

NOTICE OF NON-COMPLIANCE

June 27, 2023 BY E-MAIL

Robert Holwell Country Manager KCA Deutag Drilling Canada Inc. 45 Hebron Way Suite 201 St. John's, NL A1A 0P9

Dear Mr. Holwell,

Re: Non-Compliances - Incident 2023HEB051

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) hereby issues this Notice of Non-Compliance in connection with an incident on the *Hebron* platform on May 28, 2023. The investigation report findings of Incident 2023HEB051 conducted by ExxonMobil Canada Properties (EMCP) were filed with the Board on June 9, 2023. EMCP is the Operator of the *Hebron* platform, having been granted Operations Authorization No. 24020-020-OA07 on July 23, 2021. KCA Deutag Drilling Canada Inc. (KCAD) is the employer of the Drilling Maintenance Team (DMT) that performed the task.

Factual Information:

From the C-NLOPB's review of the above-noted investigation report, we understand that while the DMT was completing maintenance on the knuckle boom crane on the *Hebron* platform using a hydraulic pin puller arrangement, the puller rod was exposed to tensile loads above the puller rod yield rating during three of the five attempts to pull the pin. Four of these attempts also exceeded the hydraulic jack rated capacity. The puller rod failed on the fifth attempt. This resulted in the puller rod fracturing and being projected approximately 19m across the pipe deck, striking the top of the northwest pipe deck crash rail. The puller rod then deflected off the crash rail and made a second deflection approximately 12m down to the north pedestal crane bottom landing, finally resting at approximately 14m down on the Utilities/Process Module (UPM) upper deck process north side walkway. The puller rod weighs approximately 6.8 kg. No barriers were in place for the path the puller rod travelled to the crash rail, or for the drop path to the deck and walkway below. The incident had the potential for fatality.

Upon review of the incident report and additional documentation submitted, the following facts have been identified and relate to the following instances of non-compliance:

- 1. The KCAD procedure (CAHE-KCA-OMOPR-15-501-0001) for pulling the pin did not include adequate information to execute the work safely. Specifically:
 - a. The procedure did not include the load rating for threaded puller rod and confirmation that the maximum force imposed by the hydraulic jack must not exceed the load rating of the puller rod;
 - b. The Enerpac catalogue load values for pressure being applied when using a 30 ton, 60 ton or a 100 ton hydraulic jack were not included in the procedure;
 - c. The maximum safe operating pressure for using the hydraulic pin puller arrangement was not fully understood;
 - d. Detailed, step-by-step instructions on how to perform the pin pulling activity were not included in the procedure and the work pack did not include sufficient details; and
 - e. The procedure did not include information on what to do if the employees were unable to successfully remove the luffing cylinder pin.
- 2. The knuckle boom crane Original Equipment Manufacturer (OEM) recommended procedure for pulling the luffing cylinder pin was not available to the employees.





- 3. The Job Safety Analysis (JSA) and toolbox talk risk identification card did not identify the threaded rod parting as a potential hazard and did not reference exceeding yield load for the threaded puller rod as a hazard to consider.
- 4. The 30 ton hydraulic jack was exposed to 39.6 ton and the 60 ton hydraulic jack was exposed to 65.6 ton, which in both cases exceeded their rated load capacity.
- 5. The puller rod was exposed to loads in excess of yield three times.

Specific Non-Compliances:

It is the finding of the Chief Safety Officer that KCAD did not comply with the following:

- 1. The employer failed to take all reasonable measures to ensure the health and safety of its employees at the workplace, contrary to the *Canada–Newfoundland and Labrador Atlantic Accord Implementation Act* paragraph 205.018(b) as noted above under "Factual Information".
- 2. The employer failed to communicate to its employees, and other individuals at the workplace, all information necessary to pull the pin safely, contrary to the *Canada–Newfoundland and Labrador Atlantic Accord Implementation Act* paragraph 205.019(1)(d) as noted in points 1 to 3 above under "Factual Information".
- 3. The employer failed to ensure that its employees carrying out the pin pulling activities, and particularly each supervisor, were made aware of known or foreseeable health or safety hazards, contrary to the *Canada–Newfoundland and Labrador Atlantic Accord Implementation Act* paragraph 205.019(1)(f) as noted in point 3 above under "Factual Information".
- 4. The employer failed to provide its employees carrying out the pin pulling activities with the instruction necessary for their health and safety, contrary to the *Canada–Newfoundland and Labrador Atlantic Accord Implementation Act* paragraph 205.019(1)(j) as noted above under "Factual Information".
- 5. The employer failed to ensure that all equipment used for the pin pulling activity were safe for their intended use and used as intended, contrary to the *Canada–Newfoundland and Labrador Atlantic Accord Implementation Act* paragraph205.019(1)(m) as noted in point 4 and 5 above under "Factual Information".

Corrective Actions:

We acknowledge that ECMP has initiated the implementation of corrective actions to prevent recurrence. In addition, the Chief Safety Officer requires the following items to be addressed by KCAD:

- As per paragraph 6(2)(c) of the Canada—Newfoundland and Labrador Offshore Area Occupational Health and Safety Regulations, conduct an audit to determine all of the failures and gaps in the occupational health and safety program that contributed to these non-compliances;
- Employees and individuals using all jacks and similar tools are trained and competent in their safe usage; and
- Review the use of all jacks and similar tools on the *Hebron* platform to ensure that the force output and associated equipment limitations are included in all relevant procedures.

The results of these actions are to be submitted to the satisfaction of the Chief Safety Officer no later than **September 30, 2023**.

Confirmation is required that this Notice of Non-Compliance has been posted in a public place on the *Hebron* platform. This Notice of Non-Compliance will be posted to the C-NLOPB website.

Should you have any questions or wish to discuss these matters further please contact the undersigned at

Sincerely,

--- DocuSigned by:

Paul Alexander
Chief Safety Officer



