Subra Company
P. O. Box 9813
New Iberia, LA 70562
337 367 2216
subracom@aol.com

Testimony of Wilma Subra
Subra Company
Louisiana Environmental Action Network
Lower Mississippi Riverkeeper

Before the
Subcommittee on Oversight and Investigations
of the House Energy and Commerce Committee

on
Local Impact of the Deepwater Horizon Oil Spill

Human Health and Environmental Impacts Associated with the Deepwater Horizon Crude Oil Spill Disaster

June 7, 2010

St. Bernard Council Chambers, Chalmette, Louisiana

My name is Wilma Subra and I am testifying on behalf of Subra Company, Louisiana Environmental Action Network (LEAN) and the Lower Mississippi Riverkeeper (LMRK). Thank you for the opportunity to testify on the issues of human health and environmental impacts associated with the Deepwater Horizon Crude Oil Spill

I have been involved with oil and gas drilling and production issues and the associated environmental and human health impacts for more than 30 years and serve as a technical advisor to community groups on the issues. I have served on the EPA Common Sense Initiative, Petroleum Refining Sector Subcommittee, the National Commission on Superfund, the EPA Permit Reform Committee, EPA Toxics Data Reporting Committee of the National Advisory Council for Environmental Policy and Technology, EPA RCRA Remedial Waste Policy Advisory Committee, Vice-Chair of EPA National Advisory Council for Environmental Policy and Technology (NACEPT), Co-Chair of the EPA NACEPT Standing Committee on Industrial Sectors, EPA NACEPT Petroleum Refining Sector Workgroup, EPA National Advisory Committee (NAC) to the U.S. Representative to the Commission for Environmental Cooperation (CEC), EPA National Environmental Justice Advisory Council (NEJAC), Superfund Subcommittee, EPA National Environmental Justice Advisory Council (NEJAC), Co-Chair of the Pollution Prevention Work Group, EPA National Environmental Justice Advisory Council (NEJAC) Cumulative Risk/Impacts Work Group, EPA National Environmental Justice Advisory Council (NEJAC) Gulf Coast Hurricanes Work Group, EPA Class II Injection Well Advisory Committee, board member of the State Review of Oil and Natural Gas Environmental Regulations Board (STRONGER), board member of EARTHWORKS, founding member of the Oil and Gas Accountability Project, advisor to the Texas Oil and Gas Accountability Project, and member of the STRONGER workgroup that developed Hydraulic Fracturing Guidelines.

Human Health and Environmental Impacts Associated with the Deepwater Horizon Crude Oil Spill Disaster

On April 20, 2010, the BP Deepwater Horizon drilling rig exploded and burned in the Gulf of Mexico, 50 miles off the Louisiana coast. The explosion resulted in the deaths of 11

workers on the drilling rig. On April 22, 2010, Earth Day, the Deepwater Horizon drilling rig sank into the Gulf of Mexico. The rig separated from the riser pipe that had connected the rig to the well head (5,000 feet below the surface) on the Gulf of Mexico floor. Crude oil and natural gas flowed from the riser pipe into the Gulf of Mexico and created the largest spill in US history.
The crude oil spill resulted in and continues to result in severe environmental damage to the Gulf of Mexico and the coastal wetlands and estuaries along the coastal areas of Louisiana The crude oil spill has also resulted in human health impacts to residents in the coastal communities and to workers toiling to contain and clean up the oil in the Gulf of Mexico and the coastal wetlands and estuaries.

Louisiana has 7,721 miles of tidal shorelines, The coastal areas of Louisiana are the most abundant and vulnerable to negative impacts from the crude oil spill. The fragile wetlands, estuaries and near shore waters of Louisiana serve as spawning and nursery grounds for Louisiana seafood that provides or did provide a large portion of the seafood consumed in the United States. These wetlands and estuaries in eight of the nine coastal parishes, St. Bernard, Plaquemines, Jefferson, Lafourche, Terrebonne, St. Mary, Iberia, and Vermilion parishes, have received floating crude oil, dispersed crude oil plus dispersants and tar balls from the BP Deepwater Horizon Drilling Disaster. The wetlands and estuaries in these parishes have been severely impacted and continue to be impacted as the crude oil continues to come on shore.

Fishing grounds from the mouth of the Mississippi River to Pensacola, Florida were shut down on April 30, 2010. The fishing grounds west of the mouth of the MIssissippi River to Grand Isle were shut down in early May. As the crude oil plume moved to the west, additional fishing ground were closed. The livelihood of

the fishing community was instantly removed. The environmental impacts of the crude oil spill will negatively impact the wetlands, marshes and estuaries for decades into the future.

Crude Oil Aerosols and Associated Health Impacts

BP's crude oil spill and ongoing failure to control the source of the spill have resulted in the formation of crude oil aerosols in the air which have moved on shore ahead of the crude oil slick and continues to move on shore. These crude oil aerosols have caused community members along the coast of Louisiana, Mississippi, Alabama and Florida to experience odors. In Louisiana, the crude oil aerosols have resulted in health impacts including headaches, nausea, respiratory impacts, irritation to eyes, nose, throat and lungs and asthma attacks and have been experienced by people living along the coastal areas in St. Bernard, Plaquemines, Jefferson, Lafourche and Terrebonne parishes as well as in the New Orleans metropolitan area. These symptoms have also been experienced by workers and fishermen in the general area of the crude oil slick and areas where tar balls have washed onshore.

The Environmental Protection Agency (EPA) web site state "some of these chemicals may cause short-lived effects like headache, eye, nose and throat irritation, or nausea."

Local Fishermen Hired To Contain and Cleanup the Crude Oil Spill and Resulting Health Impacts

In order to offset the loss of livelihood, BP was encouraged to hire local fishermen, who have first hand knowledge of the wetlands, marshes and water bodies, to install booms and absorbent pads to protect the coastal areas and estuaries and to participate in the crude oil cleanup activities. As part of the

agreement for employment, the fishermen were required to sign an agreement that seriously compromised their existing and future rights and potential legal claims. After a court appearance in U. S. District Court on May 2, 2010, Judge Berrigan indicated the language in the agreement was over broad and Legal Counsel for BP agreed to enter into a stipulated judgment holding that the offensive provisions were without effect.

On May 4, 2010, Louisiana Environmental Action Network (LEAN) and Lower Mississippi Riverkeeper (LMRK) received and began distributing protective gear to the fishermen to utilize during cleanup activities. The protective gear consisted of half face respirators with organic cartridges, goggles, gloves and sleeve protectors. LEAN and LMRK have continued to provide protective gear to fishermen and individuals going into the polluted areas.

Workers hired by BP began reporting health symptoms such as severe headaches, nausea, difficulty breathing, and dizziness. However, the workers including the fishermen were reluctant to report their health symptoms for fear they would lose their jobs. The wives of the fishermen spoke out over concern for the health of their husbands. Soon the wives stopped speaking out for fear their husbands would loose their jobs.

The Louisiana Department of Environmental Quality (LDEQ) and Louisiana Department of Health and Hospital (LDHH) stated that oil cleanup workers "should avoid skin contact, and oral cavity or nasal passage exposure to oil spill products [by] using appropriate clothing, respiratory protection, gloves and boots."

On May 7, 2010, returning to U.S. District Court, the fishermen challenged BPs attempt to put the responsibility for compliance with technical safety laws related to hazardous substances on the

fishermen. Judge Engelhardt ordered a consent agreement wherein BP agreed to take responsibility to ensure workers were properly trained in Haz-mat protocol and provided all necessary equipment at BP's expense.

BP continued to fail to provide adequate protective gear to the fishermen. Subra Company, LEAN, and LMRK provided information to the EPA on the lack of compliance by BP with the terms of the consent agreement in not providing proper training and protective gear to the employed fishermen, and the lack of the Occupational Safety and Health Administration (OSHA) enforcement of worker safety regulations in conjunction with the response efforts.

On May 16, 2010, OSHA issued a detailed directive on the training required for specific task responders and stated that OSHA has officials monitoring the training and observing cleanup efforts to insure that the cleanup workers are provided protective equipment and comprehensive instruction.

Still BP failed to provide respirators to the workers exposed to the crude oil and the workers experienced health impacts. The workers were afraid to speak up due to the potential to lose their jobs. Those fishermen who attempted to wear respirators while working were threatened to be fired by BP due to the workers using respirators.

Shrimpers employed to use their shrimp boats as oil skimmers have not been provided with the appropriate protective gear. The oily skimmers and pads are being pulled into the shrimp boats, by the boat crews, with bare hands and no protective gear.

On May 26, 2010, a number of worker became ill on the job and were transported to the hospital. The workers reported

headaches, nausea, dizziness and chest pains. On Friday, Nay 28 two additional workers became ill with severe headaches and chest pains and were also transported to the hospital.

The protection, safety and health of the fishermen and other workers performing the deployment of booms, collecting the crude oil residue and cleaning up the environment are of great concern to Subra Company, LEAN and LMRK.

Decisions Have Resulted in Detrimental Impacts to Human Health and the Environment

Decision have been made that have and will continue to result in detrimental impacts to human health and the environment as a trade off for attempts to reduce the quantity of crude oil from reaching the shores, estuaries and wetlands of the northern Gulf of Mexico.

The actions to reduce the quantity of crude oil slick from reaching the shores, estuaries and wetlands of the northern Gulf of Mexico have included burning of the floating heavy portions of the crude oil slick, application of dispersants to the floating crude oil slick and subsurface application of dispersants to the crude oil near the point it flows into gulf waters near the well head, 5,000 feet below the surface of the Gulf of Mexico. These actions have resulted in negative impacts to human health by polluting the air, by burning of the heavy portions of the crude oil slick, and by aerial and ship board application of dispersants. The actions have had detrimental impacts to the water column, sediment, biota and wetland areas by dispersing the crude oil into the water column, sediments and wetland areas. The dispersing of the crude oil also has resulted in a much larger area of impact in the Gulf of Mexico than has been covered by the surface crude oil spill.

The failure to control the source of the crude oil spill has resulted in the shutting down and evacuation of five production platforms in the Gulf of Mexico due to the presence of the crude oil slick in the area of the platforms. Other well locations have been warned to be prepared to shut-in their production and evacuate. One rig had to be shut-in due to workers on the rig becoming ill from the air emissions from the crude oil slick.

Surface and Subsurface Application of Dispersants

BP is using the dispersants Corexit 9527 and Corexit 9500 to disperse the surface crude oil as well as the crude oil as it exits the well head, 5,000 feet below the surface of the Gulf of Mexico. These dispersants were preapproved for surface application for oil spills on water. The dispersants were not preapproved for sub-surface applications. Corexit 9527 contains propylene glycol and 2-Butoxyethanol (2-BE). Corexit 9500 contains propylene glycol. The other components in the dispersants are proprietary. Propylene glycol and 2-BE are toxic and bioaccumulate up the food chain.

Initially BP used Corexit 9527 to disperse the crude oil on the surface of the Gulf waters through the use of air planes. When the supply ran out, BP switched to the slightly less toxic Corexit 9500. Additional supplies of Corexit 9527 were secured and are currently being used on an ongoing basis. The application of the dispersant to the crude oil on the waters surface is being applied by air planes and boats.

Because the dispersants were not preapproved for sub-sea application, the Environmental Protection Agency required that the use of the dispersant sub-sea be suspended until test could be performed. The first two testing efforts were flawed. The third test was performed May 10th and 11th. As a result of the

testing, the EPA and NOAA approved the use of the dispersant for subsurface application on Friday, May 14, 2010. The use of the dispersant for sub-sea application must follow requirements established in the EPA's Dispersant Monitoring and Assessment Directive. The Dispersant Monitoring and Assessment Directive should have included requirements to monitor sediments, establishment of requirements for a monitoring grid system and frequency of monitoring, establishment of action levels which require discontinuation of application of the dispersant when the action levels are exceeded, and analysis of the dispersants in the water column and the air.

The dispersants being used by BP suspends the crude oil from the surface water into the entire water column and the sediment of the Gulf of Mexico. The dispersed crude oil and dispersants distribute throughout the water column, contaminate the water and sediment and damages and destroys aquatic species. The dispersed oil will be washed on shore and contaminate the wetlands and estuaries, will be distributed in the Gulf waters and sediments and serve as a source of contamination that will bioaccumulate up the food chain for a long period of time. In addition, the dispersed crude oil and dispersants will add additional stresses to the Dead Zone off the Louisiana coast.

The Louisiana Department of Health and Hospitals, Department of Environmental Quality and Department of Wildlife and Fisher expressed their concerns to BP about the potential dispersant impacts on Louisiana's wildlife and fisheries, environment and public health. The agencies are concerned about the impacts of the use of the dispersants and requested BP's commitment that the dispersants being used will not cause irreparable, short-term or long-term harm to our wetlands, coast, environment, marine life wildlife or people.

NOAA has issued predicted maps of the location of the oil slick plume along the coastal areas of the northern Gulf of Mexico on a daily basis. Subra Company, LEAN and LMRK have consistently requested that the federal agencies prepare and issue maps of the dispersed oil plume in order to prepare for the consequences of the movement of the dispersed crude oil and dispersants.

Work of Subra Company, LEAN and LMRK

Each decision being made in response to the Deepwater Horizon Oil Spill event has some positive and some very negative impacts to human health, the environment and the ecosystems along the coastal areas of the Northern Gulf of Mexico. These decision are being made for the most part by the federal agencies that make up the Incident Command and with limited input from the populations most impacted by these decisions.

Subra Company, LEAN and LMRK have worked extensively with the communities being impacted by this catastrophic disaster to monitor the ongoing activities and detrimental impacts, provide information, education, and methods of addressing the situations, engage the communities in the response efforts and decision making processes and provide protective gear to community members and workers being exposed to the environmental impacts of the disaster.

Health Survey Instrument

In order to capture and document the human heath impacts resulting from the various aspects of the Deepwater Horizon crude oil and natural gas spill, Subra Company developed a human health survey instrument and through LEAN, provided the instrument to community members in the impacted areas and areas to be impacted. The results of the human health impacts

documented in the surveys will be used to assess the severity and magnitude of the human health impacts associated with the Deepwater Horizon disaster.

Request

Subra Company, LEAN and LMRK need the assistance of the Subcommittee on Oversight and Investigations of the Energy and Commerce Committee and the federal governmental agencies in order to protect the health of coastal community members and the fishermen from the destructive impacts associated with the crude oil disaster and desperately need the existing laws and regulations to be enforced.

Subra Company, LEAN and LMRK would like to thank the Subcommittee on Oversight and Investigations for the opportunity to provide information on the human health and environmental impacts associated with the Deepwater Horizon crude oil spill disaster.