Form 7-1 Operational Checklist: Media filter (MF)

Service provided on: Date:________ Time:________________ Reference #:_______________________
Service provided by: Company: ________________________ Employee: ________________________
Date of last service: ___________________________________ By: ☐ You ☐ Other:________________
Date of last inspection: ________________________________

1. Type of media filter:

Single-pass:	☐ Sand	☐ Foam	☐ Peat	Other: ____________________
Recirculating:	☐ Sand/gravel	☐ Foam	☐ Textile	Other: ____________________
Trickling filter:	☐ Gravel	☐ Plastic	☐ Textile	Other: ____________________
Upflow filter:	☐ Gravel	☐ Plastic	☐ Wood chips	Other: ____________________

   a. Manufacturer: __________________________ Model #: _______________________________
   b. Distribution method: ☐ Pressure distribution ☐ Gravity distribution

2. Conditions at media filter
   a. Evaluate presence of odor within 10 ft of perimeter of system:
      ☐ None ☐ Mild ☐ Strong ☐ Chemical ☐ Sour
   b. Source of odor, if present: _________________________________
3. Cover
   a. Type of cover: ☐ Free access ☐ Buried ☐ Lid
   b. Filter cover intact. Yes____No_____
   c. Method of securing cover: _______________
   d. Distribution component accessible. Yes____No_____
   e. Surface water/infiltration into components. Yes____No_____
4. Venting/Air supply: ☐ Passive ☐ Active ☐ Not present
   a. Supply: ☐ Aspirator ☐ Compressor ☐ Blower ☐ Free air (go to 4.g)
   b. Operation: ☐ Continuous ☐ Timed (On _____min., Off _____ min)
   c. Air supply unit operating properly. Yes____No_____
   d. Pressure at air supply unit: ______________psi
   e. Air flow at air supply unit: _____________cfm
   f. Air filter/screen: ☐ Cleaned ☐ Replaced
   g. Venting appears operable. Yes ____No____
5. Media surface
   a. Biomat on surface. Yes____No_____
   b. Uniform gravity distribution. N.A.____Yes____No_____
   c. Uniform spray pattern. N.A.____Yes____No_____
   d. Ponding in/on media. Yes____No_____
   e. Plugging/clogging of distribution components. Yes____No_____
   f. Media appears to be settling. Yes____No_____
   g. Appropriate maintenance performed. Yes____No_____
   h. Pest activity at surface. Yes____No_____
6. Effluent quality
   a. Turbidity: ___________NTU
   b. Oily film on the surface of effluent. Yes____No_____
   c. DO at outlet: ___________mg/L
   d. pH at outlet: _______________
   e. Temperature at outlet: _______________
   f. Bypass or overflow noticed. Yes____No_____
   g. Effluent odor after passing through media filter:
      ☐ None ☐ Mild ☐ Strong
   h. Effluent color after passing through media filter:
      ☐ Clear ☐ Brown ☐ Black

NOTES

2. ☐ Acceptable
   ☐ Unacceptable
3. ☐ Acceptable
   ☐ Unacceptable
4. ☐ Acceptable
   ☐ Unacceptable
5. ☐ Acceptable
   ☐ Unacceptable
6. ☐ Acceptable
   ☐ Unacceptable

Reference #:___________________

7. Pressure distribution: N.A___________
   a. Distal head before cleaning
      i) Equal height. Yes____No_____
      ii) Height (inches): _____________in
   b. Lateral condition
      i) Laterals in need of cleaning. Yes____No_____
      ii) Laterals cleaned. Yes____No_____
      iii) Method for cleaning laterals:________________________
   c. Distal head after cleaning
      i) Equal height. Yes____No_____
      ii) Height (inches): _____________in
8. Gravity distribution: N.A___________
   a. Device: ________________
   b. Uniform distribution. Yes____No_____
   c. Operating properly. Yes____No_____
9. Filter drainage systems
   a. Ponding in media filter sump. Yes____No_____
   b. Gravity drainage operational. N.A.______Yes____No_____
   c. Solids buildup in sump area. N.A.______Yes____No_____
   d. Underdrain vents present. Yes____No_____
   e. Underdrain vents appear operable. Yes____No_____
10. Additional tasks for recirculating filters
   a. DO in recirculation tank: ____________mg/L
   b. Inspected recirculating device. N.A.___Yes____No_____
   c. Cleaned recirculating device. N.A.____Yes____No_____
   d. Design recirculation ratio: ________:_______
   e. Actual recirculation ratio: ________:_______
   f. Recirculation changed to: ________:_______
   *If dam configuration, recirculation device cannot be inspected or cleaned
11. Additional tasks for trickling filters
   11.1 Clarification chamber
   a. Solids blanket below recirculation pump inlet. Yes____No_____*
   *If no, was system pumped out. Yes____No_____
   b. If screened inlet, was screen cleaned. Yes____No_____
   11.2 Sludge return
   a. Solids blanket slightly above return pump. Yes____No_____
   b. Changed solids return rate. Yes____No_____
      i) Pump: ☐ Off ☐ On
      ii) Changed from ____ min to ____min
12. Manufacturer's required maintenance performed. Yes____No_____
   (If 'Yes', attach Manufacturer Inspection form to this report, if supplied)
13. Lab samples collected for monitoring. Yes____No_____
   Types of analysis:____
   ____
   ____

7. ☐ Acceptable ☐ Unacceptable
8. ☐ Acceptable ☐ Unacceptable
9. ☐ Acceptable ☐ Unacceptable
10. ☐ Acceptable ☐ Unacceptable
11.1 ☐ Acceptable ☐ Unacceptable
11.2 ☐ Acceptable ☐ Unacceptable