

**PROCEDURES FORM FOR THE  
ESTIMATION OF THE KL FROM UNIT SPECIFICATIONS**

NAME OF THE FACILITY for site specific biorate determination

NAME OF UNIT for site specific biorate determination

NAME OF COMPOUND

HENRY'S LAW constant for the compound (mole fraction in gas per mole fraction in water at 25 degrees Celsius)

Methanol

IDENTIFY THE TYPE OF UNIT (check one box below)

Quiescent impoundment

Surface agitated impoundment

Surface agitated impoundment with submerged air present

Unit with submerged aeration gas

1	
2	
3	
4	

**PROCEDURES BASED UPON THE TYPE OF UNIT**

1. Use Form 5 to determine KL for the surface of the quiescent impoundment.
2. Use Form 5 to determine KL for the surface of the quiescent part of the impoundment. Use Form 6 to determine KL for the part of the surface that is agitated, then complete Form 6 with  $K_q$  as determined from Form 5.
3. Use Form 5 to determine KL for the surface of the quiescent part of the impoundment. Use Form 6 to determine KL for the part of the surface that is agitated, then complete Form 6 with  $K_q$  as determined from Form 5. The total system KL is the sum of the KL from the completed Form 6 and the equivalent KL from Form 7.
4. Evaluate the fraction of the surface that is agitated and the extent of the aeration. Use Form 5 to determine KL for the quiescent part of the surface of the impoundment. Use Form 6 to determine KL for the part of the surface that is agitated, then complete Form 6 with  $K_q$  as determined from Form 5. The total system KL is the sum of the KL from the completed Form 6 and the equivalent KL from Form 7. See section 5.6.1 in the document Air Emission Models for Waste and Wastewater.

Estimate of surface KL obtained from above procedures (m/s)

5	
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If the submerged aeration is present, the equivalent KL from Form 7

6	
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The total KL is the sum of line 5 and line 6.

7	
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