Figure: 30 TAC §217.210(i)(2)

Equation H.3.

$$C_0 = C^* + (C_i - C^*) \exp^{-\frac{Ka}{0.0365Q}}$$

Where:
C_i = influent five-day biochemical oxygen demand (BOD_5) concentration, milligrams per liter (mg/l)

C_o = target effluent BOD_5 concentration, mg/l

C* = wetland background limit, mg/l
(for total suspended solids (TSS), $C^* = 5.1 = 0.16C_i$)
(for BOD_5, $C^* = 3.5 + 0.053\ C_i$)

K = first-order areal rate constant:
(34 meters/year (m/yr) @ 20° C for BOD_5)
(1,000 m/yr @ 20° C for TSS)

a = is required wetland area, hectare (active treatment area, not including dike, buffers, etc.)

Q = design flow in cubic meters per day