Evaporator and Sugarhouse Shutdown and Cleaning Procedures

The following procedures describe how {name of sugarhouse} shuts down and cleans equipment in the sugarhouse.

Arch

Select the bullet points that relate to the type of evaporator you use in your sugarhouse.

For a wood fired evaporator:

- Spread the fire out and keep the blowers on to burn remaining wood.
- Turn the blowers off when only embers left in firebox.

For an oil-fired evaporator:

• When the low sap warning sounds, turn off the burners.

Concentrate tank and input to evaporator

- Drain any concentrate out of the input pipeline. Add this concentrate to the flue pan.
- {If you have a pre-heater} drain the pre-heater pipes by opening the bypass valve into the back float box.
- Drain the back float box and add this liquid to the flue pan.
- Rinse the concentrate tank with filtrate water and drain water via bypass valve so it does not go into evaporator.
- Put a mouse stick in the concentrate tank.

Front/syrup pans

After the sweet in the syrup pans stops boiling, drain and filter the sweet.

- Drain the sweet from each pan section through the filter press and into the clean 5 gallon food-grade pails.
- Insert plugs in pan so water cannot flow into the pipes that connect the pans.
- If you soak your pans on the arch: Immediately add filtrate water to the empty syrup pan to a depth of 4 6 inches. If needed, add pan acid according to the ratio specified on the manufacturer's instructions.
- If you acid wash your pans: Move the pan to the cleaning stand and add filtrate water to the empty syrup pan to a depth of 4 6 inches. Add {amount of acid based on amount of water} pan acid according to the ratio specified on the manufacturer's instructions.
- If you have a pan washer: Move the empty syrup pans to the pan washer and start the wash cycle.
- Make sure the valves are open or the pipes are removed that connect the pans so water does not freeze in these pipes.

Back/Flue pan

After the sweet in the flue pan stops boiling and the arch has cooled

- Spray the inside of the hood and wipe down with a clean sponge.
- If the flue pan needs to be cleaned: Drain the sweet into a tank or syrup drum. Add filtrate water to the empty flue pan to a depth a few inches above the depth you boil at. If needed, add pan acid according to the ratio specified on the manufacturer's instructions.
- If you have a pan washer: Start the wash cycle.

Draw off container

• Clean with hot water

Filter Press

- Run hot water through the filter press to clean the pump.
- Take the filter press apart and discard the used papers and DE.
- Wash the filter press plates with hot water.
- Open the drain plugs to drain the pump.
- Wipe down the outside of the filter press.

Utensils including barrel filler

• Clean with hot water.

Outside of Evaporator

• Spray with water and wipe down the outside of the Evaporator.

Sugarhouse

- Wash the floor.
- *If you burn wood:* Sweep water into the area where wood is put into the arch to wet any hot ash or coals.
- Close the cupola doors.

The following procedures describe how {name of sugarhouse} finishes cleaning and sets up for boiling the next day.

Front/syrup pans

- Scrub each syrup pan and drain the filtrate water.
- If a syrup pan does not come clean then you can swap it out for an extra, clean pan. Move the dirty pan to the cleaning stand and fill with clean filtrate water. Add pan acid according to the ratio specified on the manufacturer's instructions.
- If a pan had acid in it then add {amount of baking soda required to neutralize the amount of acid} of baking soda to water to neutralize it and drain the neutralized water. Rinse pan and then add at least 6 inches of clean filtrate water and soak pan overnight.
- *If you have a pan washer:* Move the clean syrup pans from the pan washer back to the arch.

- Connect the pans with the pipes and fill with buckets of sweet.
- Clean the food grade buckets with hot water.

Back/Flue pan

• If flue pan had acid in it then scrub it. Add {amount of baking soda required to neutralize the amount of acid} of baking soda to water to neutralize it and drain the neutralized water. Rinse pan several times with clean filtrate water.

Filter Press

- Assemble the filter press with new filter papers.
- Close the drain plugs for the pump.
- Connect the filter press to the draw-off tank and the barrel filler.