## Water Softener Optimization Form

**Date:** __________  **Site Address:** _____________________________  **Site Contact (first name):** ____________________

**Optimization conducted by (company):** ___________________________  **Training Certification Number:** ____________________________

**Technician:** ___________________________  **Optimization Scheduling Basis:** ______Dealer-initiated optimization (rental/nonrental/service call) ______Customer-initiated optimization (received letter)

**Water Source:** ______Waukesha ______Private Well ______Pewaukee ______This softener was not optimized because it does not discharge to the municipal sanitary sewer

1. **Family Size?** ________________
2. **Are there any special medical needs necessitating soft water?** Yes___ No___ (use slightly more conservative settings)
3. **Plumbing Configuration?** Hot Soft only__________
   Hot and Cold Soft, except for outside hose bibs & kitchen sink__________
   Other? (explain)______________________________________________

4. **Are there other treatment devices?** ________________
   Point of Entry “POE”/ Whole-house Systems: Iron Filter _____ Other: ________________
   Point of Use “POU” Systems: RO _____ UV _____ Filter______ Other: ________________
   Before or after water softener? ____________________________

5. **Water Softener Information:** **Serial number:** ________________  **Approx. Age or Date of Mfg.:** ________________
   **Make:** ______Culligan ______Kinetico ______Water-Right ______Soft Water ______Mermaid ______Hanson ______Guthrie & Frey ______Hellenbrand ______Ecowater ______Kenmore ______Electrolux ______Morton ______G.E. ______North Star ______Ecopure ______Abendroth ______Final Barrier Water ______Hauge ______AO Smith ______Vantage
   Other: ________________
   **Specific Model:** ________________  **Downflow Brining**____  **Upflow Brining**____
   **Time Clock** (if time clock, regeneration frequency) every ___Days
   **DIR Demand Initiated Regeneration (flow)**____ **DIR Demand Initiated Regeneration (sensor)**____
   **Cu. ft. resin** _____

6. **Optimization**

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Optimized</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardness Setting</strong></td>
<td>(Grains/Gallon)</td>
<td>Based on map from CH2M</td>
<td></td>
</tr>
</tbody>
</table>
| **Salt Efficiency** (Grains/Lb. Salt) | With age factor: | Without age factor: | 4000 grains of hardness removed per lb. of salt, or higher without age factor. With age adjustment factor of 2% per year, calculate: 
\[(\text{Capacity in grains / salt dosage}) - (\text{(Capacity in grains / salt dosage) x age x 2%})\] |
| **Salt Dosage (Lbs.)** | Max. target of 5 lbs. per cu. ft. resin. For example, if optimized to 5 lbs. per cu. ft. of resin and if actual resin volume is 1.5 cu. ft., then enter 7.5 lbs. Use lowest salt dose recommended by manufacturer based on valve, salt curve, injector size, etc. |
| **Injector Size** | Based on manufacturer recommendation |
| **Capacity (Grains)** | N/A | Calculated by the manufacturer based on valve, optimized salt setting and injector |
| **Capacity (Gallons)** | N/A | Calculate: (optimized capacity in grains) / (new hardness setting in grains per gallon) |
| **Reserve Capacity Gal. – Mechanical** | Hot soft only - set to 30 gallons per person Hot & cold soft – set to 60 gallons per person |
| **Reserve Capacity Gal. – Electronic** | Program in the new salt dosage, capacity/grains. Refer to mechanical reserve capacity if system allows the programming of total gallons and reserve. |
| **Add Resin Cleaner** | N/A | Apply based on cleaner instructions |
# Water Softener Optimization Form

<table>
<thead>
<tr>
<th>Time Clock Override</th>
<th>On or Off</th>
<th>If there is a time clock override for a DIR system, record initial settings then turn off override and set basis for regeneration to be demand</th>
</tr>
</thead>
</table>

**Notes**

For time clock systems, fill in the table above the same as demand based system. Calculate regeneration timer settings based on actual water usage rate if recent water bills are readily available and provided by customer. If not, base on: Hot soft only - set to 30 gallons per person or Hot & cold soft – set to 60 gallons per person.

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7. What time is the softener set to regenerate at? ________________
8. Is the time shown on the softener the same as the actual time? ______ Fix if not. If not adjustable, note the time shown on the softener _______ and actual time _______.
9. Does the current softener appear to be working? _______________
10. If repairs are needed to the system: (list and describe recommendations)
    __________________________________________________________________________________________________________
    __________________________________________________________________________________________________________
    Estimated cost of repairs: ____________________________
11. Are there any other recommendations or comments?
    Valve
    Resin (e.g., replace)
    Tank
    Other
    It is recommended that a softener 15 years old and not meeting 3,000 grains/lb with age adjustment should be replaced with an optimized DIR softener or the resin replaced.
    It is recommended that time clock systems should be replaced with optimized DIR systems
12. Applied Sticker