	<b>GILES CHEMICAL</b>		
	<b>COMPANY POLICY / PROCEDURE</b>		
	<b>70 Tons per Shift Production Rate</b>	Page : 1 of 3	Revision : 02 Date : 10/26/2009
	Author: <b>Patrick Owen</b>	Job Specific Instruction	

**Personnel responsible:**

1. All

**Safety equipment:**

Safety glasses and safety shoes, other safety equipment as needed for each situation encountered

**Summary:**

This document outlines the process parameters for making 140 tons of Crystal per day (70 tons per shift). It is a guideline, not an absolute since it is hard to predict every situation you may encounter. The key to running this process correctly is consistency – keep it running. Do not run hard and then shut down.

**Procedure:**

**Raw Materials**

1. Ensure a sufficient supply of MgO and Acid are in their respective storage tanks at all times.

**Digesters**

1. **Use both digesters** for making 70 tons.
2. Set MgO drive dials on 7.
3. Run about 32 gallons per minute of Mother Liquor (16 in each digester)
4. Aim for a Density of 1.384
5. Slow the Mother Liquor down if the density drops below 1.380.

**Press**


1. Kick the press off when the Mud Tanks get to 60%.
2. If needed set gpm shutoff to 40 gpm to get press productivity up. This shouldn't be necessary if you are turning both presses over.

**Crystallizer**

1. **Run 2 Crystallizers** when making 70 tons per shift.
2. Feed 10-12 gallons per minute of Mother Liquor (5 to 6 gpm in each Crystallizer)
3. Keep solids below 160 if possible. Use more Mother Liquor if necessary.
4. Density should not exceed 1.44.
5. The discharge pump should run at 26 – 28 gallons per minute.
6. Adjust the brine feed if the level gets above 180 or below 150.
7. Run the vacuum set point at 0.85" Hg, close the automatic bleeder valve up top if you have to in warmer weather.

**Dryers**

1. Run salt temperatures at 32-35 degrees C. **Do not exceed 35 C.**
2. Dryer rotation should be set to 1350 on the dryer speed drives.

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## TRAINING DOCUMENTATION

	EMPLOYEE	TITLE	SIGNATURE	DATE
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**GILES CHEMICAL**  
**COMPANY POLICY / PROCEDURE**

**70 Tons per Shift Production Rate**

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Author: **Patrick Owen**

Job Specific Instruction

Revision Number	Revision Date	Revision Author	Revision Description
00	6/9/2006	PLO	New Procedure
01	6/5/2009	PLO	Updated for new format and level control
02	10/26/2009	PLO	Increased Mother Liquor to 5-6 gpm from 4-5 gpm