Form 7-2 Operational Checklist: Aerobic treatment unit (ATU)

Service provided on: Date: ___________________ Time: ___________________ Reference #: ___________________
Service provided by: Company: ___________________ Employee: ___________________
Date of last service: ___________________ By: □ You □ Other: ___________________
Date of last inspection: ___________________

NOTES

1. Type of ATU:
   □ Suspended-growth □ Attached-growth □ Sequencing batch reactor
   □ Combination attached/suspended-growth
   □ Rotating biological contactor □ Other: ____________
   a. Manufacturer: ____________ Model #: ____________

2. Conditions at the ATU
   a. Evaluate presence of odor within 10 ft of perimeter of system:
      □ None □ Mild □ Strong □ Chemical □ Sour
   b. Source of odor, if present: ____________
   c. Was foam/residue observed outside the unit. Yes __ No __

3. ATU access
   a. Located at grade. Yes __ No __
   b. If ‘No’, how deep is tank buried. ____________
   c. Risers on tank. Yes __ No __
   d. Evidence of infiltration in the risers. Yes __ No __
   e. Lids securely fastened. Yes __ No __
   f. Lids in operable condition. Yes __ No __

4. Venting/Air supply
   a. Air supply method:
      □ Aspirator □ Aerator □ 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. Aeration chamber
   a. Mixing in aeration chamber. Yes __ No __
   b. DO in aeration chamber: ____________ mg/L
   c. pH in aeration chamber: ____________
   d. Temperature in aeration chamber: ____________
   e. Settlability test:
      Settled __%, Floating __% in _______ min
   f. Biomass color in the aeration chamber:
      □ Brown □ Black
   g. Sludge pumping recommended. Yes __ No __

6. Additional tasks for attached-growth: media evaluation
   a. Plugging. Yes __ No __
   b. Floating. Yes __ No __
   c. Media washed. Yes __ No __
      If washed, indicate method used: □ Air □ Water
   d. Media replaced. Yes __ No __

7. Clarification chamber
   a. Scum layer. Yes __ No __
      If yes, thickness: ____________ in
   b. Clear zone depth below outlet: ____________ in
   c. Effluent screen/tertiary filter cleaned. N.A. Yes __ No __
Reference #:____________________

d. DO in clarifier: ___________mg/L

e. pH in clarifier: ___________

f. Temperature in clarifier: ___________

g. Effluent odor after passing through unit:
   [  ] None       [  ] Mild       [  ] Strong

h. Effluent color after passing through unit:
   [  ] Clear       [  ] Brown       [  ] Black

i. Effluent turbidity: ___________NTU

8. Sludge return operating:
   [  ] Passive       [  ] Active
   a. If active, pump was checked manually. N.A. _______ Yes ___ No ____
   b. If active, pump operating properly. N.A. _______ Yes ___ No ____

9. Control Panel:
   N.A. ___________________
   a. Controls operating properly. _______ Yes ___ No ____
   b. Is enclosure watertight. _______ Yes ___ No ____
   c. Alarm test switch operating properly. _______ Yes ___ No ____
   d. At time of inspection, control switch was set to:
      “Hand/Manual” _______ “Auto” _______

   e. If auto, setting: Time On: _______ (min) Time Off: _______ (min)

10. Alarm(s):
    N.A. ___________________
    a. Types: [  ] Air pressure       [  ] High water       [  ] Remote
    b. Alarms operating. _______ Yes ___ No ____
    c. Alarm readings:

    |    | Reading (present) | Reading (last) | Difference | N.A. |
    |----|-------------------|----------------|-----------|------|
    | i. | ETM               |                |           |      |
    | ii.| Alarm Counter     |                |           |      |

    Elapsed time in alarm status: _______ (PTR) - _______ (LTR) = _______ Time (hours)
    Number of alarm events: _______ (PACR) - _______ (LACR) = _______ Events (number)
    d. Battery backup charged. N.A. _______ Yes ___ No ____
    e. Telemetry operable. N.A. _______ Yes ___ No ____

11. Manufacturer’s required maintenance performed. _______ Yes ___ No ____
    (If ‘Yes’, attach Manufacturers Inspection form to this report, if supplied)

12. Lab samples collected for monitoring. _______ Yes ___ No ____
    Types of analysis: ________________________________

__________________________________________

ETM: elapsed time meter
LACR: last alarm counter reading
LTR: last time reading
NC: number of cycles
PACR: present alarm counter reading
PTR: present time reading