

GILES CHEMICAL ~ PREMIER MAGNESIA

Company Procedure

Title: In-coming Raw Materials – Reserve Samples Number: P13-QA-100-082

Owner: Ashley Williams Revision: 3
Effective Date: 11/8/2016 Page: 1 of 3



1.0 Purpose

This procedure describes the steps necessary for obtaining, evaluating, and storing reserve samples of incoming sulfuric acid and MgO.

2.0 Scope

This procedure applies to all incoming Magnesium Oxide and Sulfuric Acid used in the Manufacturing facility.

3.0 Responsibility

<u>Material Handler</u> is responsible for properly labeling and obtaining samples. <u>Quality Associate</u> is responsible for storing and performing periodic visual inspections of all samples.

4.0 Safety Considerations

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

- MgO Sample Bag
- Acid Sample Bottle
- Acid Sample Label
- Acid Sampling Stick
- MgO Sampling Stick

6.0 Procedure

All incoming railcars are to be sampled for testing and the remaining sample held for reserve sample

MgO

Material Handler is responsible for performing steps 1-4 of this procedure

- 1. Obtain a sample bag from the Material Handlers desk.
- 2. Record date, time, railcar number, silo being offloaded into, and operator initials on each sample bag used.
- 3. Following *MgO Unloading Procedure (P12-PR-200-006)*, obtain sample of railcar contents using sampling stick and place into the sample bag.

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4. Place sample in designated area on Material Handler desk for Quality Associate to pick-

Ouality Associate is responsible for performing steps 5-9 of this procedure.

- 5. Take sample to lab for testing to be performed following *In-coming Raw Materials* MgO and H2SO4 (P13-PR-100-076).
- 6. After testing is complete the sample will be resealed and logged on the *In-coming Raw* Materials – MgO Reserve Samples Log (P13-QA-100-F082a).
- 7. Sample will then be stored in the designated area.
- 8. A visual inspection of each sample shall be performed at six month intervals and recorded on the *In-coming Raw Materials – MgO Reserve Samples Log*.
 - a. If the appearance of the sample has not changed, a check shall be placed in the designated area of the log.
 - b. If the appearance has changed, an X shall be placed in the designated area of the log and a Laboratory Services Request (L12-FM-200-008) submitted for testing of the MgO sample for reactivity and LOI.
 - c. A Laboratory Services Request should also be submitted for the bulk salt that was made from said MgO railcar to be evaluated against the current USP monograph.
- 9. Samples will be maintained for a period of four years then disposed of in the mud pit for removal to the landfill. Date of disposal and who disposed of material shall be recorded on the *In-coming Raw Materials – MgO Reserve Samples Log.*

Acid

Material Handler is responsible for performing steps 1-4 of this procedure

- 1. Obtain an acid sample bottle from the Material Handlers desk.
- 2. Record the railcar number, tank being offloaded into, date, time, and operator initials on the sample label.
- 3. Following Acid Unloading Procedure (P12-PR-200-005), obtain sample of railcar contents using sampling stick
- 4. Clean all acid residues from the sample bottle and place completed label on it.
- 5. Place sample in designated area on Material Handler desk for Quality Associate to pickup.

Quality Associate is responsible for performing steps 6-10 of this procedure.

- 6. Take sample to lab and perform tests following *In-coming Raw Materials MgO and* H2SO4 (P13-PR-100-076).
- 7. After testing is complete the sample will be resealed and logged onto the *In-coming Raw* Materials – Acid Reserve Samples Log (P13-QA-100-F082b).
- 8. Sample will then be stored in the designated area.

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- 9. A visual inspection of each sample shall be performed at six month intervals and recorded on the *In-coming Raw Materials Acid Reserve Samples Log*.
 - a. If the appearance of the sample has not changed, a check shall be placed in the designated area of the log.
 - b. If the appearance has changed, an X shall be placed in the designated area of the log and a *Laboratory Services Request (L12-FM-200-008)* submitted for testing of the acid sample for pH and sulfate.
 - c. A *Laboratory Services Request* should also be submitted for the bulk salt that was made from said acid railcar to be evaluated against the current USP monograph.
- 10. Samples will be maintained for a period of four years then disposed of by an outside Hazardous Waste Company.

7.0 Reference Documents

In-coming Raw Materials – MgO and H2SO4 (P13-PR-100-076)
In-coming Raw Materials – Acid Reserve Samples Log (P13-QA-100-F082b)
In-coming Raw Materials – MgO Reserve Samples Log (P13-QA-100-F082a)
Laboratory Services Request (L12-FM-200-008)
MgO Unloading Procedure (P12-PR-200-006)
Acid Unloading Procedure (P12-PR-200-005)

8.0 Change Information

Updated Reserve Sample form numbers, expanded responsibilities.