



June 19, 2009

*letter sent electronically*

Mr. Howard Pike  
Manager, Operations and Safety  
Canada-Newfoundland & Labrador Offshore Petroleum Board  
5<sup>th</sup> Floor, TD Place, 140 Water Street  
St. John's, NL A1C 6H6

Dear Mr. Pike:

**RE: Water Ingress into Helicopter Transportation Suits**

On June 9, 2009 you sent letters to the three producing operators in the Newfoundland and Labrador offshore area (ExxonMobil, Petro-Canada and Husky Energy) in which you outline concerns that were noted by your staff during their recent visit to the Offshore Safety and Survival Centre of the Marine Institute (MI-OSSC). Those concerns related to the amount of water ingress experienced during training exercises using the Helly Hansen flight suit E-452. These concerns have also been brought to the attention of the producing operators by members of their workforce and MI-OSSC staff. In this letter I will provide you with an outline of the actions the industry is collectively taking to evaluate the concerns and to address them. We also wish to meet with you in the near term in order to discuss this further and assess any connections to the work we are currently undertaking to prepare for the review of the CGSB Standard 65.17-99 (Helicopter Passenger Transportation Suits System).

We have identified two concerns relating to the water ingress issues: the use of the suit in a training scenario and the fit of the suit. We note that a certain amount of water ingress is accounted for within the calculations used to develop appropriate insulation factors of the suit. This calculation is a part of the CGSB standard. Water ingress in training was identified to industry early in the implementation of these suits and at the time it was noted that this is expected because the use of the suit in training is not what the suit was designed for. The repeated use of the suit in the underwater egress trainer and other in-water training exercises (life raft, etc.) causes the suit to be repeatedly submerged in a way beyond what it was designed for. An emergency situation would not require that extent of repeated submersion. However, recent additions to the training (i.e. additional

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in-water exercises to train on the HUEBA<sup>i</sup>) have caused more feedback regarding the water ingress experienced by trainees.

Further, we have recently, in conjunction with the return to helicopter flight operations, engaged Helly Hansen on a suit fit program of the entire workforce. All individuals are being fit tested at the heliport prior to flight offshore. A small number of individuals have been found through this program to need a suit customized to them; it has been found in these cases that either the wrist seals, hood or boots need to be changed to match their specific size. This is being addressed and those individuals are being sent offshore via supply vessel in the meantime. However, the fit of a suit to an individual in training might not be conducted to the specific degree that Helly Hansen is doing through this program prior to flight. Therefore an individual may not be receiving a perfectly fitted suit in a training situation.

However, in recognition of the concern, all the operators in Newfoundland & Labrador and Nova Scotia have asked Helly Hansen for an assessment of the performance of the E-452 during helicopter egress. This testing will be completed by CORD Group Limited, who is authorized by Transport Canada and Underwriter Laboratories to conduct approval testing, and who have been involved in the development and approval of various types of immersion protection since 1983. The test will measure leakage during a simulated underwater egress from a helicopter. The test protocol and methodology are being finalized and the testing is anticipated to take place during the week of June 21, 2009.

The testing will include:

1. a single submerged helicopter egress by each test subject from a simulated S92 configuration: the subject would egress, swim to the surface, inflate lifejacket, swim to a life raft and board. This would be conducted in waves and wind and leakage into the suit would be measured immediately after on the pool deck using measurement devices and procedures outlined in the current CGSB standard;
2. test subjects will be of differing sizes and HUET experience (their preparation would include recording their measurements, suit fitting, briefing and training);
3. the test would be conducted and video and leakage data collected;
4. results will be reviewed and a report prepared within days of completion.

Throughout this process the operators will keep their workforce apprised of the outcomes via the JOHSC process.

We recognize that the CGSB Standard testing protocol is different from that planned for this test procedure. We intend to transfer learnings from this test process and use the results within the upcoming review of the standard.

As noted above, we would like to organize a meeting with you to discuss this further and to develop a cohesive approach to the review of the standard. CAPP will coordinate this discussion for all the east coast operators and we will be in contact with you shortly to

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arrange. If you wish to discuss this further please don't hesitate to contact me or Aurora Reid (902 420-9084) as I will be out of the province for a few weeks. Thank-you for providing us with feedback on your experiences, we will ensure that results of the testing are communicated to you in a timely manner.

Sincerely,



R. Paul Barnes  
Manager, Atlantic Canada

c.c. Michele Farrell – Petro-Canada  
David Day – ExxonMobil  
Don Williams - Husky Energy

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<sup>i</sup> HUEBA: Helicopter Underwater Emergency Breathing Apparatus