

April 12, 2013

Ref: 10-L-0010-13

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

Dear Ms. Young:

## Re: Response to the Latest Environment Canada Comments

Corridor Resources Inc. (Corridor) is submitting this letter in response to the latest comments from Environment Canada (EC) sent to Corridor by the Canada-Newfoundland and Labrador Offshore Petroleum Board on March 6, 2013, on the Old Harry spill modelling that was conducted for Corridor by SL Ross Environmental Research Ltd. (SL Ross) and Applied Science Associates (ASA). Corridor has been involved in discussions with EC and the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) since May of 2012 on this spill modelling issue - almost a full year. This situation has materially delayed the processing of the Old Harry Environmental Assessment (EA) and placed Corridor's project schedule at risk.

Corridor remains of the opinion that the modelling conducted by SL Ross is valid for the purposes of the EA. We further believe that the additional information and context provided in this response letter and the accompanying report should close out this issue and allow the EA review to be completed. Corridor's detailed response, after thorough discussion with SL Ross and Stantec, is included in the accompanying report to this cover letter. Our detailed response includes: (i) Information to address the key issues, namely, emulsification and dispersion that have resulted in the discrepancy between the EC and SL Ross results; (ii) additional modelling results by SL Ross, where they have used, for comparison purposes, the same dispersion algorithm used by ASA; and (iii) a detailed, line-by-line response to the specific issues raised in the EC January 25, 2013 letter.

The following critical points, described in more detail in the accompanying report, support the validity of the SL Ross modelling work as appropriate for the Old Harry EA:

- Evidence has been provided from EC's own dataset and actual documented spill examples that the light, Cohasset oil surrogate will not emulsify. Therefore, only modelling results that exclude emulsion formation are appropriate in this case. Note that the ASA modelling (September 20, 2012) used an emulsification factor only to demonstrate that a model of the Cohasset oil will emulsify if the default values in OILMAP are used. ASA notes that emulsification is not appropriate for a very light oil such as Cohasset;
- Scientific references and actual spill examples are included as evidence that natural dispersion
  plays an important role in the fate of diesel and the light, Cohasset crude oil used as a surrogate
  for the potential Old Harry product;
- Scientific references presented in the report indicate that natural dispersion will occur as long as breaking waves are present and breaking waves are known to begin in offshore waters at wind speeds as low as 7 knots (3.6 m/s);

- It is Corridor's view, in agreement with SL Ross, that spill models appropriate for Old Harry should account for natural dispersion through the full range of wind speeds when breaking waves
- Winds greater than 10 knots (5 m/s) exist in the vicinity of the Old Harry project for more than 50% of the time in all seasons, so wind speeds higher than 10 knots need to be considered when looking at realistic modelling scenarios;
- The full variability of winds in the region has been accounted for in past modelling efforts through the use of the 52 years of hourly MSC 50 time series wind data, which is the most appropriate dataset to use in our view;
- New modelling by SL Ross using a natural dispersion cut-off at 10 knot wind speeds shows that the area potentially affected from the operations is small, would not interact with any shoreline, and would not result in any material change from an EA perspective (i.e., the zone of influence is not materially affected such that it would change EA conclusions); and
- SL Ross has been responsible for the modelling of the fate and behavior of potential spills for almost all of the exploration and development operations on Canada's east coast since the early 1980s. These reports have all been reviewed and accepted by the appropriate government agencies, including EC, over this extensive time period. We respectively submit that the SL Ross model is well known and respected in the region.

In summary, Corridor is of the view that it has completed a thorough investigation into this spill modelling issue and has illustrated, through a preponderance of evidence, that the modelling work completed to date (three different sets of modelling, involving two spill modelling expert companies) is adequate for the assessment of environmental effects of the single exploratory well planned at the Old Harry site. Corridor identified, early in its planning stage, that spill modelling would be a critical issue and we have been duly diligent in our efforts to contract internationally recognized spill modelling experts with a depth of experience in this field, to conduct modelling appropriate for the type of products likely to be produced at Old Harry, and to provide timely information to respond to issues raised by EC. We do not believe that additional work is warranted on this issue.

If you have any questions on the information provided, please let us know. We are available at your earliest convenience to discuss how best to close out this issue.

Yours truly,



Dena Murphy, OHSE Manager Corridor Resources Inc.

David Burley, Manager, Environmental Affairs, C-NLOPB CC. Darren Hicks, Environmental Analyst, C-NLOPB

Enclosures