

Environmental Health Program Regions and Programs Branch 1505 Barrington Street, Suite 1817 Halifax, NS B3J 3Y6

December 14, 2010

ATL-2009/10-080 / OF15-91-39

Elizabeth Young
Environmental Assessment Officer
Canada-Newfoundland and Labrador Offshore Petroleum Board
5th Floor, TD Place
140 Water Street
St. John's, NL A1C 6H6

Subject: Health Canada's response to the proponent responses to Health Canada's original comments (dated July 26, 2010)¹ on the Hebron Project, Comprehensive Study Report, June 2010²

Dear Ms. Young:

Thank-you for your letter dated December 2, 2010 containing the proponent's responses to Health Canada's original comments related to the Comprehensive Study Report for the proposed Hebron Project². Health Canada has reviewed the proponent's responses to Health Canada's comments with respect to noise, air quality health effects (on-shore and off-shore), and recreational fisheries. Health Canada is satisfied with the responses to the comments regarding noise, on-shore air quality health effects and the effects of the project on recreational fisheries. Health Canada is providing one additional comment with respect to off-shore air quality, which is presented in the following table that includes Health Canada's original information request, the proponent's response and Health Canada's additional comment (new information has been bolded).

Health Canada

Original HC Comment #3 Air Quality –	EA Reference:	Section 6 – Air Quality; and Air Emissions and Dispersion Modelling Study for the Hebron Project ³
Offshore		
	Scoping Document Cross Reference:	Section 5.3.4.2 Air Quality (Bullet one – description and annual estimates of air emissions associated with all project activities)
	Scoping Document Satisfied:	Unclear
Preamble:	In a review of National Pollutant Release Inventory (NPRI) for the Hibernia off-shore platform, several polycyclic aromatic hydrocarbons (including acenaphthene,	

¹ Health Canada. 2010. Letter Report to Elizabeth Young, Canada-newfoundland Offshore Petroleum Board. Letter report dated July 26, 2010.

² Stantec Consulting Ltd. 2010. ExxonMobil Canada Properties, Technical Document: Hebron Project Comprehensive Study Report. June.

³ Stantec Consulting Ltd. 2010. Air Emissions and Dispersion Modelling Study. Report Prepared for Hebron Project, June.

acenapthylene, fluorene, naphthalene, and pyrene), n-hexane, benzene, toluene, ethylbenzene and xylenes were reported to have been released to air in 2008 (Environment Canada, 2009). These substances were not specifically modeled in the Air Emissions and Dispersion Modelling Study² and it is unclear whether they were implicitly included as part of the total volatile organic compound (VOC) releases or whether they were not assessed. <u>Air Reference:</u> Environment Canada. 2009. National Pollutant Release Inventory, 2008 data.		
Hibernia (NPRI ID: 6096). http://www.ec.gc.ca/pdb/websol/querysite/facility_substance_summary_e.cfm?opt_np ri_id= 0000006096&opt_report_year=2008		
Please indicate whether or not these substances were included in the modeling assessment. If they were not, please provide a rationale as to why they were excluded, as several of these substances can act as respiratory irritants, and at least one (i.e. benzene) may be carcinogenic to humans via the inhalation route of exposure.		
Individual VOCs were not modeled in this study only total VOCs. The Project is in the early stages of design, and the level of detail required to undertake individual VOC emissions is not available. Therefore, the emission factors for total VOCs were acquired from the US EPA AP-42, Section 3.1 Stationary Gas Turbines. Once the platform is operational, EMCP will report per National Pollutant Release Inventory, on VOCs and other releases, as required by legislation.		
Given that the specific VOCs to be released are not known, it is unclear how the risk to human health from exposure to those substances will be evaluated. Please provide a discussion about the following: • Will VOCs be monitored as individual substances or as total VOCs? • If VOCs will be monitored as individual substances, how will the individual substances be determined? • How will VOCs be measured and reported (i.e. as releases in tonnes/year or as concentrations in mg/m³)? • How will the health risk to humans (including workers and any other		

If you have any additional comments/questions, please contact the undersigned at your convenience.

Sincerely,

Allison Denning,

Regional Environmental Assessment Coordinator

Health Canada, Atlantic Region

cc: Tom Ferris, Manager, Environmental Health Programs, Health Canada Gregory Kaminski, Senior Environmental Health Assessment Specialist, Health Canada