Ch. 14 - Proposed Changes

• Section 14.1.3.2 - Definitions
  • Innovative Technology
  • Outfall
  • Professional Engineer
  • Public Use Area
  • Raw Wastewater
  • Technology Not Fully Developed
  • Treatment Works
  • Viable
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• Section 14.2.4 - Anaerobic Wastewater Treatment Lagoons
  • 1,250 feet from residences or public use areas (100,000 gpd or less)
  • 1,875 from residences or public use areas (greater than 100,000 gpd)
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• Section 14.2.5 - Separation Distance Exceptions
  • Remote Pumping Station
  • Remote Subsurface Wet Weather Equalization Basin
  • Office or Laboratory Buildings
  • Wetted Disposal Area for Land Application (per Chapter 21)
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• Section 14.2.5 - Separation Distance Exceptions (continued)

  • Wastewater Facilities for Water Treatment Plants
  
  • Boiler or Cooling Tower Blow Down Holding or Flow Regulating Basins
  
  • (These Exceptions do not apply to Stripping Towers for Wastewater Treatment)
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• Section 14.2.6 - Flood Protection
  • Protect structures and electrical equipment to the 100 year flood elevation plus 1 foot

• Section 14.4.1.3 - Prohibited Wastes
  • Any waste with a closed cup flashpoint of less than 140 degrees

• Section 14.4.2 - Pre-Design Meeting
  • Appendix 14-C (Mechanical Treatment Facilities)
Ch. 14 - Proposed Changes

• Section 14.4.3 - New Process, Equipment and Application Evaluation and Contingency Plan
  • Criteria for the Review of an Innovative Technology
  • If Necessary, Protocol for Appropriate Testing
  • Contingency Plan (Perhaps if Less than 3 Full Scale Facilities)
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- Section 14.4.5.1 - Critical Flow Conditions, Municipal
  - Maximum Seven Day Wet Weather (MSDWW) flow

- Section 14.4.5.2 - Existing System, Municipal
  - At least 5 years of Flow Data Recommended
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- Section 14.4.5.5 - Wet Weather Flow Equalization
  - Return Flows to the Treatment Plant in a Timely Manner During Off-Peak Periods
  - Where feasible, a plant hydraulic capacity equal to or exceeding the wettest 7 days of record is recommended
  - In no case, shall the plant hydraulic capacity be less than the AWW flow
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• Section 14.4.6.1 Domestic Loadings
  • TKN Design Loadings for Incremental Growth

• Section 14.4.6.2 - Industrial Loadings
  • Discussion on variability of organic loadings, especially small plants and periodic processes
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• Section 14.4.6.3 - Other Loadings
  • Identify

• Section 14.4.8.8 - Sludge Disposal During Construction
  • Present Acceptable Plan
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• Section 14.5.1 - Facility Reliability Classes
  • Updated descriptions of the receiving streams based on current use designations

• Section 14.5.2.2 - Unit Process Reliability Criteria B
  • Two stage nitrification includes intermediate clarification
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• Section 14.5.3 - Power Source Reliability
  
  • Recommendation to use an emergency generator where both substations may lose power
  
  • If natural gas is proposed, an emergency generator that can run on multiple fuel supplies should be considered
  
  • Exception for aerated lagoons to not provide backup power for disinfection has been eliminated
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• Section 14.6.1 - Discharge Impact Control
  • Cascade Aeration
  • Limited or across-stream dispersion

• Section 14.6.3 – Sampling
  • Effluent Sampling Prior to Disinfection is Required, except UV Disinfection
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• Section 14.6.4 - Effluent Diffuser System
  • May be considered to eliminate acutely toxic conditions in the receiving stream
  • The treatment plant should be designed to meet average effluent limits at any time
  • Pumping is required to ensure adequate head
Ch. 14 - Proposed Changes

• Section 14.6.4 - Effluent Diffuser System (continued)

  • The orifice velocity should be 10 feet per second if the risers may become covered with sand and mud

  • Recommendations are provided for port sizing and location

  • Risers shall discharge below the low water surface of the receiving stream
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• Section 14.6.4 - Effluent Diffuser System (continued)
  • Reliability shall be considered
  • Manifolds must be placed below the natural stream bed
  • Location of the diffuser in the river shall be posted
Ch. 14 - Proposed Changes

• Section 14.7.2 - Flow Measurement
  
  • Where continuous flow measurement is provided, the design should record the maximum hourly flow during any 24 hour period and the peak instantaneous flow every minute
  
  • “H” flume recommended for flow measurement at small systems
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• Section 14.7.2 - Flow Measurement (continued)

  • Extra flow measurement will be required if influent and effluent flows are different (such as sequencing batch reactors or plants with excess storage or flow equalization)

  • Magnetic flow meters will be accepted

  • Elapsed time meters will be limited to systems serving 500 PE or less
Ch. 14 - Proposed Changes

• Section 14.7.3 - Sampling Equipment
  • Provide as necessary to meet Discharge and Influent Monitoring Requirements
  • Influent Sampling shall be at the Plant
  • Composite Samplers shall meet the Electrical Requirements of Section 13.4.7
  • Include Provisions to report the amount and rate of Septage
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• Appendix 14A - Recommended Process Pipe Color Coding (updated)

• Appendix 14B - Recommended Laboratory Guidelines
  • Additional laboratory monitoring may be required on a case by case basis
  • Delete mention of Asbestos Floor Surfaces
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• Appendix 14B - Recommended Laboratory Guidelines (continued)
  • Air Intake and Exhaust should maintain positive air pressure in the Laboratory
  • Microscope (added)
  • Balance and Table (added)

• Appendix 14C – Mechanical Treatment Facilities
  • Summary of Section 14.5