Aquatic Maintenance Policy & Procedures Manual

NORTH COUNTY & GIFFORD Aquatic Center
INDIAN RIVER COUNTY

1 Overview

Aquatic centers play a vital role in our community, and maintaining a high standard of cleanliness is essential. With the constant flow of visitors, we owe it to everyone to provide a safe and healthy environment. Ensuring that our facilities are clean, appealing, and well-maintained is crucial for fostering a positive experience.

By embracing the following cleaning philosophy and policy as our guiding principles, we can enhance our facilities' appearance and create an inviting atmosphere that encourages people to visit time and again. Let's work together to make our aquatic centers the best they can be!

1.1 “Cleaning Philosophy”

Prioritize health over appearance. While it's easy to make a facility look clean, proper cleanliness is about creating a healthy environment. We effectively reduce bacteria, harmful particulates, and other hazardous materials by focusing on health. Although appearance matters, the well-being of occupants significantly depends on the facility's overall health.

Embrace the Clean Syndrome. This phenomenon illustrates the power of visible cleaning efforts. When cleaning is apparent to occupants and the facility maintains a spotless look daily, it tends to remain clean. People are naturally attentive to their surroundings; if they see a dedicated cleaning routine, they will likely help uphold that standard. Conversely, if a facility is untidy, it often remains that way, potentially worsening over time.

Exceeding expectations. It involves meeting the standard cleaning protocols and anticipating the facility's and its users' needs. This could include proactive measures, such as regular inspections to identify potential cleanliness issues before they become noticeable and implementing feedback from patrons and staff to improve cleaning processes. Overall, it's about creating a consistently clean and healthy environment that enhances the experience of everyone who uses the facility.

2 Responsibilities

Proper cleaning requires efficient and effective techniques to prepare our facilities quickly for visitors and guests. It is not just the maintenance team's responsibility; it's a shared responsibility among all staff. By committing to upholding high standards of cleanliness at all times, we create a welcoming environment that reflects our professionalism and care.

The maintenance team plays a vital role in ensuring that our facility remains clean and welcoming. Their efforts will be complemented by the lifeguards and guest attendants, who will step in as needed, creating an exceptional environment for everyone.

A maintenance checklist will be used throughout the day to communicate what has been completed and what remains to be done. Please acknowledge whether you were able to complete your assigned duties or, if not, provide an explanation for any unfinished tasks. Maintain communication with the maintenance lead, Head Lifeguard, or Facility Supervisor throughout the day.

3 Supplies & Equipment

You can easily find supplies and equipment in the maintenance supply closets. Please ensure that you return all items to their original locations. This simple step helps us maintain an accurate inventory and saves everyone valuable time when searching for needed tools.

The maintenance team will maintain an inventory of all necessary items, but if you notice that you've used the last of a product or see that stock levels are running low, please inform the Supervisor On Duty (S.O.D.) immediately. Your proactive communication ensures we are always well-equipped.

It is essential to keep all storerooms, stock rooms, and janitorial carts clean, organized, and fully stocked. Dedicate a few minutes at the end of your shift to upholding these standards. Doing so enhances efficiency, supports colleagues, and contributes to a smoother workflow.

3.1 Supply Vendors

VEROCHEM

Contact: www.verochem.com
kvle@verochem.com

Product	Par Level
Pearl Screens	2Ea
Foaming Hand Soap	2 Case
Tissue Roll	2 Case
Brown Towel Roll	2 Case
White Emulsion Bowl Cleaner	1 Case
Fabuloso Lavender	1 Case
Aerosol Deodorant	3 Ea
Cleaning Vinegar	1 Gal
Latex PF Gloves	3 Case
Small White Liners	2 Case
Large Black Liners	2 Case
Clorox Germicidal	1 Case
12 " Angle Broom	3 Ea
Lobby Dust Pan	3 Ea

UNIFIRST

Contact: Office Phone: 772464-3911
Driver: Mike 321-999-5815

Product	Par Level
Wet Mop Heads	1 Case
Microfiber Towels	1 Case
Deodorizer Bowl Clips	1 case
#2 Glass & Surface Cleaner	2 Ea
#4 Foamy Mac Restroom Cleaner	4 ea
#70 Floor Degreaser	2 Ea
#64 Millennium Disinfectant	

4 Bath House Maintenance

A good and clean aquatic center is often indicated by its bathrooms' sanitary and well-maintained condition. Restrooms that are not properly cleaned and disinfected can create unsanitary conditions, allowing bacteria and pathogens to grow, which could lead to the spread of disease. Additionally, dirty restrooms can produce unpleasant odors and create an unsightly appearance. If the restrooms are unclean, guests may be less likely to return. For the aquatic manager, maintaining clean and well-kept restrooms is a top priority and an essential part of the facility's overall health and safety plan. Restrooms should be checked/cleaned 3 - 4 times daily or more on days with heavy traffic. Cleaning always starts at the top and goes down to the floor.

4.1 Walls & Dividers

1. Dust along the top of the dividers and wipe off any spots or stains daily. Wipe the walls daily with a microfiber cloth and detergent/disinfectant, cleaning from the top down. Pay particular attention to the areas around sinks, toilets, urinals, towel dispensers/dryers, and trash cans.

4.2 Sinks & Mirrors

1. All sinks shall be cleaned and disinfected at least daily with detergent/disinfectant applied to a microfiber cloth and wiping the entire sink and counter surface area, including the underside. Wipe down all stainless steel, including sanitation boxes, with stainless steel wipes daily.
2. Mirrors shall be cleaned DAILY with glass cleaner and paper towels

4.3 Shower

1. All shower stall walls and floors shall be cleaned and disinfected DAILY with cleaner/disinfectant/deodorizer sprayed on all surfaces. The product will be applied, left to dwell and left to air dry.
2. Wipe down all stainless steel with stainless steel wipes DAILY.
3. Showers shall be inspected as part of a HOURLY inspection to ensure drains are clean and clear and water is not running.

4.4 Toilets and Urinals

1. Toilets and Urinals shall be cleaned and disinfected DAILY with detergent/disinfectant in all sections of the toilet bowl inside and out. Rember to disinfect the top of the toilet seat, flush handle, and an area about eight inches around the toilet roll holder.
2. All Toilets and urinals will be flushed as part of an HOURLY inspection
   Urinals shall be treated BIANNUALY with a urinal descaler product following the product's instructions.
3. New Urinal Pucks should be added to urinals MONTHLY or more frequently if needed

4.5 Floors

1. All floors are swept DAILY with a broom and damp moped with Fabuloso. Add 3 - 4 oz. to your mop bucket. Wring out your mop as much as possible to avoid leaving too much water on the floor. Wet spills on any floor are to be removed immediately.
2. After Mopping, all Floor drains will be wiped with a microfiber cloth to remove any remaining debris and hair.

4.6 Trash Cans

1. All Trash Cans shall be emptied DAILY or more frequently during peak use periods. All wastebaskets shall be cleaned and disinfected DAILY with detergent/disinfectant applied to a microfiber cloth, and the entire surface should be wiped.
   Replacement trash bags will be kept in the bottom of the wastebasket at all times.

5 Facility Maintenance

5.1 Entrance, Corridor & Exterior

1. Front entrance and all walkways swept DAILY with broom and trash and debris collected in DUST PAN and disposed of.
2. All Entrance and Exterior walkways will be power washed BIANNUALY utilizing a pressure washer with surface cleaner attachment.
3. The parking lot and parking islands will be checked DAILY and kept clear of debris and trip hazards and curbs blown clear.
4. Awnings and Overhangs should be brushed clear of spider webbing and debris as needed. Generally MONTHLY, but as with everything else, the time of year will dictate additional needs. Use the telescoping pole with a brush attachment. NO LADDERS!

5.2 Walls/Painted Surfaces

1. All painted wall surfaces are cleaned WEEKLY with cloth and spray bottle with detergent/disinfectant, cleaning from the top down.

5.3 Counters & Work Areas

1. All counters and desks will be cleaned and disinfected DAILY with detergent/disinfectant applied to a microfiber cloth and wiping the entire surface

5.4 High Touch Areas

1. All “High Touch Areas,” such as door handles, turn styles, light switches, handrails, and toilet roll holders, shall be cleaned and disinfected 3X Daily with detergent/disinfectant applied to a microfiber cloth and wiping the entire surface

5.5 Water Fountains

1. Should be wiped down HOURLY detergent/disinfectant applied to microfiber cloth to avoid water stains forming.
2. Fountains will be cleaned DAILY with stainless steel wipes to help shine
3. Vent covers will be dusted WEEKLY.

5.6 Waste Baskets

1. All Waste Baskets shall be emptied DAILY or more frequently during peak use periods.
2. All wastebaskets shall be cleaned and disinfected WEEKLY with detergent/disinfectant applied to a microfiber cloth and wiped to clean the entire surface.
3. The replacement trash bag will be kept at the bottom of the wastebasket at all times.

5.7 Windows

First, be aware of your time of day. If the windows are hot from the sun, it will cause streaking. Clean South and west-facing windows early in the day. Clean the north side in the afternoon.

1. Windows will be washed, squeegeed, and edges wiped clean to remove excess water. WEEKLY
2. Windows and ledges should be brushed or wiped down first to remove all spiders and webbing before washing.
3. If hard water stains are present, use a mixture of 50% window cleaner, 50% cleaning vinegar, and 1 to 2 drops of Dawn dish detergent per 32 oz. Bottle.

5.8 Doors

1. Should be checked DAILY to remove fingerprints and smudges.
2. Clean door handles and seams to remove spider webbing and droppings.
3. Check MONTHLY for preventative maintenance.

5.9 Thresholds

1. Clean thresholds as needed. They get dirty according to the time of year.

5.10 Exterior Walls

The cleaning process depends on the frequency with which they are cleaned. Again, some areas get worse quicker than others and will need more attention.

1. If maintained often, simply keep them brushed off with the telescoping pole and brush. Particularly the corners and wall seams. This process will NOT work if the wall has any moisture on it, so beware of days with high humidity. You will only smear the debris worse than it was when you began.
2. If allowed to build up, you will need to power wash them. If you power wash the walls, you will then be forced to wash all nearby windows.

3. At times, this could be advantageous. If there is a section of windows that is particularly dirty AND the wall in that area needs cleaning, you get both with one stone, so to speak. This works better with two people, one to power wash and the second to come behind and clean the windows before water spots form.

6 Pool Deck Maintenance

One reason to keep a pool deck clean is that dust, dirt, leaves, twigs, and other residues on the pool deck get blown into the pool with every gust of wind. Not only does that mean an unpleasant swimming experience, but all that debris also makes the pool's filter and pump work overtime.

6.1 Deck Debris

1. The pool deck (including the pool gutters) will be kept free of all debris by sweeping and picking up trash routinely throughout the day with trash pickers or the broom and dustpan.

6.2 Trash Cans

1. All trash cans will have trash bags in them at all times and lids on every can. All trash cans will be emptied at least DAILY or when full. Full trash bags shall be consolidated into the rolling garbage can and taken to the dumpster when full.
2. The outside of all trash cans will be sprayed DAILY with detergent/disinfectant and left to air dry
3. Each trash can be removed from service WEEKLY, and the inside and out will be rinsed, cleaned, and sanitized.
4. Empty trash can liners will be placed in the bottom of the can at all times.

6.3 Deck Tables

1. All pool deck tables will be cleaned DAILY with microfiber cloth and spray detergent/disinfectant.

6.4 Deck Chairs & Benches

1. All pool deck chairs, including the Lifeguard chair, will be sprayed DAILY with detergent/disinfectant and left to air.
2. All deck chairs, guard chairs, and benches will be power washed QUARTERLY

6.5 Deck Cleaning

1. The Pool Deck will be power washed BIANNUALY utilizing a pressure washer with surface cleaner attachment.

7 Pool Maintenance

7.1 Pool Basin

7.1.1 Skimming

All flotsams shall be skimmed from the top of the water with the pool skimmer and the contents disposed of in a garbage can nearby 2X DAILY.

7.1.2 Wall Brushing

To effectively prevent algae blooms, the walls, particularly the corners between the bottom of the pools and the walls in the corners, need to be brushed down on a DAILY.

7.1.3 Bottom Vacuuming

1. The pool basin shall be vacuumed at least 2X WEEKLY to prevent the build-up of debris and accumulation of dirt on the bottom of the pool.
    a. The vacuum is placed in the pool at the end of the daily pool operations and will be removed prior to the pool's opening the next day.

Gifford	North
Saturday	Monday
Tuesday	Wednesday

7.1.4 Scum line

The line where the water level touches the stainless-steel gutter and return system will be scrubbed WEEKLY, or more frequently if the buildup of the scum line is present, using Mr. Clean Magic Sponge.

7.1.5 Plaster Basin

Periodic cleaning of plaster pool basins with a pressure washer and a surface cleaner attachment should be completed BIANNUALY with a diluted citric acid solution.

7.2 Water Quality

Preventing recreational water illnesses (RWIs) is a complex issue that requires collaboration among pool staff, swimmers, and health departments. Poor maintenance of pools can lead to low levels of disinfectants, allowing various germs to spread, which can cause illnesses such as diarrhea, skin infections, and respiratory issues.

The Certified Pool Operator on-site will manage pool water quality, perform general and preventative maintenance, and address minor repairs and operational issues.

7.2.1 Water Testing

1. Pool water chemistry is a science that must be performed properly to ensure the health and safety of a swimming pool. Improper pool chemistry can lead to unsafe conditions and could cause damage to an aquatic facility's operating system.
2. Pool chemistry errors include the use of chemical reagents that are not full strength, inaccurate addition of reagents, inaccurate water sample volume, poor light conditions, and inaccurate color interpretation.
3. The Florida Department of Public Health requires pool water to be tested at least 1X DAILY every day the pool is open for operations, and the results are logged on the MONTHLY SWIMMING POOL REPORT.
    a. All tests are completed using the Taylor Technologies K-2005C Service Complete Swimming Pool Test Kit.
4. 1X WEEKLY, the water chemistry will be tested for Total Alkalinity, Total Combined Chlorine, Total Calcium Hardness, and Stabilizer Levels.

7.2.2 Water Chemistry Requirements

1. Well-balanced water chemistry is the key to crystal clear and healthy water—the recommendation of the CDC as outlined in the MAHC for water balance levels.
    a. Maintain free chlorine levels continuously between 2–10 parts per million.
    b. Maintain the pH level of the water at 7.2 – 7.8.
    c. Maintain the Alkalinity of the water between 80-120 ppm
    d. Maintain Calcium Hardness between 180-220 ppm
    e. Maintain Cyanuric Acid (Stabilizer) between:
        i. 01- 15 ppm on NCAC Competition and GAC Lap Pool
        ii. 00 NCAC Activity Pool & Spray Pad

7.2.3 Water Treatment Chemicals Dosing

1. All County Pools utilize BECSys controllers, which provide optimal water quality while minimizing chemical usage. The controller monitors the pool water chemistry and activates the chemical feed systems as needed to control the Sanitizer and pH levels.
    a. Sanitizer – The pool uses Sodium Hypochlorite (Pool Shock) stored in 500-gallon plastic storage tanks in containment vessels in the mechanical equipment cage at each pool.

    b. PH Control – The pool uses Carbon Dioxide (CO_2) gas stored in large, pressurized bulk tanks located in the mechanical equipment cage at each pool

2. Backwashing—Backwashing should be initiated when the pressure difference between the effluent and influent of any filtration system reaches ten or more. The backwash process should continue until the water in the sight glass appears clear (you should be able to see your finger through it). Adhering to all posted instructions and procedures is essential to completing backwashing.

7.2.4 Back Washing

1. Backwashing should be imitated when the pressure difference between the effluent and influent of any filtration system reaches ten or more.
2. The backwash process should continue until the water in the sight glass appears clear (you should be able to see your finger through it).
3. It is essential to complete backwashing by adhering to the instructions and procedure in the site-specific job aid.

7.2.5 NCAC

7.2.5.1 POOL-H2O-001 NCAC Competition Pool Back Wash Procedure

7.2.5.2 POOL-H2O-002 NCAC Activity Pool Back Wash Procedure

7.2.6 Gifford

7.2.6.1 POOL-H2O-001 GAC Back Wash Procedure

8 Features

As the season begins, having a thorough and organized strategy for maintaining your water park can significantly reduce downtime for attractions and help control costs. Well-maintained water park equipment is more profitable and ensures years of reliable service, allowing your guests to enjoy their time safely.

8.1 Water Slides

8.1.1 daily

1. Cracks, chips, or bubbles in exterior surfaces
2. Rough patchwork at joints or cracks
3. Caulking protruding from joined flanges
4. Leaking seals at joints
5. Walking Flumes Inspecting
    A. Cracks, chips, or bubbles
    B. Excessive movement of flumes when walking on
    C. Joints opening-up
    D. Loose risers on turns
6. Landing or pool bottom padding is in good condition and adequately secure
7. Sufficient water flow in the channel and correct water level in the splash pool or runout lane

8.1.2 Weekly

1. Inspecting Slide Tower
    A. Stairs Connections for corrosion damage
    B. Pillars & Piers – Rust and Damage
    C. Torque Check all Bolts
2. Clean & Wax Flumes

8.1.3 Semi-Annually

1. Inspect Bolts for tightness (Torque Spec)
2. Inspect all surfaces for any loose components,
3. Inspecting restrictor plates, valves, and restrictive areas of flow to remove debris blockages
4. Run water in all equipment before opening to ensure flow is consistent and ensure water flow is as required in the O&M Manual and no leaks, pooling water, or standing water

8.1.4 Annually

    1. Complete Slide Flume restoration
2. Inspect all slide arms and Columns for corrosion
3. Check all Bolt's Torque Spec
4. Inspect and refinish the exterior slide body as needed

Note: Slide Preventative Maintenance applies to all slides, including those part of play structures/

8.2 Play Structures

Daily, weekly, semi-annual, and end-of-season inspections of the structure's play area and mechanical systems must be conducted to ensure all components are operating safely and without interruption. Regular audits of the daily inspection and maintenance checklist will ensure all inspections and maintenance tasks are up to date.

8.2.1 Daily (PM)

1. Obstructions in Play Area Pathways
2. Cracks or chips in deck surfaces
3. Chipped or peeling paint
4. Proper operating pressure and flow to all effects
5. GPM flow rates conform to design flow rates for each water slide
6. Empty filter baskets of lint and debris
7. Water levels in shutdown lanes are at the correct operating levels

8.2.2 Weekly (PM)

1. Delamination or excessive wear and tear to the façade
2. Damaged safety net handrails, support bars, or attachments
3. Check valve operating assemblies
4. Clogged jets and nozzles causing ineffective operation of interactive elements

8.2.3 Semi-Annually

1. Loose connections on the structure's standpipes
2. Loose metal roof cladding Signs of fatigue in the tipping buckets pivot shaft (cracking of metal or welds

8.2.4 Annually

1. Cycling valves and replacing worn valves
2. Inspect the façade and platform for Delamination or excessive wear and tear, cracking metal or paint
3. Inspect all surfaces for any loose components,
4. Inspecting restrictor plates, valves, and restrictive areas of flow to remove debris blockages
5. Run water in all equipment before opening to ensure flow is consistent and ensure water flow is as required in the O&M Manual and no leaks, pooling water, or standing water
6. Inspecting netting and stairs in play structures for holes, chips, or cracks

8.3 Spray Pad

8.3.1 daily

1. The aquatic play pad is free from litter and debris

2. The play area is free of obstructions and trip hazards
3. Drain covers clean and clear of debris
4. The overspray of the components does not reach the surrounding landscape
5. Nozzle's spray does not exceed safe pressure (5Psi)

8.3.2 Weekly

1. Wash the Spray deck with detergent and a low-pressure rinse
2. Clean TouchPad Windows with a Vinegar and water solution

8.3.3 Semi-Annually

1. Confirm that the Drain covers are smooth and flush with the surface
2. Confirm ground sprays are still flush with the final grade
3. Verify the current day and time on the controller
4. Run the controller in test mode to ensure all zones are working as intended
5. Test all activators to ensure the controller is receiving

8.3.4 Annually

1. Clean and treat all fixtures with diluted Citrus Acid to remove scale build-up
2. Inspect all spray features for corrosion, clean and treat as needed
3. Repaint all structures every 3 years or more frequently if needed

8.4 Diving Boards

8.4.1 daily

1. Hose the board off with fresh water
2. Ensure all bolts are secure and free from erosion and corrosion.
3. Confirm Fulcrum operates easily
4. Check that all rails and ladders are secure

8.4.2 Weekly

1. Clean the surface with warm water (no Pressure wash) and a gentle detergent (no Ammonia or Bleach)
2. Confirm Board is level
3. Observe hinges from the end of the board while the diver bounces; Hinges should not move or make any noise

8.4.3 Semi-Annually

1. Confirm that the board is aligned with the stand and not closer to one side or the other
2. Confirm Bolt Torque Spec

8.4.4 Annually

1. Inspect the board for any hairline cracks
2. Complete Fulcrum Rebuild

8.5 Automatic Pool Cleaner -

To clean the filter, remove it from the cleaner and rinse it thoroughly with water. If the filter is excessively dirty, you may need to soak it in a mild cleaning solution before rinsing. Regularly cleaning the filter will ensure your automatic pool cleaner operates at its best. After each use, you should inspect the brushes and wheels of the automatic pool cleaner. These components can become worn out or clogged with debris over time, affecting the cleaner's performance. Check for any signs of damage or excessive wear.

8.6 Starting Blocks

8.6.1 Weekly

1. Clean and rinse the surface using a plastic bristle brush to scrub the surface gently
2. Rinse platform sides with fresh water

8.6.2 Annually

1. Clean and rinse the surface. Use a non-abrasive, non-chemical-based cleaner such as a mild dish detergent, a plastic scrub brush, and non-chlorinated water to remove dirt and stains from the 3M surfaces.
2. Clean the stainless steel starting platform using Spectra Clean and a 3m scratch pad to remove any rust stains.
3. After thoroughly cleaning the stainless steel frame, apply Spectra Shield and let it dry

8.7 Back Stroke Flags

8.7.1 Annually

Inspect the Flag for excessive sag or numerous torn flags. Replace if needed

9 Mechanical Preventive Maintenance

This manual section provides the responsibilities, policies, and procedures for the maintenance of all Indian River Cunty Board of Commissioners Aquatic Facility Equipment. This section aims to achieve the following goals:

- Preserve Taxpayer Investments -Ensure that public buildings are well-maintained to protect the investments made by taxpayers.

- Extend Equipment Lifespan- Implement preventative maintenance to prolong the life of aquatic facility components, thereby maintaining their value and the significant tax dollars they represent.
- Enhance Operational Efficiency—Facilitate the proper functioning of aquatic facilities to ensure they operate at peak efficiency, including minimizing energy consumption.
- Reduce Inefficiencies—Preventative maintenance keeps equipment in working order, helping eliminate operational inefficiencies and reducing energy usage.
- Prevent System Failures - Implement measures to prevent failures in aquatic facility systems, which can disrupt activities and the delivery of public services
- Support Public Service - Trouble-free operation of aquatic facilities allows public employees to perform their duties effectively and serve the community.
- Conduct Regular Inspections - Preventive maintenance involves regular inspections and timely replacement of essential equipment, helping maintenance staff minimize issues that could lead to operational breakdowns
- Maintain a Safe Environment - Sustain a safe and healthy environment by ensuring that facilities and their components are properly repaired and structurally sound.
- Protect Facility Integrity—Preventive maintenance safeguards the physical integrity of facility components, thereby preserving a safe environment for employees and the public.
- Ensure Cost-Effectiveness—Approach maintenance in a cost-effective way, preventing minor issues from escalating into significant system and equipment failures.

By focusing on these objectives, we can ensure the effective management and maintenance of aquatic facilities.

9.1 Architectural Structures

9.1.1 Doors

9.1.1.1 Semi-Annually

1. Inspect the frame and supporting structure
2. inspect hardware, hinges, latch keeper, lock, etc. Apply graphite where needed, wipe off excess
3. Inspect glass, putty, or retaining pieces. Correct any deficiencies
4. Operate the door to observe the functioning of the check. Adjust and service as needed.
5. Check opening/closing resistance pressure and speed in compliance with ADA recommended 8.5
6. to 10 FtLb opening/ closing force

7. Touch up paint as needed.

9.1.2 Electrical

9.1.3 Fluorescent Lights

9.1.3.1 2Yr

1. Turn off the branch circuit at the panel or individual light switches in the room as appropriate.
2. Disassemble fixture. Remove the louver or diffuser as necessary. Clean with mild detergent and let dry
3. Remove all fluorescent lamps, wipe lamps with a damp cloth, and reinstall.
4. Reassemble all removable parts to the fixture.
5. Clean up the area and remove any trash.

9.1.3.2 5Yr

1. Turn off the branch circuit at the panel or individual light switches in the room as appropriate. Do not attempt to replace energized lights
2. Disassemble fixture. Remove the louver or diffuser as necessary
3. Remove all fluorescent lamps and install new lamps
4. Test light fixtures. Replace starters and ballasts where necessary. Note and report any needed electrical repairs.
5. Reassemble all removable parts to the fixture.
6. Clean up the area and remove any trash.

9.1.4 Motors

9.1.4.1 Monthly

1. Perform visual inspections by taking note of physical and mechanical conditions. Inspect anchorage, alignment, and grounding connections
2. Inspect air baffles, cooling fans, and slip rings and clean them as necessary

9.1.4.2 Annually

1. Perform visual inspections, noting physical and mechanical conditions. Inspect anchorage, alignment, and grounding connections.
2. Inspect air baffles and ensure they are clean; cooling fans shall be operating.
3. Turn off the motor and follow LOTO
4. Verify tightness of accessible bolted electrical connections by calibrated torque wrench in accordance with published data
5. Inspect the capacitor for signs of damage or bulging
6. Spin the motor shaft by hand to ensure it rotates smoothly without any noticeable grinding or excessive play.
7. Use a multimeter to measure the resistance between each pair of motor leads; readings should be consistent and within the manufacturer's specifications.
8. Perform a Thermographic survey while the motor is operating and review for any hot areas

9.1.5 Fences & Gates

9.1.5.1 Semi-Annually

1. Gates:
a. Inspect all pivot points, hinges, latches, etc. Apply lubricant where needed, wiping off excess.
b. Check all locking devices. Lubricate as required.
c. Inspect center gate support rollers and lubricate as required.
d. Clean roller track of any debris.
e. Check bolts, fasteners, and mounting hardware. Tighten or adjust as necessary.
f. Check for any obstructions that retard full swing or movement of the gate.
g. Check that shrubs and trees are pruned clear of the gate.
h. Check hold open devices for proper operation. Lubricate as required.
2. Fences:
a. Check posts and corner posts, support guys, and horizontal bars between each support post.
b. Check wire and anchor point; re-stretch and re-anchor if necessary.
c. Inspect fence anchors along the bottom and at the point where the fence is connected to the post.
d. Treat with galvanized protectant where rust has developed.
e. Apply weed control along the entire base of the fence.
f. Check that shrubs and trees are pruned clear of fencing.

9.1.6 Flag Pole

9.1.6.1 Quarterly

1. Adjust tension cable
2. Check stops on cable
3. Lubricate bearings where possible
4. Inspect cable, strands, hooks, and clasps for wear and replace if necessary
5. Inspect anchor bolts
6. Inspect pole surface condition
7. Inspect the flag for wear and tear

9.1.7 HVAC

These items are inspected and maintained by the County's Facilities Department for this facility.

9.1.8 Irrigation

These items are inspected and maintained by the County's Facilities Department for this facility.

9.1.9 Landscape

These items are inspected and maintained by the County's Facilities Department for this facility.

9.1.10 Parking Lot

These items are inspected and maintained by the County's Facilities Department for this facility.

9.1.11 Plumbing

9.1.11.1 Water Heater

1. Monthly
   a. Check for leaks
   b. drain a few gallons of water from the tank to remove sediment from the bottom.
2. Annually
   a. Flush the tank -removing sediment that can reduce efficiency and cause corrosion.
   b. Inspect the Anode Rod
   c. Test TPR Valve

9.1.11.2 Mixing Valve

1. Annually
   a. Turn on the water: Run hot and cold water at different flow rates to verify the valve maintains a consistent mixed temperature.
   b. Check for fluctuations: Ensure the temperature does not suddenly change when adjusting the flow rate.

9.1.12 Roofs

These items are inspected and maintained by the County's Facilities Department for this facility.

9.2 Pool

9.2.1 Pumps

9.2.1.1 Peristaltic

1. Daily
   a. Inspect Suction and Injection Tube fittings for leaks
2. Quarterly
   a. Replace Injection point one-way fixture
   b. Flush Suction Line tank filter
3. Annually
   a. Inspect roller assembly and ensure roller is turning freely and has no signs of wear; replace if necessary
   b. Replace tube on Stenner Pump
   c. Replace injection tube from pump to injection point
   d. Replace the Suction tube from the pump to the chemical supply tank
   e. Flush Suction Line tank filter

9.2.1.2 Centrifugal

1. Daily
   a. Check for leaks, excessive vibration, or noise
   b. Confirm head pressure is within range of design performance

2. Quarterly
   a. Verify the integrity of the pump's foundation and check the hold-down bolts for tightness
   b. Check for Vibration and excessive vibration. Verify the integrity of the pump's foundation and check the hold-down bolts for tightness.
   c. Apply a light coat of rust-preventive product to expose machined surfaces and prevent rust and corrosion.

3. Annually

a. Bearing Frame and Foot: Inspect for cracks, roughness, rust, or scale. Machined surfaces should be free of pitting or erosion.
b. Bearing Frame: Inspect all tapped connections for dirt. Clean and chase threads as necessary. Remove all loose or foreign material. Inspect lubrication passages to ensure they are not blocked.
c. Casing – inspect for signs of wear, corrosion, or pitting. The casing should be replaced if wear exceeds a depth of 1/8 inch. Check gasket surfaces for signs of irregularities.
d. Impeller—Inspect the impeller for wear, erosion, or corrosion damage. Replace the impeller if the vanes are bent or show wear over 1/8-inch deep.
e. Frame Adapter – inspect for cracks, warping, or corrosion damage and replace if any of these conditions are present.

9.2.2 Sand Filters

9.2.2.1 Daily

1. Inspect filter vessel for leaks
2. Backwash as indicated by Influent Effluent difference of greater than 10 psi

9.2.2.2 Annually

1. Visually inspect the filter medium to ensure no channeling is occurring and evaluate of replacement is needed
2. Inspect Flow Meter Sensors
3. Exercise Valves with out pressure and under operations. Repair and replace as needed

Appendix I – PM Job Aids