

Name:

Date:



## 2<sup>nd</sup> Floor Practical

**To be completed by every Operator as part of their in-house training requirements to enhance job knowledge and operational proficiency. Operator may use notes and other training material including the Furnace Operations Manual. The candidate will work directly with Mentor OR Shift Supervisors to complete Practical.**

**\*\*Turn in completed practical to Operations Training Coordinator\*\***

### **Part 1: Written Practical (complete on separate sheet of paper)**

1. List all CFG components and describe their functions. (Including CFG Poly System)
2. List and explain all CFG alarms and response procedures.
3. Describe what makes up the CFG feed.
4. List 3 places the CFG feed pumps speed can be adjusted.
5. What 2 places can the centrate be discharged to?
6. What step must be taken after inputting the desired torque setpoint with the machine in autotorque?
7. List all components of the ash system.
8. Give a general description as to how the ash system works.
9. In normal operating mode, which ash filter is dedicated to which ash line?
10. How and where can the ash be diverted to the opposite ash filter?
11. Explain the Waste Heat Boiler Soot ash conveyance system and list its components.
12. Where is the WHB soot ash conveyors LCP located and what is controlled from this panel?
13. Briefly describe the dry scrubber, list its components and explain how it relates to the ash system.
14. Give a brief description on how to start the ash system from dynac.
15. Explain how to manually backwash an ash filter.
16. Where is the Bin Vent fan and what is its purpose?
17. Briefly explain how to run the ash unloading station.
18. What is Supervac? List its components.
19. How do you run Supervac?
20. Explain what role carbide lime plays in the CFG feed process as well as how the system works and its components.
21. Explain the boiler feedwater process and identify its components.
22. What is the Deaerators main function?
23. Briefly describe how the DAFs operate and list all of the systems components.
24. What is the Sludge Blending Tank and how is its level monitored?
25. Give a brief description of how the SCB OCU operates. List its components.
26. What are the water softeners on the first floor used for?
27. What MCC is dedicated to the SCB?

**Part 2:**

<b>Tasks</b>	<b>Date</b>	<b>Initials (Trainer)</b>
1. Start the centrifuge		
2. Shut down the centrifuge		
3. Restart the centrifuge after it trips		
4. Perform a cold flush and CIP		
5. Re-valve centrifuge cake pumps(ex.#2 cake pump to #3 CFG)		
6. Re-valve centrifuge feed pumps (ex.#2 feed pump to #3 CFG)		
7. Run cake and capture tests (cook offs)		
8. Switch centrifuge feed to waste line		
9. Study and comprehend centrifuge schematic on the PCS.(Dynac)		
10. Use spray water to do a case flush.		
11. Locate all of the breakers to the centrifuge, cake pump, and feed pump 1-4		
12. Valve up a poly feed pump to a different CFG (ex. #2 poly pump to #1CFG)		
13. Demonstrate competence in placing the carbide lime system in service while exercising all safety precautions.		
14. Demonstrate how to valve the centrate to the secondary		
15. Locate and clean the CFG polymer strainers		
16. Demonstrate how to adjust the torque setpoint		
17. Demonstrate how to perform a hot CIP		
18. Secure the heat exchanger following a hot CIP/Flush		
19. Clear a carbide lime plug		
20. Demonstrate how to switch boiler feedwater pumps		
21. Demonstrate how to bypass the float valve on the Return Condensate Tank		
22. Demonstrate how to purge the Dry Scrubber.		
23. Demonstrate how to put the DAF polymer system online		
24. Demonstrate how to switch DAF recycle pumps		
25. Exercise the telescoping valves		
26. Adjust the DAF collector arm speed		
27. Get the "Rope" level from the sludge blending tank		
28. Perform a manual backwash on the water softeners on the 1 <sup>st</sup> floor.		
29. Switch Solids Building OCU towers		
30. Walk through and become familiar with MCC 73		
31. Demonstrate how to safely reset a breaker following a trip		
32. Change a fuse in a lighting panel		

33. Pick 10 pieces of equipment from the equipment list and identify them in the MCC		
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Trainer's Comments: