1.0 Purpose

The purpose of this procedure is to explain and document the current controls in place to prevent metal contamination in the product. It is Giles' intent to continuously improve all of our policies and processes. This procedure documents our current practices.

2.0 Scope

This procedure applies to operations at the Manufacturing facility at 102 Commerce Street in Waynesville, NC.

3.0 Responsibility

It is the Production Unit's responsibility to monitor and ensure that all controls are in place any time product is being produced.

4.0 Safety Considerations

PPE requirements will be observed in designated areas.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

N/A

6.0 Procedure

Consideration is given to equipment failure modes when setting up the processes that make up Giles' process in order to prevent contamination (ie. small bolts are avoided, bearings have spacers when possible, etc.).

Filtration:

Filtration is used for the Brine and Mother Liquor to prevent solid contaminants of any type.

1. The Filter Press filters the Brine at 5 micron progressing to sub-micron levels.
2. A sock filter is used for the Mother Liquor that is fed to the Crystallizers. This sock has an opening size of 100 microns.

3. The sock is cleaned and inspected on weekly clean days. This is documented on the Weekly Cleaning Log (P13-FM-100-xx)

Screens

Screens are used at various points in the system to stop contaminants in the system.

1. A screen and rejector is used after the Dryer/Cooler to reject anything over 0.25 inches in size. This rejector can handle nuts, bolts, and other large pieces that could get into the system after the Crystallizer/ Centrifuge system. The filters protect the process to that point.
2. A 0.25" screen in the Main hopper chute protects the system from the Dryer/Cooler to the Main Hopper.
3. A 0.25" screen in the Bagger hopper chute protects the system from the Dryer/Cooler to the Bagger Hopper.
4. All screens are to be visually inspected at least once per shift and documented on the Salt Operator Log (P13-FM-100-005).

Magnets

Large rare-earth magnets are used at each final hopper to remove any ferrous contaminants that make it all the way to the place of final package.

1. A grate of rare earth magnets protects the Bagger Hopper
2. A grate of rare earth magnets protects the Main Hopper
3. A grate of rare earth magnets protects the Overs Hopper
4. Bolt on magnets protect the screener chutes.
5. On each clean day, remove all magnets and holders are cleaned. This is documented on the Weekly Clean Day Log (P13-FM-100-017)

7.0 Reference Documents

Weekly Clean Day Log (P13-FM-100-017)
Salt Operator Log (P13-FM-100-005)

8.0 Change Information

New Document