NATIONAL ENVIRONMENT AND PLANNING AGENCY Enforcement Branch Post Planning/Permit/License Monitoring

Inspection Date: 15 August 2014 Report in Series: 2 of 2014

Time of Inspection: 10:00 a.m.

Permitted Activity: To carry out Geotechnical Investigations

Location of Activity: Old Harbour Bay, St. Catherine

Applicant: China Harbour Engineering Company Limited

Reference No.: 2014-14017-BL00010

Name of Contact: (name redacted)

Contact Telephone #: (number redacted)

E-Mail:

Investigating Officer: (name redacted)

Present were: (names redacted)

Description of Licenced Activity: Beach Licence for the use of the foreshore and the floor of the sea (Pursuant to the section 11 of the Beach Control Act 1956)

Observations and Comments:

No work was being conducted at the time of investigation. A larger barge than that observed on previous site visit was observed by the coordinate represented by C1. A marker buoy was also observed at each of the two points that were indicated in CHEC schedule submitted 5 August 2014: C1 and Q2. An underwater assessment was done for each point to determine if there were any benthic organisms at the site of boring. A dive was done at C1 as it was over 20 feet while snorkeling was done for Q2 which was about 10 feet. The top layer of the sea floor at C1 was mud and deposits on the barge showed that marl and other types of soil were also found below the surface. At Q2 the sea floor was mainly composed of soft coral and sand.

Compliance Table:

| No | General Condition | Level of | Comments/Action |
|----|--|------------|--|
| | | compliance | |
| 10 | No sign or notice may be erected or placed upon or in the Licensed Area unless the size, wording and location thereof have previously been approved in writing by the Authority. | | A sign was observed which speaks to the beach licence application. |
| 11 | The Licensee shall, prior to the commencement of the licensed activity, post a sign in a prominent place on the licensed area using the same design and | | A sign was observed on Little Goat Island. No Fourth Schedule was found on file therefore this could not be assessed. Upon assessing the |
| | words as set out in the Fourth Schedule of | | file in house, it was duly noted that |

| 17 | this Licence. The Licensee shall not modify the physical | Full | other signs are present on site. However, these signs were not observed upon assessing the site. Other signs should be put up in prominent places including the Old Harbour Bay area where most residents live. No modification to the environment |
|----|---|------------------------|--|
| | nature of the Licensed Area or construct or carried out any modification in connection with the Licensed Area except under a Licence granted by the Authority pursuant to the Beach Control Act. | | was observed. |
| No | Specific Condition | Level of Compliance | Comments/Action |
| 1 | The Licensee shall comply with all the representations made in the application number 2014-14017-BL00010 dated 10 January 2014 received and date stamped 24 January 2014 by the Natural Resources Conservation Authority and documents entitled "Implementation Plan of Geotechnical Investigation for the First-Stage Container Terminal Project in Portland Bight Port, Jamaica with the exception of table 2.1 Borehole Coordinates dated January 2014 received and date stamped 24 January 2014; "First Phase of Jamaica Portland Container Terminal Statement for Changing of Engineering Survey & Geotechnical Investigation" dated 24 April 2014 received and date stamped 1 May 2014 and any accompanying addenda | NC | The document states that three working days were to be used to prepare the work site. Work commenced prior to submission of requisite documents to the NEPA and so this work was not assessed. Drilling is slated for 37 working days. NEPA was not knowledgeable of this work plan and work was said to commence in the week of the 28 July 2014. This problem cannot be rectified for coordinates C1 and Q2. Methods used for drilling was submitted 5 August 2014. No work was being conducted at the time of the site visit therefore PPE could not be assessed. No portable toilets are on site. No Emergency Response Plan was submitted prior to work. Diameter of the drill was not measured however at a previous site inspection (5 August 2014) Mr. Hill stated that it is within the confines of the permit. The methodology stated that cores no more than 3 inches in diameter |
| 2 | The Licensee shall, at least seven (7) working days prior, submit a schedule for the drilling activity to the Manager, Enforcement Branch of the National Environment and Planning Agency, 10 Caledonia Avenue, Kingston 5, or EnforcementManager@nepa.gov.im. | Full | would be used for drilling. Schedule was submitted on 5 August 2014 for drilling at C1 and Q2. |
| 3 | Any changes in the schedule referenced in Specific Condition 2 shall be submitted to the Manager, Enforcement Branch of the National Environment and Planning Agency, 10 Caledonia Avenue, Kingston 5, or EnforcementManager@nepa.gov.jm, at least seven (7) working days prior to the implementation of these changes. | NA | This is not applicable as no changes to the schedule were submitted. |
| 4 | In order to avoid interference to other waterway users, the Licensee shall notify users of the waterway of the scheduling of the works and shall as much as it is possible, prevent obstruction to the normal | NC | No article of that nature has been circulated though work is being conducted. This cannot be rectified for the drilling activity conducted for August 2014. |

| | waterway traffic. Such notification shall be | | |
|---|---|--------|---|
| | by way of a widely circulated newspaper in | | |
| | Jamaica seven days prior to the start of the | | |
| | works. Standard navigational aids warning | | |
| | users of the waterway of the works shall be | | |
| - | employed. | T 11 | N. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| 5 | The Licensee shall ensure that boreholes are drilled only at the GPS Coordinates | Full | Marker buoys were placed at drilling sites. Based on underwater |
| | outlined below as stated in document titled | | assessment boreholes were observed |
| | "First Phase of Jamaica Portland Container | | at the proper coordinates. |
| | Terminal Statement for Changing of | | at the proper coordinates. |
| | Engineering Survey & Geotechnical | | |
| | Investigation" dated 24 April 2014 received | | |
| | and date stamped 1 May 2014:" | | |
| | | | |
| | NAME LONG. LAT. | | |
| | L01 77°2′48.07″W 17°56′43.78″N | | |
| | L02 77°2′51.62″W 17°56′11.61″N | | |
| | L03 77°2′54.65"W 17°55′39.63"N | | |
| | L04 77°2′57.31″W 17°55′7.08″N | | |
| | L05 77°2′59.21″W 17°54′45.35″N | | |
| | Q01 77°3′8.33″W 17°54′7.91″N | | |
| | Q02 77°3′23.97″W 17°53′54.64″N | • | |
| | Q03 77°3′40.51″W 17°53′42.86″N | | |
| | X01 77°4′48.55″W 17°53′15.15″N | | |
| | X02 77°4′19.61″W 17°53′25.18″N | | |
| | D01 77°4′24.53″W 17°52′34.77″N D02 77°4′1.02″W 17°52′21.44″N | 4 | |
| | D02 77 4 1.02 W 17 32 21.44 N D03 77°4′10.6″W 17°53′4.17″N | | |
| | M01 77°4′32.84″W 17°52′20.73″N | | |
| | M02 77°4′20.94″W 17°52′14.07″N | | |
| | M03 77°4′9.63″W 17°52′7.56″N | | |
| | M04 77°3′57.51″W 17°52′0.81″N | | |
| | M05 77°4′41.3″W 17°52′25.6″N | | |
| | C01 77°4′22.6″W 17°51′59.49″N | | |
| | C02 77°4'40.94"W 17°51'55.67"N | | |
| | C03 77°4′16.7″W 17°51′41.34″N | | |
| | H01 77°4′32.74″W 17°51′36.3″N | | |
| | H02 77°4′45.75″W 17°50′32.38″N | | |
| | H03 77°4′58.48″W 17°49′28.99″N | | |
| | H04 77°5'8 27"W 17°48'40.82"N | | |
| | H05 77°2′35.98″W 17°43′9.21″N | | |
| | H06 77°2′19.93″W 17°42′42.59″N | 27.4 | |
| 6 | The Licensee shall notify the Agency in the | NA | This is not applicable as no changes |
| | event that a change in the location of any of the boreholes become necessary and shall | | were requested. |
| | not conduct the activity in any new areas | | |
| | without the express written consent of the | | |
| | Agency. | | |
| 7 | The Licensee shall submit to the Agency a | NA | This condition is related to the |
| | detailed report outlining the total area | | landward (Goat Island & Mainland) |
| | impacted to facilitate the drilling of the | | aspect of the project which was not |
| | boreholes, the route to be constructed and | | yet started. |
| | the methodology that will be used to create | | |
| | the access routes and working footprint of | | |
| | the drilling activity. This report shall also indicate what type and quantity of | | |
| | vegetation has been so impacted. | | |
| 8 | Pursuant to condition # 7 the Licensee | NA | |
| | shall ensure that the access routes to be | - 12.2 | |
| | created on the Goat Islands do not disrupt | | |
| | | | |

| | 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | T | |
|-----|--|-------------------|--|
| | the hydrological regime of the wetlands that | | |
| | will be impacted as a result of the drilling | | |
| | activity. Prior to the start of any access | | |
| | route construction areas requiring the | | |
| | installation of conduits to allow for | | |
| | hydrologic flows is to be identified and shall | | |
| | be submitted to the Agency for approval. | | |
| 9 | The Licensee shall inform the Agency of | NA | Cannot be assessed as it is tied to |
| | the proposed mechanisms to prevent the | | S.C 7 & 8 |
| | increased sedimentation of the water in the | | |
| | wetlands and any natural drainage areas as a | | |
| | consequence of the access route | | |
| | construction and the borehole activity at | | |
| | least Ten (10) working days prior to the | | |
| | commencement of any access route | | |
| | construction or drilling works | | |
| 10 | The Licensee shall ensure that no more | NA | This was not assessed as drilling was |
| | than 21 cores ranging in size from 75- | | not being done at the time of |
| | 100mm in diametre are removed from the | | investigation. |
| | Goat Islands, forehsore and floor of the sea | | III veologiculos |
| | as per docoument entitled "Implementation | | |
| | Plan of Geotechnical Investigation for the | | |
| | First-Stage Container Terminal Project in | | |
| | Portland Bight Port, Jamaica" dated | | |
| | January | | |
| | 2014 received and date stamped 24 January | | |
| 11 | The Licensee shall monitor turbidty values | NC | No turbidity report was submitted |
| 11 | | INC | |
| | on a daily basis to ensure that during | 4 | for the week 28 July 2014 to 1 |
| | drilling, turbidity values more than 5 metres | | August 2014 or 4 August 2014 - 8 |
| | away from the site of drilling for each hole does not exceed 10 NTUs above | the second second | August 2014, or 11 August 2014 -15 |
| | | | August 2014. No turbidity tests were |
| | background or ambient condition, | | being conducted at the time of |
| | whichever is higher. A weekly turbidity | ar teleph teleph | inspection. |
| | report shall be submitted to the Agency for | | |
| 1.0 | review. | | |
| 12 | | | |
| 13 | The Licensee shall ensure that 48 hours | NA | This is not applicable as no major |
| | prior to hurricanes or other metereological | | meteorological events were |
| | events, works should be halted and | | imminent prior to investigation. |
| | turbidity values allowed to fall below 10 | | |
| | NTUs or ambient conditions. | | |
| 14 | The Licensee shall ensure that equipment | | This could not be assessed as no |
| | being used in the drilling activities are not | | drilling activity was being done at |
| | placed on corals or other sensitive marine | | the time of investigation. Based on |
| | fauna. | | underwater assessments, no damage |
| | | | was done to corals or sensitive |
| | | | marine fauna. |
| 15 | The Licensee shall ensure that prior to the | NA | This could not be assessed as drilling |
| | start of drilling for each hole the target site | | was not being conducted at the time |
| | is cleared of any slow moving marine | | of investigation. |
| | organism which would otherwise have been | | |
| | injured by the activity. | | |
| 16 | The Licensee shall obtain the expressed | Full | A request was made for changes to |
| | written approval of the Authority prior to | | the borehole positions in a |
| | any changes in number of holes to be | | document dated 28 April 2014 and |
| | drilled in excess of the amount stated in this | | stamped 1 May 2014. No further |
| | Licence. | | requests were made to the agency. |
| 17 | The Licensee shall immediately notify the | NA | This is not applicable as no mention |
| | THE LACCHSCE SHAIL IIIIII CAIMEN IN MINITER | | |
| | | | has been made of crocodile sighting |
| | Authority of any crocodile sighting and | | has been made of crocodile sighting. |
| | Authority of any crocodile sighting and shall ensure that every effort in made so as | | has been made of crocodile sighting. |
| | Authority of any crocodile sighting and | | has been made of crocodile sighting. |

| 18 | The Licensee shall ensure that prior to the commencement of the works, a detailed Emergency Response Plan for any accidental spills – fuel, lubricants or hazardous material and sediment is submitted to the Agency for approval. | NC | No Emergency Response Plan has been submitted. |
|----|--|------|--|
| 19 | The Licensee shall immediately notify the Agency of any spillage of or accident with any hazardous chemicals, inclusive of all hydrocarbons and environmentally damaging material and shall submit a detailed report to the Agency on the clean-up activities as per MARPOL 73/78, Annex I, Regulation 26 within seven days (7) days of the date of the incident. | NA | This condition is not applicable as there were no spills observed at the time of investigation nor were there any reported incident. |
| 20 | The Licensee or its agents shall not permit the discharge of waste, including but not limited to sullage waste, oily waste or chemicals or any poisonous noxious or polluting matter into the water or on the ground, as a result of the works. | Full | There was no work being conducted and no discharge evidence of waste was observed at the time of investigation. |
| 21 | The Licensee shall ensure that there is no refueling of any marine vessel at sea within the drilling area unless provided for specifically in a Licence from this Authority. | Full | There was no work being conducted and no refueling was observed. |
| 22 | The Licensee and its agents shall ensure that there is no blasting or use of explosives in connection with this licensed activity. | Full | There was no work being conducted and no evidence of blasting was observed. |
| 23 | The Licensee shall ensure that any solid waste generated during the drilling works is disposed of at a municipal dumpsite approved by the National Solid Waste Management Authority (NSWMA). | | Four metal drums were found in the bordering mangroves at Little Goat Island. These were not observed on a previous visit and one resident stated that these were left after servicing of the barge. |
| 24 | All equipment, left over materials, equipment parts and any other material incidental to the Works shall be dismantled and removed from the floor of the sea and from shore based facilities at the completion of the Works and in any event, prior to the expiry of this Licence to the satisfaction of the Agency. | NA | This condition is not yet applicable as the project is still in progress. |
| 25 | The Licensee shall ensure that all vessels to be used in the drilling operations receive the requisite approval from the Maritime Authority of Jamaica (MAJ). A copy of the approval from the MAJ shall be submitted to the Manager, Enforcement Branch, National Environment and Planning Agency, 10 Caledonia Avenue, Kingston 5 or EnforcementManager@nepa.gov.jm prior to the commencement of drilling activities. | NC | No document of vessel approval has been submitted. |
| 26 | The Licensee shall ensure that the final report on the results of the borehole investigation is submitted to the Agency within two months following the completion of the drilling activities. | NA | Drilling is done for C1 and Q2. Based on the schedule submitted on 5 August 2014 by CHEC, a report should be submitted for these points on 31 August 2014. |

| 27 | The Licensee shall ensure that all correspondence, notifications, plans, final reports or any other documents being submitted to the Agency pursuant to any General and/or Specific Condition of the Licence are addressed to the Manager, | Full | All submissions were submitted to the Enforcement Manager. |
|----|---|------|---|
| | Enforcement Branch, National Environment and Planning Agency, 10 | | |
| | Caledonia Avenue, Kingston 5 or | | |
| | EnforcementManager@nepa.gov.jm. | | |
| 28 | The granting of this Licence does not relieve the Licensee from complying with any other statutory obligation or from applying for and obtaining any permission, certification, permit or licence required by law. These include but are not limited to Building Permission under the Building Act, Planning Permission under the Town and Country Planning Act and Environmental Permits under the Natural Resources Conservation Authority Act. | Full | Permission letters from statutory bodies such as Port Authority of Jamaica for posting of signage were submitted. |
| 17 | <u>, </u> | | |

Key

Full: Means the operation was in compliance with the condition or Condition has already been met or Condition is no longer applicable.

Partial: The operation was only partially compliant with the condition

NC: The condition was not being met.

NA: Conditions was not applicable at the time or it could not be assessed

because:____

Site Warning notice issued on site NO

CONCLUSION

Of the 30 conditions listed above 10 had full compliance, 5 had non-compliance, 5 were not assessed and 10 were not applicable. Therefore compliance was 67%.

- Drilling commenced prior to submission of requisite documents therefore several
 conditions are recorded to be breached and cannot be rectified. Several documents
 were not submitted.
- Conditions 1, 4, 11, 18 and 25 have non-compliance
- Condition 2 now has compliance. However, conditions 23 has non-compliance because metal cylinders were left by little Goat Island.

RECOMMENDATIONS

- CHEC was given until the 21 August 2014 to submit requisite documents.
- An advisory be sent to CHEC bringing their attention to S.C. 23 stating that they should be wary of solid waste left behind in areas that they are conducting work .
- Continue monitoring this site so that operation date is fully observed and proper sanctions can be made.

APPENDIX

Photos:



Figure 1: Photo showing large barge with crane observed at C1. (Photo taken -15 August 2014)



Figure 2: Photo showing close up of logos on crane and barge (Photo taken -15 August 2014)



Figure 3: Photo showing marker buoy (indicated by red circle) above the C1 borehole in front of the barge; (Photo taken -15August 2014)



Figure 5: Photo showing positions (enclosed in black square) of metal drums on the coast of Little Goat Island. Inset showing close up of one of the drums in the (Photo taken -15 August 2014)

Dated Submitted to Supervisor: Date reviewed by Supervisor: Date of Final Report: 19 August 2014 21 August 2014