

**Congressional Testimony of Heather E. Baird,  
Vice President, Corporate Communications ~ MicroSorb Environmental Products, Inc.  
United States Senate ~ June 17, 2010**

My name is Heather Baird and I am the Vice President of Corporate Communications for MicroSorb Environmental Products, Inc., of Norwell, Massachusetts. I would like to thank the committee for allowing me the opportunity to testify today. My company has a microbial technology – a powerful consortium of oil-eating microbes. Our microbes have been proven successful many times beginning when the tanker Mega Borg exploded in the Gulf of Mexico in 1990 off the coast of Texas. BP utilized our microbes in 2001 to remediate oil contamination in Lake Michigan. Further, we just concluded a scalable lab test conducted through an independent third party demonstrating that within 24 hours, our microbes destroyed over 90% of the crude oil in a Gulf of Mexico water sample. That sample was taken from the vicinity of Grand Isle, LA in late May 2010. Today, our microbes are not being utilized to save the Gulf Coast despite being highly efficacious, proven successful, non-toxic and non-pathogenic.

During the course of this testimony, I will briefly explain our microbial technology and will take you through the vast maze of decision makers with whom we have corresponded. I also hope to accurately convey the frustration we have felt over the last 59 days with regards to finding the elusive decision makers following Deepwater Horizon spill. As we lose more time trying to understand who makes the decisions, our fragile coastline loses more of its natural resources.

First, I would like to give you some background on the nature of hydrocarbon spills. Wherever there is natural oil seepage from the earth, nature has placed oil degrading microorganisms (microbes). These microbes use the oil as a food source, breaking it down into water, carbon dioxide and fatty acids, rendering the substance harmless, even beneficial.

While nature is able to clean up after itself, it takes time. The problem is that mankind now puts far more hydrocarbon pollution into the environment than nature can remove in the amount of time that man wants to allow. Science has devised ways of speeding up nature, and it is from this advancement that our company was born. MicroSorb® Microbes are also known by our formula name: The Oppenheimer Formula, (named after the pioneer in bioaugmentation, Dr. Carl Oppenheimer). It is a proprietary blend of nature's most powerful oil eating microbes, harvested from some of the most extreme and oil prone environments around the globe. With over one hundred billion microbes per gram, our formula ensures rapid remediation. Since our microbes are cultivated on Texas sweet crude oil and Gulf of Mexico seawater as a food source, they are ideally suited for the Deepwater Horizon spill. Additionally, some of our microbes are aerobic and some are anaerobic, meaning they can function in oxygen rich areas as well as oxygen depleted. These microbes work in open water, as well as sensitive areas such as marshlands, wetlands and beaches. Application is simple and highly cost effective when compared against absorbents, skimmers and boom technologies. Once applied, there is no excavation required, no costly disposal, nothing to pick-up or leave behind. Once the oil runs out, they will either die, return to former natural concentration levels, or will be safely consumed by other aquatic organisms.

Our formula is on the EPA National Contingency Product Plan Schedule (the first microbial formulation to be listed) and has been since 1991. This fact, combined with the proven success of this product, clearly makes it a smart addition to the Gulf cleanup solution. However, understanding who makes the decision to deploy has been a significant challenge.

Our president, Bill Baird, an engineer by trade, has been on the Gulf coast for many weeks now, meeting with elected officials from Plaquemines Parish to the Florida Keys. I have watched as he has tirelessly dispensed free advice to officials from city planners to governors. I mistakenly believed that with this powerful yet natural consortium of oil eating microbes plus the experience with how to deploy them, that exposure to decision makers was going to be our only challenge. The reality has been much different. Simply put, we were not clear on who is really making the decisions, and I am not sure that any business small or large knows how best to be heard.

To give the committee a sample, and this is by no means a comprehensive list, we have met on scene with:

Incident Command in Florida and in Mobile, Alabama, Governors offices, the EPA, the DEP from Florida, Mississippi & Louisiana, many mayors offices in four different states, the Coast Guard, Department of Homeland Security and city officials too numerous to count. I have also been on Capitol Hill meeting with Senators and their teams from the affected states. It is important to understand that we have put all other business on hold to chase down these people at our own expense. We have gained alignment from each of these parties, who we believed were the decision makers, since they are the true stakeholders. What I need this committee to understand is that at each one of these touch-points, we were told that our product is needed or should be deployed. However, these encouraging statements are quickly followed up with the caveat that BP holds the checkbook. Then we are inevitably told that we will be 'passed on' to someone's contact or a committee within the BP system, then we wait. As recently as this week we were told to sign up on the Deepwater Horizon website, which naturally we have already done. The American public believes that the Government is making these decisions. Our experience has been very different. The decision maker to us is now clear; without BP signoff, we remain sidelined. But how do you break through to BP amidst the millions of proposals, and with a website being the only means of contact?

Why is BP not employing bioaugmentation as part of its arsenal to clean the spill? According to EPA Publication 640/k-93/002: "The United States is the world leader in field implementation of bioremediation, an attractive alternative to conventional methods of cleaning up persistent hazardous wastes in the environment. The potential use of bioremediation technologies is significant, as federal & state governments, private industry and others responsible for environmental cleanup efforts add it to their arsenals of methods for environmental reclamation." This statement was published back in 1994. This has not been our experience with regards to this crisis. We believe that one reason why this may be is because the EPA now states that bioaugmentation is typically used as a polishing step. Bioaugmentation solutions have been classified as alternative technologies, used only after all oil has been reclaimed.

We have found that Japan has done the most comprehensive scientific research to date on the use of bioaugmentation in open water environments. I respectfully refer the committee to the studies submitted as evidence detailing how bioaugmentation is superior to natural attenuation. Time constraints do not allow me to explain in detail their methodology. However I can tell you that remediation with our formula was superior. There are additional studies that have been peer reviewed over the last decade that must be taken into account. I am happy to discuss these studies, which have also been submitted as evidence, at any time outside of this hearing.

Imagine for a moment that we are in the midst of a critical battle. We are in a battle to get the oil in the Gulf before it ruins us. Before it seeps into our marshes and beaches, before it smothers our coral reefs. At risk is a way of life, a destination for tourism, a vast food source, a treasured and fragile ecosystem, a crucial segment of national economy driven by small and large businesses across many industries. So, we anchor miles of boom as a defense, to absorb the oil and keep it at bay. But the waves splash the oil over the booms, and the currents carry it under, and the heavy crude is too thick to be absorbed effectively and the booms sometime break apart. We know that we are losing a treasure and that our children will inherit from us, thousands of miles of damaged coastline.

What can we conclude from this? We can conclude without question that the resources currently deployed for this battle are insufficient to the task at hand. However, the necessary technology does exist. It is ready. It is highly efficacious for this task and has been proven again and again. I hope that this committee can help businesses like ours determine constructive paths forward and with the appropriate stakeholders represented.

Thank you for your time and your attention to this critical and time sensitive matter.