

Ethanolamines/Glycol Ethers

Tier 3 Procedure

Section Number: 1711
Issue Number: 1.4
Original Date: 11-11-91 **Author:** Mike Viator
Revision Date: 01-27-98
Title: Swapping Sundyne Pumps
References: Glossary Of Equipment Identification (Text # 114)

=====

1711 Swapping Sundyne Pumps

1.0 Objective:

- 1.1 To effect switching of pumps without effecting continuance of plant operations.

2.0 Responsibility:

- 2.1 It is the responsibility of the operations personnel to ensure proper use of this procedure to prevent plant upset or interruption of production.

3.0 Safety Equipment:

- 3.1 Monogoggles, gloves and block safety equipment.

4.0 Special Notations:

- 4.1 The swapping of a sundyne is more critical than any other pump. Two people are required to make the swap. Be sure not to run both pumps any longer than is needed. The longer both pumps run the worst the effects of the swap will be on the plant.

- 4.2 Check the motor control center to make sure that the pump and oil pump motor control center switch gears are racked in.

- 4.3 Check each pump to make sure the oil cooler is in service.

5.0 Procedure:

- 5.1 In order to swap sundyne pumps we must let the board person know that we are going to swap pumps and which pumps will be swapped.

- 5.2 Check the oil and buffer pot pressure and level. Check the cooling tower water inlet and outlet valves and make sure they are open. check oil cooler inlet and outlet valves and make sure they are open and the fan is in the automatic position.

- 5.3 Start the lube oil pump and check the oil pressure. It should be 15 pounds per square inch gaug before the main driver motor will start. Check for any tubing leaks on the pump.
- 5.4 Open the discharge valve to the reactor and recirculation valve. Open the suction valve slowly so as not to rob pressure from other pumps in service.
- 5.5 After the suction and discharge valves are fully open, call the board person and let them know you are ready to swap the pumps.
- 5.6 On the board persons signal start the offline pump and shutdown the on line pump.
- 5.7 Leave the discharge valve open on the pump you just shutdown and start the lube oil pump just in case the pump you put on line develops a problem and you have to swap back.
- 5.8 Recheck the pump you just put on line for operating pressure, oil level, oil temperature, teg pot level and pressure, unusual noise, vibration and any tubing leaks.
- 5.9 Turn the lube oil pump off of the pump you just put on line.
- 5.10 After the on line pump has been running a few minutes and everything checks out ok, you can shutdown the lube oil pump of the pump off line and block in the discharge valve.
- 5.11 Call the board person to check on the plants condition.
- 5.12 Monitor the pump a reasonable amount of time or as long as necessary before leaving the area.

6.0 Revisions:

6.1	Revision #1	05-24-93	Deleted section stating: take a bleed from port #6 until you get liquid. Bleed to the sump under the water level. We do this step anymore.
6.2	Revision #2	12-23-94 12-23-94	Deleted section 4.4&5 Remove word "cotton" as description of gloves in section 3.1.
6.3	Revision #3	12-11-95	Yearly Review
6.4	Revision #4	01-27-98	Revised 2.1, 4.3, 5.2 Deleted 2.2