

2020 Total Ammonia Nitrogen Criteria Implementation Guidance

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Key Topics

Purpose

Alignment with criteria

Default values

Site-specific data

Reasonable Potential

Other considerations

Questions

Purpose

Permit writer's guidance



Does not replace or remove existing ammonia criteria



New default values for pH and Temperature



Site-specific data

Alignment with Criteria



304(a) federal CWA



Magnitude, Duration, Frequency



MDL (1-day acute criteria)



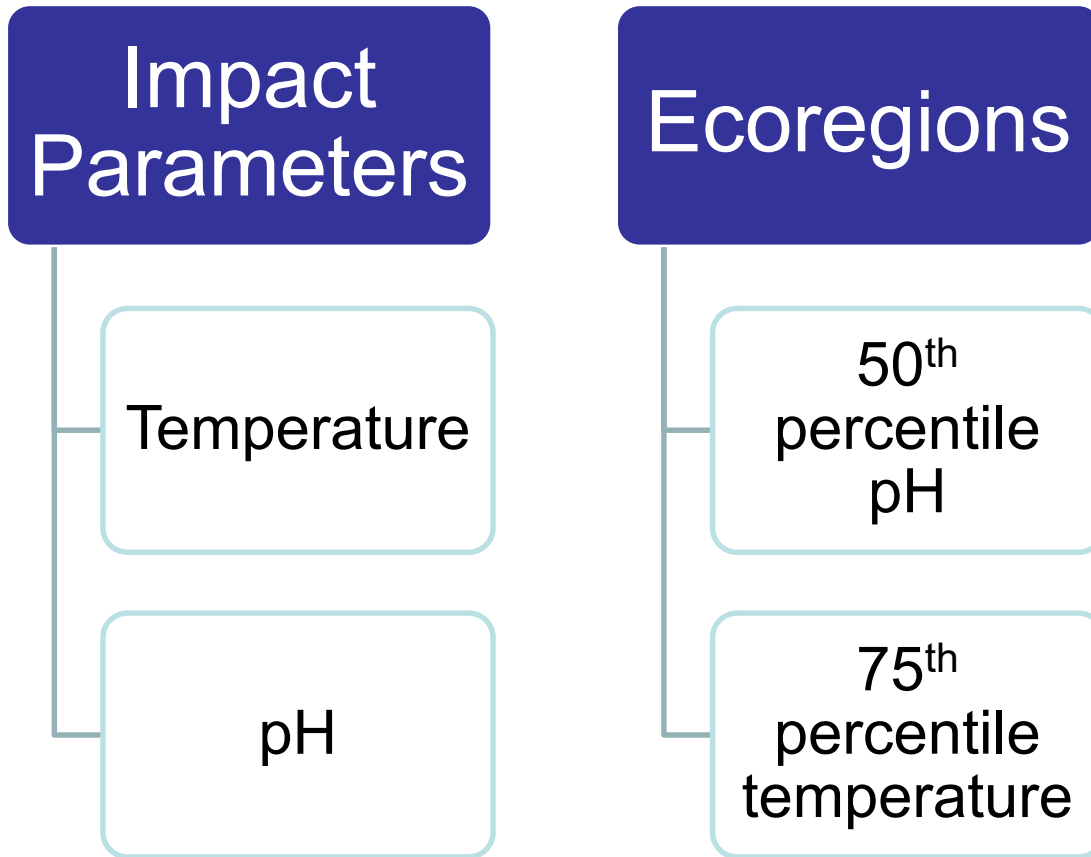
AML (30-day chronic criteria)



EPA discourages use, but for 4-day



Default Values



Ecoregion Category Description	Calendar Qtr	# of Samples	Median pH
Central Irregular Plains	1	2104	7.8
	2	3150	7.8
	3	3282	7.8
	4	2565	7.8

Ecoregion Category Description	Calendar Qtr	# of Samples	Median pH
Interior River Valleys and Hills	1	1027	7.8
	2	1393	7.9
	3	1463	8.0
	4	823	8.0

Ecoregion Category Description	Calendar Qtr	# of Samples	Median pH
Mississippi Alluvial Plain	1	288	7.6
	2	281	7.6
	3	297	7.7
	4	225	7.7

Ecoregion Category Description	Calendar Qtr	# of Samples	Median pH
Ozark Highlands	1	4956	7.8
	2	5690	7.8
	3	5500	7.8
	4	4325	7.8

Ecoregion Category Description	Calendar Qtr	# of Samples	Median pH
Western Corn Belt Plains	1	730	8.0
	2	932	8.0
	3	1090	8.1
	4	693	8.0

Ecoregion Category Description	Calendar Qtr	# of Samples	75th Percentile Temp °C
Central Irregular Plains	1	2121	7.0
	2	3104	23.5
	3	3254	27.6
	4	2574	14.0
Ecoregion Category Description	Calendar Qtr	# of Samples	75th Percentile Temp °C
Interior River Valleys and Hills	1	1570	7.5
	2	2147	24.0
	3	2085	28.6
	4	1374	16.0
Ecoregion Category Description	Calendar Qtr	# of Samples	75th Percentile Temp °C
Mississippi Alluvial Plain	1	458	10.0
	2	444	23.4
	3	347	28.5
	4	339	15.0
Ecoregion Category Description	Calendar Qtr	# of Samples	75th Percentile Temp °C
Ozark Highlands	1	5166	11.0
	2	6011	21.0
	3	6874	25.4
	4	5484	14.6
Ecoregion Category Description	Calendar Qtr	# of Samples	75th Percentile Temp °C
Western Corn Belt Plains	1	927	6.6
	2	1173	22.5
	3	1350	27.7
	4	860	13.4



Site-Specific Data

- ✓ Default
- ✓ pH (50th percentile)
- ✓ Temperature (75th percentile)
- ✓ Non-Mixing Considerations = effluent
- ✓ Mixing Considerations = edge of ZID or MZ

Reasonable Potential

Two Seasonal
(default)

- Monthly
- Quarterly

Mixing
Considerations



Ammonia
criteria

- Ecoregion (default)
- Site-specific data

Other Considerations



Cold-Water Fisheries



Cool & Warm-Water Fisheries



Early life stages present

Questions

- Thank you for comments!
- Update permits page
- Gov.delivery message
- Memorandum, guidance, comments, and responses.