ACTIVATED SLUDGE CHECKLIST

Permit # MO-_____ Facility_____ Date_____

1. What is the design flow? _____MGD; peak design flow _____MGD
2. What is the actual flow? _____MGD; actual peak flow _____MGD
3. Type of activated sludge system: conventional ____; complete mix ____; step aeration ____; contact stabilization ____; extended aeration ____; oxidation ditch ____; pure oxygen ____; sequential batch reactors ____
4. Tank dimensions: _____
5. If multiple basins are operating, is the flow distributed equally? Yes ____; No ____; N/A ____; How is it distributed? _____
6. Is operation of the system: manual ____; semi-automatic ____; automatic ____; computer controlled ____
7. Type of aeration system: coarse bubble diffused ____; fine bubble diffused ____; mechanical ____
8. Number of aeration units ____ and capacity of each _____.
9. Are all diffusers or mech. aerators working properly? Yes ____; No____
10. Is operation of aerators based on: time ____; D.O.____; other _____
11. Are tank contents mixed thoroughly? Yes ____; No ____
12. Does mixing appear to be excessive? Yes ____; No ____
13. Do there appear to be dead spots in aeration tank? Yes ____; No ____ If yes, at what location? _____
14. Are RAS pumps operating properly? Yes ____; No ____; N/A ____ What is the return rate? _____
15. Are WAS pumps operating properly? Yes ____; No ____; N/A ____ What is the waste rate? _____
16. Are flow measurement devices used for RAS and WAS systems? Yes ____; No ____ If so, date of last calibration _____
17. Does the aeration basin have a foam control system? Yes ____; No ____ Is it operable? Yes ____; No ____ Is it operating? Yes ____; No ____
18. Type of D.O. monitoring: laboratory (on site) ____; portable meter ____; stationary meter ____; date of last calibration _____
19. Color: black ____; dark brown ____; light brown ____; other _____
20. Odor: septic ____; musty ____; earthy ____; none ____; other _____
21. Foam: light, crisp ____; thick, dark ____; heavy white ____; other_____
22. Are chemicals added to control: filaments ____; foam ____; odor ____ other _____ If so, what chemicals and what location are they added? _____
23. How often are units checked? _____
24. Are operating records maintained? Yes ____; No ____
25. What is the: MLSS _____; MLVSS _____; Settleability _____; D.O. _____; NH_3-N _____; NO_3-N _____; PO_4^{3-} P _____; F/M ___ SRT _____; Sludge depth _____; Predominate microorganism _____ _____

26. Are filamentous organisms: excessive ____; abundant ____; moderate ____; some ____; few ____
27. Safety features provided: guard rails ____; nonskid surfaces ____; life preservers ____; lights ____; other _____
28. Is there an approved lockout / tagout program? Yes ____; No ____
29. Is there an alarm system for the process? Yes ____; No ____
29a. (If yes, type: radio telemetry ___; phone dialer___; local audible/visual__
30. Is an alternate power source available? Yes___ No___
30.a If yes, type: station. generator ___; port. generator ___; separate utility__
31. Do mechanical units have adequate spare parts inventory? Y ___; N___
32. What is the frequency of scheduled maintenance? _____
33. Are maintenance records maintained? Yes ____; No ____
34. Is housekeeping of units: Good ____; Fair ____; Poor ____
35. What is the general condition of units? Good ____; Fair ____; Poor____
36. What are the most common problems the Operator has had with the activated sludge system? _____
_____
_____

Comments:

_____
_____
_____
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