

For immediate release

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### **Independent Air Test at Mayflower Oil Spill Reveal 30 Toxic Chemicals at High Levels Health Symptoms Persist Despite Denials from Exxon and Agencies**

Little Rock--A citizen based organization responding the recent Exxon Pegasus Pipeline rupture and tar sands oil spill discovered over twenty-five toxic chemicals in the first ambient air sample collected on March 30.

Community leader, April Lane, has been collecting health reports from residents since the pipeline rupture on March 29. Lane relayed that "even four weeks later, residents are still feeling symptoms from the chemical exposure. People have consistently talked about gastrointestinal problems, headaches, respiratory problems, skin irritation including chemical burns, and extreme fatigue." These symptoms are consistent with exposure to the chemicals found in the independent air testing.

According to Dr. Neil Carman with the Lone Star Chapter of Sierra Club and former Texas Commission on Environmental Quality, "Thirty toxic hydrocarbons were measured above the detection limits. Each of the thirty hydrocarbons measured in the Mayflower release is a toxic chemical on its own and may pose a threat to human health depending on various exposure and individual factors. Total toxic hydrocarbons were detected at more than 88,000 parts per billion in the ambient air and present a complex airborne mixture or soup of toxic chemicals that residents may have been exposed to from the Mayflower tar sands bitumen spill."

#### **Response from Exxon, State & Local Officials**

Lane is interviewing residents about their health effects and collecting air quality data because state agencies have not been proactive in informing residents of the possible health effects associated with this particular chemical mixture also known as Wabasca Heavy Crude oil. Wabasca Heavy Crude oil, as identified by Exxon, is heavy oil (bitumen) that is diluted with lighter hydrocarbons like Benzene to allow for easier flow through pipelines.

Lane is a student at the University of Central Arkansas and President of Environmental Alliance at UCA; she also works with the Faulkner County Citizens Advisory Group. FCCAG was trained last November by Global Community Monitor in Bucket Brigade air sampling techniques.

Lane's initial air sample on March 30 detected over twenty-five toxic chemicals including cancer causing benzene and ethylbenzene. According to the Agency for Toxic Substances and Disease Registry, chemicals can have varying health effects depending on intensity and frequency of exposure. Short-term, high levels of exposure and long-term low level exposure to benzene and ethylbenzene have led to increased cancer rates. Many of the chemicals have developmental, neurological and reproductive health effects.

<b>Chemical detected</b>	<b>Long term health effects</b>	<b>Short term health effects</b>
Benzene	Cancer, possible reproductive and/or developmental effects	Breathing very high levels of benzene can result in death, while high levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.
Ethylbenzene	Cancer and reproductive effects.	Exposure to high levels of ethylbenzene in air for short periods can cause eye and throat irritation. Exposure to higher levels can result in dizziness.
n-hexane	Damage to the nervous system, numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue have been observed.	The only people known to have been affected by exposure to <i>n</i> -hexane use are at work. Breathing large amounts caused numbness in the feet and hands, followed by muscle weakness in the feet and lower legs. If removed from the exposure, the workers recovered in 6 months to a year.
Toluene	Breathing very high levels of toluene during pregnancy can result in children with birth defects and retard mental abilities, and growth. We do not know if toluene harms the unborn child if the mother is exposed to low levels of toluene during pregnancy.	Toluene may affect the nervous system. Low to moderate levels can cause tiredness, confusion, weakness, drunken-type actions, memory loss, nausea, loss of appetite, and hearing and color vision loss. These symptoms usually disappear when exposure is stopped. Inhaling High levels of toluene in a short time can make you feel light-headed, dizzy, or sleepy. It can also cause unconsciousness, and even death. High levels of toluene may affect your kidneys.
Xylenes	Studies of unborn animals indicate that high concentrations of xylene may cause increased numbers of deaths, and delayed growth and development. In many instances, these same concentrations also cause damage to the mothers. We do not know if xylene harms the unborn child if the mother is exposed to low levels of xylene during pregnancy.	High levels of exposure for short or long periods can cause headaches, lack of muscle coordination, dizziness, confusion, and changes in one's sense of balance. Exposure of people to high levels of xylene for short periods can also cause irritation of the skin, eyes, nose, and throat; difficulty in breathing; problems with the lungs; delayed reaction time; memory difficulties; stomach discomfort; and possibly changes in the liver and kidneys. It can cause unconsciousness and even death at very high levels.

Source: Agency for Toxic Substances & Disease Registry Tox Faqs and the US EPA Technology Transfer Network, Air Toxics Website

Hazardous air pollutants or HAPs detected include seven hydrocarbons identified as benzene, toluene, ethylbenzene, m,p-xylenes, o-xylene, hexane, and cumene. HAPs are regulated under the 1990 Federal Clean Air Act amendments as the most toxic of all known airborne chemicals.

The Bucket Brigade uses a certified laboratory capable of detecting VOC's in the low level part per billion range because residential health safety levels are set in parts per billion, not parts per million. Air testing in the parts per million range is approved for worker-only exposures and not residential exposures where vulnerable populations like children, pregnant women, seniors and sick people may live.

Benzene vapors in the Mayflower sample were measured at 220 parts per billion by volume (ppbV), exceeding the Texas short-term effects screening levels (ESL) for benzene of 54 parts per billion (ppb) by four times. Many residents were exposed for several days and are still being exposed to crude remaining in the environment.

Global Community Monitor Bucket Brigade Trainer Ruth Breech commented, "The spill and response has been a disservice to the community. People are obviously suffering and experiencing health symptoms from chemical exposure related to the oil spill. State and Federal need to step up immediately to document and prevent any further health issues associated with the Exxon oil spill. Agencies need to share information in a manner to ensure informed decision making and enable access to necessary resources such as medical treatment for chemical exposure."

In addition to exposure to these chemicals associated with the Wabasca Heavy Crude oil spill, residents have many questions about the cleanup operations and long-term exposure to chemicals.

On April 22<sup>nd</sup>, FCCAG held a Town Hall Meeting to discuss issues related to the oil spill. The goal of the event was to make a prioritized list of recommended actions and time frame for completion. Several presentations were given by Board Members of FCCAG, including the results of the Bucket Brigade air testing. Experts in oil spill pollution Dr. Wilma Subra and Dr. Riki Ott also presented an analysis of the available air, water, and soil data that has been collected by Exxon, EPA, and the state. These experts relayed their first-hand experiences while working on the Exxon Valdez oil spill and the BP disaster in the Gulf.

Over 100 people attended the all-day event that was held at the Faulkner County Natural Resource Center. The list of recommended actions has been hand-delivered to the Mayflower City Planning Committee. FCCAG will continue to work with the people of Mayflower and state and local officials to ensure the health and safety of the communities and ecosystems that are affected by this disaster.