Sept 23, 2011 Public Review Hebron – Additional Information Stage

Gail Fraser, Associate Professor, York University, 4700 Keele St., Toronto ON M3J 1P3 (comments are not on behalf of York, but I conduct research on oil and gas in NL)

I provided comments to the Hebron EA. I do not believe that the following was adequately addressed and I am requesting more information be provided by the proponent:

1. I requested data on the occurrence of oil sheens associated with ***legal discharges*** of produced water. To my knowledge, this information was not provided; the proponent continued to refer to spills, when I made it clear I wanted to see data presented on the frequency of occurrence of oil sheens related to legal discharges (i.e., not spills) (see Jun 17, 2011, EMCP Response to Additional Review Comments, Part I). If the data exist and are not being presented then this should be stated.

2. I requested data pertaining to the follow-up of oil (or other substances) spills (see Jun 17, 2011, EMCP Response to Additional Review Comments, Part I). Specifically, focusing on small spills because they represent chronic oil pollution and have a potential to significantly impact seabird populations over time. It is not good EA practice to discuss past oil spills by the industry, without also discussing their success of responding to those oil spills and how they assessed the impacts of those spills. The proponent states that there is no significant effect on seabirds from small spills, but provide no regional data to support that prediction. At the very least, the proponent should include their own data (e.g., Hibernia) on spill response, impacts etc. The proponent's response on June 17, 2011 (EMCP Response to Additional Review Comments, Part I), reveals the problem of not providing data which allow the public to understand the effectiveness of responses to small spills. Specifically, the proponent states "*Spills <1 L are usually dissipated before spill containment equipment can be deployed. The operator, including our environmental contractors, are not aware of data collected on seabirds potentially affected by spills <1 L.*" This response, a) assumed I was asking for spills less than 1 L; b) did not provide the number of small spills which are dissipated ("usually" is not a number); and c) did not provide data on the number of times seabird assessments were conducted with the occurrence of small spills.

3. Finally, a significant issue, for someone who studies oil and gas EAs is the change in how the EA predictions were presented in the EA in comparison to the White Rose EA. In my comments I stated (see Jun 17, 2011, EMCP Response to Additional Review Comments, Part I), "In the current EA, each phase, rather than each prediction is provided with a confidence level rating and scientific certainty. I am very concerned about the change in formatting between White Rose and Hebron EAs. This is the fourth development and production EA for this jurisdiction and each EA has a different approach. One could argue that the different approaches are an improvement on the process. But I would argue that the change between the White Rose EA and the Hebron EA up reduces the available information rather than improves on the process. As the RA, the C-NLOPB should be ensuring consistency and improvement for each EA. This current change is not an improvement." The proponent's response, "This is consistent with guidance provided by the CEA Agency (CEA Agency 1994) and represents a comprehensive level of certainty for each effect that occurs within that Project phase." does not answer why there was a change.

It is very important to understand which predictions do not have strong scientific certainty and link these predictions to a follow-up program. By providing an overall rating for each phase does not allow the C-NLOPB, as the RA to make these clear linkages; nor does it allow the public to understand how predictions were linked to follow-up programs." The response that I received indicates that the rating of scientific certainty and probability of occurrence were assessed by the consultants, but by this process would therefore untraceable because there is no public record. **This is not a transparent process and should be amended.** If the consultants have already gone through the work of assessing scientific certainty and probability of occurrence for each prediction, then it should not be difficult to put that information into the EA – where it is made absolutely clear which predictions are weak – and can be evaluated in post EA phase. **Just because a prediction is deemed *not significant* does not mean that it has strong scientific certainty,** for an example, I use seabird attraction to light/flares assessed in the White Rose EA. The non-significant effect prediction rating for the development phase had a medium level of scientific certainty for the impact of lights on seabirds; and gas flaring had a low level of scientific certainty. The non-significant assessment for the impact of lights on seabirds during production was rated medium for the level of scientific certainty; and gas flaring was rated with a low level of scientific certainty (Husky Oil 2000: Table 4.4-2). The CEA-Agency (2010) explicitly links EA scientific uncertainty to follow-up programs where "*The focus of the monitoring and follow-up program should be on those potential environmental effects associated with the greatest risk and uncertainty*." If uncertainty is not presented on a per-prediction basis then it is impossible to link predictions to the EA follow-up program.

Thank you for taking the time to consider these comments.

Kind Regards,

Dr. Gail Fraser

Citations

Canadian Environmental Assessment Agency 2010. Guide to the Preparation of a Comprehensive Study for Proponents and Responsible Authorities Appendix C: Suggested Content for a Comprehensive Study Report. Online: http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=0DABEB61-1&offset=8&toc=show

Husky Oil Ltd. White Rose development environmental complete comprehensive study, Part I. St. John's, NL: Husky Oil. 2000a; 639 pp.