

Water Pollution Control Plant Plans and Specifications (P&S) Submittal

Common Problems List

5/31/06

COMMON PROBLEMS

(This is not a cookbook recipe for preparing P&S but is a list of the common problems we see that have to be resolved. By avoiding these problems, we hope to reduce the length of time it takes to get consensus between the submitter and EPD on what constitutes acceptable P&S.)

1. P&S submitted out of sequence (see *Planning for Domestic Wastewater Systems*).
2. P&S not signed and sealed by an engineer registered in the State of Georgia.
3. Satisfactory Report of Technical Review not furnished from authority having jurisdiction showing erosion and sedimentation control measures are adequate.
4. Wetlands not addressed and/or information related to the USACOE not provided showing the wetlands work is being done to meet their requirements.
5. Stream buffer variance not addressed.
6. P&S do not match the design concurred with in the Design Development Report (DDR).
7. Construction phasing is planned that was not addressed in the DDR, and less facilities and/or equipment are shown on the P&S than was agreed to in the DDR.
8. P&S not finished and/or missing the work of a discipline such as civil, structural, electrical, etc.
9. Documents not checked and revised prior to submittal. (EPD cannot provide QA/QC.)
10. Process equipment located within 150 feet of the property line or within 300 feet of habitable structures.
11. Topographic map showing 100-year flood plain, proposed treatment plant, streams, drainage swales, wetlands and other features not provided.
12. Process equipment located within the 100-year flood plain.
13. Hydraulic profile at peak hydraulic flow not provided.
14. Plans views not provided with north arrows.
15. Geotechnical basis of foundation design not provided.
16. Basins not provided with adequate freeboard.
17. Pump calculations not provided.
18. Buoyancy calculations not provided for wetwells and other buried structures.
19. Force main high points not provided with air vacuum relief valves.
20. Gravity sewer and force main profiles not provided.
21. Force main thrust restraint not addressed.
22. Piping not shown in adequate detail (elevation, size, material, specification, etc.). Insufficient pipe details provided for items such as wall sleeves, tie-ins, valve pits, etc.
23. Bedding details inadequate or not in accordance with standard industry practices.

24. Pipe, basin and wetwell testing are not addressed.
25. Potable and/or wash water not provided or not protected from backflow.
26. Indoor blowers heat dissipation not satisfactorily addressed.
27. Freeze protection not addressed.
28. Measurement devices such as flumes not provided with adequate inlet and outlet conditions.
29. Specifications are not project-specific.
30. Utilities Locators (Utilities Protection, Inc., "Call Before You Dig", 800-282-7411) not called out in the plans or in the specifications.
31. Clearing and grubbing not addressed.
32. Erosion and sedimentation control addressed.
33. Excavation dewatering not addressed.
34. Bedding material not defined or not defined in accordance with industry standards.
35. Compaction not specified.
36. Process equipment not specified.
37. Specifications do not require manufacturer's installation and start-up assistance for equipment where it is needed.
38. Process piping not labeled.
39. Materials and/or coatings with suitable corrosion resistance not specified.
40. Specified materials are not referenced to industry standards.
41. Appurtenances such as valves, gates, instruments, pipe supports, wall sleeves, painting, etc., not specified.
42. Electrical classifications not adequately addressed.
43. Work not required to be done in accordance with OSHA standards.
44. Site restoration not addressed.