

**ETHANOLAMINES/GLYCOL ETHERS
TIER 3 PROCEDURE**

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TITLE: OFFLOADING T/C'S TO T/T'S OR T/T'S TO T/C'S
REFERENCES: GLOSSARY OF EQUIPMENT IDENTIFICATION
(TEXT #114)

442. OFFLOADING T/C'S TO T/T'S OR T/T'S TO T/C'S

1.0 OBJECTIVE:

1.1 To provide a safe and environmentally sound procedure for transferring product between tank cars and tank trucks.

2.0 RESPONSIBILITY:

2.1 It is the responsibility of the operations supervisor to ensure that this procedure is complied with.

2.2 It is the responsibility of the individual performing this task to adhere to this procedure.

3.0 SPECIAL NOTATION(S):

3.1 At all times, know where the product flow is going. Visually trace applicable lines to eliminate any doubt.

4.0 SAFETY NOTATION(S):

4.1 Monogoggles are required in the process of connecting and filling lines with product.

4.2 Appropriate gloves are required.

5.0 DEFINITIONS:

5.1 T/C denotes tank car. T/T denotes tank truck.

6.0 METHOD:

6.1 This task is accomplished by use of a portable pump to transfer product from the T/C rack to the T/T rack via the appropriate product header. New TBH header has also been added at the T/C rack so the pump can be used for this transfer.

7.0 PROCEDURE (T/C TO T/T USING PUMP):

- 7.1 Chock and ground tank car.
- 7.2 Remove 2" plug from bottom of tank car.
- 7.3 Lower gang way to walk onto tank car.
- 7.4 Apply safety gate.
- 7.5 Open eduction dome, remove 1" inch plug and open valve to relieve any pressure in car.
- 7.6 Open eduction dome after pressure is relieved.
- 7.7 Install a quick connect and bleed assembly to the 2" valve on bottom of T/C.
- 7.8 Connect proper hose to assembly and to suction of the pump.
- 7.9 Connect discharge hose to pump and proper loading header. Know which line is applicable.
- 7.10 Open internal valve on T/C, open external valve on T/C.
- 7.11 Prime the pump then open the valve on the loading header.
- 7.12 When transfer is complete, blow hoses out with nitrogen. Disconnect hoses and properly secure T/C. Also bleed down the pump at the T/C rack to prevent cross-contamination since this pump is now used to transfer both TBH and EB-tars.

8.0 PROCEDURE (T/C TO T/C WITHOUT PUMP):

- 8.1 Ground and chock both T/C's. Remove 2" plug. Install quick connect and bleed assembly to both T/C's.
- 8.2 Open eduction dome, remove 1" plug and attach nitrogen hose. Begin applying nitrogen pressure to the T/C with product to be transferred. Depad empty T/C.
- 8.3 Open dome on T/C the product will be transferred to.
- 8.4 Connect hoses to bottom of T/C's.
- 8.5 Open internal valves. When ready for transfer, open external valves. Monitor flow through open dome.
- 8.6 When transfer is complete, turn nitrogen off and depad T/C.
- 8.7 Close internal and external valves on car transferring from.
- 8.8 Connect nitrogen hose to quick connect and bleed assembly and blow hoses clean into (now) full T/C.
- 8.9 Close external and internal valves.
- 8.10 Bleed any remaining product from hose(s) and disconnect.

8.11 Secure T/C's.

9.0 PROCEDURE (T/C TO T/T WITHOUT PUMP):

9.1 Prepare T/C as in previous procedure.

9.2 Connect hose to proper product header and blow product through load header to T/T.

9.3 Disassemble and secure T/C when loading is complete.

10.0 PROCEDURE (T/C TO T/C USING PUMP):

10.1 Ground and chock T/C.

10.2 Remove 2" plug and install quick connect and bleed.

10.3 Connect discharge hose from pump to quick connect and bleed assembly on other T/C.

10.4 Open 1" plugs on both cars to depad T/C's.

10.5 Open domes and internal valves.

10.6 Open external valve on (transfer from) T/C.

10.7 Prime pump and open external valve on (transfer to) T/C.

10.8 Monitor T/C's through domes.

10.9 When transfer is complete, disassemble and secure T/C's.

REVISIONS:

	02-20-96	YEARLY REVIEW, NO CHANGES
	03-13-96	ADDED TO 6.1 AND 7.12