
	GILES CHEMICAL ~ PREMIER MAGNESIA		
	Company Procedure		
	Title: Acid Filter Check at Digesters - Monthly	Number: M12-PR-100-012	
	Owner: Robert Willis/Jody Conner	Revision: 2	
	Effective Date: 08/12/13	Page: 1 of 6	

1.0 Purpose

Outline steps necessary to lock, tag, and try the Acid delivery system to the digesters in order to clean the acid filter.

2.0 Scope

Preventative maintenance to be performed by maintenance

3.0 Responsibility

Lead operator or designee to supervise maintenance workers

4.0 Safety Considerations

Safety glasses and appropriate personal protective equipment is to be worn at all times. Full Acid Suits are required when dealing with equipment related to the delivery of Sulfuric Acid.

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

- Proper tools for PM on acid filter

6.0 Procedure

This Preventive Maintenance procedure should be conducted only under the direct supervision of the Lead Operator or designee of the shift who will be responsible for bringing down the Digesters from production and returning them to operating capability once procedure is complete (Reference: *Starting and Stopping the Digesters P12-PR-200-013*). Lead operator or designee should remain until procedure is complete.

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Page: **2 of 6**

PREMIER
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1. Rope off area underneath the salt side Primary Digester (Asset Tag #10154) to prevent anyone from walking underneath the Acid filter while work is being performed (Figure 1)



Figure 1

2. Confirm that safety shower is operational and working properly in the digester area where the work is being performed (Figure 1).



Figure 1

3. Digesters operation should be stopped per Operating Procedure: *Starting and stopping the Digesters (P12-PR-200-013)*. Lead Operator or designee of the shift is responsible for Digester operation; both starting and stopping the Digesters.
4. Lock out the Main Disconnect for the Acid Pump that delivers Acid to the plant. Pump lockout should be confirmed before moving to the next step. **Figure 1**. Lockout the main ball valve servicing product from the Acid tanks to the Acid Pump. **Figure 2**

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Revision: **2**

Effective Date: **08/12/13**

Page: **3 of 6**

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Figure 1



Figure 2

5. Make sure the acid control shutoff valve is in the off position on the Salt Side Primary Digester (Asset Tag #10154). **Figure 1.** Open the manual valve on the Salt Side Primary Digester (Asset Tag #10154) to drain any residual acid in the line. **Figure 2**



Figure 1



Figure 2

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Page: **4 of 6**

PREMIER
MAGNESIA, LLC

6. Make sure the acid control shutoff valve is in the off position on the Liquid Side Primary Digester (Asset Tag #10131). **Figure 1**. Open the manual valve on the Liquid Side Primary Digester (Asset Tag #10131) to drain any residual acid in the line. **Figure 2**



Figure 1



Figure 2

7. Next place a bucket underneath the acid filter. **Figure 1** Then carefully remove the top of the filter housing to gain access to the filter. **Figure 2**



Figure 1



Figure 2

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Page: **5 of 6**

PREMIER
MAGNESIA, LLC

8. Remove the Acid Filter and place it in the bucket carefully ensuring that no acid is spilled upon removal. **Figure 1**



Figure 1

9. Take filter above the Salt Side Primary Digester (Asset Tag #10154) and wash out thoroughly with residue falling into digester. **Figure 1**



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Effective Date: **08/12/13**

Page: **6 of 6**

PREMIER
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10. Replace filter. **Figure 1** Seal lid of Acid filter making sure that proper torque is applied.
Figure 2



11. Proper procedure to return equipment to operation:

1. Replace all effected automatic (open position) and manual acid valves (closed position) on both the Salt and Liquid Side Digesters
2. Remove lockouts in the Acid Tank Building for both the disconnect and manual feed for the acid pump.
3. Inform the Lead Operator or designee of the shift that the Digesters are available to be returned to production.
4. Remove the flagging from the area underneath the Primary Digester on the Salt Side (Asset Tag #10154)
5. Confirm with Lead Operator or designee that everything is working properly

7.0 Reference Documents

Starting and Stopping Digesters (P12-PR-200-013)

8.0 Change information

Added *Starting and Stopping Digesters* to reference documents and updated #3 to include *Lead Operator or designee* of the shift is responsible for Digester operation; both starting and stopping the Digesters.

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