

Discussion Topics for 307.8: Standards Applicability
Water Quality Standards Workgroup May 16th, 2007
TCEQ Staff Draft

Flow-Dependent Applications of Standards in Streams [307.8(a)]

- consider making distinction between the appropriate low-flow statistics for spring-fed and non-spring-fed systems
 - seven-day, two-year (7Q2) flows would still apply to non-spring-fed streams
 - an alternative statistic or value would apply to approximately six large spring-fed systems since the 7Q2 flow usually does not approximate 10th percentile flows (closer to 20th percentile in many cases)
 - looking at probability of flow occurrence approach based on linear best-fit to normally or log-normally distributed historical flow data
 - where fit less than optimal, could select low-flow value based on direct percentile rank (e.g., 10th percentile) of historical data
 - flow value could be more stringent in cases where unique biological assemblages present
- revision of low-flow exemptions [307.8(a)(1)] for the following criteria that are expressed as long-term averages (i.e., criteria that should apply at all flow conditions)
 - dissolved solids (i.e., chloride, sulfate, total dissolved solids) for classified streams in Appendix A [307.8(a)(1)(A)]
 - human health toxics criteria (currently exempted below harmonic mean flow) [307.8(a)(8)]
 - recreational criteria (geometric mean) in all perennial streams [307.8(a)(1)(A) & (F)]
 - consider how to address instances of zero stream flow
- discussion of exempting some recreational criteria at high flow conditions
 - proposed for 2000 standards, but not adopted
- other suggestions and options for flow applicability and critical conditions

- removal of references to Appendix B (table of segment-specific low-flow criteria) [307.8(a)(3) – (5)]
 - proposal to remove Appendix B [307.10] from the standards to the implementation procedures document
 - when Appendix B was included in the standards, EPA took no action since it was considered an NPDES implementation provision and therefore not subject to water quality standards approval

Discussion of EPA comments on mixing zones [307.8(b)]

- specifying size limits for mixing zones
- applying standards to point of discharge in cases of low-dilution receiving waters [307.8(b)(4)]
- preventing mixing zone overlap with zone of influence with public drinking water supply wells (similar to 307.8(b)(8))