## 1.0 Purpose

This procedure describes the steps necessary for granting Quality approval for incoming raw materials.

## 2.0 Scope

This procedure applies to all incoming raw materials used at Manufacturing.

## 3.0 Responsibility

Quality Associate is responsible for this procedure.

## 4.0 Safety Considerations

Wear appropriate PPE when working in the lab.

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 the community.

## 5.0 Materials/Equipment

N/A

## 6.0 Procedure

6.1 Open daily the Raw Material Inventory spreadsheet at N:\EngineerOps\RXR & Raw Material\Raw Material.

6.2 Identify railcars in which COA's are available.

6.3 Review COA's for identified railcars:

1. For Sulfuric Acid COA's go to N:\EngineerOps\RXR & Raw Material\Raw Material\Acid Paper Work
2. For MgO COA's go to N:\EngineerOps\RXR & Raw Material\Raw Material\MgO Paper Work

6.4 Record information on the following forms:

1. For Sulfuric Acid use *Quality Approval of Incoming Raw Materials COA – Acid (Q12-PR-100-F015b).*
2. For MgO use *Quality Approval of Incoming Raw Materials COA – MgO (Q12-PR-100-F015a).*

6.5 Check to see if railcar is within control limits and specifications.

1. Control Limits for Sulfuric Acid are set internally to alert engineering if they need to adjust the process for any differences in raw materials that are within specifications. These control limits may vary depending on vendor.

2. Specification Limits for Sulfuric Acid are as follows
   - $H_2SO_4$ Lower Specification Limit is 93.20%
   - $H_2SO_4$ Upper Specification Limit is 95.00%
   - Clarity @ 500NM Lower Specification Limit is 80.00%
   - Clarity @ 500NM Upper Specification Limit is 100.00%
   - Chlorides Upper Specification Limit is 10 ppm
   - Color Upper Specification Limit is 50.00
   - Iron Upper Specification Limit is 50 ppm

3. Control Limits for MgO are set internally to alert engineering if they need to adjust the process for any differences in raw materials that are within specifications. These control limits may vary depending on which pit is being mined.

4. Specification Limits for MgO are as follows
   - LOI Upper Specification Limit is 5.00%
   - MgO Lower Specification Limit is 92.00%

6.6 If any railcar is out of specification limits, it is automatically rejected.

6.7 If any railcar is out of control limits it is reported to the Process Engineer, who will determine further action.

## 7.0 Reference Documents

*Quality Approval of Incoming Raw Materials COA – MgO (Q12-PR-100-F015a)*
*Quality Approval of Incoming Raw Materials COA – Acid (Q12-PR-100-F015b)*

## 8.0 Change Information

Removed control limit values