

# MINISTRY OF PETROLEUM RESOURCES

## DEPARTMENT OF PETROLEUM RESOURCES

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DMR/CTO/COA/COM/V.3/102

Ref. No:.....  
9<sup>th</sup> February, 2018

Date:.....

The Managing Director,  
Shell Petroleum Development Company of Nig. Ltd,  
21/22 Freeman House,  
Marina,  
Lagos.

Dear Sir,

### **RE: CRUDE THEFT / LOSS ALLOCATION METHODOLOGY**

We refer to all previous correspondences and Minutes of Meetings on the above subject.

In an effort to regularize as well as determine the suitability or otherwise of the 2 X 12" Coriolis Flow Meter installed by SPDC at the inlet of the NCTL line into Bonny Terminal for Custody Transfer Measurement and Allocation Purposes, the Department has reviewed all the available records within our disposal alongside the additional submission by your representatives which include Datasheet/Specification sheet of the meter.

Findings from the review are highlighted as follows:

- a. The NCTL facility was installed by SPDC as a temporary arrangement pending the completion of the permanent LACT unit.
- b. The meter was calibrated and successfully proved in the presence of DPR representatives but no approval was granted by the Department for its application.
- c. SPDC was made to understand that the existing Regulations / DPR approved Guidelines do not have provision for temporary metering arrangement for custody transfer measurement
- d. Gross volumes obtained from the meter were used by SPDC for Gross Crude Oil Production Allocation to NCTL Injectors from **June 2016 to June 2017** while the density measured by the meter were used to arrive at the produced water/Net production that were allocated to the NCTL injectors between the **June 2016 to May 2017**.

In view of the above and the need to ensure that no party among the Bonny producers (SPDC, TNP, NCTL and other trunk Line Injectors) is short changed, you are required to note the following:

1. Our participation in the calibration and/or testing of the meter was not an approval to use and apply the equipment for intended purpose.
2. The approved method of BS&W determination for dynamic measurement as prescribed in the DPR guideline is the Auto sampling system with mixer device installed upstream. The water allocation to NCTL Injectors, which was based on the density measurements of the meter as described in (c) above are not acceptable to DPR. **You will therefore be required to adjust water allocations to the injectors in line with the DPR approved methodologies** as contained in our letters Ref: DMR/CTO/COA/COM/V2/045 dated 23<sup>rd</sup> December 2015 and Ref: DMR/CTO/COA/COM/V.2/154 dated 21<sup>st</sup> March 2017.
3. The Gross volume allocations as described in (d) above may be considered by the Department. However, **the extent of the consideration is subject to the outcome of a comparison between previous Gross measurements by the meter and that of the permanent LACT after commissioning.** This is to enable us further verify the accuracy of the Coriolis meter using the LACT Unit in addition to the calibration and proving described in (b) above.

Consequently, and in addition to the above, a sanction is hereby imposed against your Company with penalty of Two Hundred and Fifty Thousand Naira only (NGN 250,000:00) for violation of Part1, Section 2(d) of the Mineral Oil Safety Regulation and the provisions of Section 51 of the Petroleum Act; 1969. Also, you are kindly advised to ensure timely completion and commissioning of the LACT unit being installed at the inlet manifold of the NCTL line to enable us conclude action on the Coriolis meter.

Yours faithfully,



**U. K. Ndanusa**

For: Director of Petroleum Resources

Cc: All Third Party Injectors of Bonny Terminal