

Providing coverage of Alaska and northern Canada's oil and gas industry January 2009

report/default.htm.

Vol. 14, No. 4

Week of January 25, 2009

All about the climate

Challenging future for permitting as climate change initiatives gain traction

Alan Bailey

Petroleum News

The question of whether climate change will impact the regulatory situation in Alaska is now past, attorney Eric Fjelstad from Perkins Coie LLP told the Seminar Group's Permitting Strategies in Alaska conference on Jan. 15. Climate change is working its way into the regulatory process, he said.

"Whether one believes climate change is

USGS issues Arctic climate change report

People who want to know more about the science of climate change, especially as it pertains to the Arctic regions, might want to take a look at a new report entitled "Past Climate Variability and Change in the Arctic and at High Latitudes," published by the U.S. Geological Survey. The report is available on the USGS Web site at www.climatescience.gov/Library/sap/sap1-2/final-

The U.S. Climate Change Science Program commissioned this large and comprehensive document, which has contributions from 37 scientists from the United States, Germany, Canada, the United Kingdom and Denmark.

The report not only provides an overview of the results of climate change research but also places current climate change ideas into the context of the geological record. Geological evidence demonstrates that the Earth's climate has changed continuously throughout the Earth's history, while evidence from the more recent geologic past shows how previous temperature fluctuations compare with current climate change, especially in the Arctic.

"By integrating research on the past 65 million years of climate change in the entire circum-Arctic, we

happening or not is irrelevant. Whether one believes it's manmade is irrelevant. The regulatory programs are happening," Fjelstad said. "... Alaska is unique insofar as we're going to have those regulatory programs but we're also viewed ... as effectively being ground zero for where it is actually happening."

In fact, the topic of climate change proved to be a recurring theme in several talks in the conference.

For example, Jeffrey
Leppo of Stoel Rives LLP
talked about the impact of
climate change issues on
the application of the
National Environmental
Policy Act, the federal
legislation that determines
the need for environmental
assessments and
environmental impact
statements.

Under NEPA, the key question is whether someone is being thoughtful in making a decision that can have environment impacts nowadays, being thoughtful entails considering climate change, Leppo said. One consideration is the environmental consequences of climate change, such as melting permafrost, on a project. And another consideration have a better understanding on how climate change affects the Arctic and how those effects may impact the whole globe," said USGS Director Mark Myers when introducing the report on Jan. 16. "This report provides the first comprehensive analysis of the real data we have on past climate conditions in the Arctic, with measurements from ice cores, sediments and other Earth materials that record temperature and other conditions."Among the findings expressed in the report is a conclusion that current rates and quantities of Arctic sea ice loss are highly unusual compared with what is known to have happened over previous millennia, especially since changes in the Earth's orbit ought to have lessened the probability of sea ice melting. Sustained warming could result in the eventual disappearance of the Greenland ice sheet and a consequent rise in sea level of several meters.

The report also concludes that there have been rates of Arctic warming in the geologic past comparable to what is being observed at present. However, some projections of future human-induced climate change indicate rates of change exceeding those earlier "natural" rates. The report also warns that human induced climate change could cross a threshold beyond which the change could accelerate to become very fast and very large.

—Alan Bailey

is the greenhouse gas emissions that might result from the project.

But although climate change now generally appears as a topic within the NEPA process, there haven't been any cases so far where climate change has proved to be an impediment to a project, Leppo said.

Endangered Species Act

With the listing of the polar bear in May 2008 and the possible listing of other species that depend on Arctic Sea ice, climate change concerns have also entered the realm of the Endangered Species Act, Leppo said.

The Center for Biological Diversity proposed the polar bear listing in February 2005, at the same time as a many nations signed the Kyoto Protocol on climate change. At that time the polar bear population appeared to be stable and the listing petition was based on predictions of sea ice loss as a consequence of global warming, Leppo said.

The U.S. Fish and Wildlife Service eventually listed the polar bear as threatened because it determined that polar bears depend on sea ice; that there is a connection between sea-ice reduction and climate change; and that current reductions in sea ice are likely to continue for at least 45 years. Fish and Wildlife also said that there is an established linkage between reductions in sea ice and reductions in polar bear populations, and that the rate of and size of the change in sea ice cover make the adaptation of polar bears to the new conditions unrealistic, Leppo said.

There have been other species, such as certain types of coral that have been listed under ESA as a consequence of climate change, but these species were listed following major declines in their abundance.

The polar bear is the first species to be listed in a situation where there wasn't already a demonstrated decrease in abundance or distribution, Leppo said.

"The issue is about the threat and the consequences that could follow," Leppo said.

Dilemma for DOI

But that left the Department of the Interior with what it perceived as a dilemma, in that it wanted to list the polar bear as being at a foreseeable risk of extinction because of climate change, while on the other hand the agency concluded that ESA is not intended or well equipped to regulate greenhouse gas emissions.

And based on a scientific opinion by the U.S. Geological Survey, DOI affirmed a principle that it is not possible to establish a casual connection between specific actions entailing greenhouse gas emissions and the specific responses of polar bears. That conclusion resulted in a DOI legal opinion that the ESA does not require consultation for greenhouse gas emissions.

DOI subsequently changed the regulations for ESA consultations to reflect that opinion. And the U.S. Fish and Wildlife Service, the agency that oversees protection of polar bears, has changed other ESA regulations in a way that prevents greenhouse gas emissions being considered as a "take" of polar bears.

"Vast amounts of litigation have ensued," Leppo said. Cases cover a range of arguments against the listing, while one case argues for the severity of the listing being raised from threatened to endangered. And the DOI position — that the agency is listing the polar bear as threatened under ESA without the act being able to address the cause of the threat — presents a legal problem, he said.

"I think the courts will be very reluctant to reach that conclusion," Leppo said.

Hugely challenging

The uncertainty and change associated with the polar bear and other listings, coupled with uncertainties relating to new personnel in a new U.S. administration, will be hugely challenging in 2009, Leppo said.

"There's a great deal of uncertainty and that's a killer for projects and for schedules," Leppo said. "... Get some good consultants — this is not something to play with."

Peter Van Tuyn, an environmental lawyer with Bessenyey & Van Tuyn LLC, also emphasized that the new administration in Washington, D.C., will present a more uniform and aggressive approach to addressing climate change and climate change impacts than has been seen in the recent past.

And in Alaska the climate change issue will cross

several regulatory agencies, he said.

"We're going to see ... a fair amount of attention drawn to the Arctic because ... the Arctic is disproportionally affected by climate change," Van Tuyn said.

The Arctic provides the United States with an opportunity to apply approaches to dealing both with minimizing greenhouse gas emissions and with climate change impacts, he said.

Other big issues that will draw more and more attention include ocean acidification, and the impact of climate change on transportation and other infrastructure, especially in permafrost. And there are questions such as whether old-growth forests in Alaska should be viewed as carbon sinks.

Coal mining is also an issue in Alaska, Van Tuyn said.

"Clean coal technology is not much more than a label at this point," he said.

In addition, people can expect to see agencies being more precautionary in applying environmental protection laws than in the previous administration, Van Tuyn said.

Cap-and-trade

Tom Lindley of Perkins Coie LLC spoke about another aspect of climate change policy — the certainty that the Obama administration will push greenhouse gas cap-andtrade legislation. A capand-trade system would place limits on emissions of greenhouse gases such as carbon dioxide and methane. Organizations with emissions under the limits could sell emissions credits in an emissions market to entities with emissions over the cap.

A key question is the way in which emission allowances would be distributed under this type of scheme. One distribution method is for the government to allocate the allowances to specific industries — attempts by the European Union and six northeastern U.S. states to implement this method have failed because emissions were overallocated, thus causing the sanctioned emissions to exceed the overall emissions cap, Lindley said.

Obama appears to favor an alternative distribution method in which all emission allowances would be auctioned, so

that all organizations would have to pay for their emissions. Companies would only be allowed limited opportunities to offset low greenhouse gas emissions in one part of their operations against higher emissions elsewhere. Money raised in the auctions would be used to fund a variety of renewable energy and other sustainable-society projects, potentially including such things as plug-in hybrid vehicle research, low emissions coal plants and cellulosic ethanol development.

There are many unknowns regarding how this type of cap-and-trade program would work, including the questions of whether organizations would receive credits for reducing emissions before the program goes into operation and whether a federal scheme would preempt state and regional programs, Lindley said.

Cap-and-trade legislation will appear in Congress in 2009, Lindley said. But, although reporting arrangements could be in place by 2010, it would be unrealistic to put a complete cap-and-trade system in place before 2012, he said.

And Carol Browner, who will play a key role in the

new administration in driving energy legislation through Congress, has already advocated that the Environmental Protection Agency should regulate greenhouse gas emissions under the federal Clean Air Act unless Congress has passed effective greenhouse gas legislation by 2010, Lindley said.

But any attempt to regulate greenhouse gases through the Clean Air Act would lead to some major difficulties and complexities, mainly because the act is not designed to deal with the widespread, large-scale emissions associated with a gas like carbon dioxide, Lindley said.

International perspective

From an international perspective, the United States cannot by itself control the Earth's overall atmosphere, Lindley said. But the Kyoto Protocol, the three-year-old international climate change treaty, has run into issues such as the over allocation of emissions and the lack of control over emissions in countries with emerging economies.

And negotiations over the next Kyoto round have begun.

"There will be a next round of Kyoto," Lindley said. "It may take a year or two to get in place but there will be one."

In addition, the Harper administration in Canada has proposed the negotiation of a North American cap-and-trade system. Mexico is also interested in that concept, Lindley said. And within North America there are already several state and provincial groupings, such as the Western Climate Initiative, for addressing climate change on a regional basis.

Meantime, in a timehonored U.S. tradition, when a significant segment of the population does not see an administration moving aggressively enough in a direction that the segment wants, the public will turn to litigation to try to bring about change through the courts. That has happened in recent years in relation to climate change, with litigation relating to environmental laws such as the Clean Air Act and NEPA, and with common law litigation, Lindley said. Lindley outlined several cases that have been going through the courts, including a common law case in which the village of Kivalina on Alaska's North Slope has

sued ExxonMobil for damage to the village as a consequence of climate change.

But when it comes to an issue such as climate change, there are issues regarding proof of who is responsible for what effect.

"What does it mean even to be liable when you've got 1.2 million (greenhouse gas) sources or 3.7 billion sources and so on?" Lindley said.

Business perspective

From a business perspective, future greenhouse gas legislation will lead to the need for emissions inventory reporting of a kind already implemented in many western states, Lindley said. There will also be greater permitting scrutiny and, depending on whether gases such as carbon dioxide are regulated under national air quality standards, there may be increased difficulty in obtaining clean air permits or doing certain types of development.

And there's a huge emerging issue regarding disclosure to shareholders of climate change risks, such as the potential impact of rising sea level on a coastal manufacturing facility, Lindley said. Businesses also need to consider likely changes in government regulations and the potential for new litigation as a consequence of climate change.

Companies are starting to look at their emissions footprints and beginning to plan actions to prepare for greenhouse gas legislation. It is necessary to be prepared and positioned for enhanced greenhouse gas disclosure, and to identify areas of potential financial impact from climate change, Lindley said.

"Prepare your action plan," Lindley said. "... Protect your existing business assets and begin thinking how you're going to position yourself in the market."