

TANK CLEANING REPORT

FOR

GLOBAL CALIBRATION SERVICES LIMITED

CLEANING OF VESSELS AND SUMP TANK

AT

WEST AFRICAN GAS PIPELINE COMPANY (WAPCo)

DATE: 14TH FEBRUARY – 19TH FEBRUARY, 2020

2nd Floor, Elvita Plaza, Dome P.O. Box AT 27, Achimota, Accra (233) 030 419 719

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Job Description

Bidi Group Ltd was contracted by Global Calibration Services Limited (GCSL) to undertake cleaning of Gas Vessels and Sump Tank at West African Gas Pipeline Company (WAPCo). The Description of the tanks as follows;

| Name of Client: | WAPCo (for GCSL) | | |
|------------------------------|--|--|--|
| Location: | Tema | | |
| Tanks/Vessels Assigned: | Gas Scrubber, Filter Separators (2), Vent Scrubber, Instrumentation Fuel Skid and Sump Tank | | |
| Tank Capacities: | n/a | | |
| Tank Height: | n/a | | |
| Tank Diameter: | n/a | | |
| Product: | n/a | | |
| No. of Bidi Group Personnel: | 8 | | |
| Duration: | 6 Days (Friday 14th February – Wednesday 19th February, 2020) | | |
| Last Cleaning Date of Tank: | n/a | | |

List of Bidi Group Personnel Deployed

| 1. | Nana K.A. Fosu-Gyeabour | - | HSE Officer & First Aider |
|----|-------------------------|---|---------------------------|
| 2. | Yussif Haruna | - | Tank Cleaning Officer |
| 3. | Yaw Felix Aglago | - | Tank Cleaning Officer |
| 4. | Sumaila Agudah | - | Tank Cleaning Officer |
| 5. | Emmanuel Atuobi | - | Tank Cleaning Officer |
| 6. | Richard Darko | - | Tank Cleaning Officer |
| 7. | Emmanuel Avowotor | - | Tank Cleaning Officer |
| 8. | Yaw Marfo | - | Tank Cleaning Officer |

Pre-Cleaning Inspection Observation:

The gas plant was in total shut down at the time the Bidi Group Technicians arrived on site. There were several other contractors who were undertaking other projects at the site.

Work Procedure

During the Six (6) day work duration, the following procedure were adopted;

Day 1: Friday 14th February, 2020

- Arrival of Bidi Group personnel to cleaning site at WAPCo.
- Safety Induction and inspection of PPE by client.
- Issuance of General Work Permit to begin work.
- Toolbox meeting with authorized personnel of WAPCo and Bidi Group Team.
- Thorough inspection of the various vessels and tanks designated for cleaning was done. The appropriate areas to position truck and equipment, and the scope of cordon area was ascertained.

Day 2: Saturday 15th February, 2020 (Gas Scrubber)

- Collection of permit from WAPCo HSE Personnel.
- Holding of tool box meeting among Bidi Group Technicians and WAPCo personnel was conducted.
- Truck was positioned, cordon was set and equipment were offloaded.
- Work begun on the Gas Scrubber. There was an entry by a Bidi Group Technician. Evacuation of debris and solidified sediments was done.
- The Gamajet X was fitted and used to introduce a high pressure mixture of water and degreaser into the tank.
- The power-gun was also used to unclog stuck sediments from the outlets of the scrubber.
- The necessary paper work were signed and the team left work area awaiting continuation of work the next day.







Day 3: Sunday 16th February, 2020 (Two Filter Separators)

- Collection of permit from WAPCo HSE Personnel.
- Holding of tool box meeting among Bidi Group Technicians and WAPCo personnel was conducted.
- The filter separators were opened and high pressure power washing was conducted on the two vessels.
- The cleaning included the interior, exterior and other adjoining connections.
- The necessary paper work were signed and the team left work area.







Day 4: Monday 17th February, 2020 (Vent Scrubber)

- Collection of permit from WAPCo HSE Personnel.
- Holding of tool box meeting among Bidi Group Technicians and WAPCo personnel was conducted.
- The cleaning team begun evacuation of sludge from the vent scrubber, using specially fabricated shovels.
- The Gamajet X and power-gun were used to introduce the mixture of water and degreaser into the scrubber, to dislodge sludge that has settled on the tank walls.
- Sludge was evacuated.
- The team had to enter the tank (under the required Health and Safety Protocols) to manually dislodge sludge from inaccessible spots in the tank.
- The operation was suspended, to be continued the following day.







Day 5: Tuesday 18th February, 2020 (Vent Scrubber & Instrumentation/Fuel Skid)

- Collection of permit from WAPCo HSE Personnel.
- Holding of tool box meeting among Bidi Group Technicians and WAPCo personnel was conducted.
- The cleaning of the vent scrubber continued; evacuation of sludge was done till it met the requirements of the API Inspector.
- The cleaning of the Instrument/Fuel Skid begun. This was done by using the pressure washer to clean the interior and exterior of the skid.
- The cleaning of the sump tank was started on the same day.



Day 6: Wednesday 19th February, 2020 (Sump Tank)

- Collection of permit from WAPCo HSE Personnel.
- Holding of tool box meeting among Bidi Group Technicians and WAPCo personnel was conducted.
- Work on the Sump tank begun fully. (initial tank opening and minor evacuation of sludge was started the previous day)

- By the aid of a vacuum truck, effluent of about **8,300 lts** was evacuated from the tank
- The cleaning team continued the cleaning by using specially made shovels and mops, and a mixture of water and Xp3 Multipurpose degreaser, to rid the tank of sludge.
- The exterior of the tank and all adjoining connections were also cleaned.
- Upon inspection of the entire job by the designated API inspector, the Bidi Group team completed the assigned job and were cleared to leave site.



Recommendations

• During the tank cleaning process, there was the presence of harmful gases in the vessels. It is recommended therefore that, the opening of the tanks be done at least 24 hours to the cleaning, to enable natural degassing to take place. This will ensure a safer work environment.

Appendix

PPE & Other Safety Items Used:

- Respirators
- Overall Uniforms
- Reflective Vests
- Safety Gloves

- Safety Goggles
- Gas Detectors
- Hard hat (Helmet)
 - Wellington Boots
- Safety Boots

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- Caution tapes and cones
- Safety signage

Equipment Deployed:

- Gamajet X
- Plastic Buckets
- Scrubbing brushes
- Mops
- Squeegees
- Plastic Shovel
- Intermediate Bulk Containers
- Tools Box
- Xp3 Multi-Purpose Degreaser
- Tarpaulin

Safety Statistics

- Injuries Recorded Zero (0)
- Fatalities Recorded Zero (0)
- Near Misses Zero (0)
- Spillage of Toxic Material to environment Zero (0)

Prepared by:



Nana K.A. Fosu-Gyeabour

HSE Officer – Bidi Group

26th February, 2020