

## NLC TAMILNADU POWER LIMITED

#### **DEPARTMENTAL PROCEDURE MANUAL**

(ISO 9001:2015, ISO 14001: 2015, ISO 45001: 2018 & ISO 50001:2018)

#### STANDARD OPERATING PROCEDURE

TITLE:- SOP FOR DECANTING OF HFO/LDO

Issue Date: 29-12-2018

Revision No.: R0

Revision Date:

**PURPOSE:** TO define procedure for Decanting of HFO/LDO

**SCOPE:** This SOP is applicable at NTPL

**RESPONSIBILITY:** FOPH INCHARGE/ STORE/CIVIL

**PERFORMANCE CRITERIA:** 

#### SYSTEM DESCRIPTION:

- A tanker unloading station consists of flexible hoses, suction strainers, unloading pumps and manifolds to transfer the tanker contents into the Oil tank. Five unloading pump (3+2) with the capacity of 25 Cu.m per Hr each. The tanker unloading operation is totally manual.
- The volume of the LDO storage tanks is (200 X2) 400 KL, and HFO storage tanks is (2000x2) 4000 MT. HFO/LDO is utilised during Boiler start up and emergency conditions to stabilise the units.

#### 1.SAFETY CHECKS:

#### **RESPONSIBILITY: FOPH INCHARGE**

- Ensure all Kind of permit to works are closed.
- Ensure proper earthing is done for all the related electrical equipment.
- All the pipelines & equipments are properly fixed & supported.
- Provision of Jumpers in all the flange joints is available.
- Ensure coupling guard is fixed properly for all rotating equipment.
- Ensure that the surrounding area is clean and free of any combustible materials.
- Ensure the use of appropriate Personal Protective Equipment.
- Ensure availability of Dry powder and Foam type of portable fire extinguishers and sand buckets at designated locations.
- Check the surroundings for Oil leakage or Spillage before starting the unloading.
- Check for unwanted fire hazard material near by the surroundings.
- Make sure vehicle tyres are arrested and engines are switched off.

# 2.Valves Check before starting unloading Pump

#### **RESPONSIBILITY: FOPH INCHARGE**

- All drain valves are closed in decanting pump suction side
- Pump suction valve is in open condition.
- Open root valves of DP Switch
- Close Suction strainer drain valve
- Open root valve of suction pressure indicator
- Close pump casing drain valve
- Open root valve of discharge pressure indicator
- Open pump discharge valve
- Tank's interconnection valve to be closed



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3.Activities to be carried out and ensured, while receiving and unloading of HFO/LDO Tanker	Responsibility
Before permitting the HFO/LDO tanker inside NTPL main gate, the Stores Dept. shall verify the invoice and ensure that the lock number of individual compartment of the tanker is recorded in the invoice. After ensuring the above, the tanker shall be permitted inside and diverted to the unloading point.	STORES
• After Stores and security clearance, before unloading (and after unloading), the tanker shall be sent to Weigh Bridge/NTPL for weight measurement (gross weight and tare weight). Proper weight receipt to be handover to FOPH in-charge.	CIVIL and FOIn-charge
<ul> <li>Key number from Invoice shall be verified and corresponding key (provided by vendor) shall be taken from FOPH control room for Opening Tanker Manifold lock.</li> <li>The tanker shall be parked in flat surface and allowed to settle for 10-15 min.</li> <li>Meanwhile, the calibration certificate with dip level shall be checked and validity along with seal at the bottom of the dip rod shall be checked.</li> <li>The o/I marking and p/I marking on the dip scale corresponding to each compartment is checked along with the calibration certificate and Invoice.</li> <li>After position the tanker in the unloading point, Tanker's engine shall be switched off and key shall be kept under the FOPH in-charge's custody.</li> <li>Each compartment level shall be checked with Dip scale along with chemical paste for detection of water (called as water paste).</li> <li>If any discrepancy is found in Dip level, FOPH In-charge shall inform to the HOD &amp; the Supplier.</li> <li>Oil sample from each compartment shall be collected for checking the density calculation and if necessary, sample has to be sent to the lab to get values before starting of unloading.</li> <li>Vehicle earthing, transfer line venting to be ensured before starting the decanting pump.</li> <li>Decanting pump need to be stopped once a low pressure indication comes on the suction side of pump.</li> <li>Record initial and final level of the storage tank, and Close the tanker manifold valve.</li> <li>All the compartments shall be checked visually after completion and the tanker shall be moved back and forth twice to remove the bottom settled oil and collect the oil if any.</li> <li>After Unloading, the Tanker shall be tare weighed at Weigh Bridge.</li> <li>After completion of tare weight, Final weighment slip shall submitted to FOPH In-charge thru field operator.</li> <li>FOPH In-charge shall make sure and cross check all related documents of Quality and Quantity before sending the vehicle out and in case of any deviation, vehicle shall be kept on hold until the</li></ul>	FOPH



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Date: 29/12/2018	PREPARED BY	REVIWED BY	VERIFIED BY	APPROVED BY
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