

Management and Development Company Ltd. 100 New Gower Street St. John's, NL A1C 6K3



July 27, 2023

Paul Alexander, Chief Safety Officer
Canada-Newfoundland and Labrador Offshore Petroleum Board
240 Waterford Bridge Road
The Tower Corporate Campus – West Campus Hall
Suite 7100
St. John's, NL
A1E 1E2

RE: Temporary Volume of Stored Explosives for P&A for B-16 55 (WICC3-1/AWI3)

**File No: 358** 

Dear Mr. Alexander,

Hibernia Management and Development Company Ltd. (HMDC) is requesting Chief Safety Officer approval to increase the total explosives onboard Hibernia to a maximum quantity of 400 kg for the time period that Well Plug and Abandonment (P&A) activities for B-16 55 (WICC3-1/AWI3) take place, in lieu of the maximum quantity of 75 kg prescribed in Section 153 (1) (c) of the Canada–Newfoundland and Labrador Offshore Area Occupational Health and Safety Regulations.

## Background/Rationale

Section 153 (1) (c ) of the OH&S Regulations states that every employer must ensure "that the quantity of explosives stored at the workplace is kept to a minimum and does not, in any event, exceed 75 kg unless otherwise authorized by the Chief Safety Officer". HMDC's "Volume of Stored Explosives" letter dated June 23, 2022 (and associated CSO approval "Temporary increases for perforation activities for up to 200 kg" dated July 18, 2022) for perforating operations is on file with the C-NLOPB which specifies that the volume of explosives on board the Platform must not exceed 200kg NEQ.

HMDC requests a temporary approval to store a total of 400kg NEQ of explosives on the Platform in preparation for the abandonment of B-16 55 (WICC3-1/AWI3). B-16 55 Perf Wash Cement (PWC) operations require a long single tubing conveyed perforating (TCP) run of  $^{\sim}$  100 m, requiring > 285 kg NEQ not including backups. It is not possible to complete the job while managing within the 200 kg as all explosives for B-16 55 need to be on board prior to starting to run the continuous 100 m length of perforating guns. Once B-16 55 PWC operations are complete, the large NEQ will reduce by  $^{\sim}$  285 kg, to back within the approved 200 kg limit.

## Mitigations

The perforating guns will be sent to the Platform just in time to perform the perforating operations. All perforating operations including transportation and storage will continue to be performed in strict accordance with our vendor's procedures. As unplanned detonation of explosives could occur due to exposure to heat or severe impact, mishandling or detonation by radio signal when armed, the following standard practices will be taken to mitigate these risks:

- No other platform equipment will be lifted directly over the pipe racks whilst the guns are stored there;
- Safe perforating systems will be used to eliminate the risk of detonation by radio signal during perforating operations.
- The supplier's explosives handling procedures, which are in compliance with regulatory requirements and standards, will be adhered to at all times.

Under our current approval to store up to 200kg, there is a requirement to store all perforating guns in their transportation baskets until they are ready to be deployed into the well. However, given the quantity of explosives required for the B-16 55 abandonment and the limitations on deck space, the proposed solution is to remove the guns from the baskets and to store them in pipe racks on the pipe deck until they are deployed.

As a result of this variation, additional mitigations will be in place. With respect to the potential for dropped objects, the area will be barriered and there will be no crane lifts over the racks. The explosive charges in question are secondary charges which require a combination of both primary charges (detonators) and secondary charges for a ballistic transfer to take place. The secondary charges are rated to 300F for 100 hours as higher temperatures degrade the explosive. Direct contact with flame will cause the explosives to burn instead of explode. Detonators will be stored separately from primary explosives, in the explosives bunker.

## **Previous Conditions**

HMDC will continue to follow the previous conditions listed in the CSO approval letter dated July 18, 2022 "Temporary increases for perforation activities for up to 200 kg"" outlined below:

- 1. The practices and procedures explained in the mitigations above will be strictly followed.
- 2. Shipments will be timed such that explosives remain onboard for as short a period as reasonably practicable.
- 3. The quantity of explosives stored on the Hibernia Platform is not more than that required for the operation.
- 4. The Schlumberger Explosives Control Procedure for Hibernia and Hebron Platforms will be adhered to at all times. Any changes or updates to this procedure shall be identified to the CNLOPB.
- 5. The amount of explosives onboard is recorded on the daily reports submitted to the C-NLOPB.

Finally, this request has been reviewed with the platform workplace committee and we have received their concurrence.

Sincerely,			
HMDC President			
Attachments			
cc: Central Files			

The Hibernia Workplace Safety Committee has reviewed the following item <u>Temporary Volume of Explosives Dispensation Request file # 358,</u> during the meetings of July 14, 2023 with no objections or concerns:

Topic: CSO Request for Temporary Increase in Volume of Explosives for PCW Scope

Co-Chair #1	, 0		-	14 July	2023
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Co-Chair #2	1				
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The Hibernia Workplace Safety Committee has reviewed the following item during the meetings of July 23, 2023 with no objections or concerns:

Topic: CSO Request for Temporary Increase in Volume of Explosives for PCW Scope

Co-Chair #1	_	
Name:_		Date: 23- July - 2023
Co-Chair #2		
Name:/		Date: 23- July -2023