		Salt Packaging Line 5 Film Roll Change Procedure		Ogden Site	
Last Revision Date:	09/22/2015	2262.00		Effective Date:	October 2015
Document Owner:	Salt Plant Training and Quality Supervisor			Expected Rev. Date:	October 2017

1. Purpose:

- 1.1 Catalog the current procedures associated with the salt packaging Line 5 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 Salt Packaging Line 5 Phase5 Training and Certification program to perform any tasks outlined within this document unsupervised.

3. References:

- 3.1 *2261.xx Salt Packaging Line 5 Normal Operation Procedure*
- 3.2 *2340.xx Salt Packaging Date Code Printer Operations Procedure*

4. Definitions:

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

5. Responsibilities:

- 5.1 Line 5 operator is responsible to:
 - 5.1.1 Monitor the level of the film roll during production.
 - 5.1.2 Replace empty film rolls in a timely manner to minimize downtime.

6. Associated Equipment:

- 6.1 BA505 Bagger for Line 5
- 6.2 Drill
- 6.3 Duct tape

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
 - 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 Changing the Film Roll:**

- 9.1.1 RUN the old film roll to the end:
- a) The bagger will stop when the film roll contains only 50 to 70 more bags and a 'Low Roll' warning will flash on the control screen.
 - b) PRESS the Start button twice to acknowledge the warning and re-start the machine.
 - c) MONITOR the film roll as it runs down.
- 9.1.2 LOWER the pinch bar when the roll finishes unwinding but before the last bag is fed into the bagger:
- a) PRESS the stop button while simultaneously lowering the pinch bar.
 - b) ENSURE the pinch bar pulls the film tight.
 - If the film is not tight:
 - o TAP the Start button to manually jog the film forward until it is tight.
- 9.1.3 RAISE the low roll sensor bar:
- a) PULL OUT and HOLD the low roll sensor bar pin.
 - b) LIFT the bar.
 - c) LET GO of the pin.
- 9.1.4 SET the bagger in manual mode:
- USE the toggle switch located on the remote station on the north side of the bagger.
 - o TOGGLE the switch from 'Auto' to 'Hand.'
- 9.1.5 REMOVE the spent film tube:
- a) CUT the old bag film across the vertical axis.
 - SEE the picture below.

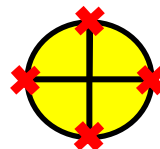


- b) REMOVE the spent film tube.
 - c) SLIDE the weight(s) from the spent tube and place it/them in the 6S location.
 - d) PLACE the tube in the recycle bin.
- 9.1.6 MOVE the chain hoist to the new film rolls using the hanging controller.
- a) New film rolls should be located in the Line 5 WIP area.
 - If no film rolls are in the WIP area, obtain rolls from the front end operator.
 - SEE *2261.xx Salt Packaging Line 5 Normal Operation Procedure*.
- 9.1.7 OPEN the new pallet of film rolls using a knife and cutting gloves if it is not already open.
- a) COMPARE the SKU number on the film roll to the SKU number given in production requirements.
- 9.1.8 SLIDE the chain hoist's bar attachment out of the chain hoist.
- 9.1.9 ENSURE no people or machinery are in the path of the new film rolls.
- 9.1.10 INSERT the hoist's bar into one of the standing film rolls.
- 9.1.11 TIP one film roll over, guiding it to the floor to control the fall.
- 9.1.12 REMOVE the hoist's bar from the new film roll.
- 9.1.13 REMOVE the film roll manufacture's lot code label from the side of the new roll.
- 9.1.14 DRILL alignment holes as needed:

NOTE:

Drilling alignment holes in the film roll provides a limited bond between the layers of film.

- a) DETERMINE whether drilling is appropriate.
 - DRILL alignment holes in the film roll for 40 pound bags.
 - Do not drill holes in the film roll for 50 pound bags.
- b) If drilling alignment holes:
 - DRILL holes in the handle area of the film using one of the two drill patterns shown below.

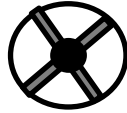


- 9.1.15 TAPE the roll as needed:
- a) SQUEEZE the film roll by hand to determine whether it is rolled tightly.
 - If there is any give in the film:

**Printed policies and procedures are only valid at time of printing.
For current policies and procedures please refer to electronic version.**

o TAPE across both ends of the film roll in an X pattern using duct tape.

▣ SEE the image below.

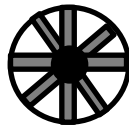


b) SQUEEZE the film roll again to determine the effectiveness of the tape.

• If there is still give in the film:

o ADD strips of duct tape.

▣ SEE the image below.



c) CONTINUE squeezing and taping until there is no give in the film.

9.1.16 CUT the new film roll:

a) CUT the bag film across the vertical axis.

• ENSURE the cut is in a different place on the film pattern as the cut on the old film.

o This allows the new film to overlap the old film when taping them together.

9.1.17 MOVE the film roll:

a) ALIGN the chain hoist attachment to the film roll.

b) SLIDE the hoist's bar through the attachment and the center of the film roll.

c) HOIST the film roll just high enough off the ground to take it to the bagger.

d) MOVE the new roll to the bagger.

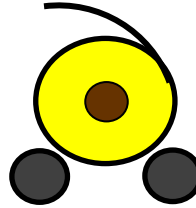
9.1.18 LOAD the new film roll:

a) POSITION the film roll over the rollers.

• The face of the film should unwind toward the bagger.

o It does not matter which way the film is wrapped onto the roll as long as it unwinds toward the bagger.

- b) LOWER the roll onto the rollers as seen below.



Caution!

The new roll must be carefully aligned with the small vertical rollers on the north and south. The south vertical roller should lightly touch the film and the north roller should sit approximately $\frac{1}{4}$ inch from the film. The rollers maintain proper film tracking, but they can break if they are too tight against the roll.

- c) ENSURE the new roll is aligned next to the small vertical roller on the south.
- USE a wrench as needed to adjust the roller, moving it north or south to sit lightly against the roll.
 - o SEE the picture below.

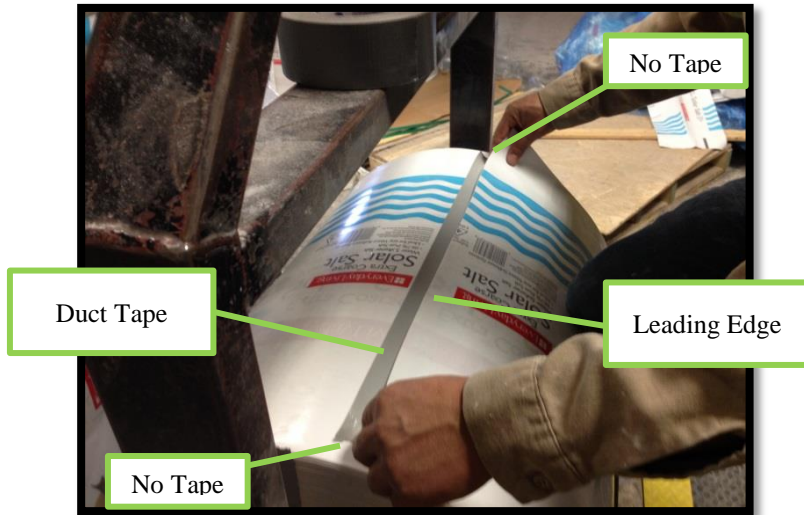


- d) ENSURE the roll is aligned approximately ¼ inch away from the small vertical roller on the north.
- USE a wrench as needed to adjust the roller, moving it north or south.
 - If the roll sits directly against both rollers, it will break one or both of them as it unwinds.
 - o SEE the picture below.



9.1.19 ALIGN the film:

- a) TAPE across the back of the new film's leading edge with a strip of duct tape.
 - LEAVE tape hanging over the leading edge to be used on the old film.
 - LEAVE two (2) inches of the film on the ends without tape.
 - SEE the picture below.



- b) POSITION the old film in line with the new film over the top of the duct tape.
 - ENSURE that the film is taped together in a way that leaves the pattern uninterrupted.
 - oSEE the picture below.



- The old bag film should be sandwiched by the new bag film.
- o SEE the image below.



- c) TAPE across the top of where the new film meets the old film.
- LEAVE the top two (2) inches of the film without tape.
- SEE the picture below.



- 9.1.20 RAISE the pinch bar off the film roll.
- 9.1.21 PRESS the start button to jog the film roll forward.
 - a) If the film is wrapped onto the roll so that feeding it into BA505 pulls it tight rather than unwinding it:
 - CHANGE the wind/unwind setting on the bagger's secondary control screen.
 - o BA505 Secondary HMI ► Unwind Settings ► Roll Stand Settings Screen
 - o Roll Stand Settings Screen ► Unwind CCW
- 9.1.22 WAIT for the spliced bag to get through the bagger.
- 9.1.23 PERFORM the film change equipment inspection.
 - a) SEE *section 9.2*.
- 9.1.24 EVALUATE the seals.
 - a) SEE *2261.xx Salt Packaging Line 5 Normal Operation Procedure*.
- 9.1.25 RETURN the bagger to automatic mode.
 - USE the toggle switch located on the remote station on the north side of the bagger.

o TOGGLE the switch from 'Auto' to 'Hand.'

9.1.26 PRESS the 'Start' button to send an empty bag through all seals.

9.1.27 RUN the bagger normally.

9.2 Film Change Equipment Inspection:

9.2.1 INSPECT the top sealer cleanliness.

- a) INSPECT at the sealer through the bagger access gate.
- b) LOOK for pieces of bag film or other debris.
- c) If debris is present:
 - TAKE the compressed air line to the bagger access gate.
 - OPEN the bagger access gate.
 - OPEN the sealer access door.
 - BLOW OUT the sealer with compressed air.

9.2.2 INSPECT the handle applicator cleanliness.

- a) INSPECT at the sealer through the bagger access gate.
- b) LOOK for pieces of bag film or other debris.
- c) If debris is present:
 - SEE *step 9.2.1, c*).

9.2.3 INSPECT the side sealer cleanliness.

- a) INSPECT at the sealer through the bagger access gate.
- b) LOOK for pieces of bag film or other debris.
- c) If debris is present:
 - SEE *step 9.2.1, c*).

9.2.4 INSPECT date code legibility.

- a) GO to the filled bags on the line after they have passed the date code printer.
- b) EVALUATE the legibility of the date code.
 - If the date code is not legible:
 - o SEE *2340.xx Salt Packaging Date Code Printer Operations Procedure*.

9.2.5 INSPECT the bagger cleanliness.

- a) INSPECT the bagger through the access gate.
- b) LOOK for loose salt or other debris.
- c) If debris is present:
 - TAKE the compressed air line to the bagger access gate.

- OPEN the bagger access gate.
- OPEN the sealer access door.
- BLOW OUT the bagger with compressed air.

9.2.6 INSPECT the air pressure gauges:

- a) Main air feed pressure must be between 100 and 110psi.
- b) Heat plenum air pressure for the sealers must be 17psi.
- c) Belt takeup air pressure must be 60psi.
- d) Dancing arm air pressure must be 40psi.

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 Line 5 Operator 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)
2262.00	09/30/2015	Rachel Johnson	Original Creation