

1. Procedure summary

This procedure describes the process of loading nurse trailer from tote into a in a closed system.

1.1. Related Procedures

Nurse Trailer Operation

CB-01-002-009

1.2. Procedure impacts and concerns

Safety

Required PPE: Standard PPE.

Hardhat required in forklift

Spotter required when reversing truck to mount nurse trailer.

Quality

Delivery

Environmental

Cost

Compliance

Compliance with OSHA's Hazardous Waste Operations and Response, and Hazardous Communication Standard in addition to the Sapphire Energy, Inc. Chemical Hygiene Plan is required where applicable. See 29 CFR 1910.120 and 1200. An authorized users list, MSDSs and label information will be available for easy reference in a binder in the administration building.

1.3. Responsibilities and owners

Document Owner

Manage content and distribution

Leo Willis

Process Owner

Responsible for content and process validation

Gil Jones

Site Manager

Responsible for implementation and conformance

Rebecca White

2. Process

2.1. Process description

Loading the nurse trailer with liquid phosphate source or nitrogen is performed using a 2" Green rubber hose, the connections on the tote, and the impellor pump on the nurse trailer. This process allows for a closed system method of loading the nurse trailer with minimal exposure to tote contents.

Note: Make sure O-Ring Gasket is secured inside of Female cam-lock.



2.2. Process diagram: Work Instruction

Items needed to perform task: Nurse Trailer, Liquid Phosphate or Liquid Nitrogen Tote , Correct sized tow hitch, 2" Tiger flex hose and a Forklift.

2.3. Process steps

2.3.1. Mount nurse trailer to truck

2.3.1.1. Spotter required when reversing truck to nurse trailer

2.3.1.2. Refer to Nurse Trailer Operation procedure for details on mounting trailer to hitch. (Ensure Correct sized hitch is being used) before mounting.

2.3.1.3. Ensure pump on nurse trailer has fuel.

2.3.1.4. Check oil level on nurse trailer pump.

2.3.1.5 Ensure nurse trailer is empty

2.3.2 Stage totes and truck next to sump grate by Chemical Storage tanks east of Polymer building.

2.3.2.1 Drive Forklift inside polymer building. A spotter is required for forklift operation

2.3.2.2 Operate forklift to lift up desired tote.

2.3.2.3 Relocate tote using forklift 1-2 feet from sump steel grates by Chemical Storage tanks in Harvest Area.

2.3.2.4 The cam lock fitting on tote needs to be facing south 2.3.2.4 Drive truck with mounted nurse trailer next to sump steel grate by the Chemical storage located in Harvest. Truck needs to be facing west and approximately 15-25 feet from sump grates.



2.3.3. Load liquid phosphate or nitrogen source tote.

****NOTE: When dosing with Phosphoric Acid, fill nurse trailer with water according to dosing sheet BEFORE adding Acid****

2.3.3.1. Verify depths on dosing sheet sent by the Director of Cultivation or appointed designee for required phosphate or nitrogen source quantity. This confirms the amount of liquid source being added to Nurse trailer.

2.3.3.2. Verify valves on nurse trailer are in proper position. For loading of liquid.

2.3.3.2.1 Valve 1 Closed

2.3.3.2.2 Valve 2 Open

2.3.3.2.3 Valve 3 Closed

2.3.3.2.4 Valve 4 Open

2.3.3.2.5 Valve 5 Closed

2.3.3.2.6 Valve 6 Closed

****Note:** for valve location refer to Nurse Trailer Operation

SOP. Figure 1

2.3.3.3 Connect flex hose using cam-lock fittings to valve 2 according to Figure 1 from Nurse Trailer Operations SOP. Attach opposite end of hose using cam-lock fittings to outlet valve on desired tote. ****Note:** Hose is located on nurse trailer see picture for location. Hose for phosphates is located in phosphate conics.



2.3.3.4. Ensure connections are secured properly to nurse trailer and tote.

2.3.3.5 Take lid off of tote and loose Tank 1 access from Nurse trailer. See Figure 1 Nurse Trailer Operations SOP.

2.3.3.6. Open valve 2 on nurse trailer according to Figure 1 from Nurse Trailer Operations SOP. Then proceed to open outlet valve on tote.

2.3.3.7. Start nurse trailer pump.

2.3.3.8. When tote is empty or reached desired volume stop nurse trailer pump.

2.3.3.6. Close outlet valve on tote.

2.3.3.7 Start pump again for and proceed to nurse trailer and tote.

2.3.3.7. Disconnect hose from tote cam lock and nurse trailer.

2.3.3.7 Drain contents left over in flex hose into drain grate. Ensure flex hose ends are in a upright position to avoid spilling when transporting to drain.

2.3.3.8 Rinse the inside and outside of flex hose thoroughly before returning into polymer room to store.

2.3.3.8. If tote contents are on ground, rinse contents thoroughly with water hose that is located nearby into the drain grate.

2.3.3.9. Dispose of gloves properly.



NOTE: Relocate tote back inside polymer building if still contains product. If tote is empty triple rinse and de-face labels or spray paint over and relocate using straight mass fork lift. Relocation area for empty totes is against fence of southeast corner in the Harvest area.

3. Required documents

3.1. Input documents

JHA for task
Dosing Sheet verified with Depths

3.2. Output documents

Replenishment log

<Output document number>

4. Document control

4.1. Revision history

R0 – Initial Release – Juan Enriquez	
R1 – <Editor name>Leo Willis	<Date>20140930

4.2. Document approval

<Name>

<Approval date>

4.3. Document reviewers

<Name>

<Last reviewed date>

<Name>

<Last reviewed date>

5. Risk analysis

<Risk name>

<Mitigation plan>

<Owner>

<RPN>