|  |  |  |  |
| --- | --- | --- | --- |
| **Control Authority:** |   |   |   |
| **Date Submitted:** |   | **Reviewer:** |   |

This review is based on the criteria established in the U.S. EPA *Development of Local Limits*, July 2004, and EPA Region 6 Region 6 *Technically Based Local Limits Development Guidance*, July 28, 1987; First Revision: May 17, 1990; Second Revision: October 12, 1993.

To Answer Part I.D., please use the priority pollutant checklist found in:

[H:\Pretreatment\SOPs\Modifications\TBLLs\01\_Sampling Plan\Review Documents](../Review%20Documents)

Abbreviations used in checklist are provided on last page.

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| A. | Date of Sampling Plan |   |   |
| B. | Does the Sampling Plan outline how the POTW will collect and analyze data to determine the appropriate local limits for their pretreatment program? |   |   |
| C. | Was the Sampling Plan submitted at least 30 days prior to the POC sampling events? |   |   |
| D. | Does the Sampling Plan contain the initial influent pollutant scan which must include the following: |   |   |
|  | 1) EPA’s priority pollutants in 40 CFR Part 122, Appendix D, Table II. |   |   |
|  | 2) EPA’s priority pollutants in 40 CFR Part 122, Appendix D, **Table III.** |   |   |
|  | 3) 40 CFR Part 122, Appendix D, **Table V**, if known or suspected to be present. |   |   |
|  | 4) Any other pollutants regulated by the Texas Surface Water Quality Standards, **30 TAC Chapter 307.** |   |   |
|  | 5) Nonconservative pollutants that are contained in the POTW’s TPDES permit(s), including but not limited to: BOD, CBOD, TSS, and NH3-N |   |   |
|  | 6) Other pollutants as applicable (e.g., pollutants listed in the CWA 303(d) List, TMDL, categorical pretreatment standards). |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| D. | 7) Statement that 40 CFR Part 136 analytical methods have been used for the influent scan. |   |   |
| E. | Does the Sampling Plan include the following quality assurance/quality control (QA/QC) for the initial influent sampling event and analysis? |   |   |
|  | 1) A 24-hour flow-proportioned or time proportional (as feasible) composite sample be performed at each wastewater treatment plant (WWTP) to determine all pollutants being contributed to the system. |   |   |
|  | 2) If composite sampling is not feasible please provide an explanation (*i.e.* conducted time-proportional sampling because…). |   |   |
|  | 3) A minimum of four grab samples, for each 24-hour sampling period, must be used for cyanide, total phenols, oil and grease, sulfide, and volatile organics, provided these pollutants are included in the influent pollutant scan. Low-level mercury samples should be collected as grab samples. |   |   |
|  | 4) Sample COCs with the description of the sampling location(s)? |   |   |
|  | 5) Documentation of appropriate sample type, preservation techniques, holding times, and shipping/storage procedures? |   |   |
|  | 6) Documentation of equipment blanks, trip blanks, and/or sampling duplicates during the sampling event?  |   |   |
|  | 7) Documentation of approved 40 CFR Part 136 analytical methods, blanks, duplicates, matrix spikes, QC charts, and/or other laboratory QA/QC control measures for the analysis? |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| E. | 8) Any other data or information used to identify the POCs. If yes, then describe. |   |   |
| F. | Does the Sampling Plan include a schematic showing the layout for each WWTP(s)? |   |   |
|  | 1) Including all treatment units and connections between them (flow schematic)? |   |   |
|  | 2) Including narrative designations of the treatment processes? |   |   |
|  | 3) Are the sampling locations for the seven (7\*) day sampling events for influent, effluent, and sludge clearly marked on the schematic? |   |   |
|  | *Note: If the sampling days are less than seven, the CA needs to include a justification for the deviation.* |   |   |
|  | 4) Are return flow locations marked on the schematic? |   |   |
| G. | Does the Sampling Plan include a definition for identifying a POC as any pollutant found at or above 0.1 milligrams per liter (mg/L) and any other pollutant the POTW and/or State may designate to be of concern? |   |   |
| H. | Does the Sampling Plan list the POCs for which seven (7\*) day sampling events will be conducted, and for which local limits will be developed? |   |   |
|  | *Note: New WWTPs that have never been sampled for TBLLs will need to collect more samples as specified in the EPA’s National TBLLs guidance manual.* |   |   |
|  | 1) If any POC is missing, then an explanation must be included specifying why the seven (7\*) day sampling events will not be conducted for any missing POC. |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| I. | Does the Sampling Plan specify that the influent, effluent, and sludge seven (7\*) day sampling events shall be performed and will include the following pollutants? |   |   |
|  | The following specified fifteen (15) national pollutants must be sampled for, whether or not they were detected in the initial influent scan. |   |   |
|  | *Note: Please refer to Table 4-1: Minimum Recommended Sampling Days of the EPA’s Local Limits Development Guidance document.* |   |   |
|  | -Ammonia (NH3-N) |   |   |
|  | -Arsenic |   |   |
|  | -BOD5 (wastewater samples only – see below for BOD analysis of sludge digester) |   |   |
|  | -Cadmium |   |   |
|  | -Copper |   |   |
|  | -Cyanide, Total |   |   |
|  | -Cyanide, Available (30 TAC 307, Table 2) |   |   |
|  | -Lead |   |   |
|  | -Mercury |   |   |
|  | -Molybdenum |   |   |
|  | -Nickel |   |   |
|  | -Selenium |   |   |
|  | -Silver |   |   |
|  | -TSS |   |   |
|  | -Zinc |   |   |
|  | -Any other POC identified in the influent scan, by the POTW, or the TCEQ. |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| J. | Does the Sampling Plan outline the seven (7) day POC sampling event schedule for the following? |   |  |
|  | Note: In addition, facilities disposing of sludge by land application in accordance with 40 CFR Part 503 and 30 TAC Chapter 312, shall sample and analyze for molybdenum and selenium. |   |  |
|  | 1) A detailed explanation of the location(s), frequency, and number of samples of the WWTP influent sampling? |   |   |
|  | *Note: Influent sampling should be prior to recirculating flows.* |   |   |
|  | 2) A detailed explanation of the location(s), frequency, and number of samples of the effluent sampling? |   |   |
|  | 3) When sampling for influent and effluent, will the POTW consider the lag time for treating wastewater (WWTP retention time)? |   |   |
|  | *Note: The purpose is to try to sample the influent and then the effluent and be sampling approximately the same event.*  |   |   |
|  | 4) A detailed explanation of the location(s), frequency, and number of samples of the Dom/Com background sampling (with no industrial contributions in that part of the WWTP service area)? |   |   |
|  | 5) Similar to the sampling during influent scan, a statement that analyses for cyanide, total phenols, oil and grease, sulfide, and volatile organics will be sampled for four (4) grab samples each day for seven (7\*) consecutive days. Low-level mercury should also be collected as grabs. |   |   |
|  | 6) A detailed explanation of the location(s), frequency, and number of samples of the Sludge (aerobic or anaerobic) Digester sampling? |   |   |
|  | *Note: Supernatant samples from aerobic or anaerobic digesters are accepted for BOD analysis to represent BOD concentrations in the sludge digester.* |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| J. | 7) Statement that one sludge sample prior to ultimate reuse/disposal will be analyzed using the TCLP during the same sampling period. |   |   |
|  | 8) Statement that sludge will be analyzed and reported as mg/kg “wet sludge.”  |   |   |
|  | 9) If the POTW intends to submit sludge results as mg/dry kg “dry sludge”, then the POTW needs to submit the moisture content of the sludge as a percent. |   |   |
|  | 10) Statement that sludge sampling and analyses for evaluation of 40 CFR Part 503 criteria will be performed in accordance with 40 CFR §503.8. Note: If sludge is sold, given away, or land applied, the metal ceiling limits in 30 TAC §312.43(b)(1) and (3) need to be used to evaluate the loading limits for TBLL calculations. |   |   |
|  | 11) Statement that all wastewater sample collection, preservation and analyses will be performed in accordance with the procedures established in 40 CFR Part 136 and 40 CFR Part 403, Appendix E, and be of such quality as to be legally defensible. |   |   |
|  | 12) Does the POTW describe the following in order to conduct necessary sampling and analyses for the seven (7\*) day sampling events for each parameter collected? |   |   |
|  | *See examples above in the initial influent pollutant scan.* |   |   |
|  | -sample type |   |   |
|  | -adequate QA/QC sampling |   |   |
|  | -preservation |   |   |
|  | -holding times |   |   |
|  | -shipping/storage procedures |   |   |
|  | -laboratory methods |   |   |
|  | 13) Statement that the TCEQ’s MALs will be met for all wastewater analyses, or an acknowledgement that any deviation from the MALs must be documented and justified. If the justification for deviation from the MALs is not provided/is not adequate, resampling may be required. |   |   |
|  | 14) Statement that all sampling concentration data will be tabulated and submitted.  |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| K. | Statement whether the POTW intends to develop MAHLs for BOD, TSS, and Ammonia (and any other non-conservative pollutants) based on design criteria for the activated sludge unit(s) to be used in lieu of inhibition values. |   |   |
|  | *Note: This information needs to be included in the TBLLs package.* |  |   |
|  | If yes, will the CA submit the following information with the TBLLs package: (explain negative answers). |   |   |
|  | 1) The POTW will need to conduct the seven-day sampling of Dom/Com background concentrations. |   |   |
|  | 2) If design criteria maximum concentration will be given in mg/L, then these values may be used directly in lieu of inhibition values. |   |   |
|  | 3) If design criteria maximum loading will be given in pounds per day/cubic feet, then the POTW needs to additionally provide total cubic feet of the activated sludge unit(s). |   |   |
|  | 4) The POTW needs to submit the Dom/Com flow as a percent of the WWTP final phase design flow. |   |   |
|  | 5) The POTW needs to submit WWTP removal efficiency based on influent and effluent monitoring or design criteria or published values as a percent removal across the entire WWTP. |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| L. | If known, a statement whether the POTW intends to develop TBLLs based on: |   |   |
|  | -uniform concentration |   |   |
|  | -industrial contributory flow (ICF) |   |   |
|  | -mass-based |   |   |
|  | -hybrid allocations |   |   |
|  | -BMPs |   |   |
|  | *Please note that based on the allocation method selected, there might be additional sampling requirements that will need to be completed in order to perform the TBLLs calculations.* |   |   |
|  | 1) If the POTW intends to develop TBLLs based on uniform allocation, then the total average concentration contributions of each parameter from all significant industrial users (SIUs) will be submitted with the total SIU flow. The POTW must indicate whether flow data are measured or estimated and if estimated, the basis of the estimate. |   |   |
|  | 2) If the POTW intends to develop TBLLs based on any other allocation methods other than uniform allocation, then the industrial user sampling concentration data and average flow for each industry will be submitted. The POTW must indicate whether flow data are measured or estimated, and if estimated, the basis of the estimate. |   |   |
|  | 3) If BMPs are part of the TBLL development, then the CA will need to include: |   |   |
|  | -Description of the end-of-pipe sampling locations at IUs with required BMPs |   |   |
|  | -List of pollutants to be reduced from IUs with the required BMPs |   |   |
|  | -List of BMP pollutants to be sampled, sample type, and 40 CFR Part 136 analytical method for each parameter collected |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part I.** | **Sampling Plan Requirements** | **Y/N** | **Section of Plan & Comments** |
| L. | -Description of how the CA will determine and include the effluent flow from the IUs with required BMPs |  |  |
|  | -Identification of containers, preservation techniques, holding times, and shipping /storage procedures |  |  |
|  | -Identification of containers, preservation techniques, holding times, and shipping /storage procedures |  |  |
|  | -Identification of containers, preservation techniques, holding times, and shipping /storage procedures |  |  |
|  | -Number of samples that will be collected at each sampling point during the seven (7\*) days |  |  |
| M. | Statement that if hauled waste is accepted, information about handling procedures, flows, characteristics, and types of hauled waste will be included with the TBLL submittal. |  |  |
| N. | Are personnel or positions identified that are responsible for: |  |  |
|  | 1) Monitoring |  |  |
|  | 2) Laboratoy Analysis |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part II.** | **Equipment** | **Y/N** | **Section of Plan & Comments** |
| A. | Does the POTW describe adequate sampling equipment or other provisions to conduct necessary sampling? |   |   |
| B. | Does the POTW describe adequate analytical capabilities to perform analyses for: |   |   |
|   | 1) BOD, TSS, ammonia, nutrients, and other conventional pollutants. |   |   |
|   | 2) Metals |   |   |
|   | 3) Toxic Organics |   |   |
| C. | If not, has the POTW described other arrangements made to do so (e.g., contract with private laboratory, or other agency)? |   |   |
| **Part III.** | **Record Keeping** | **Y/N** | **Section of Plan & Comments** |
|   | A statement that the POTW has all chain-of-custody information on-file and that the records will be maintained on-site as long as the current local limits are in effect. |   |   |
| **Part IV.** | **Signatory Requirements** | **Y/N** | **Section of Plan & Comments** |
| A.  | Has the POTW signed and certified the Sampling Plan? |   |   |
| B.  | If not, has the POTW authorized a representative, i.e. a consulting firm, to sign and certify the Sampling Plan? |   |   |

|  |  |
| --- | --- |
| **Date Review Completed:** |   |
| **Date Sampling Plan NOD/Acceptance:** |   |

|  |  |
| --- | --- |
| **Abbreviations** |  |
| CBOD | = Carbonaceous Biochemical Oxygen Demand |
| CFR | = Code of Federal Regulations |
| COC | = Chain-of-Custody form |
| CWA | = Clean Water Act |
| BOD | = Biochemical Oxygen Demand |
| NH3-N | = Ammonia-Nitrogen |
| POC | = Pollutant of Concern |
| POTW | = Publicly Owned Treatment Works |
| TAC | = Texas Administrative Code |
| TCLP | = Toxicity Characteristic Leaching Procedure |
| TMDL | = Total Maximum Daily Load |
| TPDES | = Texas Pollutant Discharge Elimination System |