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
7. Pressure distribution:
   a. Distal head before cleaning
      i) Equal height. Yes No
      ii) Height (inches): __________
   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): __________

8. Gravity distribution:
   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: __________________________