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| **General System Information** | | | |
| ***PWS Name*** |  | | **PWSID# \_\_\_\_\_\_\_\_\_\_\_\_\_** |
| ***SOPs Prepared by*** |  | ***Date prepared*** |  |
| ***SOPs Updated by*** |  | ***Date Updated*** |  |
| ***Street address of system*** |  | ***Number of service connections*** |  |
| ***Town*** |  | ***Number of people served*** |  |
| ***Zip code*** |  | ***Source type***  ***(GW, SW, )*** |  |
| ***County*** |  | ***Total source capacity (gpm)*** |  |
| ***Comments*** |  | | |
| **System Notes** | | | |
|  | | | |

These SOPs will help provide consistent, effective practices by system operators and allow unfamiliar operators to provide help if needed.

* **Post your completed template or individual pages where convenient to use and accessible to all operators.**
* Update the template when needed for new equipment, changes in system operation, contact info, etc.

**Consider laminating pages that are posted in humid areas or around chemicals.**

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| **Contact Information** | | | | |
|  | ***Name*** | ***Primary Phone Number*** | ***Emergency Phone Number*** | ***Email*** |
| ***Owner*** |  |  |  |  |
| ***Owners Rep or Manager*** |  |  |  |  |
| ***Operator in Charge*** |  |  |  |  |
| ***Assistant Operator*** |  |  |  |  |
| ***Water Testing Lab*** |  |  |  |  |
| ***Chlorine Supplier*** |  |  |  |  |
| ***Chemical Supplier*** |  |  |  |  |
| ***Equipment Vendor*** |  |  |  |  |
| ***Pump Supplier*** |  |  |  |  |
| ***Electrician*** |  |  |  |  |
| ***Power Company*** |  |  |  |  |
| ***ORWA Circuit Rider*** |  |  |  |  |
| ***Contractor*** |  |  |  |  |
| ***OHWARN*** |  |  |  |  |
| ***24/7 Spill Reporting Hotline*** |  |  |  |  |
| ***24/7 Emergency*** |  |  |  |  |

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| **PWS Name:** | |
| **Schedule for Daily Tasks: You can remove or add Task as needed** | |
| **Task** | **Notes** |
| **Collect entry point free chlorine residual sample and record on monthly operation report** | The free chlorine residual should be at least \_\_\_ mg/l at the entry point to the system. |
| **Check chlorine day tank, record amount used, and refill as needed** | When the level in the chlorine day tank is down to \_\_\_ gals add \_\_\_ qts/gals of \_\_\_\_ % chlorine and \_\_\_ gals of water. |
| **Inspect chlorine feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Record water plant meter readings & calculate total daily production** | Average day demand in summer is \_\_\_\_\_ gals per day (gpd) and in winter is \_\_\_\_\_ gpd. If demands are higher than this for more than three days, there may be a leak. |
| **Record pump run times and start cycles** | Pumps normally run \_\_\_\_\_ hours per day in the summer and \_\_\_\_\_ hours per day in the winter. |
| **Conduct a general security check** | Inspect windows, doors, hatches, screens, well caps, fences, gates, lighting, locks, and alarms. Check if locked or set, look for tampering or vandalism. |
| **Collect other chemical samples as needed** | The measured amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ should be at least \_\_\_ mg/l at this sample location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  | The measured amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ should be at least \_\_\_ mg/l at this sample location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  | The measured pH should be within range \_\_\_\_\_\_\_\_\_\_ at this sample location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Check other chemical day tank, record amount used, and refill as needed** | When the level in the \_\_\_\_\_\_\_\_\_\_\_\_ day tank is down to \_\_\_ gals add \_\_\_ qts/gals chemical and \_\_\_ gals of water. |
| **Inspect other chemical feed pump(s)** | Confirm chemical is pumping correctly and there are no air bubbles trapped in the feed line, etc. |
| **Check and record water levels in storage tanks** | The storage tank normally operates between \_\_\_\_ - \_\_\_\_ feet of water. |
| **Check other treatment processes such as cartridge filters or softeners** | Cartridge filters need to be changed when the head loss is greater than \_\_\_\_ psi. Recharge softener with salt as needed. |

**In this Appendix, fill out the sections your system needs and delete the rest. For example, if your system does not use gas chlorination, you would delete the Gas Chlorination table below.**

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| **Storage** | | | |
| ***Storage Tank Name, Location*** | ***Pressure or Atmospheric*** | ***Storage (gal)*** | ***Comments (operating levels, cleaning methods, frequency, etc.)*** |
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| **Operating Pressures** | | | |
|  | ***Low*** | ***High*** | ***Comments*** |
| ***System pressure settings (psi)*** |  |  |  |

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| **Distribution System** | | |
| ***Type of Pipe*** |  | |
| ***Distribution main size(s)*** |  | |
| ***Service connection shut-off locations*** |  | |
| ***Number of main valves*** |  | |
| ***Valve Name or #*** | ***Location*** | ***Shuts off what area*** |
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| **Treatment - Liquid Chlorine (hypochlorite)** | | | |
| ***Undiluted strength (5%, 12.5%, etc.)*** |  | ***Target chlorine residual at entry point to system***  ***(ppm)*** |  |
| ***Day tank capacity (gal)*** |  | ***Chlorine to water***  ***mix ratio*** |  |
| ***Day tank filling instructions*** |  | ***Pump make and model*** |  |
| ***Maximum pump rate (gpm or gph)*** |  |
| ***Typical pump speed and stroke settings*** |  |
| ***MSDS*** | MSDS sheet posted where chemical is stored and used and copy is attached here | | |
| ***Chemical supplier name and contact information*** |  | | |
| ***Comments*** |  | | |

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| --- | --- | --- | --- |
| **Treatment – Gas Chlorination** | | | |
| ***Setting*** |  | ***Target chlorine residual at entry point to system***  ***(ppm)*** |  |
| ***Chlorine Cylinders (lbs)*** |  | ***Number of Chlorine Cylinders on hand*** |  |
| ***Gas Chlorination instructions*** |  | ***Regulator make and model*** |  |
| ***Chlorine High level alarm setting*** |  |
| ***Chlorine Low level alarm setting*** |  |
| ***MSDS*** | MSDS sheet posted where chemical is stored and used and copy is attached here | | |
| ***Chemical supplier name and contact information*** |  | | |
| ***Comments*** |  | | |

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| --- | --- | --- | --- |
| **Treatment - Other Chemical (e.g. corrosion control)** | | | |
| ***Chemical name*** |  | ***Commercial product strength (pH, %, etc.)*** |  |
| ***Reason for use*** |  | ***Target residual and sample location*** |  |
| ***Day tank capacity (gal)*** |  | ***Day tank mix ratio*** |  |
| ***Day tank filling instructions*** |  | ***Pump make and model*** |  |
| ***Maximum pump rate (gpm or gph)*** |  |
| ***Typical pump speed and stroke settings*** |  |
| ***MSDS*** | MSDS sheet posted where chemical is stored and used and copy is attached here | | |
| ***Chemical supplier name and contact information*** |  | | |
| ***Comments*** |  | | |

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| **Treatment - Ultraviolet Disinfection** | | | |
| ***Make and Model*** |  | ***Design flow rate (gpm)*** |  |
| ***Target intensity meter reading (%)*** |  | ***Quartz sleeve cleaning frequency*** |  |
| ***Spare parts available (e.g. quartz sleeve, bulb, and o-rings)*** |  | | |
| ***Describe cleaning & bulb replacement procedures*** |  | | |
| ***Service name and contact information*** |  | | |
| ***Comments*** |  | | |

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| **Treatment - Other (e.g. cartridge filtration, softening, etc.)** | | | |
| ***Treatment description*** |  | ***Design flow rate (gpm)*** |  |
| ***Describe maintenance, parts replacement and backwash procedures*** |  | | |
| ***Service name and contact information*** |  | | |
| ***Comments*** |  | | |