

BP's Deepwater Oil Spill - Methane Levels Unusually High and Open Thread

Posted by Gail the Actuary on June 24, 2010 - 11:13pm Topic: Environment/Sustainability Tags: deepwater horizon, methane, oil spill, samantha joye [list all tags]

One issue we have read about recently is very elevated methane levels in dissolved sea water, near where the oil and gas are escaping currently in the Gulf of Mexico. Approximately 40% of the oil/gas mixture that is escaping is natural gas, and it is some of the natural gas that seems to be dissolving in the water.

The most recent report on this issue is from John Kesseler, Professor of Oceanography at Texas A & M University. He reports that near the surface, levels of methane are normal, but "Below approximately 1,000 meters, the concentration of natural gas and methane in the ocean waters jumps by a factor of one million." In other areas, methane concentrations were said to be 100,000 times normal levels.

The microorganisms that feed on methane can use up part of the oxygen in an area, and, if this happens to a great enough degree, can create "dead zones". At this point, there seems to be some oxygen depletion, but not enough to cause dead zones.

One issue we have read about recently is very elevated methane levels in dissolved sea water, near where the oil and gas mixture are currently escaping in the Gulf of Mexico. Approximately 40% of the oil/gas mixture that is escaping is natural gas, and it is some of the natural gas (which is mostly methane) that seems to be dissolving in the water.

The most recent report on this issue is from John Kesseler, Professor of Oceanography at Texas A & M University. He reports that near the surface, levels of methane are normal, but "Below approximately 1,000 meters, the concentration of natural gas and methane in the ocean waters jumps by a factor of one million." In other areas, methane concentrations are 100,000 times normal levels.

The microorganisms that feed on methane can use up part of the oxygen in an area, and, if this happens to a great enough degree, can create "dead zones". At this point, there seems to be some oxygen depletion, but not enough to cause dead zones.

According to Kessler, "At some locations, we saw depletions of up to 30 percent of oxygen based on its natural concentration in the waters. At other places, we saw no depletion of oxygen in the waters. We need to determine why that is."

Earlier in June a team of scientists lead by Samantha Joye of University of Georgia also found very high methane concentrations in some areas, farther from where the rig was originally located. She spoke of methane levels 10,000 times background levels. Her discussions were in the context of oil and gas plumes. She mentioned reduced oxygen levels as well, which are still being

The Oil Drum | BP\'s Deepwater Oil Spill - Methane Levels Unusually High - andh@pe//Whweatcheoildrum.com/node/6653 studied.

This seems to be a story that is still developing. Both teams of scientists are still analyzing data, and more information may be announced in the next weeks or months.

Somerican This work is licensed under a <u>Creative Commons Attribution-Share Alike</u> 3.0 United States License.