

Ethanolamines/Glycol Ethers

Tier 3 Safe Work Operating Procedure

Section Number: 7004
Issue Number: 1.1
Original Date: 09-02-93 **Author:**
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Title: FN-500 A/B Cleaning
Reference: S&Lp Standard "Use Of The Hydro-Blast Equipment"

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7004.FN-500 A/B Cleaning

1.0 Objective

- 1.1 To clean fan blades with no injury to personnel or damage to equipment.

2.0 Responsibility

- 2.1 It is the responsibility of the shift supervisor and area engineer to ensure that this procedure is fully complied with.
- 2.2 It is the responsibility of the person (s) performing this task to review this procedure prior to performing acidic cleaning of the equipment and to follow the guidelines set forth in this procedure for safe job completion.

3.0 Safety Notations

- 3.1 Personal safety equipment will include the following
- 3.2 Monogoggles, rubber boots, slicker suit, rubber gloves with inserts taped to seal and acid hood.
- 3.3 Anyone entering the hazard zone while work is being performed, or the area has not yet been decontaminated must wear all the required safety equipment.

4.0 Procedure

- 4.1 Tag out fan to be cleaned.
- 4.2 Remove door way and install scaffolding deck inside shroud.
- 4.3 Tie off fan blades to prevent undesired rotation. Blades may be untied to rotate as required for access.
- 4.4 Safety harness must be worn inside the fan shroud. Tie off to the gear box drive shaft or a deck post. Be sure not to leave excess slack in the rope.

- 4.5 Half of the cooling tower should be taped off as the hazard zone. The safety shower by the stair well will be used for decontamination.

4.0 Procedure: Cont'd.

- 4.6 Three men will be required for the job. One man should be positioned at the pump, one man blasting, and one observer on the tower to watch the job and communicate to pump operator.
- 4.7 The observer and the pump operator will carry radios for communication.
- 4.8 The safety observer will have all PPE required in case of emergency.
- 4.9 Acid will be applied to the fan blades with low pressure spray or foam.
- 4.10 Allow the acid to react for about fifteen minutes.
- 4.11 The blades will then be hydroblasted at no more than 3500 pounds.
- 4.12 Repeat steps 9 through 11 if necessary.

5.0 Revisions:

Revision No. 1	12-29-95	Yearly Review
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