

Aqueous Ammonia Unloading: Driver Safety Checklist

ATTENTION: Only authorized personnel or certified drivers are permitted to operate this unloading station. Full adherence to these protocols is mandatory for the safety of the facility and the environment.

1. Arrival & Position

- **Engine Off & Brakes Set:** Ensure the truck engine is turned off and the parking brake is engaged.
- **Wheel Chocks:** Place chocks on both sides of the drive wheels to prevent any accidental movement during the transfer.
- **Grounding & Bonding:** Connect the site's grounding clamp to the designated truck grounding lug. Verify the interlock light is **GREEN** on the control panel.

2. Personal Protective Equipment (PPE)

- **Minimum Gear:** Drivers must wear ammonia-rated chemical splash goggles, a face shield, and chemical-resistant gloves (Butyl or Nitrile).
- **Emergency Access:** Verify the location and functionality of the nearest emergency safety shower and eyewash station before opening any valves.

3. Connection & Leak Check

- **Hose Inspection:** Inspect the transfer hose for any signs of wear, abrasion, or chemical degradation.
- **Secure Coupling:** Connect the liquid and vapor return hoses. Ensure the **Breakaway Couplings** are properly seated and locked.
- **Dry Run Pressure Test:** Slightly open the vapor return valve first to check for leaks at the connections before starting the pump.

4. Transfer Operations

- **Vapor Return First:** Open the vapor return valves on both the truck and the storage tank to equalize pressure.
- **Monitoring:** The driver **MUST** remain at the unloading skid for the entire duration of the transfer. Do not leave the area for any reason while the pump is active.
- **Level Check:** Monitor the storage tank high-level alarm. Stop the transfer immediately if the "90% Full" warning is triggered.

5. Post-Transfer & Disconnect

- **Line Purge:** Once the truck is empty, utilize the nitrogen purge or "blow-back" system to clear the liquid line into the storage tank.
- **Valve Closure:** Close all truck valves first, followed by the skid isolation valves.
- **Controlled Disconnect:** Slowly bleed any trapped pressure from the hose couplings into the scrubber-vent line before disconnecting.
- **Stowage:** Replace all dust caps and return hoses to their designated racks. Remove chocks and grounding clamps only after all hoses are disconnected.