▲ Al Gore raised the hackles of the Canadian government this week when he criticized the country's large scale extraction of oil from the Alberta tar sands. The tar sand oil reserves are among the world's largest but are particularly energy intensive to extract. That means that extracting oil that will then be burned will emit significantly more greenhouse gases than oil extracted through more conventional means. Gore said that the extraction has led to

damage to some extremely beautiful landscapes, not to mention the core issue of adding to the reckless spewing of pollution into the Earth's atmosphere as if it's an open sewer.

The Canadian government is having none of it. Canada's natural resource minister called Gore's remarks "wildly inaccurate and misleading."

So why the hooplah now over the oil sands extraction? Most likely because the U.S. State Department faces an upcoming decision about whether to approve the construction of the Keystone Pipline, which would transport oil extracted from the tar sands across the United States to the Gulf of Mexico. More specifically, the State Department must determine whether to issue a Presidential Permit for the construction of the pipeline by deciding whether the pipeline would "serve the national interest." On March 1, the State Department released a Draft Supplemental Environmental Impact Statement (DSEIS) as required under the National Environmental Policy Act assessing the environmental effects of the proposed pipeline. The DSEIS is necessary because the applicant for the pipeline, TransCanada Corp., has proposed a new route for the pipeline in response to significant criticism over the first proposed route. Thus the original Environmental Impact Statement (EIS) must be supplemented.

The DSEIS has raised significant controversy because it concluded that greenhouse gases emitted as a result of extracting and then burning the tar sands oil would not increase dramatically whether or not the pipeline is approved. The reasoning, in the words of the DSEIS?

approval or denial of the proposed Project is unlikely to have a substantial impact on the rate of development in the oil sands, or on the amount of heavy crude oil refined in the Gulf Coast area.

That's because the analysis assumes that the oil below the tar sands — which the State Department acknowledges is particulary energy intensive to extract — will be extracted regardless of whether the pipeline is built or not. The DSEIS relies on "market analysis" that suggests that without the pipeline, the oil will be extracted and exported via rail rather than via the pipeline. So no matter what the U.S. does, the oil will be burned and greenhouse gases will be released into the atmosphere in any event (treating the atmosphere, in Gore's words, as an "open sewer.") The DSEIS, if finalized with the same conclusions, appears to give the State Department cover on perhaps the most controversial aspect of the pipeline construction, its relationship to climate change.

But the State Department analysis is by no means the last word on this topic and in fact, the Obama Environmental Protection Agency has now significantly undercut the State Department conclusion. In a letter released on April 22, EPA questioned the DSEIS conclusion that denial of the pipeline would result in the oil being extracted in any event. The State Department analysis, in EPA's view, is based on insufficient information and should be updated. Here's what the EPA letter has to say:

The market analysis and the conclusion that oil sands crude will find a way to market with or without the Project is the central finding that supports the DSEIS's conclusions regarding the Project's potential GHG emissions impacts. Because the market analysis is so central to this key conclusion, we think it is important that it be as complete and accurate as possible. We note that the discussion in the DSEIS regarding energy markets, while informative, is not based on an updated energy-economic modeling effort. The DSEIS includes a discussion of rail logistics and the potential growth of rail as a transport option, however we recommend that the Final EIS provide a more careful review of the market analysis and rail transport options. This analysis should include further investigation of rail capacity and costs, recognizing the potential for much higher per barrel rail shipment costs than presented in the DSEIS. This analysis should consider how the level and pace of oil sands crude production might be affected by higher transportation costs and the potential for congestion impacts to slow rail transport of crude.

The new EPA analysis has, in my view, now made the State Department decision about whether to approve the permit significantly more difficult. At a minimum, EPA has raised significant questions about whether the DSEIS is legally inadequate and State will need to address the concerns in the final EIS. But more crucially, EPA appears to be casting doubt on the most controversial conclusion of the DSEIS, suggesting that if the pipeline isn't built, the tar sands oil may remain in the ground. If so, the climate change impacts from approving the pipeline are substantial.

So where does this leave the Obama Administration? In a deep bind. I discussed this issue at length recently on Public Radio International's Living on Earth: http://www.loe.org/shows/segments.html?programID=13-P13-00017&segmentID=1 I can't predict whether the Obama Administration will approve the Keystone permit or not but its own EPA just made the task a whole lot tougher.