ride around in the bays looking at dolphins and talking about the area, conducting tourism. My wife at the time handled the books for the business, and we would make between \$150,000 and \$250,000 a year. During the BP oil spill I had to shut down my business due to the decline in tourism and the poor conditions of the Gulf.

Early in the spill I attended a Gulf Coast Claims Fund meeting and BP representatives told my community that they would "make us whole". They were also recruiting people to work for the Vessels of Opportunity (VoO) program through Zeke's Landing at Orange Beach, Alabama. They didn't share any of the health risks involved with working on the cleanup, however. I never would have agreed to work on the cleanup if I had known how much my health would be impacted.

1. WORKING FOR THE VOO PROGRAM

From May through July 2010 I worked on the VoO program. The cleanup operation was very unorganized; it was the most unprofessional operation that I have ever witnessed. Prior to beginning work I only received a boom class, which taught me how to lay oil boom in order to mechanically clean the oil. That was the only training I ever received. The only safety equipment I wore during the cleanup was a life jacket; we were not provided with significant protective equipment. I would wear jeans and a shirt. At one point our supervisors let us wear shorts for a week or so because it was hot. The BP contractor Parsons went through three or four different supervisors before it could figure out where to send our vessel on a regular basis.

During my first job on the VoO program I worked for a week as an oil observer, and the other workers on the vessel and I spotted some of the first oil from the spill. Dolphin Express II was the name of my boat. We were approximately a mile southeast of Perdido Pass. Our supervisors asked us to wait until someone responded, but after four to five hours no one ever came. We left the site because it was getting late, and we doubted that anyone would arrive. A boat next to me, the Jamie G, was another charter fishing boat working on the VoO program that witnessed the oil entering. We were not instructed to clean the oil that we identified, and to our knowledge no vessels arrived to clean the oil that we reported. The following day the oil came inside our pass at Alabama Point. The

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city of Alabama tried to put a big barricade in to stop the oil, but it did not prevent the oil from entering when the water was choppy. After the oil entered the pass it went into the Bayou St. John bay area.

During my second job on the VoO program I became the captain of a large supply boat for about one month. I do not remember receiving any safety information or literature when I worked as a captain. We would service the boats that were cleaning the oil and deliver different safety and cleanup equipment, such as hazmat suits, boom, and additional trash bags as requested. Our vessel had a safety worker certified in Hazardous Waste Operations and Emergency Response (HAZWOPER). He worked for Parsons, a BP contractor. If people needed a restroom break or were sick then they would get on our boat. Everyday at least one sick worker would board our vessel. At times the safety worker would evaluate the sick workers, and he would send them back to work the same day if he thought they were ok.

My third job on the VoO program involved pulling boom with one of my large vessels. We would pull heavier stuff, such as oiled boom, for a charter fisher boat called the Fishing Fool. We were pulling boom between our boats, and my boat was regularly sitting in the dispersed oil. The dispersant looked like bubbly white foam. I only performed that job for about a week.

My final job involved running a waste barge that would bag contaminated boom and send it to another barge to take the boom to the marina. The marina supervisors told me that I did not have to wear safety equipment because I was the captain and therefore I was not supposed to come in contact with the oil and dispersants. However, that was not true. For instance, when my deckhands were handling the oil boom it would splash on me. I would also inhale the chemicals from the oil. Most of the time I was up high in the vessel tower, about 30 feet off the water. It was windier up there than down below on the deck. The deck was unsafe as well, however. Once my deckhands became HAZWOPER trained they would wear safety equipment, such as rubber boots and tyvek suits, at times, but their faces were not covered and they did not have respiratory protection. One of the deckhands complained to me about the chemical smell, and often my workers complained of headaches and discomfort. Regularly water splashed us in the face.

They disbanded us after the tropical storm Bonnie in July of 2010. The VoO program informed us that they would call us back to continue the cleanup after the storm, since we were local workers. Therefore I took a course in post-oil spill cleanup and I received a purple card. It was supposed to allow me to continue working on the cleanup, since we did not have any income coming in after we were initially disbanded. However, we were never called back and they never explained why.

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While I worked for the VoO program I only received a few checks, but I had a hard time getting them. My wife and I had to keep faxing my work records because Danos and Curole kept disputing the time that I worked on the cleanup. I still do not know if I was fully paid for my work.

2. GULF COAST CLAIMS FUND

When I reflect on the oil spill it makes me mad because I had a great business and I lost it. After I stopped working on the VoO program I tried to get compensated for my losses through the Gulf Coast Claims Gund (GCCF), but I never received any payment. I also had oil in my motor from my work on the cleanup, which caused my boat to overheat. When I was a waste carrier I was tied up to the main barge, the Minnesota Barge, and I had a lot of damage and stress on my boat deck. My boat depreciated about \$50,000 from working on the VoO program. BP said that it would cover the damage, however, the GCCF did not respond to any of the claims that I filed. Later I was guaranteed payment as part of the class action lawsuit. Claims Strategies, a claim support group, promised to try and help get me claims, but it has been nearly five years since the spill and I have not yet received compensation for my losses.

I was living out of my car for about six months in the spring and summer of 2012, because I could not afford to rent a home. I have two children, and my financial difficulties have been hard for the whole family.

3. HEALTH PROBLEMS, DISPERSANTS

During the cleanup my eyes often burned and my nose bothered me. The chemical smell was the most difficult part of the job; it was strong and constant. My dad lives on a lagoon on Gulf Shores and to this day you can smell it from his house. I was coughing all the time and it was difficult to breath out there because it was hot and I constantly smelled the chemicals from the spill. It smelled like something in the air was burning. I didn't think to ask for safety equipment, however. We were focused on cleaning the oil, and I was told that I did not need any protections. I regret that no one informed me of the health risks that came with the job. Since working on the cleanup my symptoms range from a constant sore throat to nausea, difficulty breathing, violent vomiting and cramps at the same time. I have stomach problems now, and I never know when they are going to occur. Prior to working on the spill I never had eye problems. I had 15/20 vision and never wore glasses. It could be due to age, but since working on the cleanup I have had trouble seeing up close. Now my bones are real sore, and I am in chronic pain. I am achy in my arms and my legs all the time. Before the spill I was in good health and I did not have any of these symptoms.

As for dispersant use, we would see planes flying but I had no idea that they were

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spraying the dispersants in order to sink the oil. The dispersant planes would fly right over me a few times a day. It seemed like they would go from the North side of the bridge from Jack Edwards Airport out toward the Gulf where there remained a concentration of oil. Often the planes spraying the dispersant were Coast Guard planes. I was never sprayed directly, but my friend was sprayed by dispersants. She was not even in the water or working on the cleanup. She lived a few miles from the Gulf in Pensacola, Florida. A dispersant plane was spraying and flew over her house one evening when she was bringing groceries inside. Since the oil spill she has developed breathing problems, but they worsened after she was sprayed.

Since I lost my business I lost my health insurance. However, I have participated in the National Institute of Environmental Health and Sciences (NIEHS) 10-year Gulf Study program to monitor the health of BP cleanup workers. Right after the oil spill a lady with NIEHS came to my house to include me in the study. She was located in Georgia and assigned as a worker for my area. She said that my heart rate and pulse were real low. She called the main office to tell them what I was experiencing. They said they were going to send my information through the mail but they never did. A few months ago they called to speak with me and check in. They asked me questions about my health, and then they told me I would receive a certificate of sorts in the mail. The first time they sent me a \$50 gift card and I just used it for groceries. My former wife's friend told me I should participate in the study since I worked on the cleanup. The NIEHS contact told me I was two or three away from going into a coma due to my alarmingly low heart rate and pulse. She told me to be careful and monitor myself closely. She also advised me to let her know if anything got worse.

Through a letter in the mail I learned about a meeting with lawyers in June 2013 to help identify health problems experienced by cleanup workers. I did not know if working with them would result in compensation or medical treatment, but I was hoping I would receive treatment. At the direction and assistance of the lawyers, I went to a doctor located in Foley, Alabama. There is a medical class action lawsuit, but they usually do not result in much and the money will not cover medical expenses if you are not healthy. I would rather receive proper medical treatment then a settlement for my health impacts. In 2014 I attended a meeting where the charter boat captains from the BP cleanup were offered \$60,000 for settlement. As part of the settlement terms, the lawyers take 20 percent and then the captain has to pay taxes on their settlement, so they are left with about \$20,000.

The attorneys associated with the class action settlement arranged for cleanup workers such as myself to see a physician. The doctor I met with explained that my liver probably is not functioning correctly and my gull-bladder needs to be removed immediately. I may also have a problem with my pancreas. My tonsils are inflamed and probably need to be

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removed as well. He explained that my nasals and ear cavities are inflamed. One of my tonsils is bigger than the other with bumps all over it. He said it was a possibility that I was exposed to chemicals while working on the spill. He could notice that my eyes looked drained and aged as well. I used to look and feel much healthier. It worries me because I am only 45 and I have never had a history of poor health. I have never been a smoker, and before the spill I was in good health. The doctor wanted me to follow up but I do not have the money to do so. I do not have a regular doctor because I cannot afford one, so I just live with my symptoms.

4. MAKING ENDS MEET, FISH WITH LESIONS

Before the spill we had plenty of money and now I am just barely getting by. We are still surviving, but I can't give my kids all that they want. At my age it is difficult to change jobs; I have always relied on my captain license, and my livelihood was conducting fishing and dolphin tours. In order to make ends meet, I now work as a fishing guide. My captain's license makes me eligible for the job. At first I worked at Outcast Marina on the East side of Alabama Point Bridge, and I ran fishing and dolphin tours. They had a dolphin cruise boat and I would take people fishing. I was on standby all the time so that I could pick up work whenever it became available. When I go onto the water I notice that I cough more frequently than when I am on land, and my sore throat gets worse.

After the spill there were a lot of fish with lesions. Today I still see them but it is not as common. I do not think the fishing is back to normal yet. We have good fishing here, but the marine life is not as abundant as it was before the spill. If the fish do not have food then they will die, and a lot of the smaller fish and organisms that comprise the marine food web were severely impacted from the spill. During and after the spill a lot of dolphins washed up on the beach and died. A lot of the baby dolphins were stillborn as well. As a tour guide I occasionally fish, but I am scared that the water is still contaminated with dispersants and oil. It is difficult not to avoid coming in contact with the water as a guide, however. At times I get small cuts on my hands and then the open wounds are exposed. I'm concerned about touching the water due to the dispersants.

After the spill almost every fish that we would catch would have some kind of lesion. Now I do not know whether or not the Gulf seafood that we catch is contaminated. When I took people into the Gulf for fishing trips, I would clean the fresh fish that they caught. It made me feel uneasy, however. I would ask them if they wanted to eat them or throw them back, and they normally wanted to eat the fish. I often worried the people who consumed the seafood would get sick, but it was not even my business; I was working for other people. I was just trying to work to survive.

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5. CONCLUSION

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I am hesitant to even come in direct contact with the Gulf water, and I know we have tourists down here who swim in the Gulf. BP did not want to warn the public of the ongoing public health dangers resulting from the spill. In the northern part of the country BP said "Oh come down and swim in the beach." I'm concerned that people who do not know any better will swim in it and get sick and possibly get cancer later down the road. I do not go swimming unless it is in a pool.

The government works with the oil companies because our economy is so dependent on oil, but unfortunately the government does not want to take care of the people. There are a lot of people who have been unfairly impacted by the BP spill, and they deserve compensation and medical treatment. My throat stays scratchy and sometimes I lose my breath. It is worse when I am out by the water. There are days that I am worse than others, but I just never know how I am going to be. I was hoping it would leave on its own but it has been nearly five years now.

I was finally able to sell my boat, and my mom warned me that it may be the only money I would receive. It has been nearly five years and BP still has not paid me for the damage that I incurred from working on the cleanup. I never wanted to work on the cleanup but I knew we would not have the revenue from my normal business due to the spill, so I joined the cleanup. Now all I want to do is to get back on my feet again and fully regain my health.

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

Executed on March 18, 2015.

Richard J. Runell

Subscribed and sworn to before me this 18 day of March, 2015

R.L.R.

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2017 03 10 My Commission expires on: _____

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AFFIDAVIT

Rh.V

My name is Randy Varney. 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 55 years old, and I was born and raised in Barataria, Louisiana. I started shrimping as a deckhand at age 11. I bought my first skiff boat more than 25 years ago, and I have always made a living off of shrimping. However, since the BP oil spill both shrimping and my health have declined. During the summer of 2010 I worked for BP contractor DRC Emergency Services, LLC (DRC) on the oil spill cleanup. At first I worked as a deckhand, then I provided supplies to boats working on the cleanup, and eventually I worked as a captain on the cleanup. Throughout that time I was provided minimal safety equipment and developed what are now chronic health problems. I would like to know what is compromising the health of my community and our seafood.

1. EXPOSED

Early in the job I received training for how to lay boom, a net used to contain and remove oil. However, I didn't receive the hazardous materials (HAZMAT) course until the end of my time working on the cleanup. The HAZMAT course was just a show, because you couldn't fail. The instructors gave us the answers for the final exam and everybody passed. They coached us through each question and said things such as, "If it's not answer choice A or B, it must be C."

During the HAZMAT course I learned that we were supposed to wear respirators and protective suits when we were cleaning up oil, because we could be exposed to chemicals such as benzene. The class also explained that exposure to different chemicals mixed together can be very dangerous. When we worked on the cleanup we did not wear proper gloves, respirators, suits, or any sufficient Personal Protective Equipment (PPE). I don't understand why we were sent to a safety course at the end of the job that told us how to protect ourselves, yet DRC did not provide us with the recommended safety equipment.

At one point I worked on a boat that was used to hold oil until it was collected by smaller boats. We had to sleep in close proximity to the oiled boom for four to five days, until it was removed. We had no choice. The boom was put into bags, but it would leak. We would put a mat on the deck, and then we would place the bags on top of the mat. We had to load and unload the boom, and it was heavy and oily. We had cheap rubber gloves and paper suits, but the oil would sink through them. Whoever ran the cleanup was focused on profits, not our health.

According to news reports, Corexit was often being sprayed on the same days that we were on our vessels. During the cleanup there were frequently strong winds at 25 to 30 miles per hour. I believe that we were exposed to the Corexit because the chemicals from it became airborne or got into the water. I frequently detected a chemical detergent smell on the days that Corexit was sprayed. At times I had to look for oil and oiled wildlife, such as pelicans. We would find oil inshore, behind Grand Isle and Barataria Bay. We would provide the coordinates where it was located to DRC, and DRC was supposed to send skimmer boats to those locations. When we would return to those locations the next morning there would be no oil, just foam. To my knowledge, BP and the government were only supposed to spray Corexit offshore, not inshore, but it looked like there was dispersed oil inshore. The foamy water would spray the other workers and me in the face. I would come home with my shirt covered in brown spots from

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where the water splashed me. Shorty after those experiences - within the first month on the job - I started to feel abnormal, as if had a bad cold.

2. HEALTH PROBLEMS

Before I began working on the cleanup I took a physical, including urine samples and x-rays. There was nothing wrong with me at that time. I also felt like I was in good health. However, after the first month on the job I felt like I had a cold and it got worse as I continued to work. I went to Jefferson Medical Clinic, and they told me I had an upper respiratory infection. After a month into the job my ears started bleeding and I developed a sore throat. My eyes began to hurt and itch real bad, as if they had blisters. I didn't know the cause of my sudden health problems. My eye problems will not go away. The oncologist said he couldn't determine what was wrong with them. He prescribed me eye drops that cost \$125 and they didn't last long. When I ran out, my eyes went back to burning and itching. My throat irritates me and is sore every day, and I often have bad headaches.

Since working on the cleanup I have developed a rash all over my chest and thyroids. I put the antibiotic cream on it for months and months. The rash consists of little bumps that spread from the bottom of my rib cage to my shoulders and under my chest and arms. It gets itchy when I don't have the cream. I must purchase the cream and anything else that the hospitals or clinics prescribe for my symptoms. I have noticed that the rash comes back the most when I go out on the water, and I feel worse when I get overheated.

I have become intolerant of chemical smells that have never affected me before. For instance, I cannot stand the smell of perfumes, air fresheners, cleaning products or anything that comes out of aerosol cans; I have to remove myself from the smells. I can no longer wear cologne or even burn a scented candle, because anything that releases a strong smell repulses me, as if my body is rejecting it. I never had those reactions before I worked on the cleanup.

I have also noticed myself forgetting a lot. It includes simple things, such as forgetting whether or not I have washed my hair in the shower. I put my shirt on and I can't remember if I put on deodorant. At times when I am driving I forget where I am momentarily, and then I suddenly remember. I don't forget how to drive, however. I did not have memory problems before the spill, but now I have good days and bad days. I went to Ohio for a week in the summer of 2013, and I felt much better; my symptoms began to subside. When I returned home I felt the way that I had felt when I left; the symptoms began to come back.

I don't know what is wrong with me. I feel like I have been poisoned, almost as if I'm dying. It is one thing to have symptoms for a week or a month, but I have been through years of ineffective treatment. It's as if the doctors are treating me for something that I don't actually have. I only feel better for a few days until I run out of antibiotics, eye drops and cream. When I go to different doctors they don't want to hear anything about the spill or being infected with oil and toxins. They don't want to look at the cause of these reoccurring problems or discuss their possible connection to the spill. They only treat the individual symptoms. Where is the doctor's concern for the patient? It is not right; I feel a doctor should try to help the patient no matter what.

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In early December I went to one of the health clinics run by the Kennedy Center for Justice that is located on the bayou, and I saw a doctor who specializes in chemical exposure. He took a blood test and urine sample and checked my heart and gave me a complete examination. The results recently came back. He told me that I had an upper respiratory infection, but he did not explain what had caused it. My blood work came back fine, but the exam did not test for the chemicals found in the oil and dispersant.

I am not the only person who has had health problems since the spill, but it seems to affect people in different ways. When I was a captain, I had a deckhand in his mid-thirties. He would bag the oil and unload it onto other boats. Since working on the spill he has developed heart problems. People who I've known for years and were in fine health prior to the spill are now using breathing apparatuses. One of my friends now has brain cancer. One man who I used to go trolling with for years is now breathing out of his throat through a breathing tube, and the doctors don't know what is wrong with him. He never smoked.

Despite this onslaught of health problems in my community since the spill, over three years later no one is explaining what is the cause. Is it because of my old age, or due to chemical exposure? We live on a bayou, which is 100 yards from my backdoor where I keep my boat. Is my proximity to the water making me sick? We only hear about the health problems in other parts of the Gulf through Facebook, not on the news, because we are sharing what we know with one another. We also share what we are experiencing with our neighbors and fellow fishermen.

I am a commercial fisherman, so I'm on a boat during the summer. It's difficult now, because when I am outside in the sun and it starts to get hot, I feel like I am going to pass out or have a heat stroke. Before the spill I used to go trolling on my own without a problem, but I no longer go out alone or make as many trips. I used to go out for 20 days in a row. Now I can only go out for five days, and then I have to come in for five days to rest before I go back out. When I went trolling in the summer of 2013 the heat really affected my rash and depleted my energy. Sometimes the other fishermen and I saw oil in the current line – where the current makes a line and debris settles. In August and September 2013 I was not out that much because there were not a lot of shrimp.

3. SEAFOOD DEFORMITIES

When the season first opens in early May there is a rush of shrimpers. It usually lasts a few weeks. However, after the first week into the 2013 season ninety percent of the boats were tied up on the bayou. There are fewer shrimp where there used to be an abundance of shrimp before the spill. What do we do now? Worse yet, since 2011 we have been catching shrimp that are deformed. I have worked in these bayous and canals my whole life and I never saw shrimp like this before the spill, especially inshore where the shrimp are born and raised. Some look like they had acid dropped on their shell, or they have black gills and tar. Some of the shrimp have sores and tumors on both sides of their heads and discoloration, as if they are rotten but still alive. I only come across a few shrimp without eyes, but some shrimp have eyes that are clear and not fully developed. If you take the heads off the shrimp often look fine, but if you take the heads off and put them in a bag and let the gook ooze out then it turns your stomach.

Most people, including many of the fishermen, don't want to hear about the oil spill because they want the shrimp to be safe and to make a living. They don't want to stop doing what has been in

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their family for generations. For decades Barataria Bay has been known for having some of the best shrimp in the world. We don't have other work; we live on the bayou, and fishing is what we do. Everything we have is tied up in the bay, because that is our living. Now I have to go to different locations then where I normally fish. Places that used to have shrimp, such as Barataria Bay and Little Lake, which is 20 miles west of Barataria Bay, are no longer as plentiful. I have noticed about a 60 percent decline in catch. At first most of the deformed shrimp were in Bay Jimmy and Barataria Bay, but now the impact appears to be spreading. I am catching them further up in Lafitte as well.

We are looking at thousands of shrimp, so it is difficult to go through every shrimp and pick out those with deformities. However, if I'm catching deformed shrimp, then other fishermen are catching them as well. We are selling the shrimp, and the idea of it making someone sick really hurts me. The seafood may be safe, I'm not saying it's not, but something is wrong. After the spill President Obama said that the seafood was safe and the beaches were clean. It hurts me to now see the kids digging in the sand, because in many cases the beach cleanup workers covered up the oil with sand. The workers made videos of this practice and posted them online, and I also saw reports of it on the news. Just like the beaches, I don't know if the shrimp are safe. The government said it has tested the public beaches and seafood for chemicals, but how am I supposed to feed the shrimp to people when I am catching deformed shrimp?

4. CONCLUSION

We felt good about our lives and communities prior to the spill. But after it occurred, people have been out of work and their health is declining. At that point it is easy to become depressed. Fortunately I own my boat and my house, and I have excellent credit. I don't have an education, but I have always known how to make money. I have been selling seafood all of my life. I lay in bed now and ask myself, what am I going to do? I do a lot of pacing from the back door to the front door. I am 55 years old; I am too old to start looking for a new career. I had a part-time job in the winter at a bait shop, but now it is gone. Since the oil spill there aren't too many people fishing, and not a lot of people want to buy shrimp now. I used to sell shrimp to local establishments that would then re-sell the shrimp, but as consumer demand went down so did my sales.

I think that everyone needs to know what really happened during the oil spill cleanup and what the impact has been on our communities. In the future, oil spill cleanup workers should receive HAZMAT training and be fully informed of the potential health risks associated with the chemicals that they will be exposed to, before they begin working. Further, our communities and the public should not have to question whether or not government seafood testing is reliable or how much seafood we can safely consume. We have a right to know what we are being exposed to.

Rh.V.

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

Executed on December 16, 2013.

June Vanne

Subscribed and sworn to before me this 10 day of March, 2014

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Notary Public My Commission expires on: _____



AFFIDAVIT

My name is **Sector**. I am submitting this statement confidentially, 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 providing this statement because I am concerned about the health of everyone who consumes Gulf seafood contaminated by the BP oil spill. I have lived in **Sector**, Louisiana my whole life. Until recently, I helped run a seafood restaurant in Louisiana. **Sector** and I decided to close the restaurant after we realized that the seafood we served was contaminated by oil. I could not bear to serve other people's children and grandchildren a product that I did not want my own children to eat. Gulf seafood is being shipped all over the world. Who is going to take care of those made ill by contaminated seafood?

My family has worked in the seafood business for generations.

. owns a seafood processing plant, and I worked for it from age 15 to 20. At the time it was called a platform. At the plant we would buy, boil, clean, package and sell shrimp. I later became a truck driver and for approximately three years I transported seafood for **sector**, located in Louisiana. The plant would buy crabs, peel them and sell the crab meat. I then began my own seafood transportation company called **sector** and distributed different processed food to wholesalers in Louisiana. I closed it after I received a better job opportunity to become a **sector**. However, that work slowed down in the years before the oil spill and when the offshore drilling moratorium took effect.

After the Deepwater Horizon explosion,

Later, in October 2011 **Control** offered me a position in his seafood restaurant. I was going to become a co-owner, but before we could do the paperwork we decided to shut down due to food safety concerns.

We specialized in boiled seafood, and offered

boiled crabs, shrimp and seafood platters.

One night in June 2012 when we were serving boiled crabs, a patron was eating the crabs and said that she couldn't get a black substance off of her hands, even when she scrubbed it with a napkin. She showed me that when she opened the back side of the crab and squeezed it, a black oil-like substance came out of it. I asked if she would mind if I documented it, in the event that she got sick. She agreed and we took photos of the crab and her hand. I proceeded to give her a wet paper towel with Dawn dish washing liquid and the black substance on her hand came off right away. She then proceeded to keep eating the crabs, at which point I panicked and said, "Let me get you some fresh crabs." I had never seen anything like that before the oil spill; I was shocked. We were also having problems with soft shell crabs. **Second 1** had frozen soft shell crabs from before the spill. We initially sold those, and they were very popular. However, we ran out and began serving soft shell crabs from catch that was collected after the Deepwater Horizon explosion. Customers repeatedly complained that they tasted bad, as if there were old. However, they were fresh catch. **Second 1** owns a seafood plant, and he would buy the seafood for the restaurant directly from the fishermen and we would take them to the restaurant. They were as fresh as they could be. After the patrons complained about the soft shell crab we decided to stop selling them; we were scared of someone getting poisoned. Folks weren't complaining about hard shelled crabs at that time, but we started findings problems with them as well. After the first oiled crab incident we started paying closer attention and noticed more crabs that looked like they were contaminated with oil. We also started looking more closely at the shrimp; to our surprise, they frequently had no eyes and their heads contained a thick black substance. I didn't know what it was but **Second 1** or the interval of the restaurant it must be oil.

After these events, **Sector** and I had a long discussion and decided that we should close the restaurant before someone sick, or before we got sued for serving a contaminated product. After we closed the restaurant, on **Sector** I sent the photos to BP and asked about filing a business loss claim. The following week, a BP representative called me three times in one night, asking me questions and providing instructions on how to file my claim. He said, "I'm really glad you sent it to us. We can work together and it will be beneficial." I had not shared the photos publically yet and he said, "We appreciate you contacting us and not going public." He said that BP would help us out as much as it could. He told me to file as an individual for a claim for a business economical loss and to send the photos with my claim. He assured me not to worry, and said that BP would help. He didn't tell me how to contact him but instructed me to call the number 1-800-333-3991 and submit information by email. We decided to see what would happen with our claim before going public. One month ago – nine months after I had filed the claim - BP said I should have filed as an individual economical loss and denied my claim.

wanted to figure out what was wrong with the crabs. He put them in a tank and placed 10 gallons on cooking oil into the tank. Within days, the cooking oil had disappeared. I believe that the crabs were exposed to Corexit and the Corexit is responsible for this. If the Corexit is going to eat the oil that fast, what is it going to do to a person? processing plant was peeling crabs and he wanted to make sure they weren't contaminated. He contacted the Louisiana Department of Health and Hospitals, and it told him to get a black light to identify any contamination. The back meat and shrimp are a neon blue color under the black light. Those photos as included in this affidavit as Exhibit 1.

I don't have a future anymore, because I don't have a restaurant; my dream was to oversee the restaurant and now I can't. **Solution** shared that dream. After we decided to close the restaurant, he had a stroke. He had invested all of his savings - \$200,000 - into opening the restaurant. He was worried sick about closing it. Since the restaurant closed, I have been on

higher and higher doses of antidepressant pills. We are really struggling financially. My husband works as a **second second**, and we are trying to survive on his income. However, he makes in a month what he used to make in a week as a **second second second**. I am aggravated, because I was very active and always working, yet I have had no work since we closed the restaurant. After we decided to open the restaurant, I got rid of my truck. I cannot afford to start over or risk reinvesting in my previous company under the current conditions.

There is not a demand for distributing Gulf seafood. Since the spill seafood catch has declined dramatically and there is almost no seafood for commerce. Fishermen are having problems trying to find seafood, and its cost has skyrocketed since catch is scarce. This is usually the time of the year when crabs come out and the catch is so plentiful. However, this year there are virtually no crabs. A friend of mine went skimming – a method of collecting shrimp & crabs from the seafloor - all night and only caught three crabs. Normally he would come back with several bushels. Usually he would have a crab boil but this year he has to have a shrimp boil instead, and even then the shrimp were smaller than normal. Shrimpers going trolling are also noticing a significant decline in their catch. Each year since the spill the crab catch has declined and 2013 is the worst year yet.

My hope is that no one gets sick from contaminated seafood, and if they do then BP should take responsibility. BP should develop a fund for any health problems connected with this oil spill. I have lost almost half a dozen friends from cancer since the spill. What will happen to us? Prior to the spill, my friend had cancer of the stomach but the doctors had removed it all. After the spill he developed it again and passed away. Another friend found out that he had cancer six months ago and they will bury him today. There are so many people on our bayou dying from cancer. A 40 year-old mother who is a neighbor of mine developed rare cancer of the appendix after the spill. The doctors told her that the cancer is ongoing and there is no cure. She goes into remission and then the cancer comes right back. In addition to rising cancer rates, we have so any allergy problems. Every neighbor I speak with is living on antihistamines. Most people in our community are also living with awful sinus problems and migraines now. These problems were not common during previous oil spills or prior to the Deepwater Horizon disaster; they became widespread in the aftermath of the BP oil spill.

As part of the long-term GULF STUDY, the National Institute of Environmental Health and Sciences came into my house and took samples from my urine, fingernails, toe nails and hair, and swabbed the inside of my mouth. They said I would receive the results in two to three weeks, but it has been several months and I have not received anything. I have read the foregoing three page statement, and declare that it is true, accurate and complete to the best of my knowledge and belief.

Executed on May 30, 2013.

Subscribed and sworn to before me this _____ day of _____, 2013

Notary Public My Commission expires on: _____
