

		Salt Packaging Lines 1 and 4 Pool Salt Citric Acid Procedure		Ogden Site	
Last Revision Date:	10/05/2015	2205.00	Effective Date:	November 2015	
Document Owner:	Salt Plant Training and Quality Supervisor		Expected Rev. Date:	November 2017	

1. Purpose:

- 1.1 Catalog the current procedures associated with the Salt Packaging equipment.
- 1.2 Bring the knowledge and practice into the current format.
- 1.3 Provide formal written criteria for operations personnel to follow and provide materials for training.

2. Prerequisites:

- 2.1 Operators must have completed Phase3 in the applicable Salt Packaging Phase5 Training and Certification program to perform any tasks outlined within this document unsupervised.

3. References:

- 3.1 *2202.xx Salt Packaging Line 1 BA501 Normal Operations Procedure*
- 3.2 *2247.xx Salt Packaging Lines 4 and 6 Normal Operations Procedure*
- 3.3 *2345A1.xx Salt Packaging Quality and Production Report*

4. Definitions:

- 4.1 **Work in Progress (WIP) Location:** Area that holds raw materials needed for the job.

5. Responsibilities:

- 5.1 Salt packaging operator is responsible to:
 - 5.1.1 Test citric acid addition rate.
 - 5.1.2 Ensure proper creation of pool salt through citric acid addition.

6. Associated Equipment:

- 6.1 BA501 Bagger for Line 1
- 6.2 BA504 Bagger for Line 4
- 6.3 Beaker
- 6.4 Knife
- 6.5 Mobile citric acid hopper

7. Required PPE and Tools:

- 7.1 Standard PPE for outside activities.
 - 7.1.1 Hard hat
 - 7.1.2 Steel-toe boots with metatarsal guards
 - 7.1.3 Safety glasses
 - 7.1.4 Company supplied uniform
 - 7.1.5 Gloves (appropriate for the task)
 - a) Leather gloves for lockout operations
 - b) Cutting gloves
 - 7.1.6 Hearing protection
- 7.2 Personal locks
- 7.3 Cutting knife

8. Policy:

- 8.1 The authorized and trained employees responsible for this equipment/process are expected to adhere to this procedure.

9. Procedure:**9.1 Adding Citric Acid:**

- 9.1.1 LOCATE the mobile citric acid hopper.
- a) The movable stairway and attached hopper should be located in the production office.
- 9.1.2 ROLL the stairway to the line.
- a) For Line 1 the bottom step should be in front of the empty bag pallet.
 - b) For Line 4 the bottom step should be at the northeast corner of the line.
- 9.1.3 POSITION the stairs.
- a) For Line 1 they should face west.
 - b) For Line 4 they should face southwest.
- 9.1.4 CONNECT the citric acid hopper red air line without the clamp on it to the bagger.
- a) The air line connects on the east side of the bagger above the bag clamp for both Lines 1 and 4.
- 9.1.5 CONNECT the citric acid hopper yellow air line to the bagger's solenoid connection.
- a) The solenoid connection is next to the bagger's main power control for both Lines 1 and 4.
- 9.1.6 ENSURE adequate citric acid is in the hopper:
- a) CLIMB the stairs.
 - b) LOOK inside the hopper.
 - c) The hopper should be at least half full to begin the run.
 - d) If more citric acid is needed:
 - RETRIEVE a bag of citric acid.
 - o The bags should be in the line WIP location.
 - o If they are not, OBTAIN additional bags from the front end operator.
 - ▣ For Line 1 SEE *2202.xx Salt Packaging Line 1 BA501 Normal Operations Procedure.*
 - ▣ For Line 4 SEE *2247.xx Salt Packaging Lines 4 and 6 Normal Operations Procedure.*
 - OPEN the bag using a knife and cutting gloves.
 - e) POUR the bag into the hopper.
- 9.1.7 CLOSE the ball valve at the base of the hopper which leads to the connected red air line.
- 9.1.8 OPEN the ball valve at the base of the hopper which leads to the red test line.
- a) The test line is the one with a clamp and a free end.
- 9.1.9 REMOVE the clamp from the test line.

9.1.10 LOCATE the testing beaker.

- a) It should be stored on the staircase.
 - CONTACT the production operator if unable to locate the beaker.

9.1.11 HOLD the beaker under the test line.

9.1.12 TEST the citric acid addition:

- a) PRESS the shaft on the solenoid valve three times.
 - The valve is on the north side of the bagger for both Lines 1 and 4.
- b) Air mixed with citric acid will fall into the beaker.
- c) ENSURE the beaker contains 8mL to 10mL of citric acid.
 - If the amount in the beaker is not correct:
 - o TURN the citric acid feed knob at the base of the hopper to adjust the feed.
 - ▣ TURN the knob clockwise to decrease the feed.
 - ▣ TURN the knob counter-clockwise to increase the feed.
 - o RE-TEST the citric acid addition by repeating *steps 9.6.9 and 9.6.10*.
 - If the amount in the beaker is correct:
 - o RECORD the test on *2345A1.xx Salt Packaging Quality and Production Report*.

9.1.13 REPLACE the clamp on the red test line.

9.1.14 CLOSE the ball valve leading to the test line.

9.1.15 OPEN the ball valve leading to the connected red air line.

9.1.16 Line 1 only:

- a) TURN ON the citric acid addition using the bagger HMI.
- b) BA501 HMI ► Home Screen ► Citric Acid On

9.1.17 BEGIN bagging.

- a) SEE the appropriate line normal operations procedure.

9.1.18 MONITOR the level of citric acid in the hopper.

- a) GO up the staircase and ensure there is adequate citric acid approximately every 500 bags.

10. Audit:

- 10.1 The Salt Plant Training and Quality Supervisor or a designee will audit this procedure as needed for compliance and accuracy.

10.1.1 Compliance:

- a) Are operators performing the tasks in this procedure to the standards as they are outlined within this document?

10.1.2 Accuracy:

- a) Can the operators perform the tasks to the standards as outlined within this document?
 b) Have all of the significant changes that have been made to the equipment or procedure that this document covers been updated already?

10.1.3 Revision Requests/Document Updates:

- a) If any of the above questions can be answered as a 'No,' the document needs to be updated by turning in the appropriate revision request.
- Ensure all MOC practices, policies and procedures are followed.

11. Training:

11.1 The Salt Packaging Phase5 Training and Certification Program requires recertification annually or as needed if the process and/or expectations significantly change.

11.1.1 Refresher training will be done on an as-needed basis or when/if the process and/or expectations of this document significantly change.

Revision History

Revision Number	Date of Revision	Author	Changed Section(s)
2205.00	10/09/2015	Rachel Johnson	Original Creation