Personnel responsible:

1. Process Personnel

Safety:

Safety shoes and safety glasses are required when working in the production area.

Summary:

Below is a list of common issues encountered with the process and some ideas for what to check and correct.

List:

Acid Tanks

Level High – probes probably frozen
No Acid – Check Acid Pump
Pump Kicking Off – Check current monitor settings

Silos

No MgO to Day Hopper – Check rotary valves or blower; check control panel settings
Day Hopper – check level probes, make sure both are working or rat-holing can starve liquid side

Digesters

Acid – Check MgO Feed, Day Hopper, make sure acid valve isn't stuck, circulation loop, mix pot, pH probe, pH meter box, control signal, set point
Green- Check acid feed, make sure acid valve isn't stuck, circulation loop, mix pot, pH probe, pH meter box, control signal, set point
Too Hot - Make sure Mother Liquor is being fed instead of water, may have to lower MgO feed, Check MgO reactivity
Pump Stopping – Make sure mix pots are OK, "Purge" Cir Loop, give it time

Mud Tanks

Acid (or Green) – Get digesters straightened out, then recirculate mud back to primary digester until pH comes up (or down)
Stopped Up – Drain tank and shovel it out; agitator or blades probably bad

Press(es)

Mud Feed – check mud valve to make sure it isn't stuck, check agitator and blades if tank settles out
Plates Bulging – Air blow and core blow should be checked
Cakes Slimy – check baymag ratio, squeeze system
Low Press Runs – there is a fishbone attached to an incident investigation from 2005 for this
Press Won't Start – make sure HPU button is pushed, cool the water tank, check all pump starters, press won't start if other one is starting or stopping

Brine Storage/Feed
Can't pump fast enough – tank, pipe, valve, or pump probably caked with Calcium Sulfate – clean it all
Overflowing – shut off the press and check for water leaks going into the tank

Crystallizers
Hot – check vent pipe, vapor pipe, cooling water, steam eductor, vacuum pump, vacuum control valve, check for vacuum leaks, level may be too high
Cold – open vacuum blocking valve and check vacuum set point
Level Low – decrease output and/or increase brine feed
Level High – decrease brine feed and/or increase output
Discharge Won't Run – check centrifuge interlock
Discharge Stops – clods probably in crystallizer – begin filling alternate, but may be OK in 24 hours
Elbow Pump Stopping – clean the air filters on the drive cabinet
Fine Salt Loop Hot/Cold – check level, check fine salt loop pump, wash out loop, check steam valves
Not enough brine feed – clean the brine feed lines, pump, and tank

Centrifuges
Stopping – check for unusual vibrations, clean air filter on drive box
Slopping – wash centrifuge well, check for very fine salt, slow down crystallizer discharge, check speed (48 hz)

Dryers
Hot – check set point and make sure manual valves are closed, check I/P
Cold – check steam supply, is crystallizer feed too much?, are fans running?, check I/P
Won't Control – check dust collector and fans, check control valves, ensure steam supply, check I/P

Monitoring System
Can't Log In – call Dean about DHCP and DNS server, reboot Monitoring System Server
Loss of Control – check racks, reboot server
Tanks Show Empty – check racks, reboot racks and server, log in again

Mother Liquor
Too Much / too weak – Check the mother liquor pump seal, check foe too much water in the mother liquor pot
Tank Salting – check centrifuge basket after checking for salt in mother liquor pot
Too Strong – check crystallizer temps